

THE UNIVERSITY of EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

- This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.
- A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.
- This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.
- The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.
- When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

Timing of single motherhood: implications for employment careers in Great Britain and West Germany

Hannah Zagel

Phd Social Policy
The University of Edinburgh
2013

Abstract

This thesis investigates how family–employment reconciliation issues associated with single motherhood affect women's employment careers. The study fills a gap in the literature, which rarely considers single motherhood and employment as processes in the life course, much less in a cross-country comparative perspective. Patterns of employment trajectories during and after single motherhood are examined as the outcome of individual and institutional circumstances. Great Britain and West Germany are used as contrasting cases that represent relatively different contexts of labour market structures and family policy. Longitudinal individual-level data from the British Household Panel Survey (BHPS) and the German Socio-Economic Panel (SOEP) are analysed, looking at the period between and including 1991–2008.

The thesis develops a theoretical model that assumes differential career outcomes for experiencing single motherhood at different life stages. Higher difficulties of family–employment reconciliation are predicted for women experiencing single motherhood at a young age compared to later stages. The acquisition of marketable resources, which stands in the context of education systems, is assumed to be one of the central mechanisms mediating the relationship between age at single motherhood and employment. Moreover, policies directed at single parents affect reconciliation, shaping opportunity structures on which women can draw in single motherhood. Compared to the German context, Britain provides little institutional support securing labour market attachment for women in single motherhood, particularly when their children are young. Although providing more generous family policy measures in comparison, West German maternity leave regulations are often not applicable to women in single motherhood, and childcare is mostly granted on a half-day basis.

The findings from three steps of empirical analysis provide new insights and highlight specific facets of established facts. First, fixed effects logistic regression is used, which exposes a negative association between single motherhood and entering full-time employment. No differences are observed between partnered and unpartnered mothers, but effective childcare arrangements support women's transition in both Britain and West Germany. The second step of the analysis explores employment career patterns during and after single motherhood using sequence analysis. The emerging typical patterns are observed to different degrees in the two country contexts. On average, more employment trajectories dominated by non-employment are observed in Britain and by part-time employment in West Germany. In the last step, these findings are used in an explanatory framework, the results of which provide evidence for the life stage hypothesis. The analysis demonstrates that not only social class but also mother's age, children's age and skill levels seem to foster employment stability and labour market attachment during and after single motherhood.



"Life stages of the woman", early 1900s¹

¹ Source: http://www.artbible.net

Declaration

This thesis is my own work, apart from where otherwise indicated, and has not been submitted for any other degree or professional qualification.

Edinburgh, 2 April 2013

Hannah Zagel

Acknowledgements

First and foremost, I would like to express my deepest gratitude to my supervisors, Alison Koslowski and Ingela Naumann. I thank them for open and inspiring conversations, supervisory and practical guidance and mentorship throughout the years of writing this thesis. Their support has been very important to me. I would also like to thank Paul Norris, whose door was always open for me to get methodological advice.

My thanks go to the Graduate School of Social and Political Science at the University of Edinburgh and the German Academic Exchange Service (DAAD) for funding this research. I feel privileged and honoured to have received their awards.

Staff and students made the Social Policy department at the University of Edinburgh a supportive and friendly host environment for which I am very grateful. I want to thank Traute Meyer and Jochen Clasen, for whom it was a pleasure to work in my role as JESP editorial officer during the past years. Thanks also go to my new colleagues at the SFB 597 and ZeS at Bremen University, who so generously welcomed me to the team and gave me the space for the final edits of this thesis.

The SOEP team at DIW receives my thanks for hosting me during the three months of my guest stay in 2011. I also want to thank the BHPS and SOEP survey participants, and acknowledge the efforts of the wider SOEP community in supporting young academics of whom I am lucky enough to be one. For methodological advice and professional inspiration I would like to give my warmest thanks to Pia Schober and Marco Giesselmann. I wish to thank the staff of AQMeN Scotland for their support and in particular Tony Glendinning. I would like to express my deepest thanks to Heiner Ganßmann, who

contributed considerably to my initial decision to come to Edinburgh by telling me about a curious hill in the middle of the city. Ellie and Clare are thanked for a thorough copy-editing of this thesis. Thanks also to Tom for geeky stats advice.

My work on this PhD has been inspired by the conversations, gatherings and collaborations with several wonderful people. I want to thank Hilary, Maddie, Rosalind, Kathleen, Jo and Aoife for being truly inspirational feminists and friends through whom my academic and my social life in Edinburgh was greatly enriched. I want to thank my dearest people back home, Mia, Aletta, Bettina, Bert, Dennis, Eve, Felicia, Hilde, Jan, Johan, Lena, Nele, Philipp, Rike and Thommy, for their support from the distance and in each other's visits, without which my work on this thesis would have been a much less enjoyable experience. I particularly want to thank Catherine-Rose for the good times we shared and for the stimulating conversations we had, which I value deeply. I want to thank Benny, who often reminded me of the life beyond the PhD. I am grateful for the friendship and love, which were precious and enriching in many ways during the past years. I am unspeakably happy that working on this thesis involved meeting Alexander, an intellectual and emotional companion, whose listening and thoughtful critique have been calming in difficult times, and with whom besides the PhD so many more journeys seem possible.

I want to thank my brother Benjamin for being a wonderful sibling through whom I know what it means to feel unconditionally connected. Last but not least, from the bottom of my heart, I want to thank Sibylle, Rolf, Klaus and Muazzez for their love and parental support. Unmistakably, the inspiration for this thesis was sparked by a remarkable woman: Mama, this is for you.

Edinburgh, 2 April 2013

Contents

Abstract	2
Declaration	4
Acknowledgements	5
Contents	7
List of abbreviations	11
Notes	11
List of tables	12
List of figures	14
Chapter 1 Introduction	16
1.1 Families and careers	16
1.2 Family-employment dynamics in Britain and West Germany	20
1.3 Research outline and contributions	25
Chapter 2 Literature review	31
2.1 Empirical research on the British case	32
2.1.1 Stories and facts about single motherhood	32
2.1.2 Single motherhood and employment	36
2.2 Empirical research in Germany	41
2.2.1 Potentials and positions	41
2.2.1 Single motherhood and employment	47
2.3 Comparison of empirical findings: conclusions	51
2.3.1 Research traditions	51
2.3.2 Blind spots	54
Chapter 3 Analytical perspectives and theoretical concepts	58
3.1 Previous theoretical perspectives	58
3.1.1 Individuals, couples and households	58
3.1.2 Employment and skills in context	63
3.1.3 Gendered welfare regimes	69

3.2 Theoretical framework	73
3.2.1 Defining family life and single motherhood	75
3.2.2 Defining relationships between family life and employment	84
Chapter 4 Policy frameworks	96
4.1 Welfare regimes	97
4.2 Policies and careers	102
4.2.1 Childcare	104
4.2.2 Leave regulations	117
4.2.3 Transfer payments	122
4.2.5 Activation policies	133
4.3 Summary	137
Chapter 5 Methodological approach and data	140
5.1 Analysing the dynamics of single motherhood	142
5.1.1 Analysing transitions	143
5.1.2 Analysing trajectories	149
5.2 Introducing the datasets	153
5.2.1 British Household Panel Survey	154
5.2.2 German Socio-economic Panel Survey	156
5.3 Analysing single motherhood and careers with BHPS and SOEP	157
5.3.1 Data limitations	158
5.3.2 Variables	162
5.4 Summary	168
Chapter 6 Single motherhood at career entry	169
6.1 Background	169
6.1.1 Early career stage, motherhood and class	170
6.1.2 Institutional components	172
6.2 Questions and hypotheses	175
6.3 Descriptive analysis	177
6.4 Fixed effects regression	186
6.4.1 Independent variables	189

6.4.2 Regression results	192
6.5 Summary	200
Chapter 7 Career trajectories during and after single motherhood	205
7.1 Career trajectories and single motherhood	206
7.2 Questions and hypotheses	211
7.3 Analysing employment trajectories	213
7.3.1 Samples and measures	214
7.3.2 Aggregate description	217
7.3.3 Clusters of sequences: results from OM and cluster analysis	221
7.4 Summary	231
Chapter 8 Understanding diversity in employment trajectories during a	and after
single motherhood	235
8.1 Career trajectories as outcomes	236
8.1.1 Family dynamics	237
8.1.2 Skills, class and regime contexts	238
8.1.3 Ethnicity	239
8.1.4 Institutional frameworks	241
8.2 Hypotheses	242
8.3 Exploring diversity in career trajectories	243
8.3.1 Independent variables	244
8.3.2 Linear regression	246
8.3.3 Multinomial regression	248
8.4 Results	251
8.4.1 Descriptive results	251
8.4.2 The occurrence of non-employment	255
8.4.3 Who has a continuous full-time career?	257
8.6 Summary	264
Chapter 9 Conclusions and discussion	268
9.1 Conceptual contribution	270
9.2 Methodological contribution	272

9.3 Main empirical contributions	275
9.3.1 The early career stage	276
9.3.2 Employment trajectories	277
9.3.3 The diversity of trajectories	278
9.4 Limitations and future research	279
9.5 Closing remarks	281
Chapter 10 Appendix	283
Chapter 11 Bibliography	292

List of abbreviations

ALG Arbeitslosengeld (Unemployment Benefit)

BHPS British Household Panel Survey

BMAS Bundesministerium für Arbeit und Soziales

(Federal Ministry for Labour and Social Affairs)

BMFSFJ Bundesministerium für Familie, Senioren, Frauen und Jugend

(Federal Ministry for Family, Old People, Women and Youth)

CASMIN Comparative Analysis of Social Mobility in Industrial Nations

CSA Child Support Agency

CTC Child Tax Credit

DE Germany

DWP Department for Work and Pensions

EU-SILC European Statistics on Income and Living Conditions

GDR German Democratic Republic

ISCO International Standard Classification of Occupations

MA Maternity Allowance

OM Optimal Matching

ONS Office for National Statistics

SMP Statutory Maternity Pay

SOEP Socio-Economic Panel

UK United Kingdom

WFTC Working Families Tax Credit

WTC Working Tax Credit

Notes

All translations from German to English are made by the author unless an official translation was available.

Conversions from Euro to British Pounds are based on the Bank of England conversion rate of 8 November 2012 (1.2549 Euro per 1 GBP).

List of tables

Table 2.1 Employment rates of women in different family situations by	age of
youngest child	38
Table 3.1 Theoretical sequence types and career examples	89
Table 3.2 Life stages and career sequences	93
Table 4.1 Policy support of family-employment reconciliation in single	
motherhood	104
Table 4.2 Childcare landscapes	106
Table 4.3 Leave regulations	119
Table 4.4 Child benefit	123
Table 4.5 Child maintenance	127
Table 4.6 Social assistance and interactions with other transfers	130
Table 4.7 Activation measures	134
Table 5.1 Censoring of single motherhood periods in the SOEP	161
Table 6.1 Per cent of observations by variable and country	179
Table 6.2 Determinants of full-time employment, women 17-30 yrs., Gre	eat
Britain, fixed effects logistic regression, odds ratios	195
Table 6.3 Determinants of full-time employment, women 17-30 yrs., We	:st
Germany, fixed effects logistic regression, odds ratios	199
Table 7.1 Ideal type sequences: results from previous studies	209
Table 7.2 Aggregate characteristics of employment sequences during ar	ıd after
single motherhood	220
Table 7.3 Empirical clusters and theoretical types: employment sequence	es 224
Table 7.4 Distribution of labour market trajectories	227
Table 8.1 Independent variables by trajectory category, mean values	254
Table 8.2 Non-employment occurrence, linear regression with robust st	andard
errors	257

Table 8.3 Multinomial logit results: relative risk ratios (RRR) for trajectory	
categories compared to reference category (full-timers)	263

List of figures

Figure 3.1 Dimensions of de-familisation: Independence from family
relationships71
Figure 3.2 The concept of self-determination: independence from partner and
markets
Figure 3.3 Links between regime, single motherhood and employment 75
Figure 3.4 Examples of family life dyads: constellations of single motherhood.
Figure 3.5 Age and skill levels 91
Figure 3.6 Analytical perspective on single motherhood and employment status
92
Figure 4.1 Take-up of formal childcare by child's age and duration of weekly
childcare, 2010
Figure 4.2 Total annual hours of compulsory education by school grade,
2011/12
Figure 4.3 Child benefit in the UK and Germany: monthly payment as
proportion of mean equivalised income 1990–2010
Figure 6.1 Distribution of family life observations by women's age, GB 181
Figure 6.2 Distribution of family life observations by women's age, DE 181
Figure 6.3 Per cent of full-time employment observations by family
constellation, women in Great Britain, 17-30 yrs
Figure 6.4 Per cent of full-time employment observations by family
constellation, women in West Germany, 17-30 yrs., 1991-2008 183
Figure 6.5 Per cent of observations (person years) in full-time employment by
level of education, women in Great Britain, 17-30 yrs., 1991-2008 184
Figure 6.6 Per cent of observations (person years) in full-time employment by
level of education, women in West Germany, 17-30 yrs., 1991-2008 185
Figure 6.7 Per cent of observations (person-years) in full-time employment by
vocational qualification and country, women 17-30 yrs., 1991-2008 186

Figure 7.1 Distribution of women by age at first observed single motherho	od216
Figure 7.2 Shares of women's employment statuses per wave by country	219
Figure 7.3 Modal sequence plots by cluster and country context	226
Figure 7.4 Sequence index plots by cluster	228
Figure 7.5 Sequence index plots by cluster and country context	229
Figure 7.6 Distribution of clusters by country context	230

Chapter 1 Introduction

1.1 Families and careers

Enabling reconciliation of family life and employment is one of the central challenges of post-industrial capitalist societies. This is because the arrangement of the male-breadwinner female-homemaker model, which dominated the family and work life of the 1960s and beyond in many countries, has come out of balance. Women's labour market participation is increasingly approaching similar levels to men's (OECD, 2011), partly because some mothers return to work after childbirth in progressively shorter intervals (Dex and Joshi, 1999). The upward trend in women's employment is complemented by growing social acceptance, and increasingly also by the expectation that women's primary role is no longer limited to the unpaid carer, but also includes paid work in the labour market (cf. Lewis, 2009). This is despite the fact that mothers continue taking on the main share of caring for their children (Craig and Mullan, 2011; Sayer and Gornick, 2012), even though more fathers now engage in paternal care at least some of the time (cf. Smith and Williams, 2007). Single motherhood illustrates the potential for tensions between family life and employment particularly well, exemplifying the challenges created by the observed social changes. Single motherhood is disproportionally implicated with financially difficult circumstances for women and their children (Bradshaw et al., 1996), which is why it has recently received increased public and policy attention. Making these issues ever more pressing, single motherhood now is a relatively widespread phenomenon, because family dynamics have become increasingly diverse over the past decades (e.g. Beck-Gernsheim, 2002; Crouch, 2008). Alongside the rise in cohabitation (Kiernan, 2001; Nazio and Blossfeld, 2003), the high prevalence of divorce is one of the most pronounced changes in family

life since the 1960s (Kaelble, 2007). More children are born to parents who are not married today than at any time since in the middle of the last century (Eurostat, 2012a). In the vast majority of the cases where parents do not live together in the same household the child stays with the mother (OECD, 2012a). The economic vulnerability associated with single motherhood is partly explained by the consequences of partnership dissolution (Andreß et al., 2006). That is, divorce or separation has strong negative consequences on the economic situation of many women, because the household loses the partner's input in income. Single motherhood, however, also often combines different forms of inequalities (Choo and Ferree, 2010). That means, alongside economic risks resulting directly from separation, mothers who are single are often structurally disadvantaged in the labour market. The emerging question is how women who experience single motherhood manage to reconcile family life and employment, which can have a vital function in maintaining their own and their children's living.

A considerable body of literature has examined the relationship between single motherhood and employment, but only few studies acknowledge the dynamics of the interrelation over time (exceptions are e.g. Ermisch and Francesconi, 2000; Ott et al., 2012; Rowlingson and McKay, 1998; Stewart, 2009). For one, the majority of studies treat single motherhood as a static phenomenon conceptually and empirically, discounting that separation, re-partnering and children's growing up make family life a dynamic process. It is common practice to discuss characteristics of 'single mothers', 'lone mothers' or 'one-parent families' in comparison to the two-parent family, sometimes referring to 'broken', 'incomplete' or 'fatherless' families (see Marsden, 1969; Slater, 2013). This on the whole pragmatic, sometimes normatively tainted, approach creates an analytical lens, which omits the changeability of family constellations (cf. McKay, 2003). Often being a transitory family status followed by new partnerships and family constellations (Ermisch and Pevalin, 2005; Misra et al.,

2012; Skew et al., 2009), single motherhood can be a phase of (re)organisation and (re)orientation, in which women use previously unpractised strategies of work at home and in the labour market (e.g. Klett-Davies, 2005; Mädje and Neusüss, 1996). More clearly than in the literature on single motherhood, research analysing female employment more generally increasingly discusses labour market participation as a process, which is severely influenced by having and planning to have children (e.g. Brugiavini et al., 2010; Cornelißen et al., 2011; Dex and Joshi, 1999). In consideration of these aspects the initial question formulated above can be amended so as to ask how the implications of experiencing single motherhood for family–employment reconciliation influence employment careers a) at specific points in the life course, and b) over time.

While surprisingly little is known about the role of single motherhood for women's employment as a career process, and even less in comparative perspective, a relatively large body of literature is concerned with differences of policies for single mothers across welfare states (e.g. Bradshaw et al., 1996; Giddings et al., 2004; Lewis and Hobson, 1997; Lewis, 1999; Millar and Rowlingson, 2001; Ostner, 1997). These studies highlight the importance of policy provisions for women in single motherhood in terms of support with cash and services. Adding to these potential mediators of family-employment reconciliation, other regulations intervene in employment careers at different points in the life course. Notably, research in an institutionalist tradition of the sociology of education has emphasised the importance of labour market structures and education systems (e.g. Allmendinger, 1989; Gangl, 2003; Kerckhoff, 1995; Mayer and Müller, 1989). Hence, accounting for structural factors makes the cross-country comparison a relevant perspective. Adding to the previously defined research puzzles, the question that emerges is whether and in what way institutional frameworks alter the conditions of how experiencing single motherhood affects family–employment reconciliation.

Taking these considerations as its starting point, this thesis investigates how family-employment reconciliation issues associated with single motherhood play out for women's employment careers in different institutional contexts. The thesis draws on a residence-based definition of single motherhood, including women who live with their dependent children but without a partner. Other studies have used the more traditional view of 'unmarried motherhood' which includes cohabiting women with children (Evans and Thane, 2011). The present perspective also excludes mothers with a nonresident partner (so-called 'living-apart-together partnerships'), which are considered in some of the recent lone motherhood studies (Bastin, 2012). Hence, the definition of single motherhood employed in this thesis sets the focus on structural conditions of live-in partnerships rather than on legal factors or the idea that any partnership matters for family-employment reconciliation. Aiming to contribute to understanding why some (single) mothers have more stable careers than others, this thesis addresses three main questions. Focusing on the aspect of timing in the life course, the first question is what role single motherhood plays in determining labour market integration at the sensible phase of the early career stage. With the conceptual lens centred on individual social processes the research asks, secondly, what differences in employment careers of women experiencing single motherhood can be observed, and how variation can be described. Particularly considering the role of countries' institutional configurations in shaping careers, long-term employment patterns of individuals are compared across different contexts. Aiming to unravel some of the individual-level mechanisms, the third main question is what factors are associated with stable employment careers of women experiencing single motherhood.

1.2 Family-employment dynamics in Britain and West Germany

In light of the research puzzles this thesis addresses, the UK and Germany are useful cases for studying family–employment reconciliation of women in single motherhood. This is for two main reasons. Firstly, the countries have slightly diverging aggregate profiles of 'single mothers', which coincides with relatively different angles from which the issue of single motherhood and employment is discussed in the countries' public and academic spheres. Secondly, the countries stand for different models of family policy, despite showing some commonalities in policies for women in single motherhood. Contrasting these different traditions in discourses and regulative frameworks against each other, and comparing individual family and employment dynamics situated within them, this thesis attempts to distinguish issues of a) intra-group diversity of mothers who are single; b) family–employment reconciliation mechanisms in the single motherhood situation that are common across countries; and c) country-specific logics in policy frameworks.

Single motherhood is a somewhat more common experience among mothers in the UK than in Germany. The most recent available data show that 26 per cent of families with dependent children were 'lone parent families' in the UK (ONS, 2012a), and it was 19 per cent in Germany (Destatis, 2010). Besides the slightly higher occurrence of single motherhood in the UK than in Germany, employment rates of British women in single motherhood are relatively low. While 54.2 per cent of current single mothers were employed for any amount of hours per week in 2008 in the UK, this figure was 61.9 per cent in West Germany (Jaehrling et al., 2012). Although British rates have been increasing since the late 1990s they are still low compared to other countries, and also compared to partnered mothers within the UK (Chambaz, 2001; Jaehrling et al., 2012).

Accordingly, based on recent aggregate data, partnership status seems to matter for the employment of mothers in prime working age (25-49 years) in the UK but not in Germany. In the UK, employment rates of mothers with a co-resident partner are higher (87 per cent) in this age group than of mothers without a coresident partner (60 per cent) (2010 data; Eurostat, 2012b). In Germany, on the other hand, employment rates were not associated with partnership status, with around 70 per cent for both partnered and unpartnered mothers being employed in 2010 (Eurostat, 2012b). This could suggest that having a partner in the household relieves difficulties in family-employment reconciliation in the UK but not in Germany. The observed association could also reflect the fact that low-skilled women, who have low employment prospects to begin with, are overrepresented among unpartnered mothers in the UK, both compared to other mothers and in cross-country comparison (Jaehrling et al., 2012). Correspondingly, several studies on the British case suggest that the negative association between partnership status and employment in fact reflects a social class effect (e.g. McKay, 2003; Rowlingson and McKay, 2005). These studies argue that, in Britain, lower-class women with initially lower chances of being employed are more likely to enter single motherhood, which aggravates their disadvantages in the labour market (see also Rowlingson and McKay, 1998). This finding points to the important aspect of structural barriers linked to class inequality, which prevent many British women in single motherhood from participating in the labour market. The perspective augments the view often taken in research on the German case, where structural inequalities are less often considered in discussions of single motherhood and employment.

The angle usually taken in research on the German case, however, can also add to the perspective on the British one, in that it takes biographical circumstances more clearly into account. In the comparison with Germany, it becomes apparent that British women currently in single motherhood tend to be younger than their German counterparts. Research on the British case has treated this

aspect as a dimension of the class question (cf. Duncan, 2007; Robson and Berthoud, 2003), presuming that young age at single motherhood is a mere byproduct of lower-class women having a child. The assumed causal chain is that class determines the age at which women have their first child and the probability of being single mothers, which in turn determines the ability of taking up employment. The link between social class and the level of skills people acquire (cf. Breen and Goldthorpe, 1997) is only implicitly carried along in the argument, despite being central in the social stratification literature (cf. Crompton, 2008). The present research suggests, instead, that mothers' age at entering single motherhood contributes to explaining differences in labour market participation beyond social class by influencing skill attainment directly. The expected mechanism is that experiencing single motherhood at a young age, that is, having a child outside a partnership or separating from a partner, intervenes in standard processes of career building such as completing education and transitioning to the labour market. The present research also notes that these individual factors interact with how countries organise skill acquisition and initial labour market integration (e.g. Estévez-Abe et al., 2001; Gangl, 2003; Kerckhoff, 2000; Müller and Gangl, 2003; Shavit and Müller, 1998). For example, acquiring intermediate-level vocational skills in the German context can go a long way in preparing for a relatively secure occupational track (Ludwig-Mayerhofer et al., 2011; Protsch and Dieckhoff, 2011), the returning to which is safeguarded by qualification certificates. The British system does not work in the same way, providing relatively insecure labour market prospects for individuals with lower than general academic skill attainments (Iannelli and Raffe, 2007). Hence, depending on the context, experiencing single motherhood before the transition to the labour market is made can have more or less severe consequences for the career.

Certainly, this argument does not disagree with social class background being an important factor in determining the level of education and the kind of career individuals are likely to have. However, the present research suggests that the strong emphasis of social class sometimes made in the literature obscures the mechanisms evolving from the intersection of individuals' demographics and education. On the one hand, accounting for the dynamics of single motherhood, as is done more in research on the German case, helps avoid an analytical determinism of social class, family structure and employment. On the other hand, the perspective highlights the embeddedness of family life and employment careers in individuals' life course. For example, in Germany, mothers who are single and have teenage children are more likely to be employed than their British counterparts, while employment rates are low for mothers of younger children in both countries (BMAS, 2011; DWP, 2010a). This suggests that children's aging and mother's age at single motherhood may have an impact on employment. This thesis argues accordingly that the life stage at which women experience single motherhood is decisive for their immediate ability to reconcile family life and employment, but also for their career progression.

As for institutional differences between the countries, policies of the welfare state are assumed to set the frameworks in which women in single motherhood negotiate family–employment reconciliation. Research often discusses Britain and Germany as opposite cases in terms of institutional configurations relevant for individuals' labour market involvement. The present research, as is often done, focuses on West Germany because, with its Socialist heritage, the East German pathway of family development is proceeding in distinct patterns (Schneider et al., 2012). Although the East-West German comparison can yield interesting insights not least in terms of family life and single motherhood (Huinink et al., 2012) this thesis concentrates on the cross-national comparison embedded in welfare state regime research. Intra-UK differences are arguably less severe than those between East and West Germany (see Chapter 5), but this thesis primarily looks at Great Britain. Besides classical welfare state research

classifying Britain as a liberal regime and West Germany as a conservativecorporatist one in their respective degrees of 'de-commodifying' citizen workers (Esping-Andersen, 1990), the comparison is also established in newer international social policy research (e.g. Clasen, 2011). The present study concurs with that research in that British and German welfare state logics are useful contrasting cases for investigating different structural prerequisites for family-employment reconciliation. A general assumption about the two regimes is that the British welfare system less explicitly intervenes in family life than the German one (Daly, 2011), which has a tradition of actively fostering the male breadwinner female stay-at-home model (Pfau-Effinger, 2005). On the other hand, British social policy has especially focused on absorbing the consequences of mass unemployment since the 1980s, implying that eligibility criteria for social assistance were widened to special-risk social groups (Clasen and Clegg, 2011) such as women in single motherhood. More recent developments are in the reverse direction. Since the late 1990s, policies for single mothers are characterised by a shift from the provision of primarily cash benefits towards more welfare-to-work measures in Britain (Haux, 2011; Lewis, 2009; Millar, 2008). This trend is also visible in Germany (Ostner, 2010, p. 201; Schwarzkopf, 2009), although to a lesser degree. It has been argued that the development indicates general welfare state restructuring trends in postindustrial societies, implying also that social policy increasingly addresses single motherhood as one of the emerging 'new social risks' (Bonoli, 2005; Esping-Andersen, 1999; Taylor-Gooby, 2004). Despite similar directions in reform trends, however, policy changes are implemented at a different pace in Britain and Germany, following country-specific logics, which are relatively stable over time (e.g. Ferragina et al., 2012). The present research assumes that, despite the reforms of the social assistance schemes in the 1990s and 2000s, the British system continues providing fewer alternatives to income support benefit receipt to women in single motherhood than the German system. Throughout the 1990s and into the 2000s, women in single motherhood in Great Britain have found labour market inactivity is covered by basic income assistance for relatively generous periods (up to the child's age of 16 until 2008) (cf. Haux, 2011), and comparatively little institutional provision supporting family-employment reconciliation (Lewis et al., 2008). Especially for low-skilled women, then, employment is not a more secure or rewarding option. On the other hand, the German family policy regime fosters women's part-time careers more actively than the British system, as relatively affordable childcare is granted on a half-day basis (Jaehrling et al., 2012).

1.3 Research outline and contributions

In summary, the present research argues that the negative effect of single motherhood on employment varies for women at particular life stages, in different countries, and in its consequences for employment careers. The research strategy to investigate these relationships proceeds partly deductively and partly with explorative analysis, building on previous research primarily on the British and the German cases, which are reviewed in detail in Chapter 2. In order to analyse the issues empirically, the thesis will propose a conceptual framework with which to understand single motherhood as a changeable status in family life, and employment careers as a sequential process that interacts with the family domain (Chapter 3). On the basis of the theoretical framework the stated assumptions are investigated in three analytical steps, tackling one main research question with empirical analysis in each of them.

The research is primarily based on the analysis of individuals, but considers the findings in the cross-country comparative design between Britain and West Germany. It traces differences in the policy settings of the two countries, linking them back to the question of what facilitates family–employment reconciliation (Chapter 4). Policies addressing single motherhood are evaluated, showing the diverse and sometimes contradictory logics of family policy landscapes. This allows mechanisms to be discerned that are particular to the country context

from those that are rooted universally in the phenomenon of single motherhood. The statistical analyses of individual career trajectories draw on data from two large-scale national longitudinal surveys, the British Household Panel Survey (BHPS) and the German Socio-Economic Panel (SOEP), using information from survey waves between and including 1991–2008. Although the two panel surveys are among the most advanced ones today, the present study encountered severe data limitations, and hence supports calls for further funding and development of international large-scale panel surveys. The applied methods vary in that each stage of the analysis has a different focus, but an overview of methodological approach and data is given in Chapter 5. This discusses methodological issues of analysing single motherhood and employment in a quantitative longitudinal perspective and a cross-country comparative design.

The first step of the empirical analysis looks at the early career stage, testing whether single motherhood hinders full-time integration at labour market entry, when skill attainment and time-invariant individual background characteristics are accounted for in fixed effects logistic regression analysis (Chapter 6). The results show that single motherhood is negatively associated with entering full-time employment at the early career stage beyond social class background and skill attainment in both countries. However, the findings also clarify that, at this career stage, there is no difference between single or partnered motherhood; both diminish women's chances of entering full-time employment in the British and West German contexts respectively. The second analytical step, then, explores differences in patterns of careers during and after single motherhood using sequence analysis (Chapter 7). The analysis finds eight typical employment trajectory patterns in the data, which are unevenly distributed across the two country contexts. In line with the expectations, British trajectories more often entail non-employment compared to trajectories observed in the German context. Moreover, a large proportion of British

employment careers during and after single motherhood are unstable, often featuring one or more interruptions or severe ruptures. Among the observed trajectories of German women, part-time careers make up a large share. That means that there is evidence supporting the idea of regime-typical outcomes for family-employment reconciliation when careers are observed as processes. The third analytical step investigates factors associated with stable employment careers using further regression techniques (Chapter 8). In particular, this explanatory step tests the life stage assumption in terms of long-term career development. For one, the analyses examine factors associated with different degrees of labour market attachment during and after single motherhood. The evidence supports the life stage hypothesis, suggesting that a lower age at first entering single motherhood results in trajectories with more periods of nonemployment. In the second part of this step, the career typology is used for analysing whether women's characteristics at the time of single motherhood are associated with the probability of having a full-time trajectory rather than another one. The results suggest that starting off in single motherhood with preschool children makes part-time or unstable career trajectories more likely compared to when children are older. As expected, occupational class also contributes to explaining types of career trajectories during and after single motherhood. Compared to professional occupations, elementary ones make insecure trajectories more likely. This supports research stressing social class as a major factor.

The thesis concludes that life course timing of single motherhood contributes to understanding differences in women's immediate employment transitions as well as in the subsequent career development. The life stage model proved useful in that it enables disentangling some of the interactions between dynamics in family life and employment processes, which unfold in the context of countries' institutional environments. Rather than aspiring to replace established concepts such as social class and skill attainment, the aim was to

add life course aspects for analysing family–employment reconciliation in single motherhood. The empirical analyses of this thesis demonstrated the value of each of the concepts, suggesting, however, that the focus on one exclusively is limiting. One thing this study illustrates particularly clearly is, after all, the diversity in employment patterns of women with single motherhood experience. While it is uncontested that 'inherited' socio-economic inequalities do contribute to women's chances of being successfully integrated into the labour market, these interact with individual and institutional conditions experienced in the single motherhood situation and thereafter.

As for contributions to the research landscape, the present project stands out in several aspects. For one, this study of employment careers of women experiencing single motherhood is an example case for research of topical issues emerging from historical processes of social change (e.g. Beck-Gernsheim, 2002) based on 'newer' theoretical principles such as the life course perspective (cf. Mayer, 2009). The subject links several areas of research with different research focuses, ranging from gender relations to labour market inequalities to consequences of policy provision. The main aim of the current project is to contribute an evaluation of mechanisms at the intersection of these domains. While single motherhood can be understood as one mode of gender inequality when it comes to the distribution of parental care responsibilities, it may also be considered in its capacity to create unequal opportunities for individuals in the labour market. In this function single motherhood is not confined to the gender question but rather opens the view for differences among women. Disaggregating the labour market inequality question beyond the gender divide emphasises issues of intra-group heterogeneity. Not only does this perspective sensitise for more universal stratification mechanisms potentially at work, as is reflected in the social class discourse, but it also allows for an understanding of single motherhood in its diverse forms and its heterogeneous outcomes. The focus on women alone is justified in this context by their higher empirical risk of experiencing single parenthood compared to men, which may be considered a result of gendered parenting roles. This higher risk also goes along with a historically developed institutionalised image of 'the single mother'. This implies that the social, cultural, regulative and material experience for single fathers is often qualitatively even more distinct than it is among mothers who are single. These aspects make single fatherhood a subject for study by itself, which is beyond the scope of this study.

In addition to the substantive contributions this thesis also enriches the research landscape by using a range of methods which transcend the core methodological canon in this area. Treating single motherhood as a dynamic family situation requires using methods that are able to capture processes. With fixed effects regression and sequence analysis, two techniques for addressing different aspects of the longitudinal perspective are used. Fixed effects regression is arguably one of the rare methods for exploiting the merits of panel data efficiently (Allison, 2009). In a design resembling the experimental logic employment statuses are measured for the same women before and after they experience change in family life. The method enables controlling for unobserved heterogeneity, which is generally difficult to control for and remains an undesirable intervening factor in most other explanatory analyses. The present study benefits from the application of this method, because single motherhood is a classical case for ascribing causal effects where unobserved factors are at hand (e.g. Steele et al., 2009; Zagel et al., 2013). Sequence analysis, on the other hand, is not a technique for testing explanatory associations, but is a purely descriptive method. Its particular merit is that data from several sequential time points can be accounted for as a chain of statuses (Macindoe and Abbott, 2004). This makes it particularly useful for analysing employment as career process (e.g. Brzinsky-Fay, 2007; Halpin and Chan, 1998). The use of these methods on the subject of the thesis provides new perspectives in research

on single motherhood and employment. What is more, the combination with the country comparison is a further contribution to the field.

On this basis, the research contributes to the debate on the role of welfare states in setting the opportunity structures for the employment of mothers who are single. The results suggest that welfare provisions matter for women's ability to maintain their household in a single motherhood situation. In terms of policy, the findings emphasise the importance of differentiating between subgroups of women in single motherhood. On the whole, the thesis invites thought about policy approaches addressing inequalities accumulated prior to single motherhood (cf. Ott et al., 2003) rather than putting the family situation at the heart of policy measures. However, tailor-made policy approaches aiming at bringing women in single motherhood into employment do have to consider the specific barriers that exist, one of which seems to be access to affordable childcare covering mothers' work hours. In addition to current policies' focus on children's age, the results of this thesis will highlight the importance to consider potential measures of support to women in single motherhood in respect of the career stage they are in.

Chapter 2 Literature review

This chapter reviews empirical research looking at single motherhood in the British and the German context. The review is organised into three sections. In the first two sections empirical findings from research on single motherhood in the UK (Section 2.1) and Germany (Section 2.2) are presented. The separate presentation of each case reveals particularities in the research traditions on the British and the German cases. The reviewed evidence also helps to explain that aggregate employment rates of mothers who are single, as discussed in Chapter 1, differ in the two countries because of slightly different group compositions and characteristics. Accordingly, the review demonstrates the variety of circumstances in which women in single motherhood live and work in each of the countries. A pattern observable in both country contexts is that experiencing single motherhood at certain life stages often goes together with particular sets of socio-economic and family circumstances. In Section 2.3 some conclusions from reviewing the country-specific literature are drawn in a comparative perspective. This section, especially, points to the weaknesses and potentials of the two nationally-specific empirical research traditions. It demonstrates that the preoccupation with social class in research on the British case can add to the perspective taken in research on the German case by pointing to stratification patterns which underpin experiences of single motherhood. On the other hand, the approach found most in research on the German case provides the analytical tools for understanding single motherhood in the biographical context. The comparative results pave the way for developing an analytical framework in the subsequent Chapter 3.

2.1 Empirical research on the British case

This section discusses previous empirical research on single motherhood in the UK. It presents, in two subsections, how the question of what influences the degrees to which women in single motherhood engage in employment is approached by the literature, and what such research has found. In Subsection 2.1.1, the framing of debates around and of research on single motherhood is discussed alongside the presentation of some key statistics. Subsection 2.1.2 discusses the main aspects research on the British case considers in explaining employment of women in single motherhood.

2.1.1 Stories and facts about single motherhood

In the British case, 'social class' is a central reference in discussions of single motherhood. Corresponding to the different existing concepts of social class (cf. Crompton, 2008), connotations of class-based arguments of single motherhood vary. The class concept underpinning most media discussions of single motherhood describes differences in prestige, status, culture and 'lifestyles'. The central argument mainly used by media commentators and political actors entails that single motherhood is a common phenomenon in 'lower-class culture', which is associated with social problems, such as high rates of poverty, benefit receipt and non-employment. Correspondingly, the public discourse around women in single motherhood is relatively negative in the UK. Narratives emerging in the political sphere and the media (e.g. Gold, 2011; ISER News, 2012; Philipps, 2011; Sky News, 2011) include the notion of mothers who are single failing to take on social responsibility (to engage in the labour market) (Lewis, 2009). Statistics showing the comparatively high rate of social assistance recipients among women in single motherhood (e.g. Department for Work and Pensions, 2012) fuel this view. The narrative persists even with changes in the share of people in single parenthood receiving income support

benefit from more than half of current single parents in 1997 to just under 30 per cent in 2010 (DWP, 2005, 2012; Gingerbread, 2012; own calculations).² The highly normative debate has been around throughout the 1990s and has been taken up by the (conservative/liberal democrat) coalition government since 2010 (Slater, 2013). It coincides with an underclass narrative that is loaded with a blaming tone (cf. Conway, 2010; Lewis, 1999).³ These politicised narratives have motivated the academic debate around single motherhood in the British case, which also often draw on a notion of social class, but use it more as a concept defining a dimension of social stratification.

In this sense, social class denotes structural inequalities in the distribution of social and economic resources (cf. Crompton, 2008). Accordingly, the association between single motherhood and lower social class background means that the family situation coincides with comparatively difficult economic circumstances (e.g. Marsh, 2001; Millar and Rowlingson, 2001; Rowlingson and McKay, 2005, 1998). Other causal links are less often made. In other words, the association is assumed to merely reflect the group composition of single mothers, among whom those with low resources are overrepresented (cf. McLanahan, 2004; Rowlingson and McKay, 1998). Hence, common factors found to explain away the negative effects of single motherhood are those

_

² Many of the former Income Support recipients have moved to the group of Jobseeker's Allowance (JSA) claimants guided by strong welfare-to-work principles (cf. Gregg and Harkness, 2003).

³ Slater (2013) illustrates the underclass thesis with a quote from a document called *Broken Britain*, produced by the government-informing conservative think tank Centre for Social Justice in 2006: "We have adopted an inclusive use of the term 'family breakdown' which can be summed up in three key words: dissolution, dysfunction, and 'dad-lessness'." The document suggests that the alleged rising number of 'families without fathers' among socially disadvantaged families was one of the driving causes of a 'dysfunctional society' with e.g. high levels of vandalism and crime.

describing women's socio-economic status, such as educational attainment, class of origin and neighbourhood deprivation (e.g. McKay, 2003). Moreover, moving into single motherhood may increase the risk of socio-economic disadvantage, but if those entering the situation are already underprivileged the disadvantages intensify (Rowlingson and McKay, 2005).

Rowlingson and McKay (1998) investigate belief in the widely held stereotype that women with low socio-economic background are more likely to enter single motherhood, and more often do so by having a child outside a partnership, than those who are better off. Their findings show that, as the result of a process involving "having sex; not using contraception or not using it successfully; getting pregnant; not having an abortion; not getting together with the baby's father (or any other man); and not giving up the baby for adoption" (Rowlingson and McKay, 1998, p. 94), having children outside a partnership is often associated with being from a low socio-economic background. However, their examination of differences between women entering single motherhood via the two most prevalent routes, having a child outside a partnership and separation from a partner (including divorce), shows that the growth in single motherhood from the 1950s and 1960s to the 1990s was mainly due to a continuous increase in the occurrence of partnership separation. This indicates that single motherhood has not become a more widespread phenomenon because more women with low socio-economic status become mothers outside a partnership (Rowlingson and McKay, 1998, p. 196). Rather, separation is the most important route into single motherhood and its significance has been increasing since the 1960s (ibid.). Separation can be associated with severe economic penalty for women who enter a situation of single motherhood (e.g. Andreß et al., 2006) as they lose the second potential contributor to household income.

Indeed, regarding resources for maintaining a living for their family members, the average single parent is relatively disadvantaged compared to those in two-parent households in the UK (Gingerbread, 2012). For example, 40 per cent of women in single motherhood are social housing tenants compared to 12 per cent of two-parent households (ibid.). With home ownership being relatively common in the UK,⁴ social housing remains a good indicator for economic disadvantage. Inequality in disposable income is also pertinent even if mothers are in employment. The median weekly income in 2008 for single-parent households in which the parent was employed for at least 16 hours per week was £337, compared with £491 for two-parent households in which one parent was employed, and £700 where both parents were employed (DWP, 2010a, Table 6.3). Low economic resources constrain women's ability to 'outsource' parts of childcare and housework responsibility (Cooke and Sayer, 2012) either by directly covering costs for these services or by making facilitators (e.g. transport, prepared food) affordable options.

Low incomes also reflect corresponding labour market positions and qualification profiles of mothers who are single. Furthermore, where they do paid work for 16 or more hours per week, women in single motherhood are less likely to be in the top three groups of the Standard Occupational Classification (SOC) (managerial, professional and associated professional) than partnered mothers working the same amount, regardless of the partner's employment status (DWP, 2010a).⁵ The share of women having no completed academic

.

⁴ Owner occupation was at 69 per cent in 2000, with 21 per cent living in social rented and 10 per cent in other rented housing in the UK. In comparison, only 43 per cent of people in West Germany were owner occupiers in 1998, 10 per cent were living in social rented and 47 per cent in private rented housing (Pickvance, 2007, p. 510).

⁵ Of women in single motherhood working 16+ hours, 30 per cent were in the top three SOC groups, while 48 per cent of partnered women working 16+ hours who had a partner also

qualifications is relatively high (24 per cent) among those in single motherhood compared to that among partnered mothers (10 per cent) (DWP, 2010a; Table 4.3). On the other hand, women in single motherhood are underrepresented at the higher end of the academic qualificational scale with only 11 per cent having a first degree or higher compared to 26 per cent of partnered mothers (ibid.).⁶ These statistics give a rough idea of the difficult economic circumstances in which many mothers who are single are living in the UK. As has been shown, socio-economic factors can be seen as both outcomes of single motherhood and conditions predating a woman's experience of single motherhood. So far, their role as the precondition for or the result of employment has not been clarified. The following section more explicitly evaluates factors influencing the degree to which women in single motherhood engage in employment in the UK.

2.1.2 Single motherhood and employment

As indicated in Chapter 1, single motherhood is commonly viewed as an extreme example of conflict in family–employment reconciliation (e.g. Edwards and Duncan, 1996; Lewis, 1989; Millar and Ridge, 2001). This is an indication of the increased difficulty women experience in trying to manage the competing demands of the two spheres of economic maintenance of the household and caring for the home and children. In the family sphere this concerns, on the one hand, children's needs to be supervised, and on the other hand, the ability to transfer care responsibility from the mother to other providers, be they formal or informal⁷ ones (see Gingerbread, 2010; Misra et al., 2012). The issue of

working 16+ hours were in these SOC groups, and 40 per cent of those working 16+ hours whose partner was not working (DWP, 2010a; Table 5.6).

⁶ In terms of vocational qualifications, mothers in couples are almost equally unlikely to have any (42 per cent have none) as women in single motherhood (45 per cent).

⁷ The distinction of formal from informal childcare provider is that the former is not primarily based on personal social contact and also has at least a basic organisational character.

family–employment reconciliation has been increasingly discussed in response to recent government reforms in the UK (Haux, 2012; Lewis, 2009; Skinner and Finch, 2006). As is further discussed in Chapter 4, reforms tightened the conditionality of the social assistance benefits which people receive on the basis of their single-parent status by reducing its eligibility-marking child age threshold by lowering the upper age-limit of children for whom benefits would be paid. The underlying issue here is whether and to what degree conditions for mothers' engaging in employment are improving as their children get older, that is, because of a diminishing need for supervision over their children's lives or improved options of external provision of such care for older children. In 2008, 37 per cent of women in single motherhood lived with a youngest child aged between 0–4 years, 28 per cent had a child aged 5–10, 24 per cent one aged 11–15, and 11 per cent one between 16–18 years (ibid.). This distribution did not diverge much from that in households with coupled mothers.

Overall, mothers with younger children are less likely to be employed (Eurostat, 2012c). Statistics also show that women in single motherhood whose children are in preschool age are less likely to be employed than those with older children or partnered mothers with preschool children in the UK (DWP, 2010a). On the other hand, unpartnered women with children aged 11 and older are sometimes reported as having higher employment rates than partnered mothers of children of the same age group by the end of the 1990s (Gregg et al., 2009; Haux, 2012). Data from 2008 do not, however, give strong support to this pattern, but do show that partnered mothers remain more likely to be employed if their children are aged 11–16 (see Table 2.1). This could point

⁸ The reforms are further discussed in Chapter 3.

⁹ For mothers in couple settings children's age distribution in 2008 in the UK was 0-4 years: 46 per cent , 5–10 years: 25 per cent , 11–15 years: 20 per cent , 16–18 years: 9 per cent (DWP, 2010a; Table 2.1).

to data inconsistencies, but could also be a reflection of other trends in the first eight years of the 2000s, such as a catching up of partnered mothers. As mentioned above, reasons for these patterns can be related to the diminishing need for constant supervision with children's increasing ages or with mothers' better possibilities of sharing their care responsibility with others, such as childminders, teachers at schools or others in informal settings.

Table 2.1 Employment rates of women in different family situations by age of youngest child

Age of youngest child	Single motherhood (%)	Co-parenting motherhood (%)
0–4	36.53	49.72
5–10	50.38	64.98
11–15	64.07	71.27
16–18	72.09	72.08

Source: Department for Work and Pensions, 2010: Families with children in Britain: Findings from the 2008 Families and children study (FACS), own calculations based on tables 2.1, 2.3, 5.2.

The difficulty of reconciling family and employment can be assumed to intensify if there is more than one child in the household, as mothers' tasks diversify. For example, mothers may be involved in the organisation and logistics of their children's needs and activities (e.g. nurseries, schools, sports practice, music lessons, homework support). On average, however, mothers who are single more often have only one child and much less often than partnered mothers do they have two children; single mothers and those in two-parent families are equally likely to have three or more children. In the UK, in 2008, over half (58 per cent) of women in single motherhood had only one dependent child, ¹⁰ 28 per cent had two and 14 per cent had three or more dependent children (DWP, 2010a). Single motherhood with three children of different ages can be assumed to reflect a rather distinct biographical experience, compared to that of a mother with an only child. Not only does a

¹⁰ Defined as children living with their parents and are either aged under 16 or in full time education, but excluding children who have a partner, spouse or child living in the household.

higher number of children suggest that the mother is older, but it also points to different possible scenarios in how the family constellations developed. These factors may have an impact on women's ability to engage in employment, which is discussed below.

Indeed, McKay and Rowlingson (McKay, 2003; Rowlingson and McKay, 2005, 1998) stress that single motherhood is not a static social status, and that considering its dynamics can be crucial for analysing labour market outcomes of women. Particularly the demographic variations reflected in mothers' and children's ages imply that single motherhood occurs at different time points and for different durations in women's lives (Rowlingson and McKay, 1998). Some research specifically examines the transitional character of single motherhood, defining it as an episode of unpartnered mothers sharing the household only with their dependent children, which has a starting and an end point. Hence, single motherhood 'ends' if the partner moves in and the household constellation is changed. Re-partnering is the other major end to single motherhood alongside children moving out of the household. Based on the idea that re-partnering may be a path out of poverty in that it can resolve issues around childcare and low income, Skew (2009) unpicks re-partnering mechanisms based on longitudinal data from the British Household Panel Survey. She finds that the chances of re-partnering are particularly low for women entering single motherhood at an older age, for those who live off a transfer income, and for those with more than one child. This suggests that, if re-partnering is indeed a route out of economic disadvantage and reconciliation problems, it does not seem to be the most available option for some who seem to need the most support. How much of a problem for women's employment is it, however, for a single mother to remain in single parenthood for longer?

McKay's (2003) approach considers the duration of single motherhood for employment outcomes. He looks at labour market statuses before and after

entry into single motherhood, using retrospective life-history data of British women in 1994–95. The results show that only just over half of the women who were non-employed at the point of transition into single motherhood remained inactive five years later if they were still mothers in one-parent families. This indicates that a large share of women in single motherhood move into employment as time passes. Several reasons could account for this, among them being economic necessity or that the children reach an age in which they require less supervision. The study by Evans et al. (2004) aims at identifying what determines having different employment transition patterns for women in single motherhood. They find that the employment-non-employmentemployment pattern is associated with single motherhood at ages over 30, with only one child, longer-term employment experiences and A-level qualifications. The non-employment-employment-non-employment pattern on the other hand is associated with mothers' ages in the twenties, having three or more children and having health problems. Stewart's (2009) results point in a similar direction. Analysing why women experiencing single motherhood have different types of employment trajectories in the UK she finds that mothers' circumstances at childbirth matter. Compared to steady home-carer trajectories or mixed employment trajectories, having a steady employment trajectory is associated with relatively more favourable socio-economic position, fewer children and also higher average age at childbirth. The results supplement above-presented information from cross-sectional statistics, suggesting that being in single motherhood at different life stages is associated with particular sets of employment constraints. Interestingly, this latter point is more strongly picked up on in German research on single motherhood. The framing of the German discourse and findings of relevant empirical studies are discussed in the following section.

2.2 Empirical research in Germany

This section gives an overview of previous empirical literature on single motherhood in Germany. Subsection 2.2.1 illustrates how single motherhood is approached as a research topic, demonstrating that it is much less concerned with aspects of social stratification than in the British case. In subsection 2.2.2 the perspective on the relationship between single motherhood and employment in research on the German case is presented on the basis of some empirical studies. It should be noted that, although this study focuses on West Germany, many statistics aggregate information for the entire country, making it difficult to separate out differences between women in East and West Germany. Differences will be flagged up where possible.

2.2.1 Potentials and positions

While it was shown that, in the British case, single motherhood is often discussed in a social class context, research on the German case tends to emphasise that single motherhood comes with a set of burdens for the mother. In contrast to the strong tradition of British research in making class central to social analysis, the German case reflects a tradition of social research which tends to refuse class as a valid concept of stratification (Dahrendorf, 1968). Rather, especially since the late 1980s, German sociology has been strongly influenced by ideas emphasising horizontal differentiation of society, as, for example, promoted by Beck and Beck-Gernsheim (Beck and Beck-Gernsheim, 2001; Beck, 1994, 1986; Beck-Gernsheim, 2002). This perspective also implies that single motherhood has been discussed in a much less negative discourse regarding alleged failures to engage in the labour market in Germany (cf. Ostner, 1997), because single motherhood is considered being one of the horizontal social categories. Furthermore, the emphasis in German research is

¹¹ This view seems to be rooted in German sociologists' ambition to refute Karl Marx' theory of class conflict, which has also led to challenges of his analytical concepts (Dahrendorf, 1968).

typically not put as strongly on the potential negative social and economic consequences of having a child outside a partnership, but more on those of a couple separating. This point is, for example, stressed by Ott et al. (2012) who find that single motherhood is not usually pursued as a way of life (p.23). The perspective is also less associated with a focus on women's choice or responsibility for being in this family situation. Instead, research on the German case has been much in the spirit of understanding single motherhood as 'weibliche Lebenslage' (Enders-Dragässer and Sellach, 2002). This notion, not grasped by any term in English language, denotes single motherhood as a situation in which women's scope for action is framed by its material and social circumstances in a way that is specific to the lives of women. Single motherhood is discussed with a focus on women's role as a mother who is, voluntarily or involuntarily, living outside the normatively dominant model of the two-parent family setting and confronted with a particular set of social and economic conditions (e.g. Enders-Dragässer and Sellach, 2002; Schwarzkopf, 2009). As will be shown in the following, this emphasis on how the maternal role can be fulfilled can add to the British perspective. Just like research in the British case, however, in the German case the research discourse is couched in aggregate statistics indicating that women in single motherhood are in a disadvantaged socio-economic position compared to partnered mothers.

In terms of income this means that women in single motherhood rely, on average, on fewer economic resources than mothers in couples: 31 per cent of 'single mother households' had a net monthly income lower than €1,100¹² in 2009 compared to only 8 per cent of couple households (Destatis, 2010, p. 28). Earnings from employment was the main income source for 58.2 per cent of women in single motherhood compared to 52.5 per cent of women in two-

 $^{^{12}}$ That is £876.56 according to conversion rates of the Bank of England as of 8 Nov 2012, and about £203.85 per week.

parent households (Destatis, 2010, p. 26). This implies that West German women in single motherhood rely more on market work, taking on the role of the breadwinner, while couple arrangements still often involve a traditional division of household labour in which women rely on their partner's income. On the other hand, transfer payments (social assistance benefits) were the primary income source for 31.3 per cent of women in single motherhood in 2009, but for only 6 per cent of mothers in couples with children, which reflects the important role such payments have in securing economic subsistence of women in single motherhood.¹³ Compared to 1996 the share for women in single motherhood had gone up from 27.2 per cent relying on transfers as their main income while it remained stable for mothers in couples (ibid.).¹⁴ As suggested by British research, some of the socio-economic disadvantages of women in single motherhood compared to partnered mothers may be due to the composition of the groups of women. Indeed, women in Germany are less likely to have high and more likely to have low qualifications when observed in single motherhood. The share of those with no completed vocational qualifications was 24 per cent among women in single motherhood in 2009 compared to 18 per cent of mothers in two-parent families. High attainments were held by 18 per cent of women in single motherhood compared to 22 per cent of partnered mothers. An almost equal share of 59 per cent of women in single motherhood and 60 per cent of partnered mothers had intermediate qualifications in the same year (Destatis, 2010, p. 22).

-

¹³ In East Germany these relationships are reversed. Mothers in a partnership are here more likely to be employed than their single counterparts; and East German women in single motherhood are overrepresented among transfer payment recipients (Destatis, 2010).

¹⁴ These shifts are likely to be partially explained by changes at the level of claimant categorisation (Jaehrling et al. 2012, p.126) resulting from the merging of social assistance and unemployment benefit in the 2005 welfare reforms into benefit of basic support for job seekers (Grundsicherung für Arbeitssuchende/ALG II) (BMAS 2011; Destatis 2010).

Beyond aggregate statistical profiles, studies on interrelations between single motherhood and employment in Germany have often been explorative or inductive. A central aim has been to establish what are typical patterns of living and working among women in single motherhood and to classify these in ideal type categories (BMAS, 2011; Kull and Riedmüller, 2007; Mädje and Neusüss, 1996, 1994; Ott et al., 2003; Schneider et al., 2001; Schöningh et al., 1991). This was often based on qualitative analysis, especially in the early studies. Some research also draws on quantitative data facing the same trade-off between limited sample sizes and longitudinal data as research on the British case (e.g. Ott et al., 2012). Strikingly, compared to research on the British case, aspects of 'diversity' among women in single motherhood are addressed more clearly from an analytical angle that stresses the biographical dimension. That means that the circumstances of women in single motherhood are more explicitly evaluated in terms of family and employment histories than is the case in British research (e.g. Schneider et al., 2001). This may reflect the methodological traditions and contexts of academic cultures and different norms and discussions of social class. In any case, research on the German case includes rich descriptions of women in single motherhood from various perspectives.

One approach has been to look at differences among women in single motherhood in terms of how meanings and identities around their status as single mothers are negotiated (BMFSFJ, 2011a; Mädje and Neusüss, 1994). This is often in the context of their receipt of social assistance benefits. For example, Mädje and Neusüss (1994) investigate the degrees to which benefit-receiving women currently in single motherhood view their situation as constraining. With a sample of 313 women living in Berlin, their data basis is relatively large for a qualitative study, although limited to one German city. On the basis of their in-depth interviews, Mädje and Neusüss identify a division of perceptions between women evaluating their situation as constraining or stigmatising and

those who feel particularly enabled by the receipt of state support. Based on her study of women in single motherhood in Berlin and London Klett-Davies (2005) found similar patterns, differentiating between three types of women in single motherhood (pioneers, copers and strugglers) with different strategies of making sense of their benefit receipt. 15 Including data from qualitative group interviews with both benefit receiving and non-receiving women in single motherhood, a report by the German Federal Ministry for Family, Senior Citizens, Women and Youth (BMFSFJ, 2011a) highlights the progressive potential in the surveyed women's life strategies in three type categories (partnership-oriented perfectionist, flexible pragmatists and competent realists). This focus on individually perceived potentials seems to have the downside of obstructing the view on structural inequalities in accessing employment among the women, as are commonly demonstrated to exist by British research. However, the report does refer to the types of orientations being associated with women's life stages at single motherhood. For example, women in the partnership-oriented perfectionist type are characterised as being generally younger, having younger children and having separated from their partners relatively recently. Considering the overall age distribution, it is more likely for women in single motherhood in Germany to be in one of the other type categories. In 2011, only 15 per cent of women in single motherhood were in the youngest age group and between 20 and 29 years old, 30 per cent are between 30 and 39, 47 per cent are between 40 and 49 and 8 per cent are aged 50 or older (BMFSFJ, 2012). In comparison, then, these data suggest that women who are currently in single motherhood in Germany are less likely to be younger than those currently experiencing single motherhood in the UK. However, in both countries, most women in single motherhood are older than 35. The BMFSFJ (2011a) report indeed ascribes its two other ideal type categories, which are associated with a more stable and

_

¹⁵ Although framing the analysis in terms of welfare arrangements in two countries, Klett-Davies does not make analytical use of the comparative design.

self-assured perception of self, to older women with more established social networks and career pathways, and with older children. The age ranges of children correspond to the dominance of these two patterns in that older children are overrepresented among single mother settings. In 2009, 47 per cent of women in single motherhood had a youngest child who was in their teens (10–17 years), 22 per cent had a child aged 6–9, and 31 per cent had a preschool child (younger than 6 years) (Destatis, 2010, p. 15).

Using data from 30 biographical interviews, Mädje and Neusüss (1996) also characterise their six identified categories of benefit-receiving women in single motherhood in reference to age bands and ages of children. However, their focus is specifically on the particular role of social assistance in the identity construction of women in single motherhood. On the one hand their results confirm that there are different forms of orientations and strategies with which women in single motherhood define their successes in family and work life. On the other hand they find that among younger women in single motherhood the type category consolidated phoenix is one of the common patterns. This pattern, despite low qualifications and relative labour market distance, involves women's perception of 'finally having achieved something' in the care of their (young) child. Another type category conveying a divergent finding to the aforementioned report is that of tradition/convention. This type is characterised by women's middle age and perceptions of failure and exclusion from social and economic life. They often have no or very limited qualifications, no labour market experience and long periods of benefit receipt, which they perceive as stigmatising (Mädje and Neusüss, 1996, pp. 90–93). This analysis suggests that in addition to the current life stage at single motherhood, past biographical pathways shape the experience as do projections of future trajectories. The next section looks at specific links research on the German case has revealed between single motherhood and employment.

2.2.1 Single motherhood and employment

The research interested in employment behaviour of women in single motherhood in Germany is also often concerned with biographical aspects. One focus is the interplay between processes in the family and employment spheres, for example studied by Schneider et al. (2001). Their study covers both orientations towards employment and actual employment practice across longer biographical periods. The authors use their data of 80 biographical interviews for categorising and describing five characteristic types of experiencing single motherhood and one for single fatherhood.¹⁶ They stress that single motherhood seems to affect the labour market history negatively where employment interruption coincides with single motherhood or followed soon afterwards. For example, women in their sample whom they categorise as young and never married tend to interrupt their employment with the birth of their children (Schneider et al., 2001, p. 80). These women have difficulties in entering or returning to employment after several years of non-involvement in the labour market. The authors ascribe the women's problems to their little work experience and overall low qualifications, but also suggest that they would typically be 'family-oriented'. Women categorised as divorced after long marriage in the same study, on the other hand, are characterised as employmentoriented. Employment orientation is also reflected in the two sub-patterns in this type category: continuous involvement in labour market activity or postdivorce take-up of employment (ibid., p.90ff.). Due to their overall higher qualifications women of this ideal type have a structural advantage over the previously discussed group. In addition, women in the *divorced* category often attend further education for improving their chances on employment. Hence,

_

¹⁶ The period covered by the interviews is from birth child to the time of the interview (end of the 1990s). Interviewees are grouped into 6 ideal-types of single parents: the young, never married, the divorced after long married, the widowed, the multiple-dads-families, the high-income single mothers and the single fathers.

according to their analysis, the mother's age at which she first experienced single motherhood as well as previous partnership constellation and employment-orientation are the most important influences on her employment history.

The observed employment behaviour of women receives more attention than their orientations in Kull and Riedmüller's (2007) study. The authors' strategy is also to categorise different profiles of women in single motherhood, but they use quantitative longitudinal data of employment histories from the Socioeconomic Panel (SOEP). Such data generally has the potential for statistical analysis and generalisation of the results to larger populations, because the survey design follows rules of sample randomness and representativeness. However, this applies to Kull and Riedmüller's analysis only with reservations, since their subsample of 81 East and West German women is rather small and highly selective.¹⁷ Nevertheless, the data allow for considering at least five consecutive years of women's observed labour market positions. 18 The patterns Kull and Riedmüller find in the data serve as the basis for developing a typology of labour market trajectories. They differentiate between continuity, labour market return and labour market exit as overarching categories. Continuity in employment status is observed particularly often, but is divided into women closely attached and those distant to the labour market. These two types mark opposite cases in terms of labour market status as well as for

.

¹⁷ It can be questioned whether the requirement of a random sample is fulfilled, because the selection criteria for the sample of women (single motherhood in 2002/03; surveyed for at least five years) could be systematically related to the probability to be in the survey or to drop out (which is unknown for this group) (see also Ott et al., 2012 and Chapter 5).

¹⁸ The observation periods of five or more waves start between 1992 at the earliest and 1999 at the latest. The respondents had been living with a child under age 16 but without a partner in 2002 and 2003, excluding those who lived with parents or other adults in the same household.

developments in family life. Women in the labour market citizen (continuous employment) type had their first and often only child, resulting from a dualearner marriage, when they were around age 30, and do not interrupt their employment for more than one year. They are highly qualified and can rely on good incomes. The *labour market distant* (continuous non-employment) type, on the other hand, is characterised by often having more than one child, the first of which was born when the mother was aged around 26 (Kull and Riedmüller, 2007, p. 45). The labour market integration of women in this type category was not advanced when they had their children, which created barriers to later employment, as did their overall lower qualifications. The women categorised as labour market returners comprise both those reacting to the changed economic situation after separation from their partners with taking up employment, and those returning to employment from a break of acquiring further qualifications (ibid., p.46-50). Women categorised as labour market leavers are divided into those for whom labour market exit was induced by family circumstances (e.g. increased time for childcare) and those who left the labour market because of their meagre chances of getting a well-paid job. 19 To some extent, these results seem to mirror what was shown in British research regarding the associations between women's family histories, socio-demographic profiles at single motherhood and employment experiences. This is especially the case for the opposite poles of continuous employment and continuous non-employment. Less clear are the mechanisms behind leaving and returning to employment in the two countries. Further insight may be gained from another recent study.

Ott at al. (2012) also use quantitative survey data from the SOEP, but look at the three or more years of employment trajectories following from entry into single motherhood. They regard single motherhood experiences occurring at any time

_

¹⁹ These latter type categories are based on rather limited data (5 cases each) which makes generalisations problematic. They are thus not further discussed here.

point in respondents' observed life histories. Hence, their analytical angle is slightly different from Kull and Riedmüller's who are looking at women experiencing single motherhood in a particular year (2002–2003), with employment trajectories not only following but also preceding that experience. This implies that Ott et al. (2012) put their focus more on the potentially universal consequences of single motherhood on employment than on what it meant at a particular point in time. With this approach they also broaden their criteria for relevant cases in the data and are able to extend their data. Again, Ott et al.'s analysis results in a typology, but with four categories: stable fulltime, unstable part-time, stable part-time and stable non-employed. Comprising about 40 per cent of the sample, the group of unstable trajectories is the largest, while around 30 per cent of women have stable full-time trajectories following their first single motherhood experience, 15 per cent of the women are in each group of stable part-time and stable non-employment trajectories. The authors find indications for a period effect that involves increasing numbers of women in single motherhood who have unstable trajectories in the 2000s compared to those in the 1980s-1990s. This again points to the time-dependency of the conclusion Kull and Riedmüller draw from their analysis. Characterising women with unstable trajectories, Ott et al. find that they often have preschool children, more than one child, intermediate qualificational levels, but rarely tertiary attainments. Once more, this could imply that family-employment reconciliation in single motherhood is more difficult when children are young and if qualification levels are low. Patterns confirming influences of age at single motherhood are also found in Ott et al.'s results. Stable full-timers are less likely to be younger than 30 years while younger mothers are overrepresented among those with stable non-employment trajectories. Among women with unstable trajectories younger women are also over-represented compared to the stable full-time and the stable part-time categories. In addition to the descriptive accounts of trajectory patterns, Ott and colleagues conduct explanatory analysis on determinants of changes in mothers' labour market involvement. Their results support the thinking that having a preschool child in single motherhood makes reductions in work hours likely, but also that having teenage children increases women's probability of taking up full-time employment. Although this study comes closest to a general account of single motherhood as an issue of family–employment reconciliation in Germany, the question on what combination of factors leads to having a particular employment trajectory pattern still remains unanswered. This and other shortcomings of the previous literature are presented in the subsequent section.

2.3 Comparison of empirical findings: conclusions

This section draws conclusions from the comparison on of the two reviewed bodies of literature and points out where they add to each other and where they are similar. The discussion will show that the two research traditions combined cover central issues of single motherhood and employment empirically, but also that no coherent conceptual lens is provided, with which to make sense of all empirically relevant aspects. The first subsection (2.3.1) contrasts the British and German research perspectives on single motherhood and summarises commonalities and differences in their empirical findings. Merits and weaknesses are discussed in subsection 2.3.2, suggesting that the perspectives' specific blind spots become particularly apparent in the comparison. The section presents the conclusions in reference to the relative general lack of theoretical framing of the empirical analyses in this research domain.

2.3.1 Research traditions

The main conclusion from the country reviews is that research on single motherhood in the German and the British cases take different perspectives, which complement each other. Namely, the preoccupation with social class in the British case complements the perspective in research on the German case in pointing to the fact that there are broader stratification mechanisms underpinning the single motherhood experience than just those evolving from

separation. From research on the German case, on the other hand, the British perspective can 'learn' that biographical contexts of single motherhood contribute to diversifying the experience. While single motherhood is discussed as a family-employment reconciliation problem in both country cases (e.g. Jaehrling et al., 2012; Lewis, 2009; Ott et al., 2012), stronger emphasis is put on meeting requirements of the labour market in the British case and on meeting those of the family in the German case. The different perspectives of familyemployment reconciliation in a situation of single motherhood can be characterised as follows: in the British case the underlying question seems to be 'how women in single motherhood manage to fulfil their role as a labour market participant despite being a mother'. In Germany, on the other hand, the question research poses is rather 'how women in single motherhood manage to fulfil their role as a mother despite the need for generating income'. This could be a result of or a precondition to the differences in aggregate employment rates between the countries. In any case, broaching the subject from two angles, the literatures add to each other. However, in the results they produce the two literatures concur to some degree.

Accordingly, the review of previous research on the British and the German cases demonstrates that women in single motherhood are often economically disadvantaged compared to mothers in couples. This is because, on the one hand, single motherhood is often associated with loss in household income or resources (Andreß et al., 2006; Bradbury et al., 2001; Millar and Ridge, 2001). On the other hand, women with a low socio-economic background are overrepresented among women in single motherhood (Jaehrling et al., 2012; Ott et al., 2012; Rowlingson and McKay, 1998). The issue of economic disadvantage among women in single motherhood is central in both research contexts, but is approached rather differently. In the British case social class has played a key role, on the one hand, in describing single motherhood, and on the other hand in explaining whether and to what degree women in single motherhood engage

in employment. The fact that many women living in single motherhood in the UK are clearly socio-economically disadvantaged compared to two-parent families (e.g. Gingerbread, 2012; Marsh, 2001), and many are from a lower class background (McKay, 2003; Rowlingson and McKay, 2005) has been used as explanation for non-employment. This explanation is based on two assumed causal connections, which are sometimes conflated; namely the one between social class and single motherhood and the one between social class and employment. As was shown above, the relationships are complex and generalisation is often problematic because available empirical data are insufficient. In research on the German case social class is not a widely used concept. Here, socio-economic background is mostly accounted for as women's own qualificational achievements. Although level of qualification and social class are theoretically connected and generally found to be empirically linked (e.g. Goldthorpe, 1996), they are distinct concepts. In the German case, biographical stages in women's lives are viewed as a central analytical element for understanding consequences of single motherhood (e.g. BMFSFJ, 2008a, 2011; Mädje and Neusüss, 1994; Schneider et al., 2001) and education is one of the biographical dimensions. It is often shown that women whose single motherhood experience is in their early- to mid-twenties are more likely to be disadvantaged in terms of their employment involvement than those with experiences in their thirties or later. This was seen to be associated with the later experience which often goes together with older children, pointing to better ability of reconciling family life with employment. The fact that older women in single motherhood are also more likely to have acquired higher levels of qualifications and more work experience contributes to their relatively favourable position compared to that of younger women (e.g. BMAS, 2011; Ott et al., 2012). The associations between socio-demographic profiles and labour market participation are also visible in research on the British case (ONS, 2012b). However, although taking overall life-time inflows to and outflows from single motherhood more explicitly into account in quantitative studies

(Ermisch and Francesconi, 2000; McKay, 2003; Skew, 2009), research on the British case rarely makes the analytical links between biographical and labour market positions as is done in research on the German case. A question that remains unanswered is, then, whether the fact that a woman becomes a mother at a young age is in itself detrimental to employment, regardless of her social background, and whether this is equally the case in the two country cases? More broadly, it can be asked, which mechanisms of stratification cut through or interact with how the single motherhood experience has an impact on family–employment reconciliation, which is discussed as a 'blind spot' in the following section.

2.3.2 Blind spots

The review has shown that research on single motherhood trades off other categories of stratification for the emphasis on vertical inequalities between social classes in the British case and horizontal inequalities between biographical stages in the German case. However, the focus on social class on the one hand and biographical stages on the other hand conceptually overlap in the aspect of qualifications or skill attainment. With class origin being so closely related to individuals' prospects of acquiring high levels of qualifications (Breen and Goldthorpe, 1997), the empirical link between class and single motherhood found in research on the British case would lead to an expectation of a connection between qualifications and single motherhood. The puzzle is, then, in what way social class origin, skill level and family situation interact in defining women's degree of labour market involvement. Going beyond the preoccupation with social class in the British case, can women's higher skill attainment be expected to reduce the family-employment reconciliation problem? Or is either single motherhood or social class in fact a better predictor of employment than the level of skills? The fact that biographical stage at single motherhood seems to matter in explaining differences in women's employment underscores the surprise about skill attainment not being a more central aspect in both research traditions. Even in research on the German case, where differences in biographical circumstances at single motherhood are emphasised, conceptual links to timing of skill attainment are not formulated. The theoretical cornerstone for making these links is an understanding of standard employment careers as sequential phases of education and training, labour market entry and subsequent regular involvement (e.g. Kohli, 1985; Marshall and Mueller, 2003; Moen, 2003), where skill acquisition is assumed to occur early on. On this basis, the empirical association between experiencing single motherhood at an early life stage and the high risk of non-employment intuitively suggests that the standard career track is disrupted in the skill acquisition stage. This would entail that single motherhood is better reconcilable with a standard employment trajectory if experienced at more 'mature' life stages. The evidence for this hypothesis is patchy and has not been tested with regard to a coherent theoretical argument.

Above and beyond the level of skills, the type of qualifications women hold when entering single motherhood is a further factor that may contribute to understanding differences in employment. The assumed underlying mechanism is that different types of skills provide access to occupational domains of the labour markets, which feature varying degrees of reconciliation options (cf. Gottschall and Bird, 2003). Some studies find that there is suggestive empirical evidence for the relevance of occupational area in determining employment of women in single motherhood (e.g. Evans et al., 2004), which again previous research has not systematically tested.

Another aspect, which some empirical evidence suggests requires more attention when discussing differences in employment of women in single motherhood, is women's ethnic background. Research on women's employment in general does find differences across ethnic groups (e.g. BMFSFJ, 2010; Dale et al., 2006), but the intersection of single motherhood and ethnic

background has not been an explicit topic of public discourse or research in Europe (Krüger and Potts, 2011; Mokhtar and Platt, 2010; Zartler et al., 2011).²⁰ This could suggest that the intersection of both is empirically irrelevant. However, being a member of any ethnic minority background does not make it less likely to experience single motherhood in the UK or Germany (BMFFJ, 2000; Mokhtar and Platt, 2010). Furthermore, women's economic activity varies across ethnic groups. For example, in the UK, unemployment of white women is lower than for all ethnic minority groups (Dale et al., 2006). Research in both countries finds indications for ethnic minority background coinciding with strong employment-orientation of women in single motherhood (Edwards and Duncan, 1996; Klett-Davies, 2005; Krüger and Potts, 2011; Ott et al., 2003). On the other hand, among women in single motherhood from some ethnic minority backgrounds early marriage is common and many have low or uncompleted qualifications (e.g. BMFSFJ, 2010). Certainly, it would be wrong to assume 'ethnic minority background' was a coherent category with consistent impacts on employment (Barnard and Turner, 2011). For example, it has been shown that employment is highest for black women and lowest for Bangladeshi and Pakistani women in Britain (Holdsworth and Dale, 1997). The way in which minority background interacts with single motherhood and skill acquisition remains an open question.

In summary, previous literature on single motherhood in the UK and Germany has analytically disregarded major categories of social stratification, such as skill level, skills types (occupations) and ethnicity, by trading them off against other aspects. In the case of Germany family–employment reconciliation is assumed to dominate labour market involvement in single motherhood, while

²⁰ In the US women of black African or black Caribbean backgrounds are over-represented among those in single motherhood, which in public discourse has been used to assume causal links, implying racialisation of public discourse on single motherhood in the US.

in the British case social class is held mostly responsible for employment patterns of women in single motherhood. Despite complementing each other in the ways discussed above, the perspectives both largely disregard the conceptual 'missing link' of skill acquisition as a potentially central mechanism. The following chapter reviews theoretical approaches, which account for the aspect of skill acquisition to explain maternal employment, and develops an analytical framework for the present research.

Chapter 3 Analytical perspectives and theoretical concepts

The previous section demonstrated that literature on single motherhood in the UK and Germany is mostly empirical in a descriptively explorative way. Despite the implicit assumption of previous literature that single motherhood is an extreme form of family–employment conflict such research rarely draws explicitly on systematic theoretical frameworks. This chapter addresses the theoretical weaknesses of previous research guided by the question, 'What explains differences in the degree of employment of women in single motherhood?' As a first step (Section 3.1), the chapter evaluates analytical perspectives on women's employment in their potential to provide a framework for explaining the present research questions. In the next step (Section 3.2), based on the strengths and weaknesses of these approaches, the chapter suggests an alternative theoretical framework.

3.1 Previous theoretical perspectives

This part of the review is divided into three subsections. The first one (3.1.1) discusses family economics approaches emphasising differences in the patterns of labour market involvement between women and men. The second subsection (3.1.2) discusses other skill-based approaches, adding the aspect of institutional contexts. In the third subsection (3.1.3) the role of institutional contexts is discussed in terms of 'gendered' welfare state theory.

3.1.1 Individuals, couples and households

This section discusses family economic approaches as potential analytical frameworks for understanding differences in employment of women in single motherhood. Such approaches conceptualise women's labour market behaviour

in reference to their role as mothers, applying principles of economic theory to family life. Family economics seems to provide a suitable approach for the present research mainly because it uses skills as a key concept for understanding the relationships between employment and family life. The review of relevant empirical literature indicated that skills might be a central component of an explanation of differences in employment. The section starts with a discussion of what could be called the classical approach before turning to the bargaining approach as a perspective developed on the basis of its theoretical critique.

Undoubtedly, one of the most prominent approaches in the 'classical' domain of family economics is a development of human capital theory, most notably elaborated by Becker (1975). Mostly following orthodox economic principles, human capital theory and, in fact, family economics are built on the assumptions of utility maximisation, stable preferences and market equilibriums (cf. Mincer and Polachek, 1974). The human capital approach is an actor-centred rational choice theory. One of its key elements is that people's skills are defined as an investment in future productivity. Skills are hence marketable resources, which are entirely a function of individual characteristics (Becker, 1975). Accordingly, individuals are assumed to make rational decisions over their human capital investment. These decisions are based on the logic that individuals can expect returns on their skill investments in future earnings in the labour market. This also implies that individual differences in earnings and labour market involvement are due to differences in talent or preferences. Lower expected return also generally means lower investment. Coupled with the idea of comparative advantage, this is where the argument on the household division of labour kicks in (Becker, 1981).

The classical family economics approach assumes each household to maximise a single utility function and that there are "intrinsic differences between the sexes" (Becker, 1981, p. 21), which lead to sex-typical human capital investment decisions. These supposedly arise from women's anticipation of interrupted labour market trajectories due to childbirth and preferences for childcare. As such interruptions are presumed to be taken by women and not by men, men have a comparative advantage in their anticipation of future earnings. Consequently, women are assumed to specialise entirely on housework, or at least to invest less in their human capital than men. As a consequence, the classical family economics approach assumes marriage coupled with a division of labour in the male-breadwinner–female-homemaker way to be optimal for household production (cf. Becker, 1981).

In this framework, single motherhood is conceptualised as the result of divorce from marriage. Formulating expectations of behaviour of women in single motherhood falls outside the theoretical framework of the classical family economics model. Essentially, theoretical predictions of employment behaviour of women in single motherhood rely on the assumption that they adapt to the aftermath of a failed marriage. Because divorce is neither desired nor generally foreseeable, skill investment decisions of women experiencing single motherhood must be expected to resemble that of other women. Hence, skill investment would follow the expectation of being in partnership with a breadwinner and taking on unpaid childcare and housework. Discussing consequences of marital separation, Becker predicts that "demands of child care on their [divorced women's (HZ)] energy and attention might exceed those of married women, for they have no husbands to share any of the housework" (Becker, 1985, p. 54). Although this disregards the fact that divorced women who had been in a traditional marriage also face the lack of a breadwinner's income, labour market activity must be conceptualised in reference to the married woman's behaviour. The lack of a partner (here: husband) would be implicated with the need for the woman's own economic activity or a 'replacement' for the breadwinner. Therefore, empirical studies in household economics often investigate the role of household-external sources of income for the labour market involvement of women in single motherhood (Blundell et al., 2005; Francesconi and van der Klaauw, 2007; Gregg and Harkness, 2003; Gregg et al., 2009). These studies find support for their expectations that the extent of economic activity varies with the level of income support payment for women in single motherhood. Higher social assistance payments are associated with lower labour market involvement, which, according to this approach, can be explained with the intrinsic preference of women to undertake childcare.

The assumption of classical family economics that, based on sex-typical preferences, the 'sexual division of labour' between spouses is an optimal state implies a normative commitment to marriage. The theory has been criticised ontologically for the essentialism in the assumption of sex differences and normatively for its altruist model of the family (Tsoukala, 2007).²¹ On the other hand, other resource-based family economics approaches challenge the normative ideal of the gendered division of labour, questioning the classical model's conceptual consistency (Breen and Cooke, 2005; Foster, 1993; Oppenheimer, 1994). One criticism has been the classical framework's unitary treatment of the household, because it ignores competing interests (Blau and Ferber, 1986) and the unequal distribution of power (e.g. England and Farkas, 1986), which can exist between husband and wife. Therefore, as an alternative approach to understanding the division of labour between men and women (beyond the 'intrinsic differences' argument) researchers have applied resource

_

²¹ The primary conceptual response to the assumption of 'natural sex differences', which has become mainstream practice in the social sciences, has been to acknowledge that differences are better understood as social rather than biological categories (e.g. Butler, 1990). 'Gender' has henceforth become the preferred analytical category over 'sex', which however does not make criticism of essentialism obsolete (Hawkesworth, 1997). The discussion of these issues goes beyond the scope of this thesis.

bargaining models, allowing each spouse to have their own utility function (e.g. Manser and Brown, 1980). In such approaches, it is not necessary to assume that women have a preference for undertaking childcare. Instead, it is assumed that parents can use income for either hiring childcare or consuming goods. Childcare is understood as a common interest because child wellbeing is a 'public good' giving utility to (everyone, including) both parents (Parys and Schwerhoff, 2010).²² Separation is conceptualised as a source of bargaining power in that it constitutes the situation in which spousal negotiation of interests fails (ibid.). With this, divorce or separation is a theoretically central element for understanding women's (and men's) economic activity and childcare patterns in couples. The situation following separation is therefore formalised in some more detail than is the case in the classical model. Central is the assumption that, in a partnership, women are often in a weaker bargaining position. This is for two empirical reasons. On the one hand, child custody after separation is overwhelmingly with women, which implies the 'threat' of their being responsible for both income attainment and childcare (Parys and Schwerhoff, 2010). On the other hand, women are often economically dependent on their husbands (England and Farkas, 1986), which means that separation for them comes with high economic risk. Following the bargaining approach, separation indicates that diverging interests could not be reconciled. The allocation of resources to childcare and market work in the single motherhood situation is again down to the individual utility based on attainable wages and child wellbeing (e.g. Bernal and Fruttero, 2008; Cooke and Baxter, 2010). In summary, bargaining approaches break up the unitary conception of the household. They extend the classical family economics model to include the idea that women have individual economic interests and that

_

²² Parys and Schwerhoff elaborate the implications of divorce in an unpublished script entitled Household Bargaining over Parental Leave and Labor Market Participation. It is available online at http://emlab.berkeley.edu/users/.../laborlunch/parys.pdf

resources may be used for outsourcing childcare. Therewith, single motherhood becomes a situation with calculable constraints on family–employment reconciliation, depending on women's (human capital) resources and their ability to manage the time they can allocate to childcare. The next section discusses an approach, which accounts for the fact that both of these factors are embedded in contexts of institutional frameworks.

3.1.2 Employment and skills in context

This section follows up on the resource argument for explaining maternal employment behaviour in single motherhood. In contrast to the preceding sections this one looks at theoretical research on individuals rather than couples, which also accounts for institutional contexts. The specific starting point is a particular strand of the 'varieties of capitalism' approach (Estévez-Abe et al., 2001; Hall and Soskice, 2001), but other perspectives are also considered. In the varieties of capitalism approach, skill-based explanations for individuals' economic activity are combined with further theoretical elements which link to aspects identified as central in the empirical literature above. These include the analytical differentiation of different kinds of skills and the idea that individuals' skill acquisition and employment are placed in the context of institutional frameworks.

The respective strand of varieties of capitalism literature has been developed by Estévez-Abe and colleagues (Estévez-Abe, 2005, 2006, 2009; Estévez-Abe et al., 2001; Iversen and Soskice, 2001). Their argument is built on principles of human capital theory (Becker, 1975) and of transaction cost economics (Williamson, 1973, 1975), which are integrated in an internationally comparative analytical framework. Mainly, the human capital assumption of individual skill investment decisions is extended to include different types of skills, firmspecific, industry-specific and general skills (Estévez-Abe et al., 2001, p. 148). Here, too, skills are an indicator of an individual's future earnings in the labour

market. The following logics are applied: firm-specific skills are acquired through on-the-job training. They are the least portable skills, as their value is limited to the employer who trained the employee. Industry-specific skills are acquired in vocational schools or through apprenticeships. They are often standardised and certified by national authorities, which makes them become recognised by all employers in a given industry. General skills are the most portable type across firms and industries. Their value is independent of the type of firm or industry and they are acquired mostly in higher education.

In addition to these individual-level logics, the varieties of capitalism literature assumes that structural factors mediate skill investment risks. Its authors argue that the extent to which the workforce in a given country draws on a particular kind of skill type (e.g. mainly specific or mainly general) is assumed to correspond with this country's historically developed 'welfare production regime'. This is defined as "the set of product market strategies, employee skill trajectories, and social, economic, and political institutions that support them" (Estévez-Abe et al., 2001, p. 146). Hence, education and training systems and other institutions of the national market economies, such as labour market structures and welfare systems, stand in a complementary relationship and are assumed to facilitate a workforce with particular skill profiles (ibid.). The theory distinguishes two types of welfare production regime marking the poles of a continuum, which correspond to liberal market economies on the one hand and coordinated ones on the other hand. In these market economies social protection and the level and composition of skills of the workforce together produce 'skill regimes' with typical consequences for economic outcomes and distribution of workers across industries (Estévez-Abe, 2005). In short, coordinated market economies are assumed to have a rich institutional landscape locking economic actors into long-term relationships (Hall and Soskice, 2001). Enabling commitment and cooperation between trade unions and employers is often associated with robust vocational training systems. These and the stronger employment protection legislation as well as the generally more generous unemployment benefit payments facilitate individuals' investment in specific skills (Estévez-Abe et al., 2001). Germany is often cited as the example case for a specific skill regime. Compared to those regimes, the argument goes, liberal market economies such as the UK lack the institutional landscape and individuals are encouraged to invest in general skills.

The assumption of country-specific logics shaping individuals' skill attainments is also found in other research areas, such as the sociology of education systems (e.g. Allmendinger, 1989; Busemeyer, 2009; Kerckhoff, 1995; Shavit and Müller, 2000a). In a nutshell, this research highlights linkages between skill systems and labour markets, assuming on the one hand high regulation to produce smooth but standardised labour market entries and on the other hand low regulation to produce insecure but flexible labour market entries (e.g. Allmendinger, 1989; Hannan et al., 1996; Müller and Gangl, 2003; Shavit and Müller, 2000a). Corresponding with the idea of a 'specific skill regime' Germany is mostly cited the exemplary case for highly regulated education-to-employment transitions. The UK is often a more ambiguous case in the literature, because of its discontinued history in apprenticeship-based training (Gospel, 1995). However, since the 1980s the UK has been described as the opposite pole to the regulated German labour market entry system in Europe, indicating the relative importance of specific or general skills for the respective national welfare production regimes (Estévez-Abe et al., 2001; Wolbers, 2007). This research emphasises the role of institutions for skill and employment trajectories in the early career stages, which the discussed empirical literature had indicated to be potential junctures for employment in single motherhood. However, the education systems or school-to-work transitions literature largely disregards any reconciliation issues between family, skill attainment and employment.

The varieties of capitalism approach provides one conceptual solution in assuming that the interaction of skill types and skill regimes creates particular labour market outcomes for women (Estévez-Abe, 2005, 2006, 2009; Estévez-Abe et al., 2001). Unlike in human capital and bargaining theory, partnership is not an analytical component of this approach, neither is single motherhood. Skill investment is, however, similarly assumed to be associated with additional risks for women, because of expected family-related career interruptions which reduce the returns on investment in earnings (Estévez-Abe, 2006, p. 151f.). In addition, the varieties of capitalism theory assumes that low transferability of skills (high skill specificity) exacerbates investment risks for women. Not only are specific skills assumed to be unattractive for women who expect to interrupt their career at a later point, but employers valuing firm-specific skills would also aim at reducing their loss in investment for training and are less likely to hire women (Estévez-Abe, 2006, p. 190). Providing environments in which the attainment of particular types of skills constitutes the majority trajectory for the workforce (general skills in liberal market economies, specific skills in coordinated ones), labour markets are expected to be overall more occupationally sex-segregated in specific skill regimes than in general ones (ibid.). That is because women are expected to work mostly in occupations requiring less specific skills. Further, the configuration of countries' welfare production regimes is assumed to intervene in this mechanism.

Social policies and regulations are assumed to mediate the mainstream skill patterns characterising the workforce by securing against risks as described above. From the perspective of the individual, statutory maternity leave regulations and generous provision of accessible childcare provide such protection. However, predicting labour market outcomes for women resulting from the interaction between these policies and skill regimes, the varieties of capitalism literature highlights how employers would perceive legislation protecting against devaluation of specific skills as an extra burden. Such

policies are hence expected to set disincentives to hiring women. Statutory maternity leave policies protect women from dismissal risks, as they prohibit employers from laying off women during pregnancy. Paid maternity leave protects women against loss of income during pregnancy and child rearing periods. Both are potentially associated with extra financial and organisational burdens on employers, particularly if they value specific skills (Estévez-Abe, 2006, p. 190). Provision of preschool childcare can be expected to operate in the opposite direction, giving alternatives to maternal childcare (e.g. Smyth and Steinmetz, 2008). Hence, policies are assumed to act as constraining and enabling structures for employers' risk calculation in hiring women for training or employment.

In summary, the following predictions are made within the varieties of capitalism framework:

- a) Overall, women are less likely than men to invest in specific skills (especially firm-specific), because they and their potential employers anticipate career interruptions, which imply loss in investment.
- b) Anyone in specific skill regimes is more likely to invest in specific skills than anyone in general skill regimes, because in the former education and training systems and welfare institutions protect workers against loss of investments in specific skills.
- c) Women in specific skill regimes are less likely than men in the same regime to invest in specific skills, because institutional safeguarding exacerbates employers' discrimination against women.
- d) Compared to women in specific skill regimes, women in general skill regimes are less bound to be discriminated against on the basis of their skill investment decisions, because there is comparatively low institutional engagement.

While this is one possible line of analytical interpretation of the interaction between skill regimes and welfare states and gendered outcomes, several aspects leave room for alternative reasoning. For one, the varieties of capitalism approach has been particularly criticised regarding the rough distinction between two types of skill regimes (e.g. Culpepper, 2007; Mandel and Shalev, 2009; Rubery, 2009). In addition, Busemeyer (2009) has demonstrated how education systems research can enhance the theory. For example, he shows that specific skill regimes often go together with standardised certification practices. Standardised vocational tracks also imply that the well-established industrial relations in specific skill regimes provide protection of investment in industryspecific skills for women and men alike. Another question is, then, whether, with coordinated market economies relying on a workforce with specific skills, the strong interest women would have to invest in specific skills in these environments is actually offset by the expected discrimination, as predicted in the varieties of capitalism theory. In this context, it is important to stress that the varieties of capitalism theory provides an inherently comparative framework, which is not necessarily useful for analysing differences within a country.

One of the conceptual principles this approach shares with other human capital approaches is that risk calculations early in life determine later trajectories to a great extent. Making predictions on actual developments of these trajectories later on, including, for example, situations of single motherhood, requires additional theoretical elements. They cannot be derived from the theoretical concepts provided by the varieties of capitalism approach. However, the empirical importance of occupational area for the employment of women in single motherhood in the two country cases of the current research project, which was demonstrated in Chapter 2, suggests that analytical links to skill regime logics may be instructive. Before integrating these conceptual

components in an analytical model below, the following section discusses the welfare state dimension in more detail.

3.1.3 Gendered welfare regimes

With the skill regime approach, the previous section has presented a conceptual perspective integrating several elements, which were empirically found to be associated with employment in single motherhood. Conceptually, in that approach the influence of policy remains on a rather abstract level compared to the extensive literature existing on the relationship between family life and policy (e.g. Daly and Rake, 2003; Esping-Andersen, 1999; Gornick et al., 1997; Lewis, 2009; Lister, 2000; McLaughlin and Glendinning, 1994; Millar and Rowlingson, 2001; Sainsbury, 1999). This literature has made important contributions to understanding interdependencies between family responsibility, informal and formal structures external to the household and women's employment.

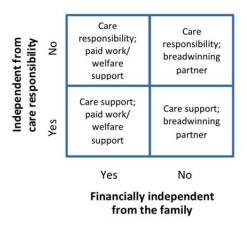
For the analysis of these relationships different concepts have been used. One of the more widespread ones is de-familisation, first introduced by Lister (1994) and McLaughlin and Glendinning (1994).²³ In both cases de-familisation is used as an analytical tool for describing the effects of (welfare) state activity on individuals and family units. Lister defines the concept of de-familisation as "the degree to which individuals can uphold a socially acceptable standard of living independently of family relationships, either through paid work or social security provision" (Lister, 1994, p. 37). In their definition of de-familisation McLaughlin and Glendinning specify the degree of independence to be from the 'patriarchal' family (1994, p. 65), but also more explicitly integrate the dimension of care (cf. Kröger, 2011). Although women's employment is only

²³ Besides having slightly different connotations Lister also uses a different term, namely 'defamilialisation', which is here used interchangeably with de-familisation.

one aspect of the concept of de-familisation, it is certainly a central one, reflecting that its advocates question the traditional division of labour on a normative level. Since its introduction the de-familisation concept has arguably surpassed several stages (Lohmann, 2009). After being used for conceptually integrating women in welfare state theory (cf. Lister, 1994; McLaughlin and Glendinning, 1994; Orloff, 1993), the concept of de-familisation was picked up by 'mainstream' welfare state researchers (e.g. Esping-Andersen, 1999). More recently, it has received criticism because its exact meaning arguably remains underspecified (Leitner and Lessenich, 2007; Saxonberg, 2013), and its operationalisation for empirical analysis is difficult (Lohmann, 2009; Saxonberg, 2013), which is a major drawback to a meaningful social scientific concept (Sartori, 1970). The complexity of the concept is illustrated by Figure 3.1, which summarises the dimensions of the de-familisation concept as defined by Lister. The figure clarifies that deriving predictions on women's employment on its basis also requires predicting who does the care work.

Correspondingly, the concept stretches across two possible strategies of welfare states to intervene in the family–market nexus: a) providing cash payments for carers, and b) promoting employment, including for example the provision of care services (Leitner and Lessenich, 2007). Although these strategies of welfare states are not mutually exclusive, scholars have pointed to the tension between them when it comes to explaining women's employment (Fraser, 1997). For example, cash payments to women in single motherhood could be characterised as de-familising in that they provide basic financial means for living independent of a partner's income. However, they also operate in the opposite direction in providing a disincentive to outsourcing childcare and thus for women to become more 'familised'. Hence, considering paid work in the market and unpaid work at home, de-familisation gives a nuanced analytical angle on welfare state–family–market relationships, which also adds a layer of complexity.

Figure 3.1 Dimensions of de-familisation: Independence from family relationships

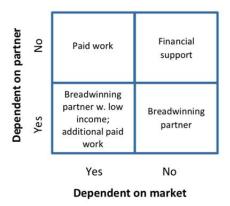


As an analytical lens for understanding employment in single motherhood the concept is not entirely suited. This is for two reasons, one related to the family concept and the other to that of employment. Firstly, de-familisation is conceptually tied up with the normative idea of a traditional family arrangement in that it commits to analysing intra-household dependency relations. However, in single motherhood traditional partner-relationships are, at least temporarily, suspended and hence an analytical emphasis on the couple is not fully suitable. Secondly, care work remains an important element of the outcome dimension in the de-familisation concept. That is, determining the extent of de-familisation requires statements on the degree of care involvement alongside those on potential work in the labour market.

One of the conceptual alternatives to de-familisation was proposed by Orloff (1993). She suggests measuring the degree to which welfare states support 'the capacity to form and maintain an autonomous household' (Orloff, 1993, p. 319, italics in original). Following Orloff, this generic dimension of welfare state support builds on the concept of 'self-determination'. The concept also includes independence from reliance on breadwinning partners (for example as secured in traditional marriage) in addition to independence from reliance on markets.

As such, self-determination is defined to "indicate individuals' freedom from coercion to enter into oppressive relationships" (Orloff, 1993, p. 320) or to stay in them. The strategies with which welfare states contribute to individuals' capacity to maintain an autonomous household correspond to those named above regarding cash or services for care. Welfare state support is hence viewed as potentially relieving individuals from oppressive relationships. The degree to which the welfare state may itself be oppressive is a normative question (Daly and Rake, 2003) the discussion of which will not be part of this thesis. Figure 3.2 illustrates that self-determination is conceptually less complex than de-familisation, mainly because it does not explicitly involve the aspect of care, and because it emphasises the individual as analytical unit rather than 'the family'.

Figure 3.2 The concept of self-determination: independence from partner and markets



Because partner dependency does not usually apply to the single motherhood situation, the scenarios in the two top boxes of the scheme are likely combinations. Cases in which ex-partners provide financial means to the mother fall under the main category of financial support (top right), where welfare state support in cash would also be found. Focusing on economic dependencies of the individual, the self-determination concept is more readily applicable to analysing the role of women's paid work in the labour market. Unlike in the case of the de-familisation concept, care responsibilities are not

crucial to the self-determination concept. However, the dimension of care may analytically be included. For example, demonstrated in family economics approaches (e.g. Parys and Schwerhoff, 2010), it can be assumed that the capacity for maintaining an autonomous household includes the ability to use income for hiring childcare or consuming goods. Policies directed specifically at women in a situation of single motherhood can be evaluated in this regard, generally distinguishing between cash or care provision. The specific sets of policies provided in the country cases of this study are further discussed in Chapter 4. At first, however, the following section derives a novel analytical framework for analysing the relationships between single motherhood and employment. The new framework is based on the discussion of previous analytical perspectives, such as de-familisation and self-determination, pulling together concepts of skills, careers and family life.

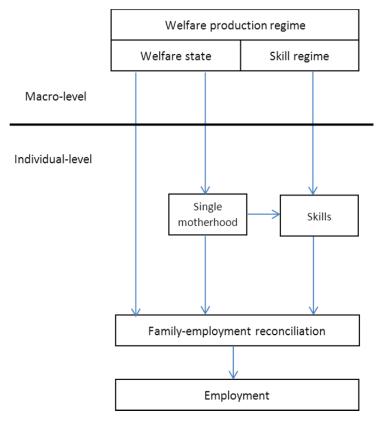
3.2 Theoretical framework

This section proposes a life-stage model of single motherhood and careers as an analytical framework for addressing the research questions of this thesis, and as a basis for deriving hypotheses in the subsequent empirical work. The proposed framework builds on three theoretical cornerstones, derived from previous literature. These are briefly summarised in the following paragraph, while the remainder of the section defines central concepts and concludes with defining the life-stage model of single motherhood and careers.

The overall hypothesis expressed in the life-stage model is that the life-stage at which women experience single motherhood is crucial for their ability to reconcile family and employment. It is important to note that 'family-employment reconciliation' is conceptually distinct from 'work-life balance', a term unsuited to analyse the relationships adequately, because of the vagueness of its conceptual components (MacInnes, 2006). The life stage hypothesis is built on conclusions from the literature, summarised in Figure 3.3. The first

conclusion is that there is a tension between having children and employment, which intensifies in the single motherhood situation. The tension results from the conflict between the personal and universal interest of maintaining the child's wellbeing on the one hand and the individual interest of achieving economic security (e.g. Parys and Schwerhoff, 2010). Secondly, as expressed by the arrows on the left of Figure 3.3, welfare states are assumed to vary in the degree to which they relieve individuals' from that tension by supporting their capacity to maintain an autonomous household with cash or care services (Orloff, 1993). Thirdly, in addition to policy impacts, the tension between family and employment is mediated by individuals' earnings potential determined by their skill level and type. These are acquired in the countries' skill regime contexts (arrow on the right), which govern the marketability of skills. The second and the third aspects are linked on the macro level in that skill regimes are complementary to welfare state arrangements (Estévez-Abe et al., 2001). More importantly for the focus of this research is however that, on the individual level, the level of skills acquired up to the point where a woman experiences single motherhood seems to be associated with their ability to reconcile family life and employment.

Figure 3.3 Links between regime, single motherhood and employment



Against the background of these conclusions, the remainder of this section further elaborates the life stage model in two subsections. The first step involves a discussion of family life and single motherhood, and defines the concepts drawing on Georg Simmel's theory of the quantitative aspects of the group (Subsection 3.2.1). In the second step (Subsection 3.2.2) a concept of employment is defined, which integrates life course principles in accounting for the time dimension as well as the idea that individual employment trajectories are embedded in the macrostructures of welfare production regimes. The section concludes with outlining the life-stage model of single motherhood and employment careers.

3.2.1 Defining family life and single motherhood

As has been demonstrated, previous research tends to rely on a static concept of family life, including the view of single motherhood as disruption of what is seen as the 'standard' two-parent family. The current research suggests an

alternative conceptualisation, putting intergenerational dyadic relationships at the heart of the family life concept, assuming these constellations are changing over time. In the following, issues with traditional definitions are presented before delineating the dyadic perspective of family life as an alternative analytical lens. This reconceptualisation is primarily a normative exercise, suggesting that traditional concepts of family life unnecessarily treat single motherhood as a second-order category of 'the family'. Accordingly, Simmel's theory takes the normative position that the mother-child dyad should be at the heart of the family concept (see Simmel, 1895). The present framework uses Simmel's concepts as analytical building blocks, but does not rely on the theory's normative orientation. Rather, the idea of intergenerational dyadic family relationships can be applied to any constellation involving a dependent child and a person with parental role. Single motherhood, the case on which this research is based, is only one possible constellation. The following sections discuss the conceptualisation of this particular case, disregarding other examples of family dyads.²⁴

Family types

Defining single motherhood as 'family type' rather than 'family situation' has a long-standing normative tradition in European and North American societies, and in social research produced therein. As indicated in the discussion of classical family economics approaches above this implies understanding families as institutional entities of which the two-parent family constellation is the standard model (cf. Peplar, 2002), defined by marriage of a heterosexual couple (Goldthorpe, 1987; Mitterauer, 1982). This view has provided the basis for national statistics, on which much of the contemporary empirical knowledge about family life is based, and for social theory. Particularly since the 'golden

²⁴ Other examples would be: father with child, grandparent and grandchild and grandparent and adult child.

ages of marriage' around the 1950s family life has primarily been theorised as the realisation of the ideal of a life-long lasting state in which a man and a woman form a union and have children (Herrmann, 2001). As Luhmann (2008) has shown among others, ideas of the form of partnership constitutive to this family model are based on a concept of love that is rooted in exclusivity and the mutual elevation of the partners above alternative mates. Implying the assumption of eternity as a condition for its 'realness' the ideal form of love and partnership are inherently and necessarily thought without the potential end. Single motherhood, as well as singledom, or solo-living, contrast this ideal (e.g. Reynolds, 2008; Wasoff and Jamieson, 2005). Lenz (2009a) names four definitional cornerstones of this standard family model:²⁵ i) clear demarcation between members and non-members, equating family with 'private sphere'; ii) clear division of labour between the sexes; iii) institutional coupling of marriage and family; iv) definition of childrearing as a major task primarily ascribed to the mother, rather than defining the rearing of a child as something that is happening 'on the side' (ibid., pp.75–76).

In previous research, then, single mother families are constructed in opposition to the standard family model and treated as a distinct analytical category. In these approaches, single motherhood has been used as an illustration for establishing that the standard model of the family is undergoing change (cf. Beck and Beck-Gernsheim, 2001; Beck-Gernsheim, 2002); and for demonstrating the marginalised position some women are in (e.g. Lister, 2006; Orloff, 1993). Such accounts often carry normative positions, which are not always made explicit (cf. Brüderl, 2006). In these, single motherhood is sometimes described as a result of modernisation and individualisation (see e.g. Beck-Gernsheim,

²⁵ In the German context the standard family model is often labelled as 'bourgeois family model' (bürgerliches Familienmodell) referring to its socio-historical origin in the middle-class milieus of the second half of the nineteenth century (Lenz, 2009a).

2002). Other commentators use the empirically observable change in family life as a basis for proclaiming a state of 'crisis' of society (cf. Bräuninger et al., 1996; Slater, 2013).²⁶ Correspondingly, there is a broad empirical literature investigating implications of different family 'types' for their members' wellbeing or socio-economic attainments (e.g. Bradshaw et al., 1996; Chambaz, 2001; Ermisch and Francesconi, 2001, 2000; Kiernan, 1992). These studies reflect an on-going normative debate on whether single motherhood produces undesirable outcomes for society and hence is a 'social problem'. Feminist perspectives oppose the normative supremacy of the two-parent family and reclaim the family status for single mother households (Daly and Rake, 2003). Their main emphasis is on power imbalances between men and women (cf. Stone, 2007); and on analysing women's social roles, for example as wives or mothers, or as clients of the welfare state in the categories of worker or divorced woman (Daly and Rake, 2003). Feminist critiques of family economics in particular have advanced theoretical perspectives on family life and women's economic activity by pointing out the limits of taking the male-headed household as the analytical unit (Jaquette, 1982; Okin, 1994). This has paved the way for thinking of female-headed households as fully-fledged units which the approach developed in this chapter builds on.

Family life processes

As demonstrated in the discussion of economic approaches above, viewing single mother households as a relative concept in comparison to two-parent ones has the limitation of treating both as 'containers', glossing over any differences among families in either category. This perspective has been said to limit the scope of analytical insights into single motherhood (Catlett and McKenry, 1996), which finds support in conclusions from the empirical evidence presented in Chapter 2. The static view neglects that the defining

²⁶ This is also often the case in politicised debates, especially in the UK (e.g. Sky News, 2011).

criteria of single motherhood, partnership status and presence of dependent children, are changeable time-dependent social processes (Rowlingson and McKay, 1998). For example, partnerships have different phases, beginnings and endings, evolve and change over time, and children grow up, move out and have partnerships of their own, changing the face of family life (see Herrmann, 2001; Lenz, 2009b; Rowlingson and McKay, 1998; Skew, 2009; Trost, 1988). These conclusions form the basis for the present conceptualisation of family life as a process involving different dyadic relationships between family members across their life span (cf. Herrmann, 2001; Lenz, 2009b; Trost, 1999, 1988). It is argued that this perspective facilitates the analysis of family phenomena in its basic social features (cf. Hollstein, 2003).

Two aspects in particular make the distinction between one- and two-parent family settings conceptually less clear cut than often assumed. For one, partnering, separation and re-partnering are markers of the process of family life, in which ties between each parent and their children, regardless of the intensity of those relationships, continue to exist. Furthermore, with repartnering of parents new family ties are built. Secondly, the process of family life is significantly defined by children's growing up. Aspects of family life are changing with the child's ageing, their altered need for care and their development of individuality, sense of self and increasing independence. A perspective of family constellations not assuming the family to be a closed entity seems to be better suited to grasp these processes. This is arguably possible on the basis of a dyadic perspective on social relationships as defined in Simmel's (1958) theory of the quantitative aspects of the group.

Family dyads

The theory was originally developed to conceptualise mechanisms of social integration. According to Simmel "(t)he social unit is a gradual concept" (1958, p. 45) whose features can be described as a function of their quantity. In his

theory the dyad makes the smallest existing social group setting. On the one hand the dyad is conceptually understood only in its relationships to both the individual and the larger societal community. On the other hand, it is characterised by a set of unique features, which will now be outlined.

For one, the dyad is dependent on the individuality of each of their members, as there is no collectivity, "no supra-structure" (Hollstein, 2003, p. 157), beyond the union of the two individuals. This also implies a particular fragility of the dyad's existence in that the union's dissolution defines the end of that group's being. Uniqueness of the individuals to each other is a further aspect on which the dyad is built, and its absence marks the risk of what Simmel calls 'triviality' (Simmel 1958, p.60), meaning that the foundation of the dyad erodes if the criterion of irreplaceability of the union to its members is not met. Furthermore, the sheer number of two implies that both members are directly responsible for any duties arising from the union (ibid., p.66). In larger groups, this direct accountability is blurred. Intimacy and closeness are further defining aspects of the dyad, which rest on the uniqueness of the individuals for each other. Intimacy is understood as the emotional reciprocity that the two members of the group share among each other but no one else, irrespective of whether the meaning of the content itself is of erotic or of everyday nature (Simmel, 1958, p. 61f.). Dynamics between members of dyads are likely to change if there is another member entering the relational sphere. The third person can contribute to the group character of the triad but likewise has the potential to separate or distance the original dyad's members. Ultimately, the third person is a new member of two more emerging dyads.

As for conceptualising family life on the basis of the concept of the dyad, Simmel suggests placing the mother-child relationship at the heart of its conceptualisation instead of defining marriage as its origin (Simmel, 1895). He also defines the mother-child relationship as the main element of stability in family life rather than assuming it was courtship between spouses, which he

claims to be an analytically unnecessary normative assertion (ibid.).²⁷ Following Simmel, childbirth is here accepted as the constituent moment for family life and its development. However, as mentioned above, it is analytically not necessary to make the mother constitutive of family life. To the contrary, the parental figure can be of any sex, as long as they acknowledge their parenthood. In the empirical majority the birth of a child implies two main sets of relationships, the parent–parent ones and the parent–child ones. However, the defining criterion for family life can be determined as the presence of one parent–child dyad, marked by a generational difference (Lenz, 2009b). If there are siblings, more dyads exist in the respective family life domain.²⁸

The definition of family life as being based on the intergenerational dyad lends itself to applying it to conceptualising single motherhood; firstly, in terms of the mother's partnership status; and secondly, in terms of the mother's relationship to the child. The parent–child relationship provides a lasting bond that is separate from the one constituted by the relationship between the parents (Simmel, 1958, p. 63). Parenthood neither ceases with dissolution of the parental union nor with the child growing out of 'dependency age' or moving out of the parental home. This implies that partnerships between adults are distinct from parent–child relationships despite being constructed as enduring entities under marriage (Simmel, 1895).

.

²⁷ As an explanation for this analytical shortcoming, Simmel identifies monogamous marriage and its implied norms as an ex-post social construction of familial bonds, which he ascribes to the historical development of private property (Simmel 1895).

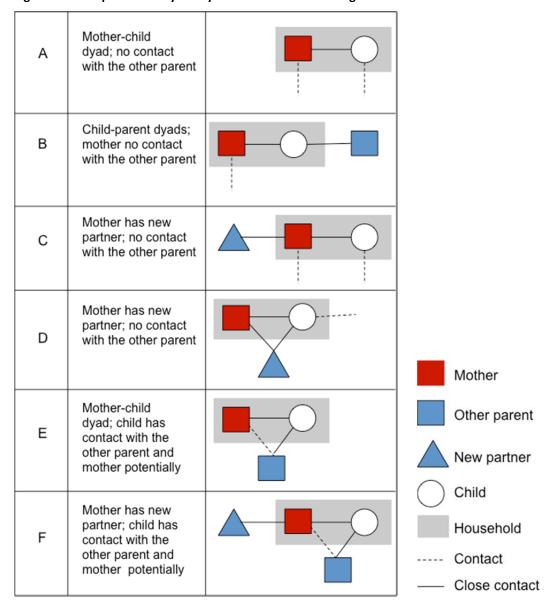
²⁸ Compared to dyads not involving a child, parent–child dyads have particular implications for individuals' emotional involvement, for example regarding the durability of children's yearning for parental love (hooks, 2000).

In order to delineate the conceptual boundaries of single motherhood, this research defines family life on the basis of the household. Accordingly, women living with no other adult but with at least one dependent child (younger than 18 years) in the household are defined as women in single motherhood. Hence, the precondition to single motherhood is that the mother lives in separation from the other original parent and that she has received custody, at least to the extent that the child stays with her most of the time. This is empirically the case in over 90 per cent of British and German households with children where the parents have separated (Destatis, 2010; ONS, 2012b). Figure 3.4 illustrates possible dyadic constellations of single motherhood.²⁹ The dyads shown are examples for family dyads with the mother's youngest child, ignoring any sibling relationships. Despite covering the main dyad constellations of single motherhood the figure is not exhaustive of all possible ones. The dotted lines indicate the possibility of contact with other parents; the continuous lines indicate close contact; household boundaries are marked by the grey shade.

In constellation (A) the mother–child dyad is not further integrated in other dyadic relationships, while in (B) the child has regular contact with its other original parent. In (C) the mother is in a new partnership, but the child does not have closer contact with her partner or with its other original parent. In (D) the mother's new partner is in more regular and close contact with the child. In (E) and (F) the other parent has closer relationships to its child and potentially also to the mother, who is in a new partnership in constellation (F). Variations within each of the type-constellations can be expected in terms of contact quality and quantity.

²⁹ Similar illustrations of family relationships are found in Trost (1988, p. 304) and Schneider et al. (2001, p. 30).

Figure 3.4 Examples of family life dyads: constellations of single motherhood.



As indicated above, there are several possible single motherhood scenarios from the mother's perspective involving her residence in at least one motherchild dyad constellation. A central conceptual element to a dyadic view of family relationships is the assumption that constellations have a high probability of changing over time. The empirically most common route into single motherhood is that the woman has her child while she is in a partnership with the other original parent, which ends before the child reaches majority age. Partnership separation can be abrupt and final or slow and gradual; it may

involve large geographical distance between the single motherhood household and the separating parent or they may remain living in the same area. Death of the partner is a further possible event leading to single motherhood, as is childbirth to a mother who is not in a partnership. For example, children may be born to a mother who is living in separation from the other original parent, because their partnership ended during pregnancy. The period of single motherhood may be ended by reconvening with the same partner or by entering a new relationship, as indicated in the possibilities presented in Figure 3.4. The family life trajectories following from first entry into single motherhood can also vary. For example, single motherhood can be a short experience interrupting family life, which entails co-resident parental dyads for most of the time. It can also extend to longer periods, which may be interrupted by shorter partnerships if any.

Such theoretical accounts of family life trajectories involving single motherhood not only reflect its variety, but also its dependence on processes of individual lives. In other words, dyadic constellations of single motherhood develop in the biographical settings of their members, depending on their age and associated life stages. Hence, analysis of the interplay between individual biographies of family dyads and potential effects of single motherhood on other life domains requires a perspective that accounts for life course processes. Therefore the following section adds the conceptual elements of employment career and the life course for further defining the analytical framework of this thesis.

3.2.2 Defining relationships between family life and employment

While empirical research shows that skill attainments and childbirth are relevant factors for female employment, the evidence for associations between particular family constellations and women's employment statuses is not unambiguous. This section argues that the question of what determines the extent to which women in single motherhood engage in employment can

usefully be analysed by combining the dyadic perspective of family life with a 'career trajectory' concept integrated in a life course framework. The aim of this section is to elaborate the theoretical relationships in, firstly, briefly introducing the idea of the life course perspective. Secondly, it is shown how the concept of career trajectory can analytically be embedded in the life course framework. Lastly, the concepts are combined in a life-stage model of single motherhood and career trajectories.

Life courses

In a nutshell, the life course perspective highlights the institutionalised structures of individual lives, which follow sequentially ordered, standardised patterns (Kohli, 1985). These patterns stand in close connection with macrolevel social structures (Leisering and Schumann, 2003), as "[t]he construction of the life course is embedded within historical, social and institutional [...] contexts" (Mills 2000, p.93). Hence, national frameworks of welfare production regimes are central components of the life course perspective. As for the individual level, the life course framework involves understanding social phenomena in reference to their position in the internal temporal structure of the individual's life progression (e.g. Mayer and Müller, 1989). The perspective implies the assumption that patterns of individual life courses are outcomes of interrelations between personal characteristics, individual action, collective contexts and institutional conditions (Mayer, 2009). Furthermore, people's actions at any point in the life course are assumed to be based on their cumulated experiences and resources (Mayer, 1998, p. 447). This makes the perspective compatible with human capital or skill-based approaches as discussed above, because they assume an association between resource input in the form of skills and output in the form of employment and earnings. A life course framework incorporates this idea by considering the meaning of input and output in relation to their position in the broader process of life progression. Taking a life course perspective also usually involves considering

the interplay between different social domains (Mayer, 2009). This is because the very concept of a life course is based on the idea that, over time, individuals pass through phases in each of which they engage primarily in one specific life domain. For example, the standard life-time pattern regarding labour market involvement consists of phases of full-time schooling, full-time employment and retirement (Kohli, 1985). Throughout these phases individuals would pass through the domains of compulsory schooling, (potentially) secondary and tertiary education, the labour market and the pension systems. The domains are linked by individuals entering and exiting them, but also in their structural compositions, as presented in the discussion of the varieties of capitalism and skill systems literature above.

In life course research standard biographies of women are found to diverge from the standard 'male pattern', because they often involve periods of family care (cf. Lévy, 1977). Accordingly, family life can be considered a further life domain. Taking a life course perspective, then, allows for both understanding employment involvement over time (e.g. Kohli, 1985; Marshall and Mueller, 2003; Moen, 2003), as well as its interdependency with the family life cycle (e.g. Aassve et al., 2007; Brugiavini et al., 2010; Krüger and Lévy, 2001). In general, the life course perspective seems to suggest that there are generalisable patterns in both domains in the form of 'normal biographies'. However, given what is known from empirical research and considering the analytical discussion of the previous section, it is difficult to make general statements about the family life process around the single motherhood experience in general and about employment of women in the situation in particular. One of the contributions of the present research to previous life course research is to further unravel the dynamics between these two domains in women's life courses.

Careers

The conceptual cornerstone of the proposed analytical framework for investigating these relationships is that both family life and employment are defined as processes. As has been discussed, time is an important analytical dimension to the dyadic perspective of family life, as it is for employment. The concept of the career (e.g. Drobnič, 2003; Moen, 2003) usefully summarises the employment process. It entails the idea of the sequencing of jobs or positions, but also that there is a form of progress over a person's work life (Rosenfeld, 1992). The career concept describes a process in which the individual passes through several successive labour market statuses. At any time point, career outcomes result from a combination of previous resource acquisition through education and training, individual background characteristics and life dynamics (Mayer, 1998). As indicated above, this conception is in line with human capital assumptions about skills being investment in future labour market outcomes; as well as with the idea that family circumstances can have an impact on such outcomes.

Research taking a life course perspective on employment processes has emphasised that transitions between single stages are crucial junctures in those processes. Some phases are particularly crucial for the succession of the next phase. The ones studied most are transitions from school to further education and from further education to employment (e.g. Blossfeld, 1987; Brzinsky-Fay, 2007; Müller and Gangl, 2003; Scherer, 2001). These vary, for example, in the duration individuals take for transitioning into the next stage of their career, according to the timing of each phase and depending on the order in which they occur (Marshall and Mueller, 2003). A useful analytical approach of looking at careers in the life course is viewing them as 'trajectories'. These are strings of sequentially ordered states varying in positions and durations of their individual episodes. The states of trajectories describing the career process are single employment statuses such as, for example, unemployment, full-time and

part-time employment. Because of the countless shapes trajectories can take with their innumerable possible combinations of states it can be difficult to categorise them and evaluate their similarities and differences. However, systematic categorisation of trajectory patterns facilitates analysis and generalisability of associations between family life processes involving single motherhood and particular career trajectories. Sackmann and Wingens (2003) usefully propose such an approach by formulating a typology of trajectory types with six standardised categories. After briefly discussing their propositions and applying them to the career concept, the following subsection outlines conceptual links between career sequences and single motherhood in the life-stage model.

While many more chains of states are theoretically possible, Sackmann and Wingens (2003) limit their analytical approach to trajectories with one to two transitions, referring to these partial trajectories as 'sequences'. Their suggested model-type sequence categories are summarised in Table 3.1. The type sequence in the first row of the table, *continuity*, is added as a baseline category. As the table indicates, the ideal type rupture is characterised by a single transition from one state into a different one. Interruptions feature two transitions; they contain two of the same states interspersed by one of another kind. Sequences labelled as *change* are characterised by two transitions, each of which leads to a new state. The remaining three types include states which Sackmann and Wingens describe as combined states, linking "two 'pure' states" (2003, p.96). The logic of 'combined states' becomes clearer with the example of career sequences discussed below. Bridges lead from one state via a combined one into another, similarly to *returns*, which however include a change back into the beginning state at the second transition. Fusion sequences are defined by two transitions of which the second one leads into a combined state of the two previous ones.

Table 3.1 Theoretical sequence types and career examples

Туре						Career sequence examples
Continuity	Α	\rightarrow	Α			Stable employment
Rupture	Α	\rightarrow	В			Employment exit
Interruption	Α	\rightarrow	В	\rightarrow	Α	Career break
Change	Α	\rightarrow	В	\rightarrow	С	Gradual employment exit
Bridge	Α	\rightarrow	AB	→	В	Reducing employment before exit
Return	Α	\rightarrow	AB	\rightarrow	Α	Temporary employment reduction
Fusion	Α	\rightarrow	В	→	AB	Returning to less hours

Note: A=Full-time employment; B=Non-employment; C=Unemployment; AB=Part-time employment Source: Sackmann and Wingens (2003, p. 98), own adaptations.

Table 3.1 also gives examples for ideal-typical career sequences added to the Sackmann and Wingens sequence typology. For simplicity, these all start with full-time employment. The examples illustrate a range of possibilities how employment trajectories can develop. States marked by the same letter can theoretically have different durations. However, large variations in durations of states between several of the same sequence type may mean their differences are larger than their similarities. The table suggests an employment exit sequence as *rupture* type, involving the individual's transition from full-time employment to non-employment. An example for an interruption sequence is the career break trajectory, which additionally to the exit features a return to full-time employment. Gradual employment exit from full-time to nonemployment to unemployment can be described as *change* sequence. A career trajectory example for a bridge sequence is the reducing employment before exit in transitions from full-time, to part-time to non-employment. A career trajectory with temporary reduction of hours from full-time to part-time and transition back to full-time employment is an example for a return sequence. A fusion sequence example is the career trajectory in which the return after a nonemployment break is into part-time employment.

Following from the assumptions underpinning the life course perspective, particular 'standard' career trajectories can be expected at certain points in the life course. However, the career sequence types of Sackmann and Wingens capture smaller sections of trajectories, which can be expected at various points in the life course. For example, individuals can take a career break at a younger or at a later stage in their career trajectory. It will become apparent in the empirical analyses below that comparing sequences requires setting a starting point, which defines a common beginning, in order to avoid comparing random sections of career trajectories. As shown in the life-stage model proposed in the following section, single motherhood can be such a beginning. It is here conceptualised as potential juncture for different employment sequences.

A life-stage model of single motherhood and career

The life-stage model proposed in this thesis implies that the development of careers in single motherhood depends on the intersection of several factors at the time of single motherhood, namely mother's age, her skill level and types, the youngest child's age and institutional contexts. Furthermore, based on the understanding of family life as a process in dyadic constellations, single motherhood cannot be assumed to be static. This means that first single motherhood entry can function as a juncture for the career trajectory, but with the changing face of family life the conditions for women's employment careers may also change. The following paragraphs explain the components of the model and present hypotheses on career trajectories in single motherhood derived from it.

In the model women's life stage is indicated by her progressing age. Age is a rough indicator for life stages, but broadly reflects different points in the life course and particular stages in the career trajectory, especially in terms of skill attainment levels. The assumed associations between age and skill levels are illustrated in Figure 3.5. The figure implies that there are different ideal-typical

skill trajectories, which are here broadly differentiated in low, intermediate and high. Low levels of skills are attained in compulsory schooling and should be acquired by the age of 15. Intermediate skill levels would be acquired between 17 and 20 and high levels of skills reached by around 25 on average. The levels of skills are assumed to be largely maintained over the course of a career trajectory.

Figure 3.5 Age and skill levels

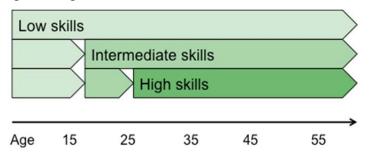


Figure 3.6 graphically formalises the life stage model of single motherhood and careers in a simplified form. The figure displays a snapshot of a mother's family life and employment career processes, ignoring other possible dyadic constellations around single motherhood as illustrated in Figure 3.4. Instead, it focuses on the characteristics of the dyad of mother and her youngest child. In general, for every dyad with an additional child the mother is in, the tension between family life and employment is assumed to increase. Potential influences of entering partnership dyads are an empirical question, because they depend on partners' involvement in care and housework, which are not straightforwardly determined theoretically. The model indicates that the life stage (mother's age, child's age, skill level) at which single motherhood is experienced has an impact on women's ability to reconcile family and employment. This in turn influences the mother's immediate labour market behaviour, expressed in her employment status. With other employment statuses following, current employment status translates into a career sequence over time.

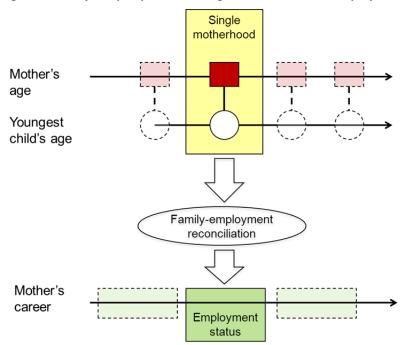


Figure 3.6 Analytical perspective on single motherhood and employment status

Accordingly, the main hypothesis behind the model is that life-stage together with skill attainment at single motherhood function as a juncture for career sequencing, because their combination structures women's ability to reconcile family and employment. From that, more specific expectations can be derived, a selection of which are summarised in Table 3.2. The career sequence typology is used to describe employment trajectories from the point of first single motherhood entry. Status 1 indicates the employment status when the woman has entered single motherhood. Status 2 and Status 3 indicate further steps in the subsequent career development.

Table 3.2 Hypothetical life stages and career sequences

Life stage dimensions			Employment statuses						
Age	Skill level	Child's age	1		2		3	Туре	Career sequence
<25	none/low	preschool age	В	\rightarrow	В	\rightarrow	В	Continuity	Stable non-empl.
<25	none/low	preschool age	Α	\rightarrow	В	\rightarrow	В	Rupture	Early empl. exit
>25	interm.	preschool age	AB	→	AB	\rightarrow	AB	Continuity	Stable part-time empl.
>25	low/ interm.	preschool/ school age	С	→	В	→	Α	Change	Gradual empl. entry
25–45	interm./ high	preschool/ school age	Α	\rightarrow	В	→	Α	Interruption	Career break
25–45	low/ interm.	school age	В	→	AB	→	Α	Bridge	Gradual empl. entry
>=30	high	preschool age	Α	\rightarrow	AB	\rightarrow	Α	Return	Temporary empl. reduction
>=30	interm./ high	school age	A	→	В	→	АВ	Fusion	Returning to less hours
>= 35	high	school age	Α	\rightarrow	Α	>	Α	Continuity	Stable full- time empl.

Note: A=Full-time employment; B=Non-employment; C=Unemployment; AB=Part-time employment; characterisation of life-stages regard point of entry into single motherhood, age bands are rough approximations.

Mothers experiencing single motherhood at ages in their late thirties and have high qualifications and school-aged children are particularly likely to have *continuous* employment career sequences compared to other experiences of single motherhood. Contrarily, experiencing single motherhood at a young age with young children and low skills is particularly likely to cause a *rupture* in the employment career sequence in the form of an early employment exit. Where this constellation goes together with non-employment at single motherhood it is likely to be associated with side-tracking into continuous non-employment trajectories, as another form of the *continuity* sequence type. At this stage, the transition into the labour market has not been completed and the necessary

resources for building a career not achieved, which constrains family—employment reconciliation.

On the other hand, if mothers experience single motherhood in their late twenties, thirties and forties, combined with intermediate or higher skills and preschool children, this is likely to involve *interruption* or *return* type sequences. That is because this life stage enables women to pick up their employment careers after leaving them for a shorter period. Experiencing single motherhood at prime working age (25–45) with low to intermediate qualifications and schoolchildren is likely to involve a bridge sequence with gradually increasing employment. This life stage, too, marks women's prime working age, and children's growing independence will provide opportunities for mothers to engage in employment, even if they had low labour market attachment to begin with. Similarly, the *change* sequence from unemployment to non-employment to full-time employment seems a relatively likely trajectory for women with low or intermediate qualifications experiencing single motherhood at age 25 or over when their youngest child is in preschool age. They would be expected to get involved in employment due to being at prime working age and being relatively well qualified. Sequences with transitions into part-time rather than full-time are other likely ones for women in single motherhood at this life stage.

As was indicated in Figure 3.3 above welfare production regimes are expected to intervene in these individual-level mechanisms. Two contextual factors, welfare state regulations and skill regimes, have been discussed as being particularly relevant. The influence of policies will be discussed in the next chapter, while this paragraph summarises expectations on skill regimes. In the present life-stage model, skill regimes are important mediating factors because in certain contexts particular types of skills are assumed to facilitate individuals' employment. Hence, experiencing single motherhood at a certain life stage can be expected to have regime-specific consequences depending on

the type of skills the respective woman has acquired. The life stages in which individuals make their first transitions to the labour market are especially crucial phases for the skill regime impact, because here skill profiles govern individuals' labour market integration. One hypothesis on the impact of skill regimes on career sequences in single motherhood therefore regards young single motherhood. Specifically, it is assumed that *rupture* type employment exit sequences are less likely for women with specific skills in specific skill regimes with regulated labour market entry systems than in general skill regimes. Having only acquired general skills in the labour market entry stage should, on the other hand, protect better against trajectories of non-employment in general skill regimes.

These regime-specific and the other theoretically derived individual-level hypotheses serve as a basis for the empirical work in this thesis. Before developing a research design and discussing methods for conducting the analyses, however, the following chapter discusses the role of specific policies as other institutional factors that are relevant for women's employment in single motherhood at particular life stages. The discussion focuses specifically on the country cases investigated in this thesis, the UK and Germany, and is held in reference to the outlined analytical framework.

Chapter 4 Policy frameworks

Institutional contexts not only affect individual career trajectories as skill systems, but also in the form of social policy. This chapter describes the welfare state arrangements of Great Britain and Germany, focusing on policies which are likely to have an impact on the employment of women in single motherhood by regulating either family care or labour market participation. The purpose of the chapter is to provide a basis for deriving expectations on the role of policy contexts for the employment trajectories of women in single motherhood in an overall more 'regulated' compared to a more 'liberal' regime. In line with the above-discussed theory, the chapter considers the country contexts as two different cases of welfare production regimes. Besides discussing their general settings, specific policies and some of the larger changes they went through in the two countries are outlined. In order to limit the framework of analysis, focus is mainly set on the period between 1990 and 2009. In this time frame several reforms of policies for single mothers have taken place on the geo-political spheres of Great Britain and West Germany. Information on the nature of these reforms, which have been substantial in particular areas, is given at the relevant sections of the chapter with some reference to potential implications for the employment behaviour of women in single motherhood. The chapter is organised in two sections that discuss those policy areas which previous literature has identified as being particularly relevant for the single motherhood situation. A brief comparative overview of welfare state arrangements in the two countries is given in Section 4.1. In Section 4.2, particular policies are discussed, such as childcare (4.2.1), leave regulations (4.2.2), different forms of transfer payments (4.2.3) and activation policies (4.2.4). The chapter concludes with a summary of expectations about

how the single policies mediate family–employment tensions and may support certain employment trajectories (Section 4.3).

4.1 Welfare regimes

This section compares the UK and Germany as two different welfare regimes based on the theoretical concepts discussed in Chapter 3 above. Applying a broad definition, welfare states are here understood as countries' specific sets of policies and regulations granting rights to transfers and services to their citizens that secure against particular social risks. The term regime is further used to emphasise the specific ways in which such arrangements form typical institutional configurations that have developed in particular historical pathways (see e.g. Esping-Andersen, 1990; Hall and Soskice, 2001). The UK and Germany are commonly placed in opposite categories of regime typologies because their institutional landscapes are exemplary for typical differences in the logics of their policy arrangements. According to the varieties of capitalism approach Germany can be characterised as having a more coordinated and stronger regulated welfare production regime than the UK, which has more features of a 'liberal', marketised one (Hall and Soskice, 2001). This rough categorisation is relatively established in a larger internationally comparative perspective, but misses out on country-specific nuances within these general regime categories. Furthermore, the discussion of the approach in the previous chapter has shown that the coordinated-liberal dichotomy does not allow defining the links between institutional environments and the employment of women in single motherhood in a way suitable for addressing the questions and deriving hypotheses for the analysis in this thesis. Approaches of 'gendered' welfare state research (e.g. Daly and Lewis, 2000; Daly, 2010; Lister, 1994; McLaughlin and Glendinning, 1994; Orloff, 1993; Sainsbury, 1996, 1999) provide additional theoretical tools and enhance the regime perspective to include policies' impact on the family–employment nexus (Gornick et al., 1997).

Germany is often cited as an example for family policy with a relatively strong support of a female home carer by means of extended leaves and cash payments (Ostner, 2010). It is also characterised as 'conservative' regime type (Esping-Andersen, 1999) with a strong orientation towards the malebreadwinner model (e.g. Ostner, 1997), which is supported by the joint taxation regulation of the income tax system (Gerlach, 2009). In line with these approaches Misra et al. (2007) categorise Germany as a country supporting women's 'primary care giver/secondary earner' strategy. This model explicitly rewards women for providing care, aiming at compensating their time taken for care outside the labour market (p.137). The UK, on the other hand, has a history of maintaining a liberal 'hands-off approach' to family policy, leaving familyemployment reconciliation issues largely up to individuals (Daly, 2010). Rather, policies are directed towards employment equality and encourage market provision of services through the tax system (Orloff, 2002, p. 16). According to the categorisation of Misra et al. (2007) the British welfare state supports a primary earner/secondary carer strategy for women, expecting both men and women to be in employment. The two 'family policy models' have marked differences compared to southern European and Scandinavian countries (e.g. Leitner, 2003). Policy frameworks of the former generally rely more on their citizens to draw on family networks, while those of the latter provide universal access to statutory childcare and other social rights and put stronger emphasis on achieving gender equality (cf. Guo and Gilbert, 2007; Kohli and Albertini, 2008). In the UK, the low policy intervention in family life is especially apparent for the provision of childcare services, relying on a largely marketised system (Evers et al., 2005; Misra et al., 2007). In line with the idea of a liberal British family policy approach, statutory parental leave policies are also limited, although those granted by individual employers may be more generous depending on previous tenure (O'Brien and Moss, 2010). The stronger regulation of German family policy is apparent both in the maternal leave system, which has an overall more generous statutory element (Jaehrling et al.,

2012), as well as in the childcare domain, which is organised largely as half-day provision on the basis of state funding of mainly third sector providers (Kreyenfeld and Hank, 2000; Naumann, 2006a).

As discussed in Chapter 3, countries' policy arrangements can be characterised in terms of their degree of supporting individuals' social and financial independence, for which the de-familisation and the self-determination concepts can be instructive. This characterisation is usually based on policy outcomes rather than on policy aims, because these may well diverge. Defining the extent to which single women with dependent children are independent of participation in the labour market and of care responsibilities is particularly relevant for the subject of this thesis. When de-familisation indicators are applied for comparing countries' policy support for reconciling family and employment, rankings are relatively inconsistent overall (Lohmann, 2009)³⁰, but differences between the UK and Germany are usually confirmed. Difficulties in assessing countries based on a single indicator for family policy reflect the tension between welfare state strategies of cash payment for carers on the one hand and provision of care services on the other hand (Leitner and Lessenich, 2007). Policies summarised in indicators often have divergent outcomes. For example, higher support of self-determination can be achieved by providing services that support individuals' ability to reconcile family life and employment but also by making cash payments, which does not necessarily support reconciliation. Regardless of such differences, analysis of family policy

³⁰ Lohmann (2009) evaluates eight studies (Bambra, 2004; Esping-Andersen, 1999; Gornick and Meyers, 2005; Gornick et al., 1997; Korpi, 2000; Mandel and Semyonov, 2005; OECD, 2001; Siaroff, 1994) each analysing a minimum of ten countries (all including Britain and Germany) in terms of their institutional frameworks facilitating 'de-familisation' in one way or another. The studies which Lohmann includes all develop an index for comparing family-related frameworks and/or produce a country ranking.

usually assumes that outcomes are similar for single and partnered parents, and especially mothers, within each country (e.g. Gornick et al., 1997). That means, for example, extensive maternal leave regulations would be assumed to have similar impacts on employment of women in single motherhood compared to mothers in a partnership. Running counter to that assumption, Misra et al. (2007) find regime differences in the impact of motherhood on employment between married and single women. Notably, the UK was among those countries where motherhood was shown to limit women's economic independence more for single than for married women. The results of the study do not provide evidence for the effects of single policies, but its authors suggest a link to transfer payments made on the basis of the single-parent status, which they suspect to foster low labour market attachment. This regards single parenthood as being an eligibility criterion to receiving means-tested social assistance benefits in the UK. However, Germany also grants social assistant payments to single parents, albeit at a shorter entitlement duration. As will be shown in the following section, unemployment benefit schemes have been central in the discussion on the employment of women in single motherhood. Being part of unemployment benefit schemes, the social assistance entitlement does not easily fit within a family policy framework. Moreover, the entitlements seem to run counter to the expectation of low state intervention in family life in the UK where entitlement periods are more extensive. The regulations reflect the British welfare system's emphasis on tools alleviating poverty (cf. Lund, 1986). They are also central to the British emphasis on single mothers' role as labour market citizens compared to the German focus on maternal duties (see Chapter 2) in that women in single motherhood are covered by unemployment assistance schemes rather than being a target of family policy.

Taken together, the broad characterisation of the two regimes illustrates that different ideas of family-employment reconciliation are prevalent in the welfare states, which lead to an expectation of divergent standard employment

trajectory patterns for women. The relatively weak regulation of British family policy would suggest that the ability to acquire independence from market and family relationships in single motherhood is strongly dependent on individual resources and previous labour market positions (cf. O'Reilly et al., 2009). Compared to the German, more highly regulated system, which seems to produce standardised life trajectories, the liberal British system yields more individualised ones. Here, the unemployment protection system provides a last resort for those who cannot rely on established labour market attachment or other economic independence. As will be further discussed below, the reforms to the unemployment benefit system in Britain from the late 1990s have arguably altered the incentive structure for labour market participation of women in single motherhood provided by the social assistance schemes. However, although more women in single motherhood can be expected to participate in the labour market at some point, it is a different question whether this employment is stable. Overall, employment interruptions are likely in the British context and single motherhood can be expected to function as 'shock' to employment trajectories especially of women with younger children and low resources. The more generous protection of women's role as caregivers in the German welfare system, on the other hand, can be expected to provide a more secure baseline support for family-employment reconciliation, if mostly in the form of a part-time support. Consequently, part-time employment trajectories seem likely. The social assistance benefit granted as unemployment protection supplements the system by bridging the child's early years. With the analytical tools developed above, more rupture, change or fusion type career sequences seem likely in the British context. In Germany, welfare state structures suggest interruption, and bridge and return sequences are likely career paths after entering single motherhood. A more detailed look at the single policies and on some of their developments over time is taken in the following section. Beyond the description of general contexts for women's careers of the present section,

the next one highlights potential mechanisms between policies and employment in single motherhood situations.

4.2 Policies and careers

Without detailing single policies the previous section characterised Great Britain and Germany as two regime types that follow different logics of policy provision. This section further discusses how regulations supporting mothers' financial security or their independence from care responsibility may mediate employment outcomes for mothers who are single. Determining longer-term impacts of policies on employment careers is difficult (Sefton et al., 2011a, 2011b) because it deems it to be almost impossible to account for all possible influencing factors. Therefore, the present discussion mainly considers immediate impacts on family–employment reconciliation, although some hypothetical career outcomes are formulated in reference to the theoretical career sequences from Chapter 3. Two assumptions are central to the following discussion.

Firstly, policies are welfare state instruments with intended or unintended consequences for family-employment reconciliation. Policy outcomes sometimes diverge from what was expected or are entirely unanticipated. Nevertheless, with the theoretical tools discussed above, predictions about the impact of welfare states on family-employment reconciliation can be hypothesised. Namely, support with care is assumed to relieve women from family responsibility, opening the opportunity to engage in employment, whereas support with cash fosters home care. Certainly, transfer payments come in different forms and at different conditions, which will influence the degree to which they relieve women's need to attain market income. For example, the ability to afford outsourcing childcare to non-maternal providers can be facilitated by transfers. However, this option is contingent on market alternatives in employment for mothers and childcare for children, which

provide a level of economic security comparable to that gained through transfers. This reflects the ambiguous nature of transfer payments in terms of their support of women's ability to maintain an autonomous household, which will become even more obvious in the discussion of policy domains below.

The second assumption is that the interaction between policies and outcomes for individuals is set in a life course context (Mayer and Müller, 1989). This implies that policies intervene in individuals' lives at certain life stages and at different durations (McDaniel and Bernard, 2011). There are two main criteria on the basis of which expectations on policy outcomes for family-employment reconciliation based on life stage at single motherhood are derived: firstly, previously acquired labour market resources such as skills and previous work experience; and secondly, eligibility to childcare support or financial assistance based on the age of the youngest child. As such, childcare provision and accessibility is often highest for preschool children when aged four or older, for school-age children the settings are different again. Leave regulations address employed women with babies, requiring a high degree of labour market attachment. Social assistance payments, on the other hand, are directed at nonemployed individuals. They take effect in situations of single motherhood for women with any level of previous labour market involvement, but are a longterm solution only for those with no better economic alternative and depend on the age of the youngest child.

Table 4.1 summarises expected outcomes of policies with potential impacts on family–employment reconciliation in single motherhood in the two welfare states. The table gives a general overview of the policy infrastructure supporting independence from family responsibility or from the need to engage in market work. Higher scores indicate stronger support. In line with the regime characterisation of the previous section, Germany has, on average, higher scores than the UK in these policy areas. The overview reflects that the

UK intervenes more strongly in the employment/ unemployment domain while Germany focuses more on the family domain. The following subsections discuss these patterns in more detail.

Table 4.1 Policy support of family-employment reconciliation in single motherhood

		Great Britain	West Germany
1	Childcare		
	Entitlement	+	++
	Costs	+	++
2	Child maintenance	+	+++
3	Leave regulations		
	Length	++	+++
	Payment	+	++
4	Transfer payments		
	Child	++	+++
	Non-employment	+++	++
5	Activation measures		
	Passive (payments)	++	+
	Active (services)	++	++

Notes: Support of independence from market rated as + Low; ++ Intermediate; +++ High

4.2.1 Childcare

The composition of childcare arrangements provides an infrastructure for outsourcing care responsibility, which may under certain circumstances lead to improved family–employment reconciliation (Plantenga et al., 2008). Forms of childcare support vary between formal and informal provision,³¹ hours covered and age ranges of targeted children (cf. Skinner and Finch, 2006; Wheelcock and Jones, 2002; Wolf and Grgic, 2009). The literature demonstrates that in most cases of single motherhood caring for dependent children is shared with others. Grandparents and non-resident parents are especially important informal

³¹ Freeth and Fong (2011) make the following categorisation: formal: nursery school/class; special day school/nursery; day nursery; playgroup/preschool; childminder; nanny/au pair/baby sitter; breakfast/after-school club; holiday club/scheme (p.36).

sources. The relatively scarce empirical research on parental contact confirms the intuitive notion that the non-resident parent is often involved in childcare. For example, empirical research on Germany suggests that the non-resident parent is in regular contact with their child more than once a week in 34 per cent of the post-separation families (Schier et al., 2011). More involvement of the other parent can improve family-employment reconciliation for women in single motherhood. This is corroborated by Australian research which suggests that among separated parents maternal employment rates are higher for those with greater proportions of shared childcare time (Kaspiew et al., 2009). Data from England and Wales indicate that, among employed women in single motherhood working 16 hours or more per week in 2008, 17 per cent had a childcare arrangement with the ex-partner. Certainly, this also reveals that expartner involvement is not the standard, much less an equal division of time for childcare between the separated original parents. Accordingly, multiple childcare arrangements are rather common among women in single motherhood (e.g. Scottish Government, 2007). The remainder of this section discusses formal childcare arrangements provided, funded or regulated by the state.

Table 4.2 Childcare landscapes

	Great Britain	West Germany
Preschool provision for children aged under 3	Provision: Mostly market-based Types: day nurseries, family centres, playgroups and childminders Coverage: 32%; any formal/any amount of hours (2010) ¹	Provision: Mostly publicly funded third sector Types: Kinderkrippen (crèches), Tagesmütter (childminders) Coverage: 22.3% (West), 49% (East) (2011) ⁶
Preschool provision for children aged 3–5/3–6	2-tiers: Welfare system: Entitlement to 15 hrs/wk (ages 3–4) in day nurseries, family centres, playgroups and with childminders Education system: pre- primary schooling (ages 3– under 5) in nursery classes and infant classes in primary schools Coverage: 96% of children aged 3–4 (of which 62% in education system and 38% in private/voluntary childcare facilities); any amount of hours per week (2012) ²	Provision: Half-day statutory entitlement for children of working parents; mostly publicly funded third sector Type: Kindergärten (day nurseries) Coverage: 79.4% (West), 91.1% (East) of children aged 3–6 (2007) ⁷
Preschool childcare costs	High; about £100 per 25 hrs on average; ³ tax credits are available ⁴	Low-intermediate; incomedependent fees; varies by state (Land); about €800 per year for married couple with income and one child aged 4 on average; 8 rebates for single parents; tax credits are available 9
Public school schedules	Full-time compulsory education age 5–16; commonly 5 hrs/day ⁵	Full-time compulsory education age 6–15; commonly 5 hrs/day ⁵

Notes: Based on latest available information; British regulations and statistics for England. Coverage: per cent of children in childcare for all children of that age group

Sources: ¹ Data for England; Smith et al. (2011); ² Department for Education (2012); ³ Daycare Trust Childcare Survey (2012); ⁴ Directgov (2012a); ⁵ Gornick et al. (1997); ⁶ Statistische Ämter des Bundes und der Länder (2011); ⁷ Statistische Ämter des Bundes und der Länder (2009); ⁸ INSM-ELTERN KindergartenMonitor (2010); ⁹ BMFSFJ (2011b); Jaehrling et. Al. (2012).

Several factors should be taken into account for evaluating formal (statutory) childcare in its capacity to facilitate family–employment reconciliation. Firstly, accessibility of childcare services is defined by whether and how it is made

available (provision) and whether it is affordable (costs). Variation in provision further determined by the predominant form of provision (private/public/third sector), administration body (health/education/welfare) and extent of provision (hours per day/week) (Naumann, 2006a, p.14). Secondly, accessibility and take-up (coverage) of childcare must be differentiated. Theoretically, parents might not take advantage of places that are made available, which would create a situation of over-supply. However, as policy provision usually also responds to a demand, provision and take-up are closely connected.

Table 4.2 gives an overview of regulations in the childcare domain, roughly covering the dependency ages of the youngest child, which is central to the present definition of single motherhood. The following paragraphs outline the regulations in the two country contexts.

Policy intervention in childcare is mostly directed at the child's early years, but compulsory school schedules have an indirect impact on care responsibility by engaging children in extra-household activity for several hours of the day. The impact school systems have on maternal employment by providing structures of formal out-of-home care is not well researched. It is provision for younger children which is generally assumed to support employment for women in single motherhood (e.g. Gingerbread, 2010; Misra et al., 2012), and which varies considerably across Great Britain and Germany (Plantenga et al., 2008). Both countries also have marked internal differences between regions. In Germany, the states (Länder) of the former German Democratic Republic (GDR) traditionally have a much higher provision and coverage of preschool childcare than the states of West Germany, which continues to shape the landscapes even today (Rosenfeld et al., 2004). Certainly, there is variation even between states within West Germany (cf. Statistische Ämter des Bundes und der Länder, 2011), because childcare is administered by the state (Länder) governments. In Great Britain, governance of childcare services has been organised separately in England and the devolved areas of Wales and Scotland since the end of the 1990s and some differences do exist between the nations (Wincott, 2006). However, compared across countries the similarities between these regions prevail (Naumann, 2011).

For children from birth up to below the compulsory school age of 5 years the British childcare system is in line with the liberal welfare state regime type. It has marketised access and only minimal universal provision (e.g. Bahle, 2008; Brewer et al., 2005) with centralised financing and reliance on user-fees (Evers

et al., 2005). There is high diversity in providers in terms of slots offered and costs (Jaehrling et al., 2012). For children aged 3–5 there are two overlapping systems of publicly funded services in the UK administered by the education system on the one hand and the welfare system on the other hand. The education system provides nursery classes in primary schools for 3- and 4-yearolds. Within the welfare system, several types of centres are available for childcare of this age group and also for younger children. The available providers are day nurseries, family centres, playgroups and childminders (DfES, 2009). Due to the fragmented system, comprehensive data on childcare take-up in the UK are relatively difficult to obtain and vary substantially across studies, especially for children aged 0–2. For example, based on a 2004 survey of employed mothers, Plantenga et al. (2008, p. 30) report that 35 per cent of surveyed mothers of 0–2 years old children used any type of childcare for any number of hours in the UK. Bahle and Pfenning (2001) on the other hand report that only 2 per cent of all children aged 0-2 attend publicly financed childcare facilities in England and Wales.³² Figures in Table 4.2 have to be seen in consideration of these variations and to be treated with caution.

There have been recent changes in the childcare domain in the UK. The 1998 National Childcare Strategy directed public money towards the extension of early-years education for all for-profit, public or voluntary providers, especially targeted at socially disadvantaged areas (Evers et al., 2005). Children aged 3–4 are entitled to free part-time childcare provided either in maintained nursery schools or classes or in private formal settings (Directgov, 2012b). Granting only

_

³² The data used by Plantenga et al. (2008) are European Commission data collected in the context of the European Employment Strategy. Their report notes that the data on childcare use are self-reported by employees in the respective countries, but there is no information on the methodology of collection. Data in Bahle and Pfenning (2001) is from European Directorate General V (1995).

12.5 hours of free childcare for 3- and 4-year-olds, increased to 15 hours in 2010, spread over five days per week over 38 weeks of the year, the bulk of childcare remains organised and provided by the private sector in Britain. The private sector provides relatively expensive services for users apart from the few free hours, which alone do not particularly encourage maternal employment (Lyonette et al., 2011). Evidence from British studies indicates that costs for childcare indeed act as disincentives for maternal employment (e.g. Jenkins and Symons, 2001). This is despite the support the British welfare state provides to parents to afford the comparatively high childcare costs. Support is granted in the form of tax credits for mothers who are in paid work for at least 16 hours per week (Directgov, 2012a). Although the increase of childcare tax credits in 1999 by providing support with costs led to an increase in employment rates among women in single motherhood (Francesconi and van der Klaauw, 2007; Gregg et al., 2009), it is unclear how sustainable such employment is (cf. Evans et al., 2004). Other support with childcare costs is granted for mothers who are in education at a non-private institution (secondary or higher education), and for mothers of 2-year-olds on benefits (Income Support, Jobseeker's Allowance, Child Tax Credit, Asylum Seeker's Support), who qualify for the same amount of free hours as all 3- and 4-year-olds (Gov.uk, 2012a). The British system can be expected being more likely to divide users into those who rely on the minimum universal provision and those who can afford additional services. It would also seem that the limited support facilitates more fractured trajectories among women in single motherhood, because it is not designed to secure a baseline provision for longer periods that consistently relieves the tension in familyemployment reconciliation.

This is different in the German system, which also does not provide universal access to full-time childcare as found, for example, in Scandinavia. Provision in East Germany is quite distinct from West Germany, still relying on the remnants of the former Socialist regime's infrastructure, and will not be

discussed further here. Like other areas of the German welfare state the system of childcare provision in West Germany relies on principles of subsidiarity and corporatism (Evers et al., 2005). Its governance is at the level of the German states (Länder) in both finance and administration (Bode, 2003). Setting market barriers high for private providers, priority is given to voluntary-sector providers supported by local governments, leading to large regional differences in provision (Kreyenfeld and Hank, 2000; Riedel et al., 2011). Provision is traditionally based on the idea that women with children are primarily carers with at best a part-time involvement in employment, which explains the historical development of a part-time childcare regime in West Germany (Naumann, 2006b). Although there have been policy initiatives to create more full-time places recently, the system continues to combine elements of public provision with a focus on half-day care (Jaehrling et al., 2012). Services provided with government funding for children below the compulsory school age of 6 comprise day-care slots for half days, usually from morning until early afternoon. There are substantial differences in provision for the 0-3 and 3-6 age groups (Kreyenfeld and Hank, 2000). After reunification with East Germany, which used to have full coverage with public childcare places for preschool children during GDR times, changes in policy regulations guaranteed each child aged between 3 and 6 years in Germany a childcare place at least on paper (Gottschall and Bird, 2003). Implementation of the regulation was delayed until 1999 and provision remains behind demand (ibid.). Coverage is far below 100 per cent even in 2011 (cf. Statistische Ämter des Bundes und der Länder, 2011). A slow realisation of reforms concerning childcare is likely to be caused by the way social services are governed in Germany. Similar to developments in Britain, but with less focus on social inclusion and more generous in the number of hours catered for per week, in 2002 the German government announced its commitment to further expansion of childcare services for all preschool children (Fagnani, 2012). The cost of preschool childcare in Germany is considerably cheaper for parents than in the UK, despite the variation between German states.³³ This is likely to enhance a mother's ability to reconcile family and employment, at least in a part-time framework. Indeed, Wrohlich (2004) finds evidence for higher costs having a small negative impact in Germany. As for take-up rates, German data are easier to obtain. In the mid-1990s the West German childcare system catered for about 2 per cent of the 0- to 3-year-olds and for 85 per cent of the 3- to 6-year-olds (Kreyenfeld and Hank, 2000). In 2011 the share of 0- to 2-year-olds in all children of that age group was 19.8 per cent in West Germany³⁴ (Statistische Ämter des Bundes und der Länder, 2011).

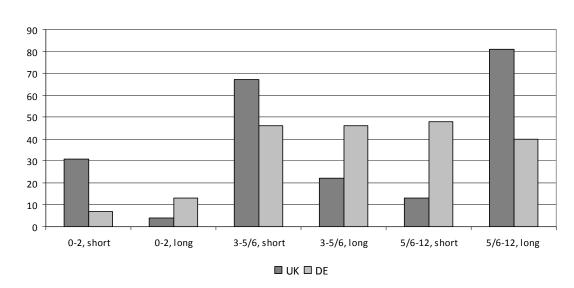


Figure 4.1 Take-up of formal childcare by child's age and duration of weekly childcare, 2010.

⁻

³³ There are few sources which give a comprehensive overview of the cost structure of German childcare across states (Länder). Although limited to public half-day provision in the 100 largest German towns for model families with two parents and one or two children, the study by the private sector Initiative für Neue Soziale Marktwirtschaft (INSM) and the magazine ELTERN (2010) that this chapter draws on gives a good overview.

³⁴ Without Berlin.

Notes: DE (Germany) includes East and West Germany; UK includes England, Wales, Scotland and Northern Ireland; per cent of the population of each age group; short=1–29 hrs/week; long=30+ hrs/week; formal childcare: pre-school or equivalent, compulsory education, centre-based services outside school hours, a collective crèche or another day-care centre, including family day-care organised/controlled by a public or private structure (Eurostat, 2010)

Source: Eurostat (2012d), EU-SILC data.

As these data are not easily comparable to those presented for Great Britain, international survey data, e.g. from EU-SILC³⁵, can be a good alternative, at least for comparing attendance since 2005. EU-SILC differentiates between formal and informal childcare for children aged 0-12. Formal arrangements include any institutional setting in which parents do not arrange the schedule by personal negotiation with the carer, including "pre-school or equivalent, compulsory education, centre-based services outside school hours, a collective crèche another day-care centre, including family organised/controlled by a public or private structure" (Eurostat, 2010). In a cross-national perspective this relatively broad definition inevitably leads to rough comparisons, but can nevertheless give an indication of the general scope of non-parental, formal childcare.

Figure 4.1 shows 2010 data from the EU-SILC³⁶ household survey element for take-up of formal childcare as reported by mothers in the UK and Germany. In

.

³⁵ EU-SILC (European Statistics on Income and Living Conditions) is a household survey conducted annually on rotating random samples (same household max. four years) of the populations in EU-27 countries. Apart from Germany, where interviews are conducted by mail-out questionnaires, individuals are surveyed in personal interviews. The German survey is likely to be biased towards people who have no difficulties with written questionnaires (Wolf and Grgic, 2009) and towards intermediate and high skills with low risk of living in poverty (Jaehrling et al., 2012, p. 19).

 $^{^{36}}$ Data collection issues of the German sample (sampling was not entirely by random procedure between 2005 and 2008) led some authors to question EU-SILC reliability. They point to

the UK two age groups are relatively likely to attend formal childcare according to these data, those aged 3-5 and those aged 5-12 years old. A large share of children in the population aged 3 years old to compulsory school-age (67 per cent) attended some type of formal childcare setting for between one to 29 hours per week. This is likely to reflect the relatively common preschool attendance of British children. The over 80 per cent of children aged 5-12 attending formal childcare for more than 30 hours per week could reflect the long hours of primary school education. German children aged between 3 and compulsory school-age are equally likely to be in formal childcare for between one to 29 hours and for 30 or more hours. A similar pattern is observable for children aged from compulsory school-age of 6 years to 12 years. In each case around 40 per cent of the respective group are in formal childcare. Except for the category 'short attendance of the 3- to 5-year-olds' in the UK, coverage in Germany is generally higher, as would be suggested by the childcare infrastructure. These figures suggest that the attendance of British children in formal childcare is more dependent on the child's age than in Germany. In the UK, preschool children attend short rather than long hours and schoolchildren aged under 12 attend long rather than short hours of formal childcare. In Germany, both categories are equally likely to attend either short or long hours. Only a low percentage of children between 0–2 years attend formal childcare for any amount of hours, but British children of that age are more likely to attend such services for short hours, while in Germany it is slightly more likely that they attend more than 30 hours per week. The patterns support the theoretical expectation that Germany provides a childcare structure allowing more continuous attendance across the early years of children than the British

improvements in the survey process implemented in 2005 which would lead to better data from 2008 onwards (Wolf and Grgic, 2009).

system.³⁷ This would go together with the expectation that employment career trajectories of women in single motherhood are more stable in Germany than in the UK for women with preschool children. There seems to be a relatively even divide, in Germany, among those whose children (aged 3–12) regularly attend formal childcare for long hours and those who only attend for short hours, which perhaps roughly reflects a divide in maternal work hours. In any case, especially in the UK, other arrangements seem necessary for women to engage in employment given the small number of hours of public provision for young children.

When it comes to older children of school-age, family-employment reconciliation is rarely assumed to be an issue (Gornick et al., 1997). An overall assumption seems to be that reconciliation is easier as soon as children enter compulsory schooling, which acts as a free provider of childcare for several fixed hours each day of the working week. However, on closer inspection, children's school attendance does not necessarily relieve parents to the extent that they can engage in full-time labour market participation. In addition, school systems vary in their annual schedules as well as in the organisation of an average school day. Figure 4.2 illustrates this point with the example of total annual taught time recommended by national curricula in the UK and Germany. The figures can only give a very rough indication of individual school days in the two countries, as schedules often vary considerably between regions and even between schools within a region. According to the data, British schoolchildren on average seem to spend more time in schools per day than German ones in Bavaria (which is the sample region). However, dividing

³⁷ The patterns may be distorted by the fact that these data represent geographical areas beyond the focus of this thesis (including Northern Ireland and East Germany).

the total number of hours by the number of school days per year³⁸ reveals that in both countries schooldays are on average not longer than five hours per day. While it would be daring to deduce any consequences for the employment careers of women in single motherhood, at least this confirms that school-age children are catered for at five hours per day in both countries. This would allow mothers to use this time for employment, but also suggests that more than a part-time involvement can imply considerable reconciliation issues for children who need to be taken to and collected from school.

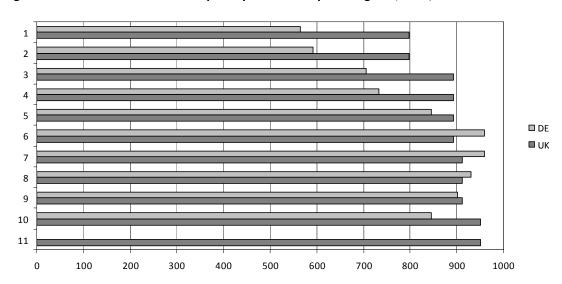


Figure 4.2 Total annual hours of compulsory education by school grade, 2011/12.

Notes: Time spent by a student in the formal part of the compulsory school programme; calculated to hours of 60 minutes per grade; German data are based on regulations from Bavaria and vary for other states (Länder); UK data is based on regulations for England and vary for Scotland and Wales; Source: Eurydice (2012).

Summarising these points in terms of impacts at different life stages at which single motherhood is experienced, country differences are largest for periods where children are of preschool age. In Germany, public provision is a

_

³⁸ 195 for England and Wales, 190 for Scotland according to Eurydice (2010); and on average 213 for Germany, where there are large differences between the states (Länder) (Gornick et al., 1997).

relatively reliable and affordable source for women with children aged 3 to school-age at least on a half-day basis. In the UK, free provision remains lower than in Germany for this age group, albeit being near universal, and additional services are expensive. In neither of the countries are the very early years (0–2) of a child well covered, which yields the question whether there are other regulations in place for this period. The following section discusses leave regulation in this light.

4.2.2 Leave regulations

Parental leave policies can be an important measure of welfare state intervention in bridging childcare in children's early years and moderating women's labour market return (e.g. Gornick et al., 1997). By definition, their relevance is largely contingent on individuals' previous employment, although there are limited provisions for mothers who were not employed. The dimensions on which parental leave policies operate are the length for which the job is protected, flexibility and the level of earnings substitution. These criteria vary between countries (cf. Moss, 2012). Parental leave is only in specific circumstances relevant for the question of how women's careers develop in single motherhood. For example, maternal leave usually covers the time directly (preceding and) following childbirth, 39 but single motherhood does not necessarily coincide with this period. Hence, maternal leave applies to the single motherhood situation only in cases where unpartnered mothers give birth to a child or where parental separation falls in the entitlement period after childbirth. As discussed in the literature review, the former is empirically the least common route into single motherhood, and it is more likely for young women. These are, however, overall less likely to qualify for extensive maternal leave, because they have a lower probability of being employed (e.g. Jaehrling et al., 2012; Rowlingson and McKay, 1998). As a consequence, maternal leave

³⁹ In some countries parental leave is a right redeemable across the first years of the child.

can be a source for support in single motherhood only in certain circumstances and at a particular life stage. In addition, parental leave can only really provide support for the financial independence of women in single motherhood if they are paid at a high replacement rate. Unpaid leave, albeit granting the security of being able to return to the previous position, mainly promotes maternal home care without solving the issue of economic security. The following paragraphs outline leave arrangements in Germany and the UK and some policy developments over time. The subsection closes with hypothesising links to life stages at single motherhood and career trajectories.

Table 4.3 summarises the main aspects of leave regulations in the UK and Germany with a particular focus on single motherhood. Leave regulations available to mothers usually consist of two elements, maternity leave as a 'health and welfare measure' (Moss, 2012) before and after childbirth, and parental leave, which may be designed as an individual or transferable right for parents (ibid.). While maternity leave after childbirth is obligatory for two weeks in the UK and eight weeks in Germany, any additional parental leave is voluntary. Beyond maternity leave, parental leave has been more generous as a statutory entitlement in Germany and more employer-dependent in the UK. The differences are relatively pronounced and point to country-specific conceptions of state intervention in family affairs. In Germany, parental leave periods have gradually been increased from 1985 when they were granted for six months. For the period from 1986-1988 the system provided 10 months of paid parental leave, increasing it to 12 months for the period between 1988-1989, to 15 months for the period 1989-1990, to 18 months for the period 1990-1993, and again to 24 months for the period 1993-2007. Since 2007, the leave period has been 12 months for the mother plus two extra months for the father, or 14 months for a single mother. In the UK maternity leave is the more generous entitlement compared to parental leave covering up to one year (52 weeks).

Table 4.3 Leave regulations

	Britain	West Germany
Parental leave	Length: 13 weeks Entitlement: Individual (per parent per child) Payment: None Flexibility: Up to child's fifth birthday Additional rights for single mothers: none	Length: First 3 yrs after birth Entitlement: Family (per child; Elternzeit) Payment: 65–67% of previous earnings (Elterngeld; 12 months); min. €300, max. €1,800 Flexibility: FT/PT; condensed period and pay; within first 3 years Additional rights for single mothers: Entitlement to maximum time of paid leave (14 months)
Maternity leave	Length: 52 weeks; dependent on previous employment Entitlement: all mothers who worked with same employer for at least 26 weeks before childbirth Payment: 90% of previous income (Statutory Maternity Pay; 6 weeks); £135.45/week (Maternity Allowance; 33 weeks); MA paid in first 6 weeks if insufficient tenure for SMP; remaining weeks unpaid Flexibility: none	Length: 6 weeks before birth and 8 weeks after birth (Mutterschutz) Entitlement: all mothers Payment: 100% of previous income (Mutterschutz; 14 weeks) for 14 weeks Flexibility: none
Total coverage for one parent (single throughout)	15 months of which 9.1 are paid and 1.4 are well paid	36 months of which 14 are well paid

Notes: Based on latest available information.

Sources: Moss (2012, 2010).

Based on current regulation, mothers categorised as single parents in Germany are financially supported for the first 14 months after the birth of a child, while in Britain all mothers are supported for 39 weeks (about 9 months). In the UK maternity leave entitlements are dependent on mothers' tenure at their place of employment before birth. Women who have been working for their employer for 26 weeks into the fifteenth week before the baby is due, are eligible for

Statutory Maternity Pay (SMP) (O'Brien and Moss, 2012). Women not qualifying for SMP may, however, be eligible for the means-tested Maternity Allowance. After the first six weeks, where SMP is paid as an incomedependent payment reimbursing 90 per cent of earnings, it is limited to a flatrate of £135.45 per week. 40 This is the statutory minimum and payments may be higher depending on employer-specific regulations. Minimum maternity leave payments in Germany, which are not dependent on previous income, are paid at €300⁴¹ per month. While they alone are not enough for covering living costs, women qualifying for the minimum payment are likely to be eligible for other statutory benefits as well. However, since 2011, parental leave payment is credited against the social assistance benefit, which limits eligibility for women previously unemployed (Blum and Erler, 2012). In Germany, women with higher previous incomes receive 65–67 per cent⁴² of the amount she had earned in the 12 months preceding childbirth (Jaehrling et al., 2012). This regulation was introduced in 2007, replacing the means-tested €300 flat-rate payment for of 6–24 months which had previously been in place.

Where studies investigate the effects of parental leave on women's labour market outcomes, longer durations are generally found having negative effects. For example, longer leaves have negative consequences for partnered women's wage development (Beblo and Wolf, 2000), work hours after return to employment (Schober, 2011) and occupational career advancement (Tomlinson et al., 2009). This suggests that, while having the advantage of securing the possibility of returning to the previous job, the length of leave sets a stronger

⁴⁰ Payment level as of 2011 (Gov.uk, 2012b).

⁴¹ That is about £239.10 based on Bank of England conversion rates as of 8 November 2012.

⁴² Since 2011, the level of Elterngeld is replaced at 65 per cent for incomes from €1,240 and above, at 66 per cent for incomes from €1,220 and at 67 per cent for incomes between €1,000 and €1,200.

incentive for leaving the full-time employment career trajectory. That said, shorter leaves are not necessarily supportive of maternal employment, especially if support with childcare is not available. Research in this field does not usually discuss the role of single motherhood. This lack of research reflects the fact that parental leave and single motherhood are not in the same way logically linked as are having a child and parental leave. Three scenarios are possible in which single motherhood and parental leave fall together. Firstly, a woman may enter single motherhood during a leave period through separation from her partner while on leave. Secondly, they may take up parental leave after having separated from their partner while still being in the entitlement period. Or thirdly, an unpartnered woman has a child and takes up leave. This demonstrates that, as mentioned at the beginning of this subsection, parental leave applies to the single motherhood situation only in a limited way.

Given a woman was previously employed, which would indicate a certain degree of labour market attachment, and one of the three scenarios applies, maternity leave can support her in bypassing shorter periods of stay-at-home care in which no other alternative is available while at the same time maintaining proximity to the labour market. Scenario one, where a woman on leave enters single motherhood, may initiate her extending the period if she's still eligible for payment. Otherwise she can be expected to seek to return to employment quickly in order to secure her income. In the British context the time window in which higher payments are made is short and thus the incentive to return to employment quickly will be higher than in Germany. The second scenario has similar implications but here it is even less likely for British women to take up leave, because they had not even been on it. Mothers who become single in the entitlement period in Germany would have a stronger incentive to take up leave than British mothers. The third scenario, in which an unpartnered woman has a child and takes up leave, is similar to the situation of partnered women taking up leave, except that not being in a partnership also curtails the possibility of a second income. In the context of shorter paid periods, here, too, British women are more likely than German women to keep leave short.

In contrast to childcare services as discussed in Subsection 4.2.1 the implications of leave regulations was shown to support reconciliation based on a rather different mechanism, namely, in the degree to which they allow women to take a break from employment. Cash payments to mothers, which are not based on women's previous employment, can have similar impacts. The following section discusses policies for cash transfers in their consequences for family-employment reconciliation.

4.2.3 Transfer payments

Transfer payments can support women in single motherhood to maintain their household, potentially relieving them from the immediate need to acquire market income. If paid on a sufficiently high level, transfers hence solve the family–employment reconciliation issue by setting incentives for home care. This section gives brief overviews of policies for transfer payments on the basis of a) being responsible for a dependent child and b) being responsible for a dependent child while not living with a partner.

Child benefits

In both countries the state pays a universal cash benefit to parents who are responsible for a child up until it reaches a certain age. Table 4.4 gives an overview of the regulations in the UK and Germany. The benefit is paid to support individuals in securing children's subsistence with a basic income supplement. The age threshold for receiving Kindergeld in Germany is 18 years or 25 years for children who are in education. This is relatively high in international comparison. In the UK, the child's age threshold for child benefit is 16, and is extended to 20 if the child is in full-time approved education. In Germany, the benefit had long been paid until the child turned 27 as long as he

or she was in education (leading to their first occupation) and earned less than €8,004/year (£6,378.20; for 2010–2011).⁴³ The regulation of children's income limit was abolished with a new law introduced in 2011, and now the main criterion is whether the child is in education.

Table 4.4 Child benefit

	Great Britain	West Germany
Child benefit	Child Benefit: universal, until child is 16 years or 20 years if child still is in non-advanced education; monthly £87.29 for eldest or only child, £57.62 (per child) for additional children	Kindergeld: universal, until child is 18 years or 25 years old if child is in education 'preparing for its future occupation';* monthly €184/child (£146.62) (since 2010)
Child tax credit	From 2001; means-tested; for parents of children under 16 (or under 20 if the child is in approved education); incomedependent	

Notes: Based on latest available information; * German: "Ausbildung für einen künftigen Beruf" (Bundesagentur für Arbeit, 2012)

Sources: BMFSFJ (2011b); Bundesagentur für Arbeit (2012); Gov.uk (2012a); Jaehrling et. al. (2012).

Payment levels are also slightly more generous in Germany compared to the UK. Figure 4.3 illustrates the development of child benefit levels (as a proportion of mean equivalised income) between 1990 and 2010 in the two countries. The considerable increase in payments in Germany in 1996 is a consequence of integrating the dual system of family tax exemptions and family support. The reforms followed a decision by the Federal Constitutional Court (BVerfG) implying that the dual system of child benefit and tax allowances did

_

⁴³ Before it was abolished in 2012, the income limit for children had been altered in the following steps throughout the past decade: 1999: DM 13,020; 2000: DM 13,500; 2001: DM 14,040; 2002: €7,188; 2003: €7,428; 2004–2009: €7,680 per year respectively.

not result in tax exemption on the child's subsistence level (BMFSFJ, 2008b). The graded payment levels by number of children, which is rooted in the idea of diminishing per capita household income with an increasing number of children (Münch, 2007), has been kept for the third child and any additional children. Today, child benefit in Germany is paid at €184 (£146.62) per month for the first child (from 2010), the same amount for the second child, €190 for the third, and €215 for any further child. Payment used to be €154 (£122.72) per month for the first child from 2002 to 2008 and €164 (£130.70) per month for the first child from 2009. Figure 4.3 seems to indicate a trend of reducing the 'rewards' for having more than one child in the German system. In the UK each additional child is paid at a much lower rate than the first child, which has not increased much as a proportion of the average income. The underlying logics therewith vary markedly in that child benefit in Germany is understood as a basic income guarantee for each child whereas in the UK it works as a mere supplement to the household income. Following the same logic, there were separate rates with slightly higher payments for carers categorised as single parents from the 1970s until 1998 in the UK. When these separate rates for single parents were abolished for new claimants, old claimants were still receiving the separate rates, which were gradually approximated to the rate for carers in couples.

Child benefits are not generally means-tested in the two countries, but the current UK government introduced an income threshold of £50,000 for the highest salary per household above which child benefit is going to be meanstested from January 2013. Between £50,000 and £60,000 child benefit will be reduced by 1 per cent for every £100 over £50,000 earned. If the highest salary is above £60,000, the household will not receive any child benefit (Gov.uk, 2013). Child tax credit, which is available to individuals with children in the UK on the basis of a means test, is another family-supporting transfer payment. It is also paid to parents responsible for a child under 16. The scheme had originally

been designed as an income top-up similar to the tax credits discussed below, but became an independent benefit in 2001 and administered as a separate entitlement since 2003. To some degree, then, the combination of child benefit and child tax credit creates a basic income guarantee for children, which is similar to the integrated measure in Germany.

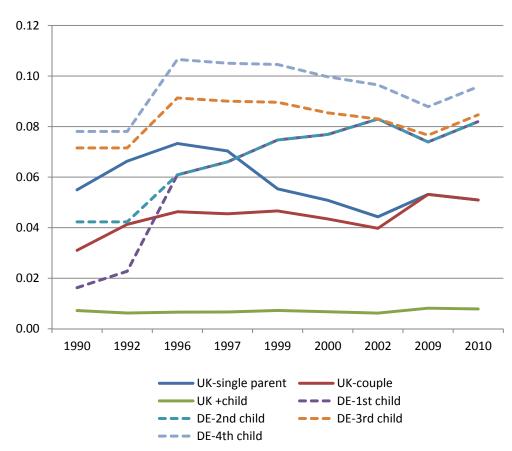


Figure 4.3 Child benefit in the UK and Germany: monthly payment as proportion of mean equivalised income 1990–2010

Notes: Conversion for Germany 1990–2001 at DM1.96–€1.00; conversion rates €–£ as of 8 November 2012, Bank of England; UK: the separate rate for single parents was abolished for new claimants in 1998, rates shown after this date apply to existing claimants only; monthly mean equivalised net income of the same year except income of 1995 for 1990 and 1992, and of 2001 for 2002.

Sources: Child benefit - BMFSFJ (2008b); Bundesagentur für Arbeit (2012); Institute for Fiscal Studies (2012); Mean equivalised net income - Eurostat (2013)

Child benefit does not by itself grant women in single motherhood the capacity to maintain an autonomous household, because only their child's economic needs are (at least partly) covered. The payments can be interpreted as a relatively stable source for an income top-up throughout the child's dependency ages, which may set an incentive to engage in employment. However, while child benefit is paid to women in single motherhood at the same rules as for partnered mothers, their receipt has consequences for the entitlement to other transfer payments, such as child maintenance or social assistance. Regulations around child maintenance are discussed in the following section.

Child maintenance

Child maintenance regulations are a further element of transfer payments to mothers who are single, which can mediate their family-employment reconciliation (Gingerbread, 2012). The regulations are part of the intervention of welfare states into post-separation family life. Law regulates questions of custody and maintenance payments, which parents can draw on in case they are not living together and do not find an agreement between them. Table 4.5 gives an overview of the regulations in the two countries. Child maintenance regulations define financial liabilities expected of parents who live apart⁴⁴ to support their children (Skinner and Davidson, 2009). Countries differ in the way they organise child maintenance, with some countries leaving the main responsibility for determining formal child maintenance to courts and others to mediating bodies such as agencies. The UK and Germany are examples of each of these cases. In Germany, the role of deciding the amount of maintenance payment if parents do not reach an agreement or if the non-resident parent does not pay lies with courts. In the UK this lies mainly the Child Support Agency (CSA), but courts can also be called upon (Skinner and Davidson, 2009).

_

⁴⁴ This excludes widowed parents.

Table 4.5 Child maintenance

	Britain	West Germany
Maintenance payments	Determination: by parents, ratified by courts, by CSA or by courts Child Support Agency Difference married/ separated: No Enforcement: Courts and CSA Child maintenance guarantee/statutory advance payment: No	Determination: by parents or by courts Difference married/ separated: Support services to unmarried mothers by youth welfare office (Jugendamt) Enforcement: Courts Child maintenance guarantee/statutory advance payment: Yes for max. 6 years until child is 12

Notes: Based on latest available information; CSA = Child Support Agency

Sources: Jaehrling et al. (2012), Skinner and Davidson (2009)

Although deciding to take the non-resident parent to court over maintenance payments is possible in both countries, legal regulations regarding child maintenance are not by default designed to enforce payments. Instead, the state encourages family-based agreements. These may be ratified by the respective legal body, i.e. courts or the CSA. Contrary to the case in Germany, where the state steps in for non-paying parents up until the child's twelfth birthday, there are no default entitlements to mothers after separation in the UK (Jaehrling et al., 2012, p. 114). The 2008 reforms of child maintenance regulations (Unterhaltsrecht) in Germany have increased the emphasis on mothers' responsibility to be employed rather than relying on payments from the partner following a 'male breadwinner' logic (ibid.). For settling on an amount of maintenance payment, in both countries the non-resident parent's income is taken into account but the resident parent's income is not (Skinner and Davidson, 2009). Furthermore, both countries take into account net earnings and other incomes of the mother. However, only in Germany were living expenses accounted for in calculating the level of child maintenance payment (ibid.). In both countries, the amount of child maintenance payment is credited in means tests for social assistance. This regulation was changed in the UK in

2011, implying that from then on child maintenance payments do not affect the level of benefits resident parents may receive. The institutional link between child maintenance and social assistance benefits may be crucial in setting incentives for engaging in paid work. This is further discussed in the following paragraph, which considers impacts on coverage and level of maintenance payments for family–employment reconciliation.

To get an overview of the scope in which the regulations apply, empirical information can be instructive. However, it is relatively difficult to obtain reliable and comparable data on child maintenance payments. Based on analyses of pooled longitudinal survey data (EU-SILC) Jaehrling et al. (2012, p. 28) find that in Germany 53.9 per cent of woman experiencing single motherhood at least once between 2004 and 2008 received child maintenance, while the figure was only 22.1 per cent in the UK.⁴⁵ This difference seems to reflect the German practice of statutory advance payments in case the nonresident parent does not pay, although it is surprising that the figure is not higher for Germany. In addition to only reaching about half or less of the potentially 'eligible' cases, research has shown that child maintenance payments often do not provide mothers with sufficient resources to maintain their household (Lewis and Hobson, 1997; Ott et al., 2003). Accordingly, Skinner and Davidson (2009) find that levels of child maintenance received by nonwidowed single parents were at about 13.2 per cent of the national average net disposable income in the UK (1999) and at 11.6 per cent in Germany (2000). The consequence of this relatively low coverage and low level of payment is that in the majority of cases women in single motherhood rely on acquiring economic security through other than or additional means to child maintenance. The low

⁴⁵ Skinner and Davidson (2009) use cross-sectional micro data from the Luxembourg Income Study and find that, in 1999, 21.8 per cent of British and 28.4 per cent of German non-widowed single parents received maintenance payments.

payment level is not in itself likely to set incentives for undertaking childcare within the home, rather than paying for it outside the home, as it does not usually grant sufficient economic security for maintaining an autonomous household. To the contrary, maintenance payments may function as an income top-up, which allows women to acquire economic independence by having a lower-paid part-time job. Overall, then, compared to the British less regulated child maintenance system the German one could be seen to support part-time care/part-time employment solutions of reconciliation. In terms of life stages at single motherhood, consequences of child maintenance regulation are applicable for children aged between 0–16 in the UK and 0–12 in Germany. Furthermore, the fact that higher child maintenance payments would generally imply lower entitlement to social assistance could suggest that there is a tradeoff in incentives to engage in employment. The design of policies involving such transfer payments and their expected outcomes are discussed in more detail in the following section.

Social assistance benefits for single mothers

In both countries, rather than being an element of family policy, social assistance benefits paid on the basis of the single-parent status (Table 4.6) is an instrument of unemployment protection legislation. As demonstrated in Chapter 2, the entitlement has been a central focus of research on labour market behaviour of women in single motherhood. Reasons for this preoccupation were discussed in Chapter 2. The underlying issue is that this benefit type is associated with considerable financial disincentive problems compared to other types of unemployment protection, because of its high effective tax rates on return to employment (Clasen and Clegg, 2006, p. 531). However, it is important to note that it is just another component in welfare state configurations relevant to the single motherhood situation.

Table 4.6 Social assistance and interactions with other transfers

	Great Britain	West Germany
Social assistance benefits (for single parents)	Income Support: means- tested; for single parents of children <5 yrs (since 2012)	ALG II (since 2005; previously Sozialhilfe): means-tested; for single parents of children <3 yrs
Transfers credited for determining payment	Parental leave payments; child maintenance payments	Parental leave payments; child maintenance payments

Notes: Based on latest available information; ALG II: Arbeitslosengeld II (Unemployment Benefit II). Sources: Directgov (2012a); Jaehrling et. Al. (2012).

From a historical perspective the benefit insures against the risk of marital break-up or the 'failure' to form a marriage (Orloff, 2002, p. 31). The 'single parent' status acts as an entitlement to social assistance on a basic level, which offers a "bottom-line capacity for independence" (ibid.) and gives some relief from the need to engage in paid work. Although social assistance benefits are not designed as family policy, familisation/de-familisation and selfdetermination are useful concepts to evaluate its effects, given that, covering single parents, the benefit is directed at individuals in a particular family constellation. As many more women than men head single-parent households, a policy measure granting social assistance on the basis of the single-parent status may be viewed as carrying the female home carer norm (e.g. Schwarzkopf, 2009), although the benefit is also effectively increasing financial independence from other family members (cf. Leitner and Lessenich, 2007). To some extent, then, implications of the relative generosity in length of payment to non-employed single parents in the UK (see Table 4.6) seems to run counter to the otherwise low intervention in family affairs. In the German context, although being less generous in terms of duration compared to the UK, the payment is in line with the overall family policy model, which emphasises women's role as carers.

In both countries reforms of unemployment protection policies were implemented in recent years. These implied making rights to social welfare more conditional on efforts made to seek employment (Clasen and Clegg, 2006). Developments involved changes to the eligibility criteria based on the singleparent status (Haux, 2011; Jaehrling et al., 2012). While in the course of the UK reforms promoting the employment of women in single motherhood became an explicit political aim (Finn and Gloster, 2010), in Germany the consequences for this claimant category were largely side-effects of broader restructuring of unemployment benefits (Schwarzkopf, 2009). In Germany, until 2005, women in single motherhood fell into the category of means-tested social assistance beneficiaries, which implied their unconditional receipt of basic cash benefits as long as their child was younger than three. In practice women in single motherhood were generally not expected to work until their child reached school age (Schwarzkopf, 2009). Following the implementation of the reforms, women 'living with a child [aged under 3] for which they have the sole caring responsibility' (SGB II, 2005; brackets added) qualify for 'basic support for job seekers', implying access to services for the promotion of employment (Schwarzkopf, 2009) as further discussed below. British reforms involved decreasing the age threshold of the youngest child which marked the limit to the duration of benefit entitlement on the basis of the single-parent status. The threshold was the youngest child's age of 16 years until 2008 from when it was lowered to 12 years. Reducing it further to 10 years from 2009, to 7 years from 2010, and to 5 years in 2012 (Directgov, 2012c; Haux, 2011), it still remains higher than in Germany.

In both countries social assistance benefits are an important income source for many women in single motherhood (Finn and Gloster, 2010; Heimer et al., 2009). As noted above, payment levels can be crucial in determining to what extent they indeed provide financial independence and relieve the need for market work. Levels are difficult to determine, because they vary by case.

Jaehrling et al. (2012, p. 116) report hypothetical monthly entitlements of social assistance benefits for non-employed women in single motherhood with a child aged 6 years in 2009 based on the OECD Tax Benefit Models (OECD, 2012b). The basic rate for mothers in Germany, whose entitlement at this stage is derived from unemployment and not single motherhood itself, is €645 (£514), and in the UK, it is £279 for women who qualified for the benefit meeting the criteria of the model case. While taking into account that child benefit, child maintenance and parental leave payments are credited against entitlement to social assistance benefits, parental leave does not usually apply to mothers whose child is 6 years. Adding housing benefits (Germany: €382⁴⁶ (£304.41); UK: £630) and family benefits (Germany: €172 (£137.06); UK: £318) the hypothetical income women receive is €1,200 (£956.25) (Germany) and £1,227 (UK) per month, which makes up about 60 per cent of the respective median equivalent incomes (Jaehrling et al., 2012). The calculations suggest that at the time when the child is about to enter school in Germany the state secures an income to non-employed women in single motherhood only just above the poverty line. For the UK, on the other hand, the model calculations reflect a life stage at single motherhood in which the child has already entered school, because compulsory school starts at age 5. This makes it difficult to compare the two scenarios with regard to the effects on employment beyond the acknowledgement that the low income could be an incentive for engaging in higher paying market work if it is available.

In summary, compared to Germany, social assistance payments to unemployed women in single motherhood have been more extensive in length but similar in terms of the level in the UK throughout the 1990s. The benefit can create a 'non-employment trap' in the careers of mothers who are single, if childcare is

⁴⁶ Derived from the lump-sum of ALG II entitlement.

inaccessible and no higher paying job is available. In particular, the long entitlement periods in the UK combined with limited access to childcare seem to be a combination which fosters career sequences dominated by non-employment. If this combination falls at a life stage with low previously acquired resources, continuous non-employment sequences seem likely, as chances of finding a better paying job are limited for the low-skilled. In Germany, social assistance payments to women in single motherhood are more likely to be associated with change or interrupted career sequences, in which the women are reintegrated into employment. The following section discusses how welfare states, in addition to sharpening conditionality to social assistance benefits, have introduced 'activation policies' partly as a response to high numbers of claimants and partly as elements of larger reforms.

4.2.5 Activation policies

Employment careers of women in single motherhood may be influenced by welfare state measures referred to as 'activation policies', which are designed to reintegrate the non-employed into the labour market. There is a large and growing literature on the topic of 'activation'. Activation is a central buzz term in research on welfare state change in the 1990s and 2000s (Bonoli, 2005; Esping-Andersen, 1999; Taylor-Gooby, 2004; Van Voorhis and Gilbert, 2001). It "is primarily about increasing labour market entry and participation, and phasing out temporary labour market exit options for working-age claimants" (Clasen and Clegg, 2006, p. 527). This section focuses on the aspects of activation policies, which go beyond curtailing rights to social security schemes.

Table 4.7 Activation measures

	Britain	Germany
In-work benefits (transfers)	Working Tax Credit/Working Families Tax Credit: Meanstested; for single parents (age 16 or older) working 16 hours or more; paid over six months period; extra childcare elements Child Tax Credit (until 2001): Means-tested; for parents of children under 16 (or under 20 if the child is in approved education); income-dependent Childcare Tax Credits: Meanstested; up to 70 per cent of costs for registered childcare for working parents (min. 16 brs (val) with shildren	Supplementary Child Allowance (Kinderzuschlag): means-tested for parents of children <25 years; income top-up paid if payment is enough to prevent ALG II receipt (since 2005)
Active labour market policies (services)	Income Support/Jobseeker's Allowance claimants: New Deal for Lone Parents; work-focused interviews	Social assistance (ALG II) claimants: access to employment services (since 2005)

Notes: Based on latest available information; ALG II: Arbeitslosengeld II (Unemployment Benefit II).

Sources: BMFSFJ (2011b); Directgov (2012a); Jaehrling et al. (2012); Strickland (1998).

Table 4.7 summarises respective policies in the UK and Germany, focusing on the main measures.⁴⁷ The measures are divided into the broad categories of financial incentives on the one hand and employment services on the other (Jaehrling et al., 2012). In the UK, activation policies in general and those targeted at women in single motherhood in particular were increasingly introduced from the mid-1990s onwards, including tax credits schemes and active labour market programmes. One major wave of UK reforms with explicit 'activation' objectives was introduced at the end of the 1990s. The generation of

⁴⁷ For a more extensive overview of available services in the UK and Germany see Goerne (2012).

tax credits introduced in 1999 set financial incentives for taking up employment, with the next one following in 2003. The 1999 reforms replaced Family Credit, the means-tested social security benefit, with the Working Families' Tax Credit (WFTC), a wage subsidy which was calculated on the basis of household income. Unlike Family Credit, which was administered by the Benefit Agency (later integrated into what is now the Department for Work and Pensions), WFTC was paid through employers and was administered by Inland Revenue. The 2003 reforms replaced WFTC with Working Tax Credit (WTC), extending the eligibility to individuals on low incomes without children, and Child Tax Credit (CTC) (Strickland, 1998). Unemployed women in single motherhood have been explicit policy targets from 1998, when they could voluntarily participate in the 'New Deal for Lone Parents' employment programme (DWP, 2010b). Since 2001 they were furthermore obliged to take part in work-focused interviews. Child tax credit in the UK can also be categorised as an activation measure, at least before its reform in 2003 (see 4.2.3.1), as it tops up income to make employment more attractive. In Germany, supplementary child allowance works in a similar way. Women in low-paid jobs can receive this payment for increasing their income above the social assistance eligibility threshold. As mentioned above, in Germany, women in single motherhood had long been covered by Sozialhilfe, the social assistance benefit, and were not counted as unemployed until their child reached the age of 3 years. At the discretion of job centre advisers, women in single motherhood were often exempted from the requirement to reintegrate into the labour market well beyond that point (Goerne, 2012). This also meant that they were excluded from employment services designed to reintegrate unemployed individuals (Schwarzkopf, 2009). Social assistance ('Hartz IV') reforms implemented in 2005 made employment services a more viable option for women in single motherhood in Germany. Overall, the UK government has operated a work-first agenda since the late 1990s reforms (Finn and Gloster, 2010) more strongly than is the case in Germany (Goerne, 2012).

The effects of active labour market policies on family-employment reconciliation of women in single motherhood are not well researched. Impacts of active labour market policies are particularly difficult to evaluate (Goerne, 2012). In an attempt to analyse the effects of the 2005 unemployment benefit reform in Germany, Ott et al. (2012) find a negative effect on the probability of taking up part-time employment, but none on full-time or non-employment (ibid., p.39f.). This could indicate that for mothers who were single and who became eligible for social assistance after the reform part-time employment lost its financial attraction. As for in-work benefits, some scholars have shown that the labour supply of women in single motherhood is particularly responsive to changes in wage rates (Duncan, 1991, p. 117). Wages must be high enough to compensate for the mother's absence in order for the decision to engage in paid work to be economically rational. Also shown by qualitative research, being employed does indeed not always improve living conditions for women in single motherhood and their children (Millar, 2008). Evidence from quantitative research shows that reforms introducing higher tax credits have increased employment take-up of women in single motherhood in the UK (Blundell et al., 2005; Francesconi and van der Klaauw, 2007; Gregg and Harkness, 2003; Gregg et al., 2009), but also that the incentives mostly led to more employment for 16-30 hours per week rather than full-time employment in both countries (Jaehrling et al., 2012, p. 59). Gregg and Harkness' (2003) difference-indifference (DD) approach to repeated cross-sectional data evaluates the effects of welfare reform introduced in 1998. They compare women in single motherhood who have been exposed to the reforms with a comparison group, estimating how the employment of women in single motherhood would have developed if they had not been exposed to the reform. They conclude that 5 per cent of the 11 per cent increase in employment rates of women in single motherhood was due to the reforms; and that those already in employment have increased their hours. By using several employment status observations from panel data before and after the policy reform, Francesconi and van der Klaauw (2007) extend the DD approach to what they call difference-in-difference-in-difference (DDD) estimation approach. Corroborating Gregg and Harkness' (2003) findings, they report that about 5 per cent more women currently in single motherhood were in employment as a result of the financial reform. They are able to determine the reasons for this increase as both higher entry rate and higher rate of remaining in the labour force.

As for the effects on employment careers of women in single motherhood it should be stressed that activation policies only apply to unemployed women. In the short term activation measures can, through various mechanisms, potentially lead to career transitions from unemployment into employment. Long-term sustainability of these impacts is not well researched. Job retention could be an issue especially regarding the role of part-time employment, because often part-time jobs are less secure than full-time arrangements (cf. Connolly and Gregory, 2008). Fusion type career sequences starting with unemployment and transitioning to part-time employment or change sequences with gradual employment return seem likely options, where activation policies improve family-employment reconciliation with making market work more financially attractive.

4.3 Summary

The discussion of policy frameworks in this chapter has demonstrated potential mechanisms which may have an impact on the employment careers of mothers who are single. It was shown that policies directed at family–employment reconciliation or at labour market integration, respectively, affect women in single motherhood to different degrees and often only at specific biographical time points.

As for the effects of childcare arrangements, the British system was described as potentially bifurcating users into those with minimum universal provision and those with additional services according to their level of income, facilitating fractured trajectories among women in single motherhood overall. The German system of childcare provision, on the other hand, facilitates more continuous usage for mothers of preschool children and more stable employment career trajectories of such mothers who are single than in the UK, albeit potentially divided over continuous part-time and full-time careers. Country differences are largest in the provision of preschool childcare.

Leave regulations apply to the current research under specific conditions. Only if single motherhood is experienced within the periods covered by leave at the beginning of a child's life does it potentially affect employed women's careers. Short career breaks of stay-at-home care can be bridged for women entering leave while in single motherhood or entering single motherhood while on leave. Compared to Germany, British leave regulations were assumed to foster quicker labour market return providing only short periods with high pay.

Transfer payments to women in single motherhood can also provide support for taking time off labour market work. Three kinds of payments were discussed, child benefit, child maintenance and social assistance benefit. Child benefit provides the means for covering children's basic needs in both countries. This baseline guarantee can work as an incentive for employment, because its receipt reduces the level of other potential payments such as child maintenance and social assistance, the latter of which tends to be a disincentive to employment. Child maintenance can also work as an income top-up. Supporting the 'male breadwinner' norm, its payment is more regulated in Germany than in the UK and would seem to facilitate part-time employment arrangements for mothers of children under 12. The support which social assistance payments provide for maintaining an autonomous household, on the

other hand, facilitates periods of non-employment. Compared to Germany, social assistance transfers to women in single motherhood in the UK are more generous in length, making continuous non-employment a common trajectory among British women in single motherhood who do not have higher paying alternatives.

Effects of activation policies are relatively difficult to determine. In general, they should foster unemployed women's return to employment. Re-entry into the labour market is an increasingly likely career path particularly in the UK since the end of the 1990s, since women in single motherhood have become explicit policy targets. However, as unemployment research has shown, regaining labour market attachment becomes increasingly difficult the longer individuals are inactive or unemployed, which is sometimes termed as 'scaring effects'. These comprise a range of reasons stretching from stigma effects of unemployment to loss of firm- or industry-specific human capital or human capital depreciation due to economic restructuring, but also signalling effects (Gallie and Paugam, 2000; Gangl, 2006). Empirical evidence from Germany confirms that the longer the periods for which women in single motherhood were receiving social assistance benefits the less likely becomes labour market re-entry (Lietzmann, 2009; Ott et al., 2003).

As demonstrated in this review, despite some similarities policy arrangements in the UK and Germany provide relatively distinct environments for individual employment trajectories of women with single motherhood experience. The following chapter discusses the methodological approach with which this thesis investigates such trajectories and the role of policy frameworks based on the proposed theoretical perspective.

Chapter 5 Methodological approach and data

This chapter outlines the methodological strategy for the empirical analyses of this thesis. The strategy covers mapping and comparing the employment dynamics of working-age women who experience single motherhood in Great Britain and West Germany. Central to the approach is the focus on individuallevel processes and the consideration that these develop in institutional contexts. As discussed in Chapter 3 both aspects are usefully captured in the life course paradigm (e.g. Mayer, 2009). The increasing popularity of the life course perspective in social research in the past decades was boosted by the emergence of more and more data sources for quantitative longitudinal individual-level This information. trend has been accompanied by methodological developments that make full use of existing data for scientific inference (ibid.). The present research also benefits from the increasingly rich data landscape. Individual-level quantitative data are analysed with methods that allow the differentiation of life stages and processes and acknowledge the conditions these set for inferences.

The embeddedness of individual-level processes in institutional frameworks is addressed by applying a comparative perspective between two countries with relatively distinct settings. One attraction of comparisons between two countries is the potential to set observations in relation to the specific sociohistorical environment in each country. What seems to be a 'normal' outcome of a policy or regulation in one country can turn out to be rather specific compared to what is observed in another country. Hence, the two-country comparative design of this research provides the basis for interpreting variations in women's employment trajectories in reference to their context beyond single-country

studies (cf. Tarrow, 2010). Comparisons between more than two countries can have the advantage that more variation may be accounted for. The use of multilevel techniques in a multi-country design would furthermore allow an analysis of the effects of macro-level variation on the individual level (cf. Hox, 2010). However, the small number of countries for which suitable longitudinal data are available restricts the possibilities of multi-country studies. Furthermore, statistical analysis with countries as units of observation are mostly limited to small sample sizes, a problem which persists in multi-level analyses (Hox and Maas, 2005).48 Drawing on country-comparisons without applying the statistical method, each additional case also adds more complexity and requires extra effort for describing and understanding them. In the scope of the present project two countries provide sufficient grounds for testing whether findings from statistical analysis on individuals reflect the idiosyncrasies of the respective country. Rather than following the strict logics of a 'most similar' systems design (Przeworski and Teune, 1970) or a 'method of difference' (Mill, 1858; as cited in Lijphart, 1971), the present research uses Britain and West Germany as mere contrasting cases. The comparison adds a valuable dimension even though this design does not allow for making causal statements regarding the impact of contextual factors on individual behaviour (Lijphart, 1975). Comparing women in the German and British settings implies contrasting two cases with distinct policy frameworks. As shown in Chapter 4, some baseline similarity in the labour market policy for women in single motherhood exists, but Britain and Germany have a relatively distinct environment in terms of

_

⁴⁸ Although there is no uncontested minimum of cases for statistical analysis, as a rule of thumb, case numbers under 100 is less than optimal, and case numbers under 30 are at best problematic. As for multi-level analysis, Hox and Maas (2005) suggest that a sample smaller than 50 at level two (the 'group level') leads to biased estimates. Besides this 'small N' problem other sampling issues exist in multi-country studies which treat countries as statistical units (Ebbinghaus, 2005).

family policy and its normative underpinnings. The assumption on which the comparison is based implies that the different institutional settings should produce typical outcomes for each country. Both compliance with the countryspecific expectations and any observable diversions give scope for interpretation. Therewith, the comparative design can enable a clarification of the nature of observations of individual-level phenomena and prevent false generalisations from being drawn. In this research the micro phenomena are patterns of employment trajectories observed in quantitative longitudinal data on mothers with a single motherhood experience across countries. One of the main advantages of a quantitative approach is that it enables the possibility of drawing on a larger data basis in each country case than would be possible in a project of the same scope with a qualitative approach. The quantitative, crosscountry comparative approach of this research addresses a gap in the research landscape on this subject. Combining a comparative design, with a longitudinal perspective on dynamics in family and work life, and quantitative methods provides a novel angle. Moreover, applying panel regression and sequence analysis in particular is a relative novelty in this area, which explains the substantive descriptive element in the present empirical strategy.

In the following sections, the choice of methodology for this research project is further detailed against the background of an overview of previous approaches to studying aspects of single motherhood and employment (Section 5.1). Data sources (Section 5.2) and their specific value to analysing present issues (Section 5.3) are introduced thereafter. The chapter closes with a summary of the methodological approach (Section 5.4).

5.1 Analysing the dynamics of single motherhood

Based on the discussion of previous methodological approaches to analysing single motherhood and employment processes on the German and British cases this section proposes quantitative techniques for realising the empirical strategy of this thesis. Despite the comparatively rich data landscapes in both countries,⁴⁹ one of the main difficulties for such research is that longitudinal data remain limited, especially on subgroups of society such as women with single motherhood experience. Within these limitations several methods have been used, broadly following the logic of looking either at transitions (change from one to another status) or at trajectories (more than one change between at least two different statuses). The following discussion of methodological approaches and their suitability for the present research focus is conducted along this divide.

5.1.1 Analysing transitions

Based on the central research interest of this thesis, whether single motherhood has life-stage specific consequences on career trajectories, one question it addresses is whether single motherhood constitutes an obstacle to smooth labour market entries for women. In other words, is employment at labour market entry less likely for women entering single motherhood compared to having a child while being in a stable partnership? This question addresses two instances of change, one in partnership and one in employment status, which can be described as transitions. A methodological approach is required, which is able to single out the effects of individual family dynamics on changes in employment status, because several other factors can also be expected to play a role in initial labour market integration. In consideration of other methodological approaches this section demonstrates the advantages of panel regression (fixed effects) over other common regression techniques for this research interest.

⁴⁹ Countries with comparatively good data availability and relatively established research traditions on the subject of single parenthood are Canada, the US and Australia.

Previous research that considered the changeability of family situations across the life course was often interested in single motherhood as the dependent variable. For example, one of the first research reports on the dynamics of single motherhood in the UK (Rowlingson and McKay, 1998) uses event history analysis to analyse transitions to single motherhood. Event history analysis provides a technique for multivariate analysis of transition probabilities and is hence suited to Rowlingson and McKay's research interest in what facilitates single motherhood entry. In their study of lifetime incidences of single motherhood and stepfamily constellations Ermisch and Francesconi (2000) use lifetable methods. This method allows them to analyse the distribution of experiences of different family constellations across the observed time period, controlling for exposure to the risk of experiencing certain transitions, and differentiating between birth cohorts (ibid., p.239). They predict that about two fifths of British women experience single motherhood in their lives, with half of the cases lasting for less than five years until step-families are formed. Repartnering of women in single motherhood in the UK is also Skew's (2009) research focus. Using an event history analysis approach to estimating the time until single motherhood, her findings confirm those of Ermisch and Francesconi (2000) on the average duration of single motherhood.

Quantitative studies on German women's experience of single motherhood have also used lifetable methods. For example, a recent study commissioned by the German Federal Ministry for Labour and Social Affairs (BMAS, 2011) shows that a quarter of the women who are in a single motherhood situation at one point in time re-partner after only three years. With survival analysis the same study shows that, in Germany, the probability of exiting single motherhood diminishes the longer women spend in the situation (ibid., p.13). In their comprehensive report on the dynamics of single motherhood in Germany, based on Socio-Economic Panel (SOEP) data, Ott et al. (2012) use multiple methods. Among other results, they find that longer durations of single

motherhood are often under-represented in analyses with the SOEP dataset, because long spells are more likely to be left- or right-censored. They use a Kaplan-Mayer survival estimation to account for right-censoring with weighting, but left-censoring cannot be accounted for.

Studies analysing employment dynamics of women in single motherhood are often especially constrained in regard to data availability. This is because variations over time both in employment and in family status are considered, and cases with no change are of limited use for the analysis. Hence, empirical investigations are often primarily descriptive, as is exemplified in the comprehensive four-country study by Jaehrling et al. (2012). Ott et al. (2012) also study the relationship between single motherhood and labour market participation in Germany, focusing on employment transitions. They use both simple cross-tabulations and proportional hazards models analysis/cox regression). In their multivariate analysis they find that the probability of taking up part-time employment is smaller for women with migration history (compared to those born in Germany), for those living in East Germany (compared to those living in West Germany) and for those who entered single motherhood in the 1980s (compared to those entering single motherhood in the 1990s or 2000s). Likewise, having younger and higher numbers of children decreases the probability that women will take up full-time employment.

As indicated in the discussion of previous methodologies above, event history analysis is a method often applied when individual-level change is the research interest. It is also widely discussed in the social science research community and included in the major statistical software packages. The focus of event history analysis is the difference in the timing of an event between individuals with different characteristics. Ultimately, the method enables the prediction of differences in the 'risks' of experiencing a particular event in a certain time

period, which is why it is also called survival analysis, transition-rate analysis, duration analysis or hazard analysis (cf. Allison, 1984). In event history analysis the risk of experiencing a certain event is regressed on a selected set of independent variables. It requires life history data, with which start and end dates of 'spells' and dates of certain events are identifiable. In principal, the question of employment of women in single motherhood at labour market entry can be addressed with this method, especially considering its ability to account for censored observations and using time-varying independent variables. However, there is one main disadvantage of this method over its alternatives, namely the problem of unobserved heterogeneity (Blossfeld and Hamerle, 1992; Vermunt, 2001). In particular, event history models tend to underestimate effects if they do not explicitly control for unobserved heterogeneity, because hazard rates tend to be negatively related to time (Blossfeld and Hamerle, 1992, p. 159). While this can be statistically accounted for by introducing a non-negative random variable to the model (ibid., p.161), panel regression arguably addresses the problem more efficiently as will be described below.

Besides single country descriptions, Jaehrling et al. (2012) also apply multivariate regression techniques for analysing mothers' transitions into and out of employment, drawing on the panel module of the European Union Statistics of Income and Living Conditions (EU-SILC). Unfortunately, the regression model is not specified. Taking 'transition' as the dependent variable, the semantic framing suggests the use of event history analysis. However, the lack of reports of standard error corrections for repeated measures, and the missing specification of the data's panel structure hints at the use of logistic regression on pooled panel data. In a similar way to the case of Evans et al. (2004), who pool British data from the Families and Children Survey (FACS) to identify determinants of different employment transition patterns for women in single motherhood, this technique does not make full use of the longitudinal

data. In order to address the present research question, Ordinary Least Square (OLS) regression with metric dependent variables or similar regression methods for categorical dependent variables are unsuited, even if applied to longitudinal individual-level data. While a generic question such as Is there an association between single motherhood and employment? can easily be addressed, the element of intra-individual change is not picked up on by simple regression techniques applied to cross-sectional data, nor is it possible to gain an understanding of the associations between the dependent and independent variables. By estimating a regression function which optimally represents the relationship between independent and dependent variables (minimising the squares between the regression line and the observations in OLS; calculating maximum likelihood in regression of categorical data) these methods treat all observations equally and disregard the clustered structure of the data, disregarding that observations of the same individual at different time points are strongly dependent on each other. This means that person-specific variation over time is unaccounted for by such methods, resulting in biased estimations of the effect of the independent on the dependent variable. One way of extending simple OLS regression for singling out intra-individual variation over time, which is sometimes regarded as a variant of fixed effects regression, is OLS regression with integrated dummy variables for each individual (Giesselmann and Windzio, 2012, p. 48ff.). That way, a separate regression line is predicted for each individual, cancelling out unit-specific variation. This leads to the same results as a fixed effects model, but is much less efficient and often time-consuming in data processing with the available software packages. As a compromise, OLS can also be extended to include context variables as mean values of the variation in time-varying individual variables (also referred to as hybrid method), controlling some of the unit-specific variation. Unlike fixed effects regression, this method also allows for the inclusion of timeconstant variables in the model, but it has the statistical limitation of not meeting the assumption of correct standard errors. OLS with robust standard errors, then, is a further variant with which having several observations for the same individual can be controlled. Random effects models, which are used rather widely for the analysis of panel data, also allow the inclusion of time-constant variables. They follow the general logic of assuming that the person-specific means of intra-individual variation from the sample, on which fixed effects models are based, do not provide the optimal values for predicting effects. The first step of random effects models is hence the calculation of such 'optimal' values. These are then 'demeaned' as is done in fixed effects models, but not eliminating all of the effects of time-constant factors. Giesselmann and Windzio (2012) suggest that, while well suited for some cross-sectional research issues, random effects models are often overrated in their benefit for panel data analysis. Furthermore, they emphasise that random effects models do not make use of the potential of panel data in controlling for unobserved heterogeneity (ibid., p.100).

Panel regression analysis is a suitable method for answering 'longitudinal research questions' such as the present one, implying change on the individual level as time-varying explanatory factors (independent variable) as well as time-varying outcomes (dependent variable) (Giesselmann and Windzio, 2012)⁵⁰. Panel regression analysis requires panel data with unit observations measured in the same intervals at several successive time points. The main advantage of panel regression over other methods such as event history

-

⁵⁰ A further alternative method with which variation over time can be accounted for are autoregressive or Markov Chain Models (Langeheine and van de Pol, 1994), also requiring the introduction of time-invariant error components for controlling for unobserved heterogeneity. An additional complication in applying this method is that its more complex second- or higher-order forms (accounting for more than one transition from t to t+1 on dependent and independent variables per individual) require software packages which are not widely available.

analysis is that, by focusing on the effects of change in the independent variable on change in the dependent variable, any influences of constant attributes on the dependent variable (unobserved heterogeneity) can be cancelled out, and a better approximation to the 'pure' effect of the independent variable can be gained (Giesselmann and Windzio, 2012). For example, young women's probability of entering full-time employment early in their careers are likely to be influenced by time-constant factors such as class background, parental occupation, any non-changing school qualifications attained up to that point and the person's general health status. In a fixed effects model these factors are held constant, meaning that the predicted effects will show results bare of their influences. The comparison of employment states pre- and post-'treatment' (here: entering single motherhood) based on data in which change in statuses of the same individual is observed at successive time points can be understood as a close approximation to an experimental logic. The method is therefore sometimes considered being especially suited for making relatively reliable 'causal' inference with which the problem of unobserved heterogeneity can be reduced (Allison, 2009; Brüderl, 2010; Giesselmann and Windzio, 2012). Brüderl (2010) even suggests that panel regression is the only currently available strategy with which one of the most fundamental problems of nonexperimental social sciences, the lack of a counterfactual, can be addressed. Certainly, any analysis of social phenomena will have to live with highly complex contexts that are difficult to control for, which severely limits the possibility of determining 'true causes and effects'.

5.1.2 Analysing trajectories

The second main research interest of this project is to asses what the different career patterns are of women experiencing single motherhood in the German and British country contexts? This research interest goes beyond the analysis of transitions and requires specific methods with which employment trajectories can be mapped and evaluated, for example by regarding careers as sequential chains

of employment statuses. Employment processes following entry into single motherhood have so far rarely been studied beyond transitions between employment statuses. Previous research has pointed to the particular potential that lies in looking at trajectories for viewing social life more holistically than is possible with methods for analysing transitions between two elements. As such, sequence analysis is a suitable method to analyse quantitative longitudinal data on partial trajectories in a given domain of social life. It originates in biology and has been promoted as a useful method in the social sciences, primarily by Andrew Abbott and colleagues, since the early 1990s (Abbott and Hrycak, 1990; Abbott, 1992, 1990; Macindoe and Abbott, 2004). It has found application in various studies since (e.g. Aassve et al., 2007; Brzinsky-Fay, 2007; Halpin and Chan, 1998; Krause et al., 2009; Ott et al., 2012; Pollock, 2007; Pollock et al., 2002; Scherer, 2005, 2001; Stewart, 2009). The main benefit of sequence analysis is that it enables the identification of similarities in biographic patterns. These can provide the basis for finding typical structures, which in turn may be used for further statistical analyses (Brzinsky-Fay et al., 2006). A key presumption is that processes underlying trajectories in social life are neither random nor purely determined by individualistic preferences. Hence, evaluating similarities across people's employment trajectories can help one to reach a better understanding of typical careers, and to investigate what determines them. Certainly, accounting for trajectories cannot be thought synonymous with looking at entire life courses. The data that are currently available of any existing quantitative dataset to date only allow one to look at partial trajectories rather than covering entire life times. Moreover, the analysis of trajectories in a certain life domain is usually limited to a particular domain, omitting information of other areas of social life.

To date there seems to be only few examples in each of the country cases of the present study which consider employment trajectories of women in single motherhood.⁵¹ The following section will discuss one for each country. Both studies address similar questions to the current research. Stewart's (2009) research looks at employment of British women surveyed in the British Lone Parent Cohort (BLPC) study. For Germany, Ott, Hancioglu and Hartmann (2012) dedicate a section of their report on single motherhood dynamics to the description of employment trajectories based on SOEP data. Both approaches use sequence analysis as a method for describing and comparing sequences of labour market statuses. The following paragraph summarises the results of these studies and points to some limitations.

Stewart's (2009) analysis gives an account of the employment trajectories of low-skilled British women, who were in a single motherhood situation (with a child younger than 5) when they were first surveyed. She uses sequence analysis for investigating employment and family history data of the BLPC in order to track the careers of women from 1-5 years after the birth of their last child to at least 6 subsequent years. Optimal matching techniques are applied, which serve to quantify differences between sequences, and to group together similar ones. Stewart concludes on 9 distinct types of employment trajectories. They range from *full-time* over *work-oriented* and *in-and-out* trajectories to those labelled as *leavers* and *home throughout*. In a second step of her analysis, Stewart applies a multinomial regression model to test what determines being in a particular category of employment trajectory. She combines the nine trajectory types into three types, to simplify interpretation. One of her findings is that,

⁵¹ To the knowledge of the author, there do not seem to be comparable studies in other countries at the time of writing. However, recently studies emerged around the 'Divorce in Flanders' dataset (cf. Sodermans et al., 2013), which seem to add to the field with a perspective on Belgium but have not yet been published.

compared to steady home-carer trajectories or mixed trajectories, having a steady employment trajectory is associated with women's higher socioeconomic position, fewer children and higher age at childbirth. Stewart's approach is a methodological novelty in this research area. Moreover, the further testing of sequence typologies with explanatory methods is not widely practiced in other research areas either. Unfortunately, Stewart's results remain only partially insightful in terms of the role of single motherhood in shaping these trajectories, because the links are not modelled. The analysis of Ott et al. (2012) on German data from the SOEP, on the other hand, takes explicit interest in the employment patterns of women who are currently in single motherhood. Their cluster analysis includes sequences with a minimum of three employment observations, starting from the first one of being in single motherhood. The report does not clarify the statistical procedure on which the cluster analysis is based and which rules are applied for determining similarity between sequences. However, the authors find four clusters of employment trajectories of women in single motherhood: stable full-time, instable part-time, stable part-time and stable non-employed. Rather than applying statistical methods for further investigation of what determines being in any particular one of the sequence clusters, they cross-tabulate the cluster type with characteristics at entry into single motherhood, which have previously been identified as relevant factors. They conclude that the full-time employment trajectory cluster is characterised by older children, being divorced, being 31 or older, higher qualifications and overall higher labour market attachment at the beginning of the single motherhood period. The following empirical analyses of the present research further investigate these relationships. By using the same concepts, indicators and methods for both countries, the results are better comparable than those based on the single country analyses. The following section will introduce the datasets used for conducting the empirical analyses of the subsequent chapters.

5.2 Introducing the datasets

The discussion in the previous section of suitable methods used for addressing the research questions of this project pointed to several data requirements. This section introduces the two data sets on which the statistical analyses are based, the British Household Panel Survey (BHPS) (Taylor et al., 2010) and the German Socio-economic Panel (SOEP) (SOEP, 2010), and describes the main variables and samples. The development of large-scale longitudinal survey datasets is one of the major methodological achievements in the social sciences since the 1960s. Particularly in the past 25 years important advancements have been made on methodological issues of survey design and operations as well as measurement and analysis (Heeringa, 2012). While these developments were pushed by the internationalisation of survey research programmes, national surveys have continued to be an important component of the longitudinal quantitative data landscape in the social sciences. The two surveys used in this research were internationally among the first ones of their scale to be started on a national level, preceded only by the American Panel Study of Income Dynamics (PSID). The surveys' long-term existence goes along with large research communities. These have developed useful resources in various research projects in many different areas of social research. The knowledge on specific features and potentials of the data sets can be a valuable source for empirical investigations.

BHPS and SOEP are both national large-scale longitudinal household surveys. As the name suggests, individuals are interviewed as members of sampled households. Both surveys are based on samples representative of the two countries' populations at the time when the surveys were started, but refreshment samples have been added in later years. Large numbers of individuals have been surveyed annually for over two decades, providing a rich resource for the present research. The rationale for using these data is twofold. Firstly, the aim of making generalising statements about women with

a single motherhood experience in Great Britain and West Germany respectively requires large-scale quantitative data. Secondly, the life course perspective and the interest in career processes ask for longitudinal data. These criteria are difficult to fulfil with other available data sources such as cross-sectional data or with data from qualitative interviews. The BHPS and SOEP surveys produce a wealth of data including demographic as well as attitudinal information surveying individuals annually with structured interviews, each lasting up to 90 minutes. Often, individuals are followed over long periods of their adult life, which allows for the mapping of individual trajectories in central life domains. The following sections introduce the two panel data sets, giving some details on the survey methodologies.

5.2.1 British Household Panel Survey

The BHPS is an annual survey carried out by the ESRC UK Longitudinal Studies Centre (ULSC) located within the Institute for Social and Economic Research (ISER), Essex, UK. Around 5,000 households with about 10,000 individuals are surveyed in the BHPS each year since the beginning of the survey in 1991. Capturing longitudinal information about individuals, the same respondents are surveyed each year. In 2009 the BHPS was replaced with its successor, the Understanding Society survey, also carried out by the ULSC. The BHPS sample was integrated in the second wave of Understanding Society, which was not made available in time for using it in the analyses of this thesis.

As for most representative surveys of Great Britain's population, the initial BHPS sample of about 5,538 households was drawn from the Postcode Address File (PAF). The file is a complete address database in the UK maintained by the government-owned postal service Royal Mail. The selection of addresses which receive less than a certain number of letters per day guaranteed the exclusion of businesses in the survey. The sample is essentially an equal opportunity sample. Clusters stratified by region were the primary sampling units,

consisting of 250 units with at least 500 households each. From each primary sampling unit 30 addresses were selected. The sample drawn in 1991 covered about 10,000 adults aged 16 or over, all of which were interviewed. These adults have since been re-interviewed annually as far as possible. The guiding principle of the BHPS is to follow individuals, not households. Because the BHPS is an indefinite life panel survey without sample replacement, following rules are required to maintain the representativeness of the original population and their descendants. Individuals who move out of an original BHPS household are followed into their new household, the members of which are integrated as survey respondents in the following wave. Booster samples oversampling the populations of Scotland and Wales were introduced in 1999 and for Northern Ireland in 2001.

BHPS data are collected with instruments covering household and individual level. A household coversheet and enumeration grid enables the tracking of membership developments of households. The former tracks changing membership by summarising entry and drop-outs, and the latter compiles basic information about all household members such as sex and age. The household questionnaire collects information for data at the household level including information on wage, income or durables. The main individual questionnaire, for which the interview takes about 45 minutes, collects information about each individual aged 16 or over. For sensitive questions there is a self-completion questionnaire. Shorter proxy and telephone questionnaires are for those who cannot be contacted for a full interview. Information for proxy questionnaires is collected from other household members who answer a rudimentary set of questions on behalf of the absent person (Taylor et al., 2010). The SOEP is organised and conducted similarly, but also has its particularities, as the following section will show.

5.2.2 German Socio-Economic Panel Survey

The SOEP is carried out by TNS Infratest (Munich) and is located at the German Institute for Economic Research (DIW), Berlin, Germany. There are currently over 20,000 individuals in about 10,000 households surveyed in the SOEP, which has a panel survey design similar to the BHPS. The initial sample for the SOEP was drawn from the Western German (old Federal Republic of Germany) residential population in 1983 and included 4,528 households of 'German' background and 1,326 households of 'foreign' or 'guestworker' background. In June 1990, after the fall of the Berlin Wall, an East German (former German Democratic Republic) sample was drawn. It consisted of 2,179 households. Today there are three additional samples (immigrants, innovation, high income), oversampling respective subgroups of the German population as well as two refreshment samples introduced in 1998 and 2006 (Wagner et al., 2007). All samples are regionally clustered multi-stage random samples. Primary sample units for most of the subsamples are states (Länder), administrative districts (Regierungsbezirke) and types of community (Gemeindetypen). The following rules of the SOEP sample members resemble that of the BHPS.

Similar to the BHPS, survey instruments of the SOEP also cover individual and household levels. An adult member of the household, the so-called 'head of household', is asked general questions concerning housing, housing costs, household income sources and dependent children in the household. The other part of the survey process consists of interviews with all household members aged 16 and older. Individual questionnaires for the additional samples contained questions that were relevant for the respective subpopulations, but have been uniform since 1996. Each respondent is also asked to fill in a biography questionnaire. There are no proxy interviews for absent adult household members in the SOEP (SOEP Group, 2001).

The BHPS was developed in approximation to the SOEP design, which facilitates the comparability of data from both surveys. It is, however, vital to develop a good understanding of the specific concepts and variables used for analysis in order to determine whether what is measured carries a similar meaning. This is a common issue in cross-country comparative research (cf. Sartori, 1991), which is addressed in the discussion of central concepts of this study in the following section.

5.3 Analysing single motherhood and careers with BHPS and SOEP

This section discusses suitability and use of BHPS and SOEP data for studying the individual employment trajectories of women with a single motherhood experience, discussing weighting issues and operationalizing the main concepts of this research. It should be noted that quantitative surveys are social entities in themselves. Their launch and development are the results of complex processes in which funding bodies and researchers negotiate the focus and contents of the survey. It is an important step in the process of quantitative data analysis to consider the rationale and framework on which the survey design and data collection of the datasets in question were based. BHPS and SOEP were both designed to enable research on social and economic changes on the individual and household levels in the respective countries, making them ideal datasets for studying sociological phenomena in family and employment domains. A good indication for the suitability of the data sources for the present research interest is their application in previous studies analysing similar issues. Indeed, as shown in the reviews above (Chapter 2 and Section 5.1) both the BHPS and the SOEP have been used in research on the dynamics of single motherhood. For example, Skew's (2009) use of the BHPS for studying repartnering behaviour, as well as Ermisch and Francesconi's (e.g. 2000, 2001) studies on single motherhood demonstrate that the dataset is well suited for analysing changes in family and partnership over time. Similarly, Hancioglu and Hartmann (2012) as well as Ott et al. (2012) demonstrate the suitability of

SOEP data for analysing the dynamics of single motherhood in Germany. The period regarded in the analyses is 1991 to 2008, which is wholly covered by both data sets; including waves A (1) to R (18) of the BHPS and waves H (8) to Z (25) of the SOEP. Ideally, the period from 1991-2008 would be further divided according to timing of specific policies or reforms in relevant policy fields. Unfortunately the present research runs into data availability issues, as will be shown in the empirical chapters. The numbers of employment trajectories observable at specific time points are too small for comparisons from which to make reliable statements on potential period effects. Hence, the comparative strategy is limited to interpreting the findings from analysis of individuals in each case in consideration of the country contexts. The contexts are understood as institutional configurations with relatively stable country-specific logics as demonstrated by studies of historical institutionalism (e.g. Hall and Soskice, 2001; Thelen, 1999), and historical sociology (cf. Mahoney, 2003). While the contexts are known to have undergone changes in the observed period, any developments such as policy reforms are understood as characteristic of the respective framework. This has further implications for the German case. In the first year of observation 1991 Germany had already been re-unified after decades of separation into East and West Germany. However, East German respondents are excluded from analysis in order to avoid intra-German comparisons of social, cultural and economic differences which developed during separation (cf. Rosenfeld et al., 2004). The following subsections further discuss the limitations of the data and the potentials for circumventing them, and define the two main indicators for the empirical analyses in the subsequent chapters.

5.3.1 Data limitations

Previous research on the subject has already pointed to limitations of the data for making reliable inferences. Limitations such as wave non-response and panel attrition are not confined to BHPS and SOEP but are a general concern in longitudinal surveys. The main problems connected to the common issue of non-response in surveys, implying increasing non-response with ageing panels (Kalton et al., 1989), are the diminishing sample sizes and the possibility that sample members who do not respond to survey contact systematically differ from those who are successfully interviewed (Lynn, 2006). Skew (2009, p. 84) notes that factors associated with higher probability of non-response in the BHPS, such as the 'never married' status or low socio-economic statuses increase the risk of dropping out of the survey for women in single motherhood. Ott et al. (2012) also state that women in single motherhood have a relatively high non-response risk in the SOEP. How weighting can help addressing these issues is considered in the following.

Analysing quantitative data potentially allows for generalising the results to larger populations. This can be achieved by having 'representative samples', a direct representation of the population, and by applying statistical methods such as weighting for making the samples mathematically look the same. Representativeness is, generally speaking, a question of whether samples are random rather than systematically over- or under-representing certain individuals or groups. Weighting, then, is the procedure of statistically accounting for the (known) probabilities of certain people to be in the sample.

The central question that has to be asked prior to any weighting is about which population the research wishes to make claims (inferences). Spieß (2008) differentiates between concrete and abstract populations to which researchers can aspire to make inferences. The focus on concrete populations implies that randomness lies in the survey design and numbers of a certain group in the sample, e.g. households with minimum income, can be extrapolated to the main population (design-based inference). The interest in abstract populations requires model-based randomness and enables inference to model parameters, such as for example the effect of education on income (model-based inference).

As mentioned, the probability of a unit (individual, household) of being in the sample must be known for valid inference. In addition, drawing generalisable conclusions in longitudinal analysis also requires accounting for unit and item non-response with longitudinal weighting procedures, in that probabilities of dropping out of the sample or of not being surveyed continuously are accounted for. Weights for various types of analyses are usually provided by the data support teams of the surveys. For both BHPS and SOEP there are several weights available along with the data sets.

The desirability and also the meaning of generalisation of results from analysis have to be considered before applying any weights. In the case of the present research, these aspects vary between the different research questions. As for the one on early career stages, it could be interesting and desirable to generalise findings on young women in the selected age group in Great Britain and West Germany respectively. In the case of the second research question, generalisation seems less desirable, as the aim is mainly to determine differences in employment careers between women who experience single motherhood at different points in their lives. Hence, it would at best be possible to generalise having certain employment trajectories to 'any women who experiences single motherhood spells in a given age range' (e.g. 16-55). Besides the question of the informational value of making inferences about such a selective group of people the second case poses challenges to weighting and extrapolating procedures. One of the arising issues has been demonstrated by Ott et al. (2012). In their analysis of single motherhood dynamics of German women they create two different types of weights to account for specific dropout probabilities. On the one hand, they create a longitudinal weight as personspecific probability of staying in the sample per episode. On the other hand they calculate a longitudinal weight that accounts for the start waves of being surveyed. It is measured as an individual's probability of staying in the sample based on the cross-sectional weight of the previous survey year and the general non-response probability for women in single motherhood. Regarding the predictions of numbers of women in single motherhood in the German population, they state that the higher non-response risk of women in this situation affects the interpretation of case numbers extrapolated with longitudinal weights. They suggest that this is because longitudinal weights balance the effects of panel attrition by calculating case-specific non-response weights, which leads to a higher weighting of longer episodes and therewith overestimation of numbers of women in single motherhood in a given year. An estimation based on data weighted with the longitudinal weight results in estimating the number of women in single motherhood in the last wave of the SOEP in 2009 to be almost double that predicted based on the German microcensus (2.67 million compared to 1.41 million).

Table 5.1 Censoring of single motherhood periods in the SOEP

	Not weighted		Weighted*	
	Cases	Percent	Cases (in th.)	Percent
Entire period	811	42.3	(4,550)	38.2
Left-censored	548	28.6	(3,169)	26.6
Right-censored	756	39.5	(5,428)	45.6
Left- and right-censored	199	10.4	(1,242)	10.4
Not left-censored	1,368	71.4	5,927**	
Total	1,916	100	11,904	100

Source: Table reproduced from Ott et al. (2012), p.10; SOEP data, including women who were observed at least once living with a dependent child aged under 18 and no partner or other adult in the same household between 1984-2009, if they were aged 60 years or younger at that time point.

Table 5.1 is taken from Ott et al. (2012) and illustrates weighting issues in terms of the censoring of single motherhood spells. The table shows that only in 42 per cent of the cases could women's single motherhood spells between 1984 and 2009 be fully observed. Against this background, which suggests that for over 50 per cent of the women either the start or beginning of the spell is unknown, it seems problematic to draw inferences on what would have to be called 'population of women experiencing single motherhood'.

^{*}Weighted with longitudinal weight (episode); **Weighted with longitudinal weight (start year).

Although it is broadly acknowledged that weighting is necessary in order to make valid inferences from statistical analysis, the practice in the small research domain of single motherhood dynamics is to surrender the lack of data with which such weighting would be possible and meaningful (see Hancioglu and Hartmann, 2012; Ott et al., 2012; Skew, 2009; Stewart, 2009). Even if complex weighting factors are calculated as in Ott et al. (2012) these do not lead to additional insights or even reliably valid results. These considerations can set limitations on the generalisability of the findings of some of the analyses below.

5.3.2 Variables

This subsection operationalizes the central concepts of this study, demonstrating the specific use of BHPS and SOEP for analysing single motherhood and employment trajectories. Other variables used in the empirical analyses are operationalised in the respective chapters.

Employment

Employment is the outcome variable of interest in this study. The employment concept is based on the idea that the career process is integrated in the life course. This implies that individuals are expected to pass through statuses of different degrees of labour market involvement across their careers. While the early career question is mainly interested in whether women are full-time employed compared to any other labour market status, the employment trajectories question addresses varying degrees of employment. Drawing on a broad understanding of 'work', single employment statuses express women's degree of involvement in the labour market without assuming it is best expressed on a gradual upward scale from no to full integration.

Individuals' employment behaviour is a key focus in the BHPS and SOEP. There are several variables measuring individuals' economic status in each survey. Criteria for selecting one (each) of them for the empirical analysis of this study were twofold. For one, it was important that the indicator would carry

the relevant employment information to cover the research interest. A further, normative dimension to this criterion is that the indicator should allow the derivation of relative predictions about the capacity to maintain an own household when being in one status compared to another. The second selection criterion was the availability of the indicator in all waves regarded in the analysis for as many individuals of the respective age range as possible. The variables selected were a combination of employment status (emplst) and labour force status (lfs) from the SOEP; and a combination of current economic activity (jbstat) and number of hours normally worked per week (jbhrs) from the BHPS. Based on these variables it was possible to construct an employment indicator with the following five statuses:

- 1) <u>Full-time employment</u> (30 or more hours regularly worked per week) including self-employment;
- 2) <u>Part-time employment</u> (less than 30 hours regularly worked per week) including non-permanent and non-regular employment;
- 3) <u>Unemployment</u>;
- 4) <u>Maternity leave</u>; and
- 5) <u>Non-employment</u> including, full-time education, long-term sick/disabled, retired, other non-working (BHPS and SOEP) and family care (BHPS only).

The main categories of the economic activity variable of the BHPS were maintained, adding a category for part-time employment and merging categories of non-employment. The distinction between full-time and part-time employment in the BHPS requires information from the indicator in the number of hours worked per week, surveyed for all persons who did paid work the previous week (or have been off from a regular job), to be considered. In the SOEP part-time employment, as surveyed in the employment status variable, is defined as less than 30 hours per week. From the SOEP, the employment status

variable was used to merge vocational training into the non-employment category and irregular employment with the part-time employment category. The former decision is debatable because people in vocational training in Germany mostly spend some of their time in firms on the job. However, it was here aimed at distinguishing between those who have already made the transition into the labour market as a full member of the labour force, which individuals in vocational training most often have not. In other words, similar to any other full-time education, vocational training is regarded as a different level of labour market involvement in the career process.

Categorising irregular or marginal employment as 'part-time employment' can also be seen as contentious, because, especially for women, part-time employment is often a full-fledged alternative to full-time employment, while irregular or marginal employment can be seen as comparatively less favourable or potentially involuntary options. The decision to merge these categories was based on the assumption that in terms of the degree to which they support the capacity of maintaining one's own household the qualitative difference is larger between these employment statuses and full-time employment than among them.

Maternity leave is categorised as a separate status, as the status implies that the respondent had a relatively high degree of labour market involvement, and a higher chance of self-determination, prior to this status. The maternity leave category is based on information from the economic status variable from the BHPS and the labour force status variable from the SOEP, which splits up the information summarised in the non-employment category of the SOEP's employment status variable. The BHPS variable is not unequivocal in this regard, because the economic status variable also has the 'family care' category, which respondents can choose. Family care (caring for a family member) therefore potentially includes some British respondents who are currently on

maternity leave. It was however not included in the maternity leave category, as it would be more problematic to assume that the majority of respondents stating to care for a family member are on maternity leave.

The unemployment category can unambiguously be derived from both datasets based on the economic status (BHPS) and labour force status (SOEP) variables. Non-employment comprises the category in which all individuals who do not qualify for any of the other statuses defined so far are contained. It combines employment statuses which are associated with a low degree of involvement, which is likely to impinge on an individual's capacity to maintain their own household. In the case of the BHPS this category, alongside statuses of full-time education, retired, long-term sick/disabled and 'something else' also involves the status of 'governmental training scheme'. This latter category corresponds to the SOEP one of 'sheltered workshop'. While people in this category can to some degree be said to be involved in the labour market, their self-determination is likely to be limited due to the restrictiveness of the work arrangement. The next section defines single motherhood as the main input factor of interest in the subsequent empirical chapters.

Single motherhood

The understanding of single motherhood as a changeable situation in family life underpins all analyses of this thesis. As suggested above, BHPS and SOEP are well suited for the analysis of family life dynamics. The data allow the operationalising of single motherhood as a changeable situation which women can move in and out of. Because a universal definition of single motherhood does not exist, different conceptualisations have been used in previous research (Rowlingson and McKay, 1998). This seems to reflect the difficulty of pinning down single motherhood as a clearly demarcated phenomenon. It is however relatively common to use a household concept defining single motherhood as the situation in which a mother is living with her dependent child but no

partner. The child age threshold which defines what 'dependent' means varies (cf. Jaehrling et al., 2012). This thesis uses the concept of *single motherhood*, which is defined as the situation in which a woman who is not in a live-in partnership is living with her dependent child or children, of under 16 years old, in the same household. This definition does not essentially differ from that of 'the single mother', which is used in other research, but emphasises the possibility of change. Namely, the situation is dynamic in that a partner can move in with mother and child or the child can grow out of the defined dependency age. In both data sets there are household-level variables characterising households as 'single parent household'. However, the preferred way of operationalising the concept for this research was to derive the information of family constellation 'by hand' as this is more in line with the theoretical ideas and less dependent on the survey convenors' definitions.

In the case of the BHPS, information on the single motherhood situation is derived from several different variables, namely 'age of youngest child in household' (agechy) and 'number of own children in household' (nchild) ⁵² and 'whether living with spouse or partner' (spinhh)⁵³. In the SOEP data information is also gathered from different variables. The data⁵⁴ contains information on whether the respondent is currently married and living with the spouse, derived from the marital status variable (p0571), or whether she is not married but in a partnership (p0572) and the partner is living in the household (p0573). Information on own children in the household is derived from the child's identification number (kidnr), which is matched with the mother's.⁵⁵

_

⁵² From the household-level wHHRESP file.

⁵³ From the individual-level wINDRESP record.

⁵⁴ From the individual-level file Plong, where individual wave-specific files are conveniently combined into one record. These files are referred to as 'SOEPlong' files.

⁵⁵ From the KIDlong file.

The dynamics of single motherhood are expressed in changes in these statuses across survey waves. As data on women included in the study are surveyed roughly on an annual basis, any changes in household constellations taking place between those observations are omitted. On this basis, the exact duration of a single motherhood spell cannot be expressed. One observation of single motherhood can indicate any time period between 1 and 23 months (cf. Ott et al., 2012). Likewise, in the case of two succeeding observations of single motherhood the actual duration can range between two and three years. This drawback cannot be resolved with the BHPS data and is accepted for ensuring comparability despite the SOEP containing information on the month in which a partner moved out. The implications of this limitation may not be too severe as separations and re-partnering usually take (at least) several months to 'materialise' and the most important changes can be expected to be picked up in an annual survey.

A further criterion defining the dynamics of single motherhood for the following empirical analysis is that no distinction is made between partners who are original parents and new partners. It has the downside of brushing over differences in the relationships among family members. The perspective is motivated by the focus on understanding women's employment rather than potential differences between stepparents and original parents. The perspective aims not to qualify the partnership constellation further, which would imply the theoretical assumption that the relationship between original parents has a unique impact on women's capacity to maintain their own household, and that partners' support with care and other household tasks varies systematically between original and stepparents.

5.4 Summary

This chapter provided an overview of methodological issues around the analysis of employment trajectories of women experiencing single motherhood. It specified a two-country comparative design between the British and German cases combined with a quantitative longitudinal strategy. It was demonstrated that the comparison allows for considering the potential impacts of national institutional frameworks on individual employment trajectories. The use of quantitative data for the individual-level analyses combined with the comparative design is a novel approach in this research field. Tackling the overall aim of investigating the impact of single motherhood timing on employment careers, the methods used are tailored to the different research interests in this thesis. The discussion showed that fixed effects panel regression provides a useful technique for investigating the impacts of single motherhood on early labour market integration by controlling for individual time-constant characteristics. Secondly, sequence analysis allows for mapping and describing employment trajectories of women during and after single motherhood. Most previous research on single motherhood has only looked at single transitions between partnership or employment statuses using simple cross-tabulation techniques, event history analysis and difference-in-difference models. The (two) existing single-country studies that consider partnership and employment as processes and analyse trajectories (Ott et al., 2012; Stewart, 2009) are limited in scope. They also remain sketchy regarding the interrelations between single motherhood, employment and institutional context. With the new combination of methodologies for studying single motherhood the present research advances the field. Lastly, by taking a novel approach, this research also reveals that often the most desirable data is not available, despite drawing on two of the most established panel surveys internationally, BHPS and SOEP. The following chapters implement the methodological strategy in consideration of its limits and potentials.

Chapter 6 Single motherhood at career entry

This chapter addresses the first set of research questions developed in Chapter 1, investigating whether single motherhood impedes women's labour market integration at an early career stage, and whether it does so differently in the contexts of Great Britain and West Germany. Comparing the probability of being employed between women entering single motherhood and mothers in a partnership, the chapter also concerns family-employment reconciliation of young women more generally. On the basis of the country comparison, the results can contribute to understanding family-employment reconciliation at an early career stage for individuals in different institutional settings. The analyses demonstrate that having children in the household restrains the probability of being employed regardless of partnership status, but that informal or formal childcare support seems to alleviate difficulties. Positive effects of educational attainment do not diminish motherhood effects beyond class differences, and neither do vocational qualifications, not even in the German context. The chapter begins by setting out the research issue in relation to the analytical framework developed in Chapter 3. It then summarises the specific research questions and defines hypotheses. The first part of the analysis is descriptive, but a fixed effects logistic regression model is specified thereafter, which is conducted separately for the two countries. The chapter closes with a summary of the results.

6.1 Background

The analytical discussion in Chapter 3 demonstrated that labour market entry can be expected to be a crucial juncture for further career development. According to the life stage model, experiencing single motherhood at an early

career stage implies an intersection of several factors that have detrimental effects on employment. Besides rupture and interruption type employment trajectories, failing initial labour market integration were ideal-typical career sequences expected at this stage. The analysis of this chapter considers skill attainment as the main factor for explaining differences in employment probabilities at labour market entry, investigating the potential mediating effects of individual family dynamics. The analysis takes national opportunity structures into account by comparing results of country-specific analyses of women in British and West German contexts. The following paragraphs develop the specific research questions addressed in this chapter.

6.1.1 Early career stage, motherhood and class

Several issues feed into this chapter's primary research interest of explaining variation in young women's employment probabilities at labour market entry. For one, determinants of individual qualification attainments are a key issue, because they govern initial labour market integration (Müller and Jacob, 2008). Across Europe, graduates from higher education have the highest chance of getting a job (Eurostat, 2012c). It is also well known that individual attainment is largely determined by people's social class origin (Breen and Jonsson, 2005; Breen, 2005; Breen et al., 2009; Kerckhoff, 1995). People from lower class backgrounds stay behind their middle and upper class peers in the level of educational achievement, which often leads to lower status jobs and lower economic positions (Erikson and Goldthorpe, 1992). Within this structure of reproduced class inequalities, what role does starting a family have for young women?

The relationships between young motherhood and education are complex. In general, having a child at a young age would seem to conflict with education. However, Klein and Braun (1995) observe that women who were in training at the time of childbearing in Germany have higher rates of return after maternity

leave than those who were in employment. This could be an indication that the standardised German education and training system allows interruptions and smooth returns, which would seem less feasible in the unregulated British system. Still, compared to those with higher qualifications, lower qualified women more often experience labour market drop-outs after childbirth in Germany (Kreyenfeld, 2010). Moreover, women with low and intermediate secondary school qualification in Germany are more likely to be in a situation of single motherhood than women with a degree in the year of and the year after first child birth (Konietzka and Kreyenfeld, 2005). In the UK women who have a child at a young age also have a high probability of having low education and experiencing single motherhood (Hobcraft and Kiernan, 2001; Robson and Berthoud, 2003). But how do these issues relate back to social class?

Both becoming a mother at a young age and experiencing single motherhood seem to be connected with social class background on the one hand and low employment probability on the other. Sometimes evidence for a causal link is found between young motherhood and low labour market prospects (Chevalier and Viitanen, 2003; Ermisch and Pevalin, 2003; Hobcraft and Kiernan, 2001; Kiernan, 1997; Robson and Berthoud, 2003). Other findings suggest that class background mediates the relationship (Ermisch and Pevalin, 2005, 2003; Hansen et al., 2009). Similarly, as discussed in Chapter 2, adverse labour market outcomes for young women in single motherhood are largely explained by

_

⁵⁶ The topic of 'teenage motherhood' has a particular tradition in British research (Duncan and Edwards, 1997; Duncan, 2007; Graham and McDermott, 2006), because the UK has the highest rates of mothers under 20 in Europe (Adamson et al., 2007). British rates are comparable with those in the US, where research on 'teenage pregnancy' is also extensive (cf. Hoffman and Maynard, 2008). Although the vast majority of women in single motherhood is older than 34 (61 per cent), there is a higher percentage who is younger than 25 (14 per cent) compared to mothers who live in couples in the UK (3 per cent in 2008) (DWP, 2010a).

selection into early motherhood and having relatively low employment prospects to begin with (McKay, 2003; Rowlingson and McKay, 2005). Based on these considerations, the main question this chapter asks is whether difficulties in family–employment reconciliation persist, and whether they are more pronounced for women in single motherhood than for women in partnership, if social class origin and the acquisition of skills is controlled for.

6.1.2 Institutional components

Beyond the question of impacts of individual dynamics on early careers, this chapter is interested in constraints and opportunity structures. National structures of education systems and labour markets explain much of the country differences in patterns of young people's labour market entries (Müller and Gangl, 2003). Skills regime theory (Estévez-Abe et al., 2001), and education systems theory (e.g. Allmendinger, 1989; Hannan et al., 1996; Müller and Gangl, 2003; Shavit and Müller, 2000a) contribute to explaining differences across countries. For example, standardisation and certification regulations are relevant institutional features, which vary across countries (Busemeyer, 2009). The German and British contexts represent example cases for different labour market entry systems (e.g. Brzinsky-Fay, 2007; Scherer, 2001).

In the UK the meaning of apprenticeship-based training has changed between the 1960s and 1990 (Gospel, 1995). Numbers of contractually secured apprenticeships and traineeships with off-the-job training of an occupational nature decreased considerably, and were replaced by a mixed system of mainly on-the-job training and reliance on the external market, creating weak links with the labour markets (Hannan et al., 1996). This resulted in vocational qualifications having lost empirical relevance by the 1980s (ibid.). Although there is a tradition for the standardisation of certification in some occupational fields such as manufacturing, building crafts and professionals in the British labour market (Marsden and Ryan, 1990) their relative importance in the system

of school-to-work transitions is low compared to Germany (Ryan, 2001). Accordingly, the relatively low level of standardisation of skills outside the higher education system in the UK produces graduates equipped with mostly general skills (Hannan et al., 1996). Hence, in contrast to vocational qualifications, attainments of general education can be expected to improve chances of employment in the early career in the UK.

Germany, on the other hand, is known for its emphasis on specific skills, which are safeguarded by a high level of regulation and standardisation (e.g. Busemeyer, 2009; Ludwig-Mayerhofer et al., 2011). The education and training system is organised to be complementary to the German labour market, which follows a distinct logic of occupations as vocations (German: Beruf als Berufung) (Deißinger, 2001). That system is rather unique in its bifurcated structure of academic general and vocational specific education (Baethge et al., 2007), the latter being provided in both firm-based apprenticeships and school-based programmes. Women concentrate in the school-based vocational programmes leading to certificates for service occupations (Krüger, 2003), which implies gendered outcomes in the occupational distribution (Gottschall and Bird, 2003). However, certified qualifications play an important role across labour market segments in the German system, setting incentives for individuals to invest in specific qualifications. This leads to the expectation that vocational qualifications improve the chances of labour market integration in the early career in Germany. Comparing these systemic features, what outcomes can be expected for young women, and especially when they become mothers?

Gender differences are commonly reported in studies on transitions to the labour market (e.g. Iannelli and Raffe, 2007; Ludwig-Mayerhofer et al., 2011; Mayer and Solga, 2008; Müller and Jacob, 2008; Shavit and Müller, 2000a; Smyth, 2005). For example, German and British women take longer to enter the labour market after finishing education than men, and having a child delays

labour market entry even further (Scherer, 2005, p. 436). Moreover, women in Germany are more distant from the 'male pattern', which implies gaining continuous full-time employment in the first five years after labour market entry, than they are in Britain (Scherer, 2001). Early careers in Britain often involve part-time employment for both women and men, but in Germany the part-time option is mainly a female career track. In Britain, on the other hand, there is a strong educational gradient, with higher skilled women being less likely to leave the labour market during those first years (p.135). Does the theoretical expectation hold that occupationally specific training is especially effective for women (Shavit and Müller, 2000a, p.449)? What differences, if any, can be observed in the effects of vocational skill attainments on women's early career employment probabilities in Germany and Britain?

In the case where a woman does have a child, and experiences single motherhood, they can draw on the support of certain policies, as described in Chapter 4. At the early career stage leave regulations securing income in a career break have limited relevance (e.g. the basic coverage of €300/month in Germany), because no labour market attachment has previously been acquired. Rather, the options of reconciling family and employment range more between outsourcing childcare during working hours and labour market exit. The former case requires a sufficient infrastructure, which is lacking in both country contexts. German women can at least rely on a part-time provision, but only really for children aged older than 3 (Jaehrling et al., 2012). Opting for labour market exit, women are likely to become dependent on their partner's income or, in the case of single motherhood, on transfer payments. Which option is the more likely one for women at the early career stage in the two country contexts? The following section summarises questions and hypotheses which the subsequent analysis will address.

6.2 Questions and hypotheses

In summary, the present chapter addresses the following questions:

- 1. Do women have a lower chances of entering employment at the early career stage
 - a. if they are responsible for a dependent child; and
 - b. if they experience single motherhood;
 - c. even if social class background and level of educational attainment is controlled for?
- 2. Which, if any, differences in the effects of vocational skill attainments on women's employment probabilities in the early career stage can be observed between Germany and Britain?

The following hypotheses are drawn from the literature review and the issues discussed in the previous section, applying the life stage model of single motherhood and careers which was outlined in Chapter 3. The hypotheses reflect the fact that expectations derived from the literature point in different directions.

Difficulties in family-employment reconciliation are particularly severe for women who have children at an early career stage, where labour market attachment has not yet been acquired.

<u>Hypothesis 1a:</u> Any own dependent child in the household will therefore decrease women's probability of being employed.

Compared to women with children in partnership, reconciliation issues are even more severe for women experiencing single motherhood at the early career stage. The single motherhood situation goes along with increased difficulties of balancing childcare responsibilities and economic maintenance of the household.

<u>Hypothesis 1b:</u> Entering single motherhood will hence have a more negative impact on employment than entering co-parenting.

There are two ways in which family–employment reconciliation can be alleviated when there are small children in the household. Firstly, childcare responsibility may be divided between the mother and her partner/the other parent, if they are living in the household; and secondly, childcare may be outsourced. Accordingly, women in couples with children and women in single motherhood are assumed to differ because, compared to the latter, the former can share the primary childcare responsibility. However, research has shown that the equal division of care work in couples is not a given.

<u>Hypothesis 1c:</u> Consequently, only compared to jointly caring couples are the chances of full-time employment lower for women in single motherhood, assuming that shared responsibility has a positive impact.

Outsourcing childcare is also expected to be positively associated with women's full-time employment.

<u>Hypothesis 1d:</u> If women in single motherhood use formal childcare more than women with children in couples who share childcare responsibility with their partner, differences in family–employment reconciliation can be mediated.

Contrary to the expectations of the previous hypotheses, the negative effects which entering single motherhood seems to have on employment at this career stage could actually be a result of social class background. Women from low social class background more often enter single motherhood at an earlier life stage than do women from middle or higher class backgrounds. Moreover, class origin also determines the chances of attaining high qualification degrees. Hypothesis 1e: In this case, family constellation should not have a negative impact on employment probabilities if class and educational differences are controlled for.

The meaning of vocational qualifications is very different in the British and West German contexts.

<u>Hypothesis 2:</u> Based on the theoretical considerations above, acquiring vocational training contributes to smooth initial labour market integration in Germany but not in Britain.

The remainder of this chapter investigates these issues first descriptively and more rigorously with a fixed effects logistic regression analysis thereafter.

6.3 Descriptive analysis

This section examines some of the key indicators in the datasets and describes features of the specific samples with which employment at early career stage is analysed. Initial labour market entry usually occurs until individuals reach their early twenties in Germany and the UK (Schmitt, 2008). By the age of 31 labour market integration has been achieved in the vast majority of cases (cf. Brzinsky-Fay, 2007; Wingerter, 2011). Accordingly, the analysis of this chapter is based on subsamples of SOEP and BHPS, which include women who were between and including 17 and 30 years at any time point between the survey years of 1991 and 2008. The selection criteria are deliberately kept relatively broad, because the use of fixed effects methods will usually result in further reduction of the sample as described below.

The key dependent variable in this analysis is full-time employment status measured on a binary scale where 1 marks observations in which respondents are in full-time employment⁵⁷ and 0 denotes any other employment statuses. The indicator is derived from current labour force status (pglfs) (SOEP) and from current economic activity (jbstat) (BHPS) as defined in Chapter 5. Changes to value 1 on this variable indicate that respondents are either entering full-time

⁵⁷ Including those who were temporarily sick in the case of the BHPS.

employment for the first time, or that they are returning to employment from an interruption. Hence, despite the restriction of the sample to individuals between 17 and 30 the analysis does not provide much information about initial labour market entry in the strictest sense. Table 6.1 summarises mean values and percentages of observations in the sample by variable. Country differences in employment mobility at this career stage become apparent the measure of full-time employment transitions included in the table. Only 13.76 per cent of the observations in the SOEP sample mark a transition into or out of full-time employment, but it is 28.53 per cent in the BHPS sample. The full-time indicator also neglects that women sometimes start their career with part-time employment, especially in Germany (e.g. Scherer, 2001). In the present samples the share of part-time employment observations among German women is only about half (6.83 per cent) of that of women in the British sample (13.16 per cent). Where possible, additional analyses are conducted and reported on part-time employment. For addressing the first question this chapter, whether motherhood in general and single motherhood in particular hampers full-time labour market integration, the sample contains useful information on individuals' family life.⁵⁸ As described in Chapter 4, single motherhood is defined as a situation in which a woman shares her household with her children under 16 years but not with a partner (even if she is in a partnership with someone external to the household). Other constellations of family life are also treated on the basis of this household concept, defined by the presence/absence of partner and children.

_

⁵⁸ The information for this set of dummy variables was derived from the following BHPS items: 'age of youngest child in household' (agechy), 'number of own children in household' (nchild) and 'whether living with spouse or partner' (spinhh); and from the following SOEP indicators: marital status (p0571), partner living in the household (p0573), child identification number (kidnr), child in household (k_inhh).

Table 6.1 Per cent of observations by variable and country

	West Germany	Great Britain
	Mean/Per cent	
Employment	-	
In full-time employment	- 59.5	54.4
Change in full-time employment status	13.8	28.5
In part-time employment	6.8	13.2
Family life		······
In partnership with child/ren	12.6	26.8
Single with child/ren	2.20	7.8
In partnership, no child	11.3	15.7
Single, no child	73.8	49.7
Age	23.4	23.3
Number of children	0.3	0.6
Qualifications		·
DE: Left school without qualification	5.1	
DE: Hauptschul-degree	25.1	
DE: Realschul-degree	36.9	
DE: Abitur/Fachabitur	32.8	
UK: No academic qualification		10.2
UK: CSE		11.4
UK: O-level		37.1
UK: A-level		27.5
UK: Teaching, 1st or higher degree		13.8
Vocational qualifications	37.2	23.1
Childcare	_	
DE: Child in any formal childcare	5.3	
UK: Joint childcare in couple		8.0
N (person-years)	12,395	10,681

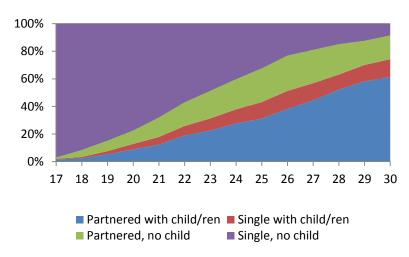
Sources: BHPS (n=10,681); SOEP (n=12,395); pooled data 1991-2008.

In both countries the average age for starting a family lies in the sample age range 17-30. In England and Wales mothers' mean age at first live birth was 27.8

years in 2010 (ONS, 2010). 59 With 29.2 years in 2011 the average age for mothers' first live birth is slightly higher in Germany (Destatis, 2012a). Most mothers captured with the present samples hence have comparatively early motherhood experiences. As regards the overall occurrence of single motherhood in the countries, the present sample only gives a limited insight due to the age distribution. Cross-sectional statistics estimate the overall share of single parents, of which 92 per cent are mothers, at 26 per cent among families with children in 2011 in the UK (ONS, 2012b). In comparison, the overall share of 'single parent families' in all households with children at any one time is estimated at just under 20 per cent in 2010 for Germany (e.g. BMAS, 2011). The age distribution of women in single motherhood is rather different between Britain and Germany. While in the UK 26 per cent of women in single motherhood were under 30 in 2009 (DWP, 2010a, p. 2010), it was only 15 per cent of women in a single mother setting in Germany in the same age range in 2011 (BMFSFJ, 2012). This difference is also reflected in the present BHPS and SOEP samples of under-30-years-olds. There are only 2.2 per cent of observations of single motherhood in the West German sample in the observed period, but it is 7.77 per cent of observations in the British sample. In Figure 6.1 and Figure 6.2 the distribution of family life observations across age is displayed for British and West German women with pooled data. As would be expected, partnership and age as well as having a child and age seem to be positively associated, although what is observed could also be cohort effects.

⁵⁹ In the same year, the average age of Scottish mothers at live childbirth, including non-first births, was 29.6 (GROS, 2011).

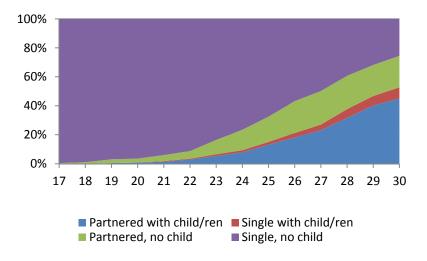
Figure 6.1 Distribution of family life observations by women's age, GB



Source: BHPS (n=10,681); pooled data 1991-2008.

The figures also demonstrate country-differences in the distribution of family situations across observations. The British pattern is characterised by larger shares of observations diverging from the 'single childless' constellation at lower age ranges than in the German sample. This could indicate that more people start their family at a young age in Britain compared to West Germany, as would be expected from the literature. Certainly, the structure of the pooled data restricts the longitudinal interpretation of these graphs.

Figure 6.2 Distribution of family life observations by women's age, DE



Source: SOEP (n=12,395); pooled data 1991-2008.

In a further step, Figure 6.3 and Figure 6.4 illustrate the bivariate relationship between family constellation and full-time employment for the present samples. The figures display the percentages of observations in full-time employment (red) by family constellation. The patterns look very similar in the two countries. On first impression, the figures support hypotheses 1a and 1b that low family responsibility leads to better employment prospects. The highest probability of full-time employment is for partnered women without children. The association is very pronounced in the British case, where more than 80 per cent of the partnered childless observations coincided with full-time employment.

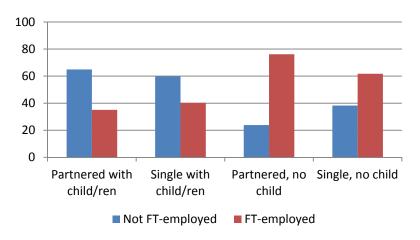
Partnered with Single with Child/ren Child/ren Child/ren Child

Figure 6.3 Per cent of full-time employment observations by family constellation, women in Great Britain, 17-30 yrs.

Source: BHPS (n=10,681); pooled data 1991-2008.

The negative association between having a child in the household and being in full-time employment is stronger for women in single motherhood in the British case but for partnered women in the German case. Whether differences remain statistically significant in multivariate analyses will be investigated below. First, the other main indicator in the analysis, educational attainment, is to be discussed.

Figure 6.4 Per cent of full-time employment observations by family constellation, women in West Germany, 17-30 yrs., 1991-2008



Source: SOEP (n=12,395); pooled data 1991-2008.

The two datasets provide various variables measuring respondents' educational achievement, including international indicators such as the CASMIN⁶⁰ scale. For the present analysis, country-specific education indicators were selected in order to allow for the different meanings of qualifications. For the German case, the most suitable indicator for the purposes of the present analysis provided by the SOEP was 'highest level of school education' (Schulabschluss), for the British case it was 'highest academic qualification' from the BHPS. It should be noted that the British indicator has to be interpreted with caution due to the reforms of the examination system in the 1980s (cf. Machin et al., 2006). Some consequences of the reforms for the categorisation of degrees are that differences between the middle categories, CSE, O-levels and A-levels blur. An implication of limiting the sample to women aged under 30 is that some of those in tertiary education will be excluded, especially in Germany, where in 2008 the average age was 25.8 years for a BA degree, 30 years for a MA degree

_

⁶⁰ CASMIN (Comparative Analysis of Social Mobility in Industrial Nations) is a classification that was originally designed for comparative analysis in social mobility research differentiating qualifications along the dimensions of skill level and skill type (König et al., 1988).

and 28.1 years for other degrees (Destatis, 2012b). Figure 6.5 and Figure 6.6 illustrate bivariate relationships between level of school/academic qualification and being in full-time employment for the two country cases.

80
60
40
20
No academic CSE O-level A-level Teaching, 1st or higher degree

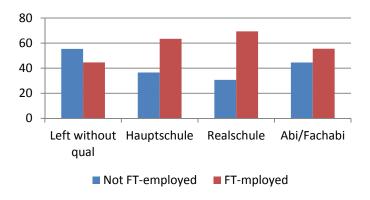
Not FT-employed FT-mployed

Figure 6.5 Per cent of observations (person years) in full-time employment by level of education, women in Great Britain, 17-30 yrs., 1991-2008

Sources: BHPS (n=10,681); pooled data 1991-2008.

In the German case the expected positive relationship between education and employment can generally be confirmed. That the relationship is less obvious in the case of the highest German school certificate, Abitur, points to the fact that this qualification often precedes university studies. This results in more observations of high school qualifications coinciding with 'no full-time employment', i.e. further education, in this category. Unsurprisingly, full-time employment was less likely where women were observed with no completed qualifications in Germany. The education indicator used from the BHPS includes completed higher education, and the figure reflects the expected positive relationship between academic attainments and full-time employment. Full-time employment is shown to be more likely when a higher academic degree is held than when A-levels are the highest qualification. Observations of no academic qualifications are associated with not being in full-time employment.

Figure 6.6 Per cent of observations (person years) in full-time employment by level of education, women in West Germany, 17-30 yrs., 1991-2008



Source: SOEP (n=10,677); pooled data 1991-2008.

Table 6.1 included information about the distribution of observations across categories of education levels. These give an indication for the different meanings qualifications have in the two countries. The values for the education variables indicate that, in Britain, higher shares of observations are at both extremes (over 10 per cent without school certificate; but about 40 per cent of Alevel and higher), while in Germany the intermediate qualification Realschuldegree has the largest share of observations (almost 37 per cent). This reflects that the British education system is based on large shares of graduates with relatively high general qualifications. However, the system also creates a considerable share of people missing out, who are likely to be the less academically inclined. With the vocational training track the German system grants an alternative pathway for these graduates, which has been labelled as 'safety net effect' (Shavit and Müller, 2000b). The indicator for vocational qualification also demonstrates clearly that the vocational track is more common in the German context (37 per cent of observations compared to 23 per cent in the British case), as explained above. Both datasets contain variables indicating whether respondents have a vocational degree. The SOEP variable differentiates between several vocational degrees, but it was here simplified to a binary variable such as contained in the BHPS. Despite its relative irrelevance in

the British education system, the bivariate analysis gives an almost identical picture of the relationship with full-time employment for the two countries (Figure 6.7). It shows that vocational qualifications are strongly associated with being in full-time employment for the women in the samples. Here, too, multivariate analysis is necessary for further insights. The subsequent section uses fixed effects regression for analysing the discussed factors together with other relevant variables in a multivariate setting in order to further investigate the research questions.

80.00
60.00
40.00
20.00

No vocational qual qual qual qual qual BHPS

SOEP

Not FT-employed

FT-mployed

Figure 6.7 Per cent of observations (person-years) in full-time employment by vocational qualification and country, women 17-30 yrs., 1991-2008

Sources: BHPS (n=10,681); SOEP (n=12,395); pooled data 1991-2008.

6.4 Fixed effects regression

The choice of method for the analyses of this chapter is primarily framed by the research questions but statistical tests against alternative options are also taken into consideration. Fixed effects logistic regression⁶¹ is used for determining women's probability of entering employment at the early career stage, accounting for changes in their family situation and in their educational

⁶¹ Panel regression is included in all major software packages; STATA 11.0, the one used here, provides it as option of the command for logistic regression with panel data: xtlogit, i(pid) fe or

attainment as well as for time-constant unobserved characteristics. As discussed in Chapter 5, fixed effects panel regression is a desirable method to answer questions interested in effects of intra-individual change (Giesselmann and Windzio, 2012, p. 33). This is because its logic comes close to an experimental one, measuring differences in the outcome before and after individuals experience change on the independent variables, holding time-invariant characteristics constant. The statistical procedure allows for differentiating intra-individual variation from inter-individual variation by eliminating the cumulated effect of all time-constant factors (Allison, 2009; Giesselmann and Windzio, 2012). The present analysis is particularly interested in what affects transitions into full-time employment in the early career stage and hence uses a binary dependent variable. This means that a logistic regression model is needed, which can be specified as follows.

The basic equation for a logistic regression model is:

(a)
$$log\left(\frac{P}{1-P}\right) = \beta_{0+}\beta_1 x_1 \dots + \beta_n x_n$$

The difference to a linear regression is that *y* values of the dependent variable are estimated proportions (here: between the log of full-time employment observations and other employment statuses) rather than observed values (e.g. income). Coefficients are expressed in log odds, which can be interpreted by their level of significance and their sign, but not by effect strength. The equation can be transformed by exponentiation so that effects are displayed in odds. Odds have the advantage that they can be compared amongst each other:

(b)
$$\frac{P}{1-P} = \exp(\beta_0 + \beta_1 x_1 \dots + \beta_n x_n)$$

For the fixed effects model of logistic regression the equation is extended by the term α_i :

(c)
$$P(y_{it} = 1 | x; \alpha_i) = \frac{1}{1 + \exp(-(\alpha_i + \beta' x_{it}))}$$

where P is the odds that the dependent variable is equal to 1 for an individual i at time t; x_{it} is a time-varying independent variable for an individual i at time t and the error term α_i represents the combined effects of all time-constant unobserved characteristics of the individual. The subject-specific factor α_i can be eliminated by using conditional maximum likelihood (Allison, 2009, p. 32), which conditions the likelihood function to the total number of observation per person. The result is that information from each person's probabilities of being in one state rather than another contributes to the likelihood function. These conditional probabilities do not contain the α_i parameters, which means that they are held constant, i.e. their influence can be ruled out in the resulting coefficients. The resulting odds ratios can be interpreted as follows. Any value smaller than 1 means reduced odds of being in full-time employment; values higher than 1 increase the odds. For example, a (fictive) odds ratio of 0.5 for 'having a child' means that this factor reduces the odds of full-time employment by half.

The fact that fixed effects regression excludes all cases that have no over-time variation implies that all women who did not experience change in employment during the observed period are dropped from the analysis. This means that the estimation of the model is based on a sub-sample of women, not including for example those continuously not in full-time employment, those continuously in full-time employment or those continuously in education, which makes it an efficient estimation method (Allison, 2009, p. 39). It is important to note that this excludes women who have not finished their education before age 30 from the present analysis. The exclusion of all non-

changing individuals also explains why sample sizes are considerably reduced in fixed effects regression. This aspect is sometimes noted as limitation of the method, because it makes including time-constant independent variables impossible, and because information is 'lost'. However, it is likewise cited as putting the method at advantage over others, because estimations are efficient in using only the necessary information (on change) (Giesselmann and Windzio, 2012), which makes them less vulnerable to omitted-variable bias (Allison, 2009, p. 39). The effects the model produces are arguably closer to 'pure' effects that are not distorted by time-constant unobserved factors. Especially in analyses of potential negative effects of single motherhood omitted variables have often been a point of contention. As has been shown above, it is difficult to disentangle mechanisms between social class background, socio-economic characteristics and single motherhood. In applying fixed effects regression and approximating the exposure of 'real' effects of single motherhood on employment in the early career stage, this study hence makes a particular contribution to this research field. The following subsection discusses the variables which are included in the model and their role regarding the testing of the hypotheses.

6.4.1 Independent variables

Following a common practice in quantitative research, the independent variables will be introduced into the model in themed groups, which relate to the theoretical framework set out above. Variable selection was limited by the need for choosing data which is available in all survey waves and in both country datasets. This was achieved with the exception of one pair of variables, as detailed below. The variables are introduced in the model in several blocks. Firstly, family life dummies (0, 1 coding, categories as in Table 6.1) are introduced, testing the effects of entering a certain family constellation on transitioning into full-time employment. Further characteristics of the life stage, the woman's age (ordinal, 17-30) and the number of children under 16 in the

household (ordinal, 0-5), are added thereafter. The descriptive analysis demonstrated that there is some association between family constellations and full-time employment, the pattern of which varied across the two countries. The multivariate analysis will allow for further conclusions, especially on the question of whether differences in employment probabilities between women in different family constellations can be explained by other socio-economic factors (questions 1a-c). The analysis of educational attainment will also allow for a discussion of the role of resource acquisition at women's early life stage.

Accordingly, the second block of variables contains the education variables (dummies with 0/1 coding; categories as defined above). For both country cases the descriptive analysis supported the expectation that level of qualification and employment probability are positively associated. In the multivariate setting the interest is here in the links between educational attainment and family constellation, but also between educational attainment and social origin. As discussed, the fixed effects model eliminates time-invariant factors and therewith controls for constant characteristics such as social class and ethnic background, addressing Hypothesis 1e.

The third set of variables is summarised under the label of 'contextual links'. Here, within the limits of the two-country design and comparability of available data, the analysis attempts to examine the effects of individual level variables in relation to the issues addressed in Hypotheses 1c, 1d and 2. This step concerns two subjects, namely the role of childcare arrangements on the one hand and that of education and training systems on the other hand.

As for the question of childcare arrangements, Hypotheses 1c and 1d expect positive effects of sharing childcare responsibility on full-time employment. Unfortunately, the data sets do not provide comparable variables covering the period of this analysis for testing the two hypotheses in both countries.

Therefore, each of the two country analyses addresses one of them. The BHPS contains a variable measuring 'main childcare responsibility' for which respondents are asked "Who is mainly responsible for looking after the child(ren)?". The present analysis includes a dummy variable coded 1 if the respondents state that they do childcare 'jointly' and zero otherwise. This implies that the comparison category to women doing joint childcare includes women in single motherhood as well as partnered women not doing joint childcare. A positive effect of this variable would mean that dividing childcare between parents facilitates women's employment. Potential changes in the effects of family constellations occurring when the 'joint childcare' variable is introduced into the model would point to links between these variables (1c) for Britain. The SOEP contains a variable useful for testing Hypothesis 1d, asking respondents whether children are attending any preschool childcare. The variable is included in the model on the German case in order to test whether there is an observable positive effect which would confirm the Hypothesis. In the British case, a suitable indicator for children's attendance of formal childcare was not available. The BHPS variable closest to the one in the SOEP was only surveyed if the respondent was in employment ("Who usually takes care of your child while you are at work?"), which rules it out for analysing determinants of employment. Changes in effect size or in significance levels of other variables when introducing the indicator would indicate that there may be mediating effects of childcare use. The two childcare indicators, but especially the German one, can tentatively be interpreted in regard of context conditions for outsourcing childcare.

An even clearer conceptual link to institutional frameworks is addressed with the final variables included in the models. In light of Hypothesis 2, each country analysis will include a variable indicating whether respondents have acquired vocational qualifications. Examining whether attaining a vocational degree leads to increased chances of being in full-time employment in this early career stage contributes to the research on labour market transitions. The expectation formulated in Hypothesis 2 is that attaining vocational qualifications in the German context is a facilitator of full-time employment with which reconciliation problems may potentially be offset. The following section discusses the results of the multivariate analysis with logistic fixed effects models by country, before conclusions are summarised for closing the chapter.

6.4.2 Regression results

Great Britain

Table 6.2 reports results of the five models estimated on the basis of the British data. Besides the effects expressed in odds ratios the table contains information on sample sizes and goodness of fit (pseudo-R² and log likelihood). The initial model, in which only the family constellation dummies are included, shows that, compared to being single and childless (reference category), both being in a partnership with child and single motherhood decrease the odds of being in full-time employment on a statistically significant level by half. Being in a partnership with children has a slightly more negative effect. However, the difference between the two is not statistically significant, as other not reported results with swapped reference category show. This supports the idea formulated in Hypothesis 1a that women with children in the household find it difficult to reconcile employment and family responsibility, but does not provide evidence to support Hypothesis 1b. The effect of being in a partnership with no children is shown not to be statistically significant when compared to being single and childless. That means entering a partnership does not make a difference to young women's odds of transitioning to full-time employment. As suggested by the pseudo-R² value the model explains a rather low share of the variation in whether or not a woman between 17-30 years in Britain enters fulltime employment.

Introducing 'age' and 'number of children' in the model increases the pseudo-R² value and decreases the log likelihood, both of which indications for improved fit of the model. As would be expected in the early years of the career, the effect of age in the next model is strong and positive. With each year a woman's odds of being full-time employed increase by 1.5. This reflects the labour market entry movements of people between 17 and 30, most of whom will have made the transition to employment in that phase. Each additional child, on the other hand, affects the odds negatively. This is in line with the expectation that having more than one child puts greater obstacles to family-employment reconciliation. Interestingly, controlling for both of these factors alters the size of motherhood effects, which become more negative (reduced odds ratios). The positive influence of age on the employment odds seem to have attenuated some of the negative motherhood effects, which now appear more pronounced with that effect singled out, because the chance of having a child also increases with age.

Introducing the educational attainment variables, of which A-levels is the reference category, does not result in changing the odds ratios of family life variables. This means that entering a household constellation including a child has a negative impact on the odds of transitioning into full-time employment regardless of the level of academic qualifications. Attaining more resources marketable in the labour market does not seem to protect against the high strains on family–employment reconciliation which a young child brings with it for mothers in their twenties. Compared to A-levels any lower qualification has the expected negative and higher degrees a positive, statistically significant effect on full-time employment. The patterns are interesting also in respect of the fact that in the models all individual time-invariant characteristics are held constant. This means that the effects of educational attainments are bare of class or ethnic differences, supporting the idea that resource acquisition itself improves the odds of full-time labour market integration for women from all

social class backgrounds. The effects of the family constellation variables also have to be read in these terms. Accordingly, entering motherhood situations diminishes the odds of being full-time employed for women of all social classes. In other words, the findings confirm that not being in full-time employment as a young mother is not merely a result of being from a low social class background but concerns all women with children, Hypothesis 1e could not be supported on this basis.

The 'joint childcare' variable turns out to have the generally unsurprising positive effect on full-time employment (Hypothesis 1c). Sharing the load of care responsibility for a young child with a partner reduces women's difficulties of reconciling family life and employment. In addition, the negative effect of partnered motherhood intensifies slightly after 'joint childcare' is controlled for, widening the difference to women in single motherhood. As opposed to the previous model, the difference between single and partnered motherhood is now statistically significant as was tested in additional analysis. This means that, as predicted in Hypothesis 1c, the odds of entering employment at the early career stage depend on the division of care work rather than partnership status as such. This is because without including the 'joint childcare' variable the effect of partnered motherhood seemed to have captured positives of shared parenting.

Table 6.2 Determinants of full-time employment, women 17-30 yrs., Great Britain, fixed effects logistic regression, odds ratios

	Model I		Model II			Model III			Model IV			Model V			
	OR		SE	OR		SE	OR		SE	OR		SE	OR		SE
Family life															
In partnership with child/ren	0.46	***	0.05	0.15	***	0.03	0.15	***	0.03	0.12	***	0.02	0.12	***	0.02
Single with child/ren	0.55	***	0.08	0.17	***	0.03	0.17	***	0.03	0.17	***	0.03	0.17	***	0.03
In partnership, no child	3.60		0.42	1.16		0.15	1.08		0.15	1.05		0.14	1.06		0.15
Single, no child (ref)	(ref)			(ref)			(ref)			(ref)			(ref)		
Age				1.50	***	0.02	1.35	***	0.02	1.35	***	0.02	1.33	***	0.02
Number of children				0.26	***	0.03	0.33	***	0.03	0.35	***	0.03	0.35	***	0.04
Qualifications															
No academic qualification							0.49	*	0.15	0.52	*	0.16	0.26	*	0.15
CSE							0.13	***	0.06	0.14	***	0.06	0.10	***	0.05
O-Level							0.21	***	0.04	0.21	***	0.04	0.19	***	0.04
A-Level (ref)							(ref)			(ref)			(ref)		
Teaching, 1st or higher degree							10.88	***	2.36	11.19	***	2.44	12.03	***	2.68
Contextual links															
Joint childcare in couple										2.34	***	0.31	2.29	***	0.31
Vocational qualifications													0.94		0.42
N (individuals)	996			996			996			996			970		
n (person-years)	7414			7414			7414			7414			7158		
pseudo R2	0.06			0.20			0.25			0.25			0.26		
Log likelihood	-2886.12 -2458.77			-2309.73 -2286.			85 -2201.75			75					

Note: *p<0.05; **p<0.01; ***p<0.001

Source: BHPS, 1991-2008.

Lastly, introducing the vocational qualification variable contributes to a small improvement of the model fit, although the indicator does not produce a statistically significant effect. The attainment of vocational qualifications, as it turns out, does not lead to improved chances of entering full-time employment in the British case. This result is not surprising given the low relevance vocational training has in the British education system and labour market (Hypothesis 2), but adds to what we know by considering the early career of women. It seems that vocational qualifications in the form as they existed in the observed period do not provide a secure track into full-time employment, let alone changing conditions for family–employment reconciliation. Separate analyses show that, for Britain, vocational qualifications neither improve the odds of being part-time employed. The following section will show whether a different pattern can be observed in the West German case.

West Germany

The results of the fixed effects logistic regression analysis on the West German case are summarised in Table 6.3. Model I has a very low pseudo-R², which indicates that only a tiny fraction of the variation on the dependent variable is explained by the family constellation women are in. The effects on full-time employment of single motherhood and being in partnership with children are both negative on a statistically significant level compared to being single without children. The effect of 'partner and child' is slightly more negative than the single motherhood one. This corresponds to what was found with BHPS data. Family–employment reconciliation seems a similarly difficult enterprise for women at the early career stage in West Germany. Contrary to the British case, however, being in a couple without children has a strong positive effect among German women in this model, which is also statistically significant. On introduction of the 'age' and 'number of children' variables in Model II, this effect disappears. This

suggests that the partnership effect in fact reflects women's higher chances of living in a couple the closer to 30 they get, which is strongly associated with the increased probability of transitioning to the labour market. The family constellation results provide evidence to support the pattern expected in Hypothesis 1a. As was the case for women in Britain, each year women are older increase the odds of entering full-time employment, and each additional child decreases them. While adding to the first model implies a small change in the effects of the two motherhood variables towards becoming more negative, the change is less pronounced than in the British case. Interestingly, the change implies that the difference between the effects of being in situations of partnered and single motherhood becomes slightly larger. However, the difference is not statistically significant, which non-reported results of additional analyses confirm. As in the British case, the results neither provide evidence for Hypothesis 1b.

Introducing the educational attainment level variables does not change much among the effects of the other variables, except for the single motherhood effect coming out on a lower level of significance. This is an indication that the single motherhood variable does not contribute massively to explaining the variation of the dependent variable. In fact, the low pseudo-R² value indicates an overall low model fit, although the log likelihood was improved compared to the previous model when adding the education variables. In the German case, having no completed school qualification does not change the odds of being full-time employed on a statistically significantly different level from having a Hauptschul-degree (reference category). This result does not cast a positive light the Hauptschul-degree, which is indeed sometimes found to having negative signalling effects to employers (cf. Solga, 2008). Attaining a Realschul-degree, on the other hand, improves the odds on being full-time employed, as does acquiring Abitur. Again, the positive effects of education can be understood as 'pure' resource attainment effects, bare of

background characteristics such as social class or ethnicity, because timeinvariant characteristics are controlled for in the fixed effects model.

In the next step, the 'formal childcare' variable is added to the analysis (Model IV), addressing Hypothesis 1d which expects that outsourcing childcare improves family–employment reconciliation. Indeed, controlling for the use of formal preschool childcare has similar implications as the 'joint childcare' variable in the British analysis. Using formal childcare has a strong, statistically significant positive effect on the odds of being full-time employed, which supports Hypothesis 1d. In this case, there is a small change in the effect of single motherhood, implying even lower odds of entering full-time employment. This indicates that childcare responsibility is a main factor in family–employment reconciliation, especially for women in single motherhood. The lack of formal support leads to lower employment chances. Again, this result is valid for women between 17-30 years regardless of social class and ethnic background, because the model controls for unobserved heterogeneity.

Table 6.3 Determinants of full-time employment, women 17-30 yrs., West Germany, fixed effects logistic regression, odds ratios

	Model I		Model II			Model III			Model IV			Model V			
	OR		SE	OR		SE	OR		SE	OR		SE	OR		SE
Family life															
In partnership with child/ren	0.19	***	0.06	0.10	***	0.04	0.10	***	0.04	0.09	***	0.04	0.09	***	0.04
Single with child/ren	0.25	**	0.13	0.21	**	0.12	0.29	*	0.18	0.21	*	0.13	0.21	*	0.13
In partnership, no child	2.48	***	0.55	1.45		0.35	1.41		0.37	1.38		0.36	1.36		0.36
Single, no child (ref)	(ref)			(ref)			(ref)			(ref)			(ref)		
Age				1.42	***	0.02	1.35	***	0.03	1.35	***	0.03	1.40	***	0.03
Number of children				0.37	***	0.06	0.35	***	0.07	0.32	***	0.1	0.30	***	0.06
Qualifications															
Left school without qualification							1.42		0.60	1.46		0.6	1.33		0.57
Hauptschul-degree (ref)							(ref)			(ref)			(ref)		
Realschul-degree							2.44	**	0.68	2.46	**	0.7	2.51	**	0.70
_Abitur/Fachabitur							5.64	***	1.87	5.68	***	1.9	5.66	***	1.88
Contextual links															
Child in any formal childcare										2.55	***	0.52	2.55	***	0.53
Vocational qualifications													0.59	***	0.08
N (individuals)	5778			5778			5001			5001			5001		
n (person-years)	1121			1121			967			967			967		
pseudo R2	0.03			0.14			0.14			0.14			0.14		
Log likelihood	-2242	2.25		-1988	3.22		-1725	5.01		- 171	4.25		-1706	5.89	

Note: *p<0.05; **p<0.01; ***p<0.001

Addressing question 2, the last step of the analysis in this chapter is the introduction of the vocational qualification indicator to the German model. Contrary to what was observed in the British case, vocational qualification has a statistically significant effect on West German women's odds of being full-time employed. However, surprisingly in respect of Hypothesis 2, the effect is negative for women of this age group. Attaining vocational qualifications shows to cut the odds of being employed by 0.59. Effect sizes and significance levels of all other variables remain unchanged, and log likelihood improves compared to the previous model, suggesting that vocational qualification does have an individual role for explaining employment probabilities. However, the negative effect on full-time employment may point to an underlying mechanism that is unobserved in this model. Additional analysis supports the ad-hoc hypothesis that the vocational track may be the entry ticket for a part-time career among West German women (see Appendix A6.2). In respect of the skill regime literature, these results contribute to the empirical knowledge of young women's labour market careers. The present analysis adds to previous research by testing the 'safety net' assumption of the German labour market entry system for women, showing that this effect exists, but only in a 'part-time safety' fashion. In the following section, the findings of this chapter will be summarised in terms of the hypotheses, linking them to the broader subject of this thesis.

6.5 Summary

It had been shown in the previous chapters that single motherhood at an early career stage is likely to be particularly detrimental to full-time labour market integration. This chapter has investigated several aspects which, based on previous literature, are central to this expectation. The main puzzle the chapter addressed was in what way social class background, changes in

family constellations and skill attainment interact in shaping young women's chances of being full-time employed. Furthermore the overarching aim was to understand these interrelations in the comparative perspective between Britain and West Germany, as to take institutional contexts into consideration. The analyses make contributions to both, questions on single motherhood and early careers as well as women's early labour market integration more generally.

The first question was whether, for women between 17-30 years, having children on the one hand and not being in a partnership on the other hand impedes on the chances of entering full-time employment, even if social class and educational attainment are controlled for. Based on the analysis, evidence was found for supporting the hypothesis that difficulties in family–employment reconciliation are severe if children enter the scene at women's early career (1a). For both countries, negative effects of having children on entering full-time employment remained strong throughout the analyses, even when additional explanatory factors were introduced. The difference in effects on employment odds between partnered and single women with children was insignificant in both countries, which means that no evidence could be found to support Hypothesis 1b.

The analysis went on to address the role of childcare responsibility, aiming to further unravel potential differences between partnered and single motherhood. Due to a lack of comparable indicators, the analysis drew on different variables in the two country cases. Especially in respect of using the comparison analytically this is a considerable limitation of the analysis. On the upside, the analyses with different indicators provided insight in the childcare issue from two different angles. The analysis on the British case supported Hypothesis 1c showing that joint childcare in couples improves the odds of entering employment. Moreover, separating out the issue of

childcare responsibility in couples, partnered motherhood showed being slightly more disadvantageous to employment than single motherhood. Certainly, these results do not account for whether women in either partnership constellation use formal childcare or not. That aspect could only be addressed in the SOEP analysis. Here, the use of formal childcare had a positive effect on entering full-time employment, which lends support to Hypothesis 1d. In addition, controlling for whether or not external childcare was used increased the negative effect of single motherhood, while the effect for being in a co-parenting situation remained unchanged. These results indicate that in the West German context formal childcare improves familyemployment reconciliation for any mother between 17 and 30, but more so for women in single motherhood. Taking these results together, the analysis supports the common wisdom that support with childcare can be crucial for young mothers' ability to reconcile family and employment, regardless of their partnership status. The findings underline that being in a partnership does not alone improve mothers' chances of entering employment, but that the partner's involvement is essential. While these latter results can only be generalised to British women under 30, it does not seem far-fetched to assume that the issue is applicable more broadly. The results for West Germany, on the other hand, emphasise the importance of formal preschool childcare for improving young women's odds of being full-time employed.

Beyond family dynamics, previous literature has explained differences in chances of being full-time employed at an early career stage with factors of social class. Moreover, some have argued that any observed negative effect of early motherhood would in fact be explained by unequal starting positions of those who become mothers compared to others. The assumption is that motherhood at a young age is itself explained by social class or ethnicity, and that equally the low probability of young women in single motherhood was explained by these factors rather than the family situation. The analyses of

this chapter provided evidence to counter this assumption in so far as that, controlling for unobserved time-invariant individual characteristics, negative effects of motherhood could still be observed. This supports the idea that starting a family in the early career stage makes family-employment reconciliation difficult. In addition, considering the level of educational attainments in the analysis, which are generally strong determinants of full-time employment, did not lead to changes in motherhood effects. This means that no evidence was found that differences in education levels explain the variation in employment odds observed between women with and without children.

Education was furthermore considered in respect of vocational skills, addressing the large body of literature which discusses individuals' initial labour market entry against the background of vocational education and training systems. The current analysis investigated whether there were any differences in how the attainment of vocational qualifications mediates young women's employment in Britain and Germany. This part of the analysis was motivated by the question whether vocational training could indeed act as a safety net for women's labour market integration, i.e. whether a vocational degree would buffer any negative effects of single motherhood. The hypothesis (2) was that, in line with West Germany's system of accredited vocational qualifications, women in this context would benefit from having such a degree compared to those who did not. In Britain, on the other hand, attaining a vocational degree was expected not to make any difference for the full-time employment integration of young women. Indeed, the analysis found no statistically significant effect for vocational qualifications in Britain. However, for the West German context results were different from what was expected. The highly significant effect of attaining vocational qualifications on entering full-time employment was negative. That means, the safety net effect of the German vocational training and education system could not be confirmed for women between 17 and 30 years. Neither did controlling for vocational qualifications alter the effects of motherhood. Additional analyses revealed that, in the German context, attaining a vocational degree increases the odds of part-time employment. This is in line with the idea of gendered education and training systems in which women often graduate from vocational schools preparing for occupations in part-time friendly labour market segments.

In conclusion, drawing on the life-stage model of single motherhood and career, the chapter has unpicked some of the central issues around the question whether and in what way single motherhood affects labour market integration at the early career stage. It demonstrated considerable barriers to entering full-time employment regardless of mothers' background characteristics and partnership status. The next step will be to examine the relationship between single motherhood and employment beyond immediate effects on transitions into full-time employment in the following chapter.

Chapter 7 Career trajectories during and after single motherhood 62

As one of its main results the previous chapter showed that, similar to having a child in a couple, single motherhood diminishes women's chances of full-time labour market integration in the early career stage. This result was consistent across the country contexts of Great Britain and West Germany. Several questions are raised by this finding, some of which will be addressed in the present and the subsequent chapters. Considering the life stage model of single motherhood and career, one question is how career trajectories develop during and after single motherhood beyond a single employment transition, and whether there are common patterns. As careers develop embedded in institutional contexts, a further question is whether common trajectory patterns are different in the two country contexts? The present chapter examines these questions empirically. As mentioned earlier, the analysis of career trajectories can add substantial informational value beyond analysing transitions between employment statuses. Investigating career trajectories of women experiencing single motherhood provides a dynamic perspective which can be useful for discussing potentially different policy needs. In an explorative approach this chapter applies sequence analysis to BHPS and SOEP data, identifying eight common career trajectories. These patterns are distributed differently in the two country

_

⁶² This chapter particularly benefitted from feedback received from four reviewers and the editor of the European Sociological Review, to which a version was submitted. At the time of thesis submission no formal decision on the date of publication had been made.

contexts, which invites interpreting the differences in terms of institutional infrastructures as is proposed in the discussion of the methodological approach above. The chapter suggests that such differences could be explained with policy frameworks discussed in Chapter 4, and mainly by differences in accessibility of affordable childcare as well as income transfers. The chapter is organised as follows. In the first section, the specific research domain is set out by evaluating approaches that develop typologies of single motherhood and career trajectories against the theoretical model of Chapter 3. On this basis hypotheses are developed in the second section. The third section discusses sequence analysis as a methodological tool, leading into analysis of the data and presentation of the results. The findings are summarised in a concluding section.

7.1 Career trajectories and single motherhood

The theoretical model developed in Chapter 3 implies that career trajectories can be influenced by family life dynamics. This assumption has been a subject of academic inquiry in previous research examining employment trajectories of women in single motherhood (BMAS, 2011; Hancioglu and Hartmann, 2012; Kull and Riedmüller, 2007; Mädje and Neusüss, 1996, 1994; Ott et al., 2012, 2003; Schneider et al., 2001; Schöningh et al., 1991; Stewart, 2009). As was discussed in Chapter 2, some of these studies, most of which have been conducted on the German case, aim at creating typologies of common trajectories. Based on the results of these studies the present section specifies the research questions in regard of the career sequences model developed above.

The theoretical sequence types developed based on Sackmann and Wingens (2003) above provide a useful toolkit for systematic categorisation of empirical career trajectories. As was explained above, sequences are differentiated by the nature and frequency of transitions between different

employment statuses. In order to develop the specific questions and hypotheses for this chapter, this section evaluates the findings from previous literature, which identified employment trajectory patterns in the sequence type framework. As demonstrated in Chapter 2, three studies stand out in providing typologies of career trajectories of women experiencing single motherhood; those of Kull and Riedmüller (2007), Stewart (2009) and Ott, Hanicoglu and Hartmann (2012). Table 7.1 summarises the empirical types of that research and gives the ideal sequence type categorisation in the last column. Corresponding to the theoretical ideal types, all three studies make the distinction between continuous career trajectories and those including transitions. Continuity sequences can furthermore be distinguished by their proximity to the labour market, i.e. whether they imply full-time, part-time or even non-employment.

Kull and Riedmüller (2007) use SOEP data on 107 East and West German women who had been living with a child under age 16 but without a partner in 2002 and 2003. Their typology of trajectories splits into three main theoretical sequence type categories: continuity, interruption and rupture. Continuous trajectories are further divided between those marked by high and those characterised by low labour market attachment. Continuity in full-time careers during single motherhood points to women's ability to reconcile family and employment, for example through support with childcare (see Kull and Riedmüller, 2007, p. 44). Continuous non-employment careers on the other hand would seem to imply that there is no access to childcare support which would make employment the more attractive option compared to the social assistance payments.

Interruption trajectories vary between long and short breaks and the main activity during the interruption period. Interruption patterns suggest that women take a break in periods where family–employment reconciliation is too difficult. Leave policies provide institutional support for bridging these periods as discussed in Chapter 3. Kull and Riedmüller's (2007) rupture trajectories describe labour market exits, which vary between those where labour market return remains an option (exit due to childbirth or due to unsatisfying job conditions), and those where the exit is final (retirement). A further category in this typology is that combining cases where no clear trajectory pattern was observable, at least none which could be generalised to characterise the category as a whole. This seems unsatisfying empirically in that a large chunk of the sample falls into this category (26 trajectories), and theoretically because it is not possible to assign an ideal type sequence.

A similar issue occurs in the study of Ott et al. (2012), who also analyse data from the SOEP, looking at women in single motherhood with employment trajectories over a minimum of three years since entering single motherhood between 1984 and 2009. Their category of unstable part-time employment is the largest among women in their sample (40 per cent) while the other dominant categories are continuity types (full-time, part-time and non-employment). Although low case numbers in both cases justify the scholars' decision, leaving a major part of the empirical observations unclassified is not necessarily the most desirable option. An alternative is carried out by Stewart (2009), who opts for the theoretically more satisfying solution of suggesting type categories beyond continuity, interruption and rupture.

Table 7.1 Ideal type sequences: results from previous studies

				No.of		Ideal type
Year	Authors	Country	Sample/method	types	Empirical trajectory types	sequences
					A: Continuous employment status	Continuity
2007			81 women in single motherhood in 2002/03; SOEP data		A1) Labour market citizen	
					A2) Labour market distant	
				9 (4)	B: Successful returners (at least 2 yrs' non-empl.)	Interruption
	Kull & Riedmueller	DE			B1) returner after long family break	
					B2) returner after short family break	
					B3) returner after phase of qualification	
	Riediffuellei		1993–2003		B4) returner from unemployment	
			1333 2003		C: Labour market leavers	Rupture
					C1) Leavers into baby break	
					C2) Discouraged leaver	
					C3) Leaver into early retirement	
					D: No pattern	
2012	Ott, Hancioglu, Hartmann	DE	454 women in single motherhood > 3 waves labour market statuses;		1) Stable full-time	Continuity
				4	2) Stable part-time	
					4) Stable non-employed	
					2) 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Interruption/
			SOEP 1984-2009		3) Unstable part-time	Fusion/Return
					1) Full-time stable (child>3.5)	Continuity
			British Lone Parent Cohort; low-skilled		8) Home throughout	
2009				9	9) Home with a blip into work	
					2) Medium returners (stable FT child 3.5-6.5);	Interruption
	Stewart	UK			3) Late returners (stable FT after child aged 7)	
			women		4) Part-timers (only ever <16hrs)	Continuity
					5) Work-oriented (broken history but mostly working)	Interruption/
					6) In and out (unstable empl. hist.)	Fusion/Return
					7) Leavers (FT early then leaves)	Rupture

Stewart (2009) analyses quantitative survey data from the British Lone Parent Cohort on employment trajectories focusing on British low-skilled⁶³ women, who were first surveyed when they were in a situation of single motherhood. Corresponding to Kull and Riedmüller's findings for the German case, Stewarts's study finds trajectories fitting the continuity (high and low attachment), rupture (labour market exits) and interruption (labour market returns) sequence types but also identifies two additional patterns. The two extra trajectory types involve more than two transitions, marking women's repeated exits from and re-entries into employment. These patterns of more unstable trajectories differ in their overall degree of being employment-oriented, which is high in the one case and lower in the other. As for characterising the empirical trajectory types in respect of the theoretical ideal type sequences, they seem to fit combinations of interruption and fusion or return types.

In summary, then, the little research done on the specific subject of this chapter has relatively consistent findings in some regard, but also leaves scope for questions and further inquiry. Trajectories typed as continuity, rupture and interruption sequences are common career tracks for women in single motherhood in the British and the German contexts. However, there are several issues arising from comparison of the studies against the theoretical framework developed above. For one, there is the question of why the more volatile employment trajectories of women in single motherhood do not appear as independent empirical categories in the two studies on the German case. In addition, the findings from Stewart were for low-skilled women, and thus leave open the question of whether they are

_

⁶³ 40 per cent of women in her sample have no qualifications and 30 per cent have only lower school qualifications.

generalisable beyond lower skill levels. The following section specifies questions and hypotheses addressed in this chapter.

7.2 Questions and hypotheses

The discussed studies on employment trajectories suggest that single motherhood is not associated with one particular career type, but that trajectory patterns fall into distinct categories. Studies on the German and on the British case found similar empirical types, which fit the theoretical continuity, interruption and rupture sequence types. Because these national case studies do not allow direct comparison of their results due to their different methodological designs, the first question this chapter addresses is: in what ways is the distribution of trajectory types similar in the two country contexts, and where does it differ? Secondly, the previous studies indicated that in the British case empirical trajectories with more than two transitions seem to be common enough to combine them into separate categories. The analyses of the German case on the other hand treated trajectories with less straightforward patterns more as residual cases. The second question is, therefore: do unstable employment trajectories during single motherhood occur less frequently and in a less systematic manner in the German than in the British context? The institutional differences of labour market structures and policy provisions directed at women in single motherhood discussed in Chapters 2 and 3 lead to an expectation of the following.

The relative generosity of the British system regarding the years of single motherhood covered by social assistance benefits delays incentives for engaging in employment.

<u>Hypothesis 1:</u> Consequently, British women's employment trajectories during and after single motherhood are characterised by an overall lower attachment to the labour market than those of German women.

<u>Hypothesis 2:</u> Continuous non-employment and late return sequence types are particularly common in the British context compared to the German one.

The half-day public childcare system for children aged 3–6 years in West Germany provides opportunities for employment involvement over this period for women in single motherhood, as do nursery classes for 3–5 year-olds in Britain. The British system is more restricted in providing fewer free hours and higher costs for anything beyond those.

<u>Hypothesis 3:</u> Hence, the half-day childcare regime in West Germany leads to an expectation that here employment trajectories during and after single motherhood are more likely to be characterised by continuous part-time employment than in Britain.

The impact of leave policies on women in single motherhood is limited to the period directly following childbirth and hence concerns only particular cases of single motherhood. In the highly individualised British leave system few women in single motherhood will benefit from these regulations.

<u>Hypothesis 4:</u> Hence, employment trajectories during and after single motherhood in the West German context are more likely to include extended leave periods compared to Britain.

<u>Hypothesis 5:</u> This also involves that rupture (labour market exit) or change (stepwise exit) type sequences will be more common in the German context, as prolonged leave has detrimental effects on labour market integration.

The differences in skill systems and labour market structures between Britain and Germany lead to further expectations. Germany's highly regulated labour market produces generally more stable career trajectories than does the largely marketised and unregulated British system.

<u>Hypothesis 6:</u> Hence, volatile trajectories during and after single motherhood are more likely in the British context than they are in that of West Germany.

The following sections outline the methods for examining these hypotheses in light of the questions this chapter addresses, and discuss the results of the analysis.

7.3 Analysing employment trajectories

The aim of the empirical analysis is to offer a descriptive account of employment trajectories of women who spend time in single motherhood in the welfare state contexts of Britain and West Germany. This objective implies that the interrelations between family life and employment are investigated as processes rather than as single events. Sequence analysis provides the opportunity to disentangle such relationships (Aisenbrey and Fasang, 2010, p. 421f.), enabling an account to be made for periodical information that is ignored by other methods (e.g. Abbott, 1990; Brzinsky-Fay, 2007). Ideally, the processes would be looked at by considering entire employment trajectories from labour market entry until retirement. However, this ideal scenario is constrained by the lack of suitable data. Instead, the present analysis focuses on employment trajectories during and after the time period in which single motherhood is observed. The use of sequence analysis as a method, implying a range of descriptive tools, contributes to understanding which employment trajectories and aggregate patterns are common during and after single motherhood. Secondly, the cross-country design can potentially give indications of the role of institutional settings in framing employment trajectories. The two-country design is used instead of a multiple country comparison, which is again not possible due to data limitations (see Chapter 5). The fewer number of country cases also enables the rich available data to be exploited in more detail. The analytical design features description on the individual and on the aggregated individual levels, intra-group comparisons for each country and cross-country comparison. The analysis proceeds in three stages,

roughly following Brzinsky-Fay, Luniak and Kohler (2006).⁶⁴ Firstly, employment trajectory sequences are described in terms of their general characteristics, looking at aggregate features of sequences by country. Secondly, optimal matching (OM) is used to calculate differences between the individual sequences jointly for the two countries. On the basis of the OM results similar sequences are grouped using cluster analysis. The third stage consists of describing the clusters and their distribution across the two country contexts. Before discussing these results, samples and measures are defined.

7.3.1 Samples and measures

As in the previous chapter, the analysis draws on 1991–2008 data from the BHPS (Taylor et al., 2010) and the SOEP (Wagner et al., 2007), which have been described in more detail in Chapter 5 above. The German sample from the SOEP only includes women who were residents in West Germany at the time of being surveyed. The Welsh and Scottish booster samples of the BHPS were excluded, leaving the Scottish and Welsh populations underrepresented. The criterion for being included in the present samples is being observed in single motherhood at least once (one survey wave) in the period of observation. As in the previous chapter, *single motherhood* is defined as a situation in which a child younger than 16 years is living in the woman's household in which no partner is also living. In the British case it is referred to as the mother's "own child", which is defined as either biological, adopted or stepchild. Similarly, for women in the SOEP the information is derived from data on the mother's birth history and on the number of children under age 16 in the household (see Chapter 5).

⁶⁴ The analyses are conducted with the Stata SQ-ados of Brzinsky-Fay et al. (2006).

The age range of the sample is restricted to between and including 16-55 years. The young age threshold at the lower end is set to include 'teenage' mothers who have been the centre of some of the research on single motherhood in the UK (cf. Duncan, 2007). The decision for a sample cut-off at age 55 is based on the consideration that both family life and labour market behaviour take a specific character from this age and above, which is not part of this thesis. Women are included whose respective period of observation was at least 10 and at the most 18 consecutive waves including and following 1991. They enter the sample when they were first observed to be in a situation of single motherhood and remain part of the sample for as long as they are part of the survey or are older than 55, resulting in a sample of 378 German and 329 British women. 65 Left-censoring occurs with information on labour market behaviour before the first observed occurrence of single motherhood being cut off. The threshold of a minimum of 10 waves is chosen to capture labour market trajectories in some length as experienced during and after women experience single motherhood.⁶⁶ According to previous research the average number of years to repartner for women in single motherhood is five years in the UK (McKay, 2003). Similarly, in the present sample, mean durations for experiencing single motherhood is just over five for British and just under five survey waves for West German women, covering periods of labour market trajectories well beyond that. Rightcensoring occurs for 63 British women and for 64 German women in the sample, as they were in a single motherhood situation when the period of

_

 $^{^{65}}$ The mean period of observation is 13.3 for West German and 14.6 for British women.

⁶⁶ For the present analysis non-response 'gaps' in employment sequences were imputed as to equal the preceding employment status. Of the 378 West German employment sequences there were 77 which had gaps. Most of these sequences with gaps (69) had one gap and most of those gaps (65) lasted one episode only. Of the 329 British sequences 53 have gaps, 43 of which have one gap and 34 lasted for one episode only.

observation ended and their subsequent labour market trajectories could not be observed. Setting the first year of observation to 1991, the eighth year of the SOEP survey, has two implications for the West German observations. Firstly, respondents who are more likely to have dropped out before this period are systematically excluded. Secondly, restricting the minimum duration of observation to 10 excludes shorter spells of single motherhood when they ended before 1991. These limitations have to be kept in mind for the interpretation of the results. Figure 7.1 shows the distribution of women by 'age at first observed single motherhood' for the sub-samples. The graph illustrates that the sample contains more women who experience single motherhood at a later age in West Germany than in Britain, which is consistent with the literature.

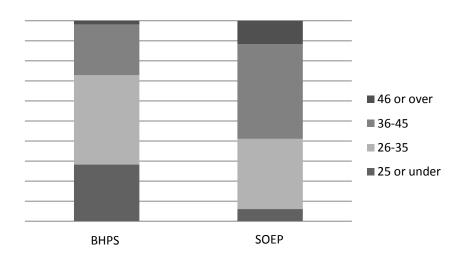


Figure 7.1 Distribution of women by age at first observed single motherhood

Sources: BHPS (N=329 individuals); SOEP (N=378 individuals); pooled data 1991-2008.

⁶⁷ In this sample, compared the overall SOEP sample including years 1984–1990, women experiencing single motherhood at age 25 or before are under-represented (6 per cent compared to 16 per cent) and the age group 36–45 are overrepresented (47 per cent compared to 35 per cent).

The central measure for the following analysis is *employment status* as defined in Chapter 5. It has five values: 1) full-time employment (30 or more hours regularly worked per week) including self-employment; 2) part-time (less than 30 hours regularly worked per week), non-permanent and non-regular employment; 3) unemployment; 4) maternity leave; and 5) inactivity, including, full-time education, long-term sick/disabled, retired, other non-working (BHPS and SOEP) and family care (BHPS).⁶⁸ In order to apply sequence analysis, information on individuals' employment statuses is defined as elements of sequences. Each wave in which a woman's employment status is observed extends the sequence by one element, together representing employment trajectories during and after single motherhood.

7.3.2 Aggregate description

The aggregate description of sequences can provide a good first overview of the distribution of sequences across the sample. Frequencies and concentration of sequences may be assessed. For example, the number of sequences featuring full-time employment throughout gives an indication of the prevalence of continuous full-time employment sequences in the sample. The concentration of sequences indicates how many of the same sequences there are in the sample, which can, for example, serve as a measure for plurality of employment sequences. Sequences can also be described in terms of the particular elements of which they consist, the length of episodes of certain elements, their order or characteristic transitions between different statuses.

_

⁶⁸ The item for employment status in the BHPS questionnaire contains both options: maternity leave and family care, which can create some ambiguity for coding, as was discussed in Chapter 5.

Figure 7.2 summarises information on the shares of each employment status per wave and provides a first impression of the distribution of statuses during and after single motherhood in the present samples. The sequential character of the employment trajectories is here ignored, but country variations in how the shares of each status develop with increasing time after first observed single motherhood become apparent. The share of British employment statuses in inactivity at first observed single motherhood gradually decreases over time. Simultaneously, statuses of full-time employment and also part-time employment increase. Maternity leave plays a minor role in overall shares of statuses among the British women during and after single motherhood. This is a first indication that Hypothesis 4 could be correct, despite the fact that inactivity is likely to capture some maternity leave (see footnote 68). In West Germany, the shares of maternity leave statuses during and after single motherhood decrease over time, while those of inactivity increase as do those of unemployment. Again, this could support Hypothesis 5 of German women's higher risk of experiencing parental leave as labour market exit track. There is a slight drop in shares of full-time employment statuses from the fifteenth wave after first observed single motherhood compared to the previously consistent proportions, which is difficult to interpret. Perhaps what lies behind the pattern observed in these aggregated statuses will become clearer in the analysis of sequences.

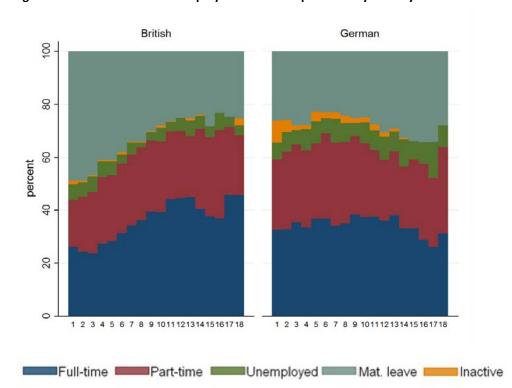


Figure 7.2 Shares of women's employment statuses per wave by country

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991–2008), N=378, own calculations; x-axis refers to observed waves starting with 1 at first observed single motherhood.

As a first step in analysing women's employment sequences during and after single motherhood the sequences' aggregated characteristics are described based on several indicators. The first measure, the average duration of statuses, summarises the number of waves individuals are observed in the respective status, indicating overall frequency of each employment status. This measure is also expressed as a percentage of the overall average sequence length in the country-subsamples to account for differences in sequence length. In addition, an indicator for labour market attachment during and after single motherhood is calculated for each country. The measure is defined as the proportion of episodes spent in full-time and part-time employment in relation to the total number of episodes. Full-time employment/self-employment is weighted with 1 and part-time/irregular employment is weighted with 0.5. Higher values of the indicator, which ranges between 0 and 100, indicate higher labour market attachment. As a

further measure, the average number of episodes in each status can serve as an indicator for stability, higher values indicating more movements in and out of statuses and thus a lower degree of stability.

Table 7.2 Aggregate characteristics of employment sequences during and after single motherhood

	BHPS		SOEP	
		% *		% *
Average number of episodes in				
Full-time/self-employment	5.1	34.9	4.7	35.3
Part-time/irregular employment	3.7	25.3	3.8	28.6
Unemployment	0.7	4.8	1.0	7.5
Maternity leave	0.1	0.7	0.3	2.2
Inactivity	5.1	34.9	3.5	25.9
Average labour market attachment	34.8		50.1	
Average number of episodes, total	4.2		3.6	
N	329		378	
	1		1	

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991–2008), N=378; own calculations. * Average duration as percentage of average sequence length, which is 14.6 waves in the BHPS sample and 13.3 waves in the SOEP sample. Indicators: Average labour market attachment ranges from 0-100, higher values mean closer attachment; Number of episodes ranges from 1-18, higher values mean more instability.

As shown in Table 7.2 the patterns of average durations in each employment status vary slightly between the countries, although not that much. On average, women in West Germany seem to experience shorter durations of full-time employment (4.7 episodes) during and after single motherhood than British women (5.1 episodes). The picture is corrected after accounting for average sequence length, showing a higher share of full-time duration for German women on average. Average durations of part-time and irregular employment statuses are similar (3.8 and 3.7) in the two samples. Average unemployment durations are on a low level and slightly longer for West Germans (1.0) than for Britons (0.7 episodes). While with 0.3 (West Germany)

and 0.1 (Great Britain) episodes average durations of maternity leave are similarly low, British women spend on average longer in inactivity (5.1) compared to West German women (3.5 episodes). The periods covered by welfare benefits (3 years in Germany; 16–12 years in the UK) roughly correspond to these aggregate figures on inactivity, in the case of Britain at least for the number of years children are in preschool age. It is unlikely that coding is an issue in measuring these durations in each status because operationalisation of the employment categories relatively straightforward. Overall, when the durations are shown as share of average sequence length in the respective subsamples, differences between country contexts appear slightly more pronounced, as British sequences are longer on average. Hypothesis 4 finds some support in the larger share of maternity leave observed among the German sequences. Part-time employment is slightly more prevalent in the German context, which supports Hypothesis 3. The observation of longer non-employment spells in British sequences indicates that Hypothesis 1 may point in the right direction. This is further supported by results of the labour market attachment indicator (second last row of Table 7.2), which indicates that relative to the British women German women are better integrated in the labour market during single motherhood. Lastly, the stability indicator suggests Hypothesis 6 correctly predicts that trajectories of British women are less stable and feature more overall mobility between statuses. The next section presents results of the second and third analytical stages of this chapter: optimal matching analysis and sequence clustering.

7.3.3 Clusters of sequences: results from OM and cluster analysis

In order to go beyond the description of aggregate features of sequences, a systematic statistical comparison of individual career trajectory sequences of women during and after single motherhood is conducted. This section

explains the methodological considerations of this analytical step before presenting results of the analysis.

The most common method for the comparison of sequences is optimal matching analysis (OM). It has repeatedly been used for analysis of employment trajectories (e.g. Brzinsky-Fay, 2007; Halpin and Chan, 1998; Pollock et al., 2002, 2007; Scherer, 2001, 2005; Stewart, 2009) and is also used in the present research.⁶⁹ OM is especially useful if there are many sequence statuses with a complex structure and a fixed order (Brzinsky-Fay, 2007, p.413). OM proceeds in two steps: defining the terms by which sequences are compared, and then measuring dissimilarities between sequences. Dissimilarities in sequences can be understood as distances – the more alike two sequences are, the smaller the distance between them. The present analysis applies the Levenshtein distance measure (Brzinsky-Fay et al., 2006; see also Appendix A7.1), measuring the number of operations that is needed to transform one sequence into another and determining the 'least costly' way. Two kinds of costs are differentiated, referring to two kinds of operations: substitution costs for replacing an element that differs between sequences, defined as the number and value of the accepted elements of difference; and insertion and deletion (indel) costs, accounting for the positioning of the elements and defined by the number of insertions and the value of the inserted element (for a more detailed explanation of the OM logics see A7.1). Studies applying OM have shown that, if indel costs are more than half of the highest substitution cost, only differences in sequence length are established (Brzinsky-Fay et al., 2006). For the present analysis, indel costs are set to 1 and substitution costs to 2. In order to account for the different lengths of the sequences analysed here, the cost values are

⁶⁹ There are alternatives to OM, but these are less discussed in the research community and hence less developed (see Aisenbrey and Fasang, 2010).

standardised by dividing all resulting distances by the length of the longest sequence. All sequences are compared against each other rather than against an ideal-typical sequence, mainly because of a lack of theoretical grounds for the latter. Rather than reporting the results of OM they are stored for use in the next step, which involves grouping similar sequences together. Cluster analysis is the most commonly used procedure in the grouping step, if the comparison step, as in the present analysis, applies a sequence-by-sequence comparison strategy (Brzinsky-Fay et al., 2006, p. 454). On the basis of the distance matrices generated by OM, similar sequences are grouped together using hierarchical cluster analysis with Ward's linkage.⁷⁰ As conventional statistical tests cannot be applied to sequence data the appropriate number of clusters is determined 'by hand' using criteria such as contextual meaningfulness and case numbers (Brzinsky-Fay, 2007, p.413).

OM, cluster analysis and grouping 'by hand' result in eight relatively distinct groups of trajectories. They are listed in Table 7.3, which summarises the main cluster characteristics, assigns suitable theoretical sequence types to each of them and indicates their degree of labour market attachment. The clusters identified in the data can be characterised as follows. *Full-timers* can be classified as continuity sequences with high labour market attachment, while the *employment-oriented* cluster combines sequences of the interruption, return or fusion types with intermediate to high attachment. *Leavers* are sequences of the bridge type with intermediate to high attachment, featuring transitions from employment over leave to inactivity. *Part-timers* are continuity-type sequences with intermediate attachment, while *part-time returners*, implying transitions from inactivity to part-time, classify as return sequence type with intermediate attachment. *Gradual returners* are low to

⁷⁰ Other possible clustering techniques are single linkage and complete linkage (Stewart, 2009). Additional analyses with single linkage produced similar results.

intermediate attachment change sequence types, with transitions from inactivity to part-time to full-time. *Casually employed* classify as interruption, rupture and change sequences with low attachment, and *inactives* are continuity-type sequences with low attachment.

Table 7.3 Empirical clusters and theoretical types: employment sequences

	Cluster	Characteristics	Sequence type	Degree of labour market attachment
1	Full-timers	Full-time employment throughout with one or two interruptions (mat. leave, unemployment or inactivity) lasting less than 1/4 of the time	Continuity	High
2	Empl oriented	Mostly employed (full- or part-time) but with interruptions sometimes lasting half as long as the observed period	Interruption, return, fusion	Intermediate to high
3	Leavers	Some full- or part-time employment with maternity leave statuses and subsequent unemployment or inactivity, which are outnumbering other statuses	Bridge	Intermediate to high
4	Part-timers	Part-time employment throughout with occasional full-time employment, maternity leave or inactivity observations or transitions to full-time	Continuity	Intermediate
5	Part-time returners	Inactivity early on and transitions to part-time employment after about a third of the observation period	Fusion, return, rupture	Low to intermediate
6	Gradual returners	Inactivity early on often with part-time as an intermediate step in transition into full-time, which is not always retained	Change	Low to intermediate
7	Casually employed	Inactivity throughout with rare and occasional part-time or full-time employment	Interruption, rupture, change	Low
8	Inactive	Inactivity throughout	Continuity	Low

The classification of the empirical sequences demonstrates similarities and differences compared to employment trajectory patterns found in previous research. Concurring with Ott et al. (2012) and Stewart (2009) the present analysis finds groups of trajectories fitting the continuity sequence type on three different degrees of labour market attachment. This is a relative robust

basis for suggesting that, for a large number of women, single motherhood does not act as a juncture for employment transitions. Where no change is observable *within* trajectories after single motherhood, differences in labour market attachment *between* trajectories would seem to be influenced by other factors than single motherhood. Differences observed between continuous trajectories, then, might even point to influences of circumstances women experience before they enter single motherhood.

On the other hand, there is also variety in career patterns among women whose employment trajectories are observed to change during and after single motherhood. For example, in the employment-oriented and casually employed trajectory clusters the present analysis finds patterns of the interruption type, as were similarly shown by Kull and Riedmüller (2007) and Stewart (2009). These patterns provide some evidence for the expectation that single motherhood can increase difficulties of family-employment reconciliation. However, the trajectory patterns found in the present analysis convey an additional message. Namely, family-employment reconciliation can remain an issue, which can manifest itself in unstable career trajectories during and after single motherhood with more than one employment transition. Similarly, the bridge-type leavers sequence pattern seems to suggest that parental leave does not always lead to better familyemployment reconciliation. For some of the women observed here it was associated with gradual drop out of the labour market. The pattern finds equivalents in the other studies' labour market exit clusters (e.g. Kull and Riedmüller, 2007; Ott et al., 2012; Stewart, 2009) fitting the rupture type. These trajectory patterns point to the potential irreconcilability of single motherhood with employment careers. The analysis of distributions of the clusters across the two country cases provides further insights.

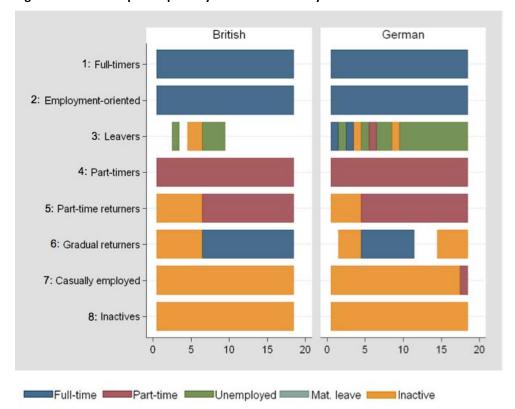


Figure 7.3 Modal sequence plots by cluster and country context

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991–2008), N=378, own calculations.

Figure 7.3 presents modal sequences for each cluster group separately for British and German women, giving a visual impression of the cluster characteristics. The ideal-typical sequences described in the modal plots (composed by the most frequent element for each position) indicate a similar picture for the two countries. Five of the groups (1, 2, 4, 5, 6) display employment-oriented labour market trajectories during and after single motherhood and three groups (3, 7, 8) indicate fragmented or labour market distant trajectories. For further evaluating country differences, Table 7.4 gives case numbers and percentages for each cluster by country-context. The table illustrates the particularly low case numbers for *leavers* among the British women and of *gradual returners* among German women.

Table 7.4 Distribution of labour market trajectories

	British		German	
	Frequency	Percentage	Frequency	Percentage
Full-timers	27	8.21	50	13.23
Employment-oriented	81	24.62	76	20.11
Leavers	2	0.61	38	10.05
Part-timers	37	11.25	94	24.87
Part-time returners	48	14.59	19	5.03
Gradual returners	28	8.51	7	1.85
Casually employed	83	25.23	60	15.87
Inactive	23	6.99	34	8.99
Total	329	100	378	100

Sources: BHPS, waves A-R (1991–2008); SOEP, waves H-Y (1991–2008).

In Figure 7.4 and Figure 7.5 sequence index plots display sequences as horizontal lines in which elements (employment statuses) are separated with different colours (Scherer, 2001).⁷¹ Sequences are plotted against the x-axis with the time interval being one survey wave per step. The sequences' unequal lengths reflect that individuals' employment trajectories are observed at different durations. The figures illustrate that the groups resulting from the analysis are relatively homogenous. Naturally, some within-group variation remains, which is inevitable given the complexity of social lives captured with the sequences. Not least, first observed single motherhood, which marks the starting point of the sequences, can be experienced at very different life stages. Nonetheless, Figure 7.5 gives an indication of the relative similarity in clusters of sequences across the two country contexts, supporting their comparability.

_

⁷¹ The interpretation of sequence index plots is sensitive to their graphical representation by the software package (Brzinsky-Fay et al., 2006).

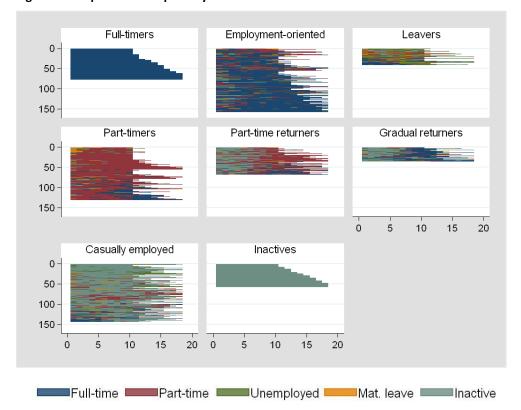


Figure 7.4 Sequence index plots by cluster

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991-2008), N=378, own calculations.

Comparing the distribution of clusters across the two country contexts in Figure 7.6, a similar sorting of sequences into clusters *full-timers*, *employment-oriented* and *inactive* can be observed. British and German women sort to different degrees into the other clusters, with the *casually employed* trajectory being dominant among the British and the *part-timers* among the German women. *Part-timers*, *part-time returners* and *gradual returners* are relatively important among British employment trajectories during and after single motherhood, the latter two not being observed as common tracks for German women. *Leavers* turn out to be a particularly rare course of labour market involvement for British women, while this is comparatively common among the observed German trajectories.

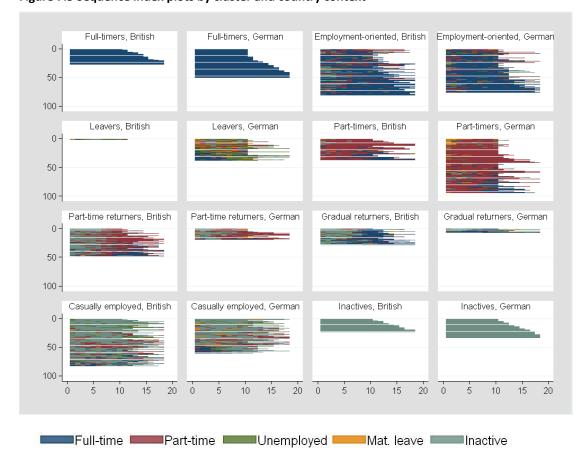


Figure 7.5 Sequence index plots by cluster and country context

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991–2008), N=378, own calculations.

The differences in the composition of dominant employment trajectories during and after single motherhood seem to match the above-outlined institutional backgrounds in both countries, providing evidence to support the specified hypotheses. The relative importance of trajectories with inactivity during single motherhood (Hypothesis 1) and delayed returns to employment or such which are achieved only gradually (Hypothesis 2) in the British context points to the lack of institutional support for reconciling continuous employment and single motherhood for British women, particularly when they have younger children. Simultaneously, patterns of increasing labour market attachment over time is more strongly visible in the British context, where *part-time returners* and *gradual returners* are relatively

common trajectories. This could reflect the younger age structure of the British sample. However, it could also point to stronger polarisation into high and intermediate attachment continuity type trajectories in the German context. This would match the tracking, which occurs in the German labour market as suggested in Chapter 3.

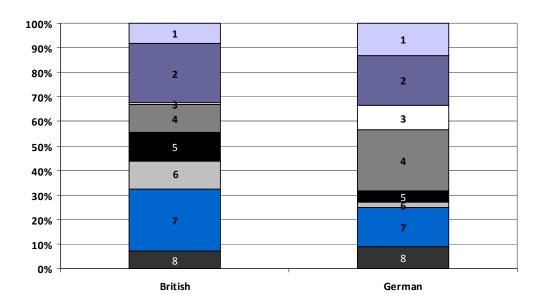


Figure 7.6 Distribution of clusters by country context

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991–2008), N=378, own calculations; clusters: 1: Full-timers, 2: Employment-oriented, 3: Leavers, 4: Part-timers, 5: Part-time returners, 6: Gradual returners, 7: Casually employed, 8: Inactive.

In any case, the comparatively high prevalence of part-time employment trajectories among German women in and post single motherhood fits with what was expected in Hypothesis 3 in consideration of the half-day childcare regime in West Germany. Moreover, women in the German context, who were clustered in the *leavers* group, with mostly maternity leave and subsequent unemployment spells, do not find an equivalent in the British data. This finding strengthens the support for Hypothesis 4 and Hypothesis 5 of higher prevalence of maternity leave and subsequent labour market exit in

Germany. Maternity leave is a less available (and less observed; see footnote 68) option for women in single motherhood in the British context, because it is a strongly individualised policy as compared to Germany. Moreover, in the years covered with this analysis unemployment was not a common status for British women in single motherhood, as they were covered with non-employment related income support benefits, subsuming them in the *inactives* cluster. Lastly, the analysis provides evidence for Hypothesis 6. Higher volatility is reflected in the greater share of British trajectories with scattered structure over the course of observation as in the *casually employed*, *employment-oriented* and *gradual returners* clusters, and is expressed in the aggregate stability indicator.

7.4 Summary

Adding to what is known about employment transitions of women entering single motherhood, this chapter demonstrates, with the example of Britain and West Germany, that single motherhood is not linked to any one particular form of employment trajectory. The findings illustrate that relationships between single motherhood and employment across the life course are complex and can only partially be understood by means of cross-sectional analysis. Career trajectories during and after single motherhood vary widely. The results show parallels to the employment trajectory typologies identified by Kull and Riedmüller (2007) for Germany and Stewart (2009) for the UK. Beyond these studies, the comparative design of the present research, which applies a harmonised methodological approach for the quantitative analysis, allows interpreting the employment trajectory patterns observed in the two countries in relation to the context in which they are embedded.

A key finding of this chapter is that there is a great diversity in how women experiencing single motherhood reconcile family and employment over time.

Typical patterns of employment trajectories identified in the data range between continuous trajectories, trajectories with marked transitions between a limited number of states and those with several transitions between different states. Optimal matching and cluster analysis provided the basis for describing eight groups of typical career trajectories during and after single motherhood observable among British and German women. Continuous trajectories are found at three different levels of labour market attachment, low, intermediate and high. Continuous low attachment trajectories, representing non-employment pathways, make up about eight per cent of all trajectories (combined for both countries), while it is slightly more than 10 per cent of continuous high attachment and around 16 per cent for continuous intermediate attachment. The fact that over a third of the employment trajectories are continuous indicates that single motherhood does not change the course of career for all women. However, with the employment-oriented high attachment trajectories and the casually employed low attachment trajectories making up about 40 per cent of all trajectories (around 20 per cent each), almost half of the career trajectories during and after single motherhood are unstable. Moreover, a further share of women in single motherhood was identified as experiencing ruptures in their careers.

The country comparison provides the framework for analysing differences in women's career trajectories in light of institutional support for family–employment reconciliation. Reflecting the 'liberal' British system, the analysis reveals generally more volatility in employment trajectories in Britain compared to Germany. On average, overall labour market attachment is higher in West Germany than in Britain. Correspondingly, the distribution of the identified typical trajectories varies between the country-contexts. The distribution patterns suggest that, compared to those in West Germany, British women more often take career trajectories that are more heavily

dominated by periods of inactivity and also more often imply multiple transitions between employment statuses during and after single motherhood. The prevalence of the inactivity pattern seems to support the assumption that the combination of lacking childcare support and prolonged social assistance payments in Britain delays incentives for engaging in employment. The higher volatility in British trajectories was also expected based on the less regulated labour market structure in the UK compared to Germany. In contrast, the results indicate that more than for British women, West German trajectories are polarised between continuously high and continuously intermediate labour market attachment. Part-time trajectories showed to be particularly common among West German women. Interpreting their predominance among German women in terms of institutional settings suggests that the half-day childcare regime is indeed better able to provide for the possibility of reconciling the two major roles of prime family carer and breadwinner. Certainly, this often comes at the price of a full-time employment career, if no additional source for childcare support is accessible.

As a further obvious difference to the British trajectory patterns, a typical career trajectory among German women consists of labour market drop out after a period of maternity leave. Given that maternity leave only applies to single motherhood in particular circumstances, the comparatively high prevalence of this pattern in the German context reflects the more generous leave system in Germany compared to Britain. However, the pattern also indicates the difficulty of reintegration into the labour market when leave ends. This finding, too, points to the crucial role of institutional frameworks in shaping employment careers of women in single motherhood. Ultimately, the observed diversity in career trajectory patterns invites the question of what it is that distinguishes women with different employment careers during and after single motherhood. In the next chapter, therefore, the

results of this chapter are used in further analyses for investigating which factors are associated with having a particular employment trajectory.

Chapter 8 Understanding diversity in employment trajectories during and after single motherhood

While Chapter 6 had demonstrated that early motherhood severely limits the chances of full-time employment at career entry regardless of partnership status, Chapter 7 has shown that career trajectories during and after single motherhood are diverse, and that patterns of diversity vary between Britain and West Germany. In combination with the theoretical considerations of Chapter 3 these findings prompt the questions: what factors are associated with differences in career trajectories of mothers who are single, and what is the role of timing of single motherhood? Consequently, this chapter interrogates factors associated with particular types of employment trajectory during and after single motherhood for women in Britain and West Germany. The chapter uses results of the previous chapter in regression analysis. The database is broadened by using the data on women from the two countries in the same models. While combining the rich data from Britain and Germany enables to apply statistical methods for analysing career trajectories during and after single motherhood, restrictions set by outcome variable and sample size foreclose the possibility of comparing institutional determinants of employment trajectories across the two countries statistically. Hence, aspects of institutional embeddedness can only very tentatively be discussed in this chapter. The findings of this chapter suggest that single motherhood timing has an impact on the periods of nonemployment in employment trajectories, but is not associated with particular career patterns. Why women have career trajectories other than full-time ones could better be explained with occupational classifications, but also

with the presence of preschool children. The following sections will situate the focus of this chapter in a broader research context, specify hypotheses and describe the method used. The last two sections will present the results and conclusions from the analysis.

8.1 Career trajectories as outcomes

As was shown in the previous chapter, employment trajectories during and after single motherhood have different shapes and patterns. Considering the broader life course context, which underpins the present research, it is likely that the degree of labour market involvement and the specific career pattern are to some extent associated with socio-biographical circumstances of the single motherhood experience. Consequently, the first question this chapter addresses is whether individual socio-biographical characteristics can explain the degree of labour market attachment of career trajectories during and after single motherhood.

Conceptualising careers during and after single motherhood as ideal typical employment trajectory patterns based on the results of the previous chapter allows for the understanding of each type as a separate process. Accordingly, each trajectory can be assumed to result from specific combinations of individual characteristics and structural conditions in which single motherhood is experienced. The second question of this chapter is, hence, which factors are associated with a particular trajectory rather than another one. The theoretical types of employment sequences used for characterising the career trajectories further help to systematise this analytical step. For example, it can be asked what leads women to have a continuous trajectory, one with an interruption, or a rupture-type trajectory with employment exit. Following the theoretical framework outlined in Chapter 3, the question of what determines certain employment trajectories implies asking what sustains family—employment reconciliation. The subsequent paragraphs

revisit previously identified, interrelated factors influencing employment, particularly considering their role for career development during and after single motherhood.

8.1.1 Family dynamics

As exemplified in the analysis of Chapter 6 and suggested by various other studies, having a child strongly interferes in women's labour market integration, with each additional child increasing the potential of familyemployment reconciliation tensions. In respect of career trajectories, the question becomes whether reconciliation difficulties are only an immediate issue or translate into remaining obstacles to the employment career. Here, considering dynamics of the individual's family life is particularly important. While Chapter 6 demonstrated that partnership status alone is not necessarily the most relevant factor, dividing childcare responsibility does make a significant difference for women's employment. The need for special attention and care of younger children, and their decreasing need for constant supervision as they grow older and into their teens, means that conditions for women's ability to reconcile family and employment improve over time (Gornick et al., 1997). However, the 'natural' course of children's growing up and trajectories of increasing labour market attachment are not necessarily causally linked. That is, interruptions of careers do not always result in a smooth re-integration into the labour market. As was shown in the previous chapter, careers of women who take time off from the labour market in single motherhood often feature later periods of non-employment (leavers) or gradual return and change-type trajectories (part-time returners, gradual returners). Having a second or third child would be expected to make return to employment even more difficult for women after taking time off (cf. Schober, 2011). Another key factor determining employment of women in single motherhood that was identified in previous studies is the biographical timing, i.e. their own age at single motherhood and their children's age (e.g. BMAS, 2011; Drobnič, 2003; Jaehrling et al., 2012; McKay, 2003; Rowlingson and McKay, 1998). As was shown before, having a child at a young age can be a particular challenge to women's labour market involvement (e.g. Kiernan, 1997). This seems to result at least partly from high family responsibility being a barrier to acquiring qualifications required for labour market involvement (see Jaehrling et al., 2012 and Chapter 6). That means missing out on resource acquisition prior to labour market entry can develop into difficulties of establishing a continuous career path. Consequences for career trajectories could be that women struggle to maintain high stable labour market attachment, as exemplified in *casually employed* trajectories of the rupture/interruption-type, or fail to develop any attachment (*inactives*). The following section discusses the aspect of skills and their role in shaping employment trajectories during and after single motherhood further.

8.1.2 Skills, class and regime contexts

As discussed previously in this thesis, having acquired high levels of family-employment qualifications is often associated with better reconciliation, and this is no less so for mothers who are single. This argument finds a broad basis of evidence in the literature (e.g. Kull and Riedmüller, 2007; McKay, 2003; Ott et al., 2003, 2012; Rowlingson and McKay, 1998, 2005; Schneider et al., 2001). Higher qualificational attainment increases employment prospects, securing the labour market attachment necessary for benefitting from maternity leave. Hence, based on high qualification levels, employment interruptions can be kept short not least because rewards for labour market return are high. Women's high qualificational attainment also tends to reflect a strong employmentorientation (e.g. BMAS, 2011), which facilitates continuity in employment trajectories with high labour market attachment. Hence, interruption trajectories seem particularly likely for highly qualified women, whereas lower-skilled women seem more prone to rupture- or change-type

trajectories resulting in labour market exit (*leavers*, *casually employed*). The other side of the coin is that attaining high qualifications requires more resources in time and money to begin with (Breen and Goldthorpe, 1997). Here, social class plays an important role. Studies on the British case consistently find that social class predetermines labour market outcomes of women in single motherhood (Duncan and Edwards, 1997; McKay, 2003; Rowlingson and McKay, 2005). For the German case, studies tend not to investigate class as an aspect of single motherhood. However, the previous chapter indicated a three-way furcation into full-time, part-time and non-employment trajectories among women in single motherhood in West Germany, which could reflect tracking along the educational gradient. Before outlining expectations about the role of institutional differences in making certain trajectories more likely than others, the next section discusses how having migrated to Britain or Germany respectively might have an impact.

8.1.3 Ethnicity

Some research indicates that women in single motherhood from ethnic minority groups are particularly employment-oriented (Edwards and Duncan, 1996; Klett-Davies, 2005; Krüger and Potts, 2011). This suggests that it could be valuable to consider ethnic background as an intervening factor in analysing what is associated with having particular employment trajectories. It was shown in Chapter 3, however, that ethnicity remains relatively little researched as a determinant of labour market involvement of women in single motherhood in Europe (Krüger and Potts, 2011; Mokhtar and Platt, 2010; Zartler et al., 2011). This is so, even though in both Germany and the UK, the probability of experiencing single motherhood is relatively similar for women from ethnic minorities and for others (BMFFJ, 2000; Mokhtar and Platt, 2010). In addition, it is rarely considered that inequalities based on gender and ethnicity often intersect in the single motherhood situation (e.g. Choo and Ferree, 2010). Certainly, the subject of ethnic background is

multifaceted in that the variation existing in ethnic minority groups across and within countries is also reflected among women in single motherhood. For example, in the UK the share of households categorised as single-parent households among black Caribbean households with children was almost 50 per cent in 2001, among black African households with children the share was 36 per cent, of white 22 per cent, of Pakistani 13 per cent, and of Indian 10 per cent (Mokhtar and Platt, 2010). Hence, women from black Caribbean and black African backgrounds were more likely than white and other backgrounds to be in single motherhood in 2001 in the UK. For women in single motherhood in Germany, in 2009, 14 per cent of the families with migration history⁷² were categorised as single-parent households while it was 21 per cent for families without migration history (Destatis, 2011), which means that the latter were more likely to experience single motherhood than the former.⁷³ Among people with migration history in Germany the most common countries of origin are Turkey, Greece, Italy and the former Yugoslavia. Experiencing single motherhood is more common among the group of Yugoslavian and least common among the Turkish migrants

_

⁷² A household is defined as having 'migration history' if at least one of the parental household members either does not have German citizenship or has acquired German citizenship through naturalisation (Destatis, 2011). Evaluation of data on ethnic minorities in Germany is complicated because definitions vary (Gierull, 2002). Administrative data usually refer to citizenship. However, it is not always clarified whether individuals' migrant status ceases with naturalisation. Moreover, public and academic debates often include 'second generation' individuals (children of foreign-born parents), some of whom would have had the possibility for naturalisation at some point in their lives, in their definition of 'migrants'.

⁷³ Compared to West Germany the intersection between single motherhood and ethnic minority background is less likely to be observed in East Germany, because a lower percentage of the East German population has a migration history (2.4 per cent compared to 8.7 per cent in all of Germany in 2009) and single parenthood is more widespread in the East (27 per cent compared to 17 per cent in West German regions in 2009) (Destatis, 2011).

compared to the other groups. These differences and within and across countries suggests that it may be problematic to summarise 'migrants' as one category. Moreover, women from the different minorities may vary in their inclination to engage in the labour market. However, following the lead in the literature it can be expected that ethnic minority background facilitates high labour market attachment careers, such as the *full-timer* trajectories, for women in single motherhood. Furthermore, the descriptive statistics invite exploring the differences that may exist between the two country cases. The following section picks up the main arguments on the role of institutional variation in shaping patterns of career trajectories.

8.1.4 Institutional frameworks

As a last preparatory aspect for deriving hypotheses in the following step, this section again considers the role of the institutional dimension in promoting certain employment trajectories more than others during and after single motherhood. Chapter 7 already spelled out some expectations on the distribution of trajectory types in the two country contexts, which were tested with descriptive analyses. While the present chapter applies a framework with which to test associations, it is debatable whether institutional mechanisms, for which some suggestive evidence was found in the descriptive analysis, will become visible. More likely, the complex structures of the two countries' institutional landscapes will be masked behind the input dummy variable indicating in which of the two contexts the women are set. The institutional support, which previous chapters have found to offset the difficulty of family-employment reconciliation in single motherhood (e.g. Cooke and Baxter, 2010; Gornick et al., 1997; Lewis and Hobson, 1997), comes in such varied forms that a place holder for the whole country is insufficient. In order to tease out effects of the different support systems, which were shown to exist in Britain and Germany in terms of policy and labour market structures, samples with a large number of countries would be needed. Even with these, the possibility of making causal statements is limited. For more detailed evaluation of single policies, which could be achieved with certain statistical methods (see Chapter 5), the present data are restricted to the level of individuals. For example, investigating one of the most significant differences between the countries, the effects of the duration of transfer payments to women in single motherhood, would require a design with high numbers of observed claimant and non-claimant employment trajectories in each country. Given these data limitations, the country indicator in the present analysis acts more as a control variable. It therewith contributes foremost to evaluating effects of the other indicators under the condition that the country context is held constant. The next section defines hypotheses summarising the expectations developed in the preceding section against this background.

8.2 Hypotheses

The previous discussion of the family–employment reconciliation themes running through this thesis provides the basis for specifying hypotheses on factors associated with particular employment trajectories during and after single motherhood. Firstly, as spelled out in the life stage model of single motherhood, an effect of age at first single motherhood is expected.

<u>Hypothesis 1:</u> The younger women are when they experience single motherhood the less likely it is that they have a career trajectory marked by high labour market attachment.

<u>Hypothesis 2:</u> Moreover, young single motherhood makes it more likely to have return or bridge-type trajectories instead of having a full-time employment trajectory.

Secondly, in line with research on educational outcomes more generally, high skill attainments are expected to be positively associated with better integration in the labour market of women in single motherhood, as is higher-class status.

<u>Hypothesis 3:</u> Low levels of education make full-time employment trajectories less likely and unstable trajectories with interruptions more likely for women in single motherhood.

<u>Hypothesis 4:</u> High status occupations go together with a better ability to offset difficulties arising from single motherhood and hence lead to better chances of having full-time employment trajectories.

Lastly, the analysis will explore the role of being a member of an ethnic minority on employment trajectories during and after single motherhood, guided by the following expectation:

<u>Hypothesis 5:</u> Ethnic minority background is associated with employment careers featuring higher labour market attachment.

Having spelled out expectations about what determines labour market trajectories during and after single motherhood, the next section introduces the methodological approach taken to test these.

8.3 Exploring diversity in career trajectories

Following the two research questions addressed in this chapter, the structure of the analysis roughly corresponds to the steps conducted in the previous chapter. Firstly, an aggregate indicator of labour market attachment is used as an outcome measure in linear regression, testing what is associated with different degrees of attachment. Secondly, the employment trajectory typology is used as a categorical outcome variable in multinomial regression. The main focus is on the second step, which emphasises differences between particular trajectory types. The sample on which both parts of the analysis are based is roughly the same as the one used in the previous chapter. However, some more cases are lost, because for some women relevant

information on conditions before the start of the employment trajectories are not observed. The sample shrinks to 653 British and German women aged 16–55 observed to have been in single motherhood and in any survey wave (of BHPS and SOEP respectively) between and including 1991 and 2008. The sample consists of women for whom the period of observation was at least 10 and at the most 18 consecutive waves including and following 1991. The following paragraph defines the independent variables used in both analyses before the subsequent sections summarise the main aspects of the statistical techniques.

8.3.1 Independent variables

In order to establish statements, which do not preclude the possibility that the observed associations may be causal, it is necessary for the independent variables to measure circumstances prior to the outcome factors ('causal time order'). This means that the independent variables must characterise women's situations before their first observed single motherhood. Accordingly, most of the input variables included in the analysis measure women's characteristics at the beginning of the observed employment trajectories or describe them as defined prior to that time and derived retrospectively. One factor is included which describes family life occurring simultaneously to the observed employment trajectory, namely the share of time a woman spends in a partnership in the overall period of observation. The lower the share of women's time spent in a partnership the longer they are observed in single motherhood. Measuring the duration of single motherhood the variable aims at reflecting the individuals' distance from a stable partnership model. Higher shares of time spent in partnership can be a rough indication for greater general partnership-affinity. However, the measure does not reveal whether it is new partnerships or the one with the children's other original parent and neither does it account for values or attitudes. The indicator is split into three dummy variables: no time (0/1), less than half the time (0/1), more than half the observed time spent coparenting (0/1). Information on the family situation at the beginning of the observed employment trajectory includes: whether the marital status was 'divorced' rather than anything else (binary, 1=divorced, 0=other); whether first single motherhood was experienced at an age younger than 25 (binary, 1=before or at age 25, 0=at age 26 or above); whether the children were in preschool age (binary, 1=yes, 0=no); and whether it was one, two or more children for whom the woman at this point was responsible (three binary dummies for one child, two children, and three or more children). Certainly, mother's and child's age are closely related, as they increase synchronously. Taking the single motherhood experience as the starting point for observed employment trajectories allows for the use of indicators which express the relative position of childbirth in women's lives. Divorce is included as a control variable, as some of the previous literature suggested that women found taking up employment after a divorce more difficult compared to women who separate from a less traditional partnership (e.g. Schneider et al., 2001).

The other main aspect that is taken into account is women's qualificational biography, which is considered as the highest completed CASMIN classification level (König et al., 1988) at the beginning of the observed employment trajectory. CASMIN levels are here split up into three categories, which are treated as binary dummy variables (0/1) in the model: vocational qualifications (1c, 2a, 2c vocational), academic qualifications (2c general, 3a, 3b), and no or lower general qualifications (1a, 1b, 2b) the latter being used as the reference category. To further qualify the person's relation to the labour market, occupational class of the first job for which information is available is included. Derived from the ISCO-88 classification (ILO, 2004), four dummy variables are used comparing individuals a) in elementary occupations, b) working in crafts, c) working in services with d) those

working as technicians, associate professionals or professionals (reference category). The category of elementary occupation also comprises people for whom no occupational information was available. The strong assumption that those with no occupational information are more likely to be working in elementary occupations is justified by the qualificational background of the women for whom information is lacking. That is, 80 per cent of the 85 women in the sample who could not be assigned an ISCO code have a CASMIN level lower or equal to 1c (basic vocational qualification) including 46 of them with inadequately completed elementary education. Such low qualification level is likely to be associated with low status occupations or not yet completed education.

Women's birth cohorts (1940–49, 1950–59, 1960–69, 1970–81) are included as binary dummy variables to control for cohort effects on type of employment trajectory. Women have a value of 1 on the variable denoting the years in which their date of birth falls and a value of zero for all others. Home ownership status is included to control for the 'good economic prospects' and 'incentive' effects which Stewart (2009) suggests are at work for home owners in the UK (coded 1=home owner; 0=renting). Lastly, a variable indicating whether the respondent was born outside the country of residence, i.e. West Germany or the United Kingdom respectively, was included as a binary dummy variable (1=born abroad, 0=born in current country of residence) for testing the effect of migration background. The following sections describe the methods in which these variables are used, before the results of the analysis will be presented.

8.3.2 Linear regression

As a first step of the analysis, a variant of the labour market attachment indicator developed in the previous chapter is used as a dependent variable in linear regression analysis. This step addresses aspects of the first question

posed in this chapter, asking to what extent certain individual biographical characteristics are associated with labour market attachment during and after single motherhood. The labour market attachment indicator is defined as the occurrence of non-employment, denoting the sum of episodes in which women were inactive or unemployed. It ranges from 0 to 18, with higher values indicating lower labour market attachment. The data of the dependent variable are skewed in that many trajectories (230) do not contain any episodes of non-employment. The variable is, however, kept with its original values, as log-transformation would result in a loss of all cases with zero non-employment episodes and because it is generally favourable to retain data untransformed. As a regression method, linear regression with robust standard errors is used.74 It could be argued that the variable of nonemployment occurrence is not well fitted to the linearity assumption, but the measure conveys the idea of a gradient in labour market attachment well enough for the purposes of this analysis. Estimating the regression with robust standard errors is one possibility for taking the clustered data structure into account, consisting of several observations per individual (trajectory) in the present analysis. Ignoring this structure would violate the assumption made in linear regression analysis (here: ordinary least square regression) that the intra-individual errors are uncorrelated (Giesselmann and Windzio, 2012). The econometric approach of adjusting standard errors was developed for responding to the problem of heteroscedasticity, implying correlated error terms, which violates the assumption of homoscedasticity. The technique corrects standard errors, taking into account that the added value of observation on the same person is lower than between different persons. Corresponding to the relation between units and measurements, standard errors are adjusted upwards and confidence intervals respectively

-

⁷⁴ The regress command is used with the vce (cluster pid) option for the estimation in Stata.

(ibid.). While addressing some of the problems the data structure poses for linear regression analysis, the adjustment of standard errors is said to be an inefficient method because it treats the symptoms rather than using the available information for the estimation. This aspect was further discussed in Chapter 6 above, where advantages of the fixed effects method were described. For the present analysis, however, linear regression with robust standard errors is a suitable approach. The interest concerns aggregate characteristics of the employment trajectories, which means that longitudinal information is only indirectly drawn on. Because the main focus of this chapter is on evaluating factors associated with particular types of trajectories a further step is needed. In order to investigate such factors, multinomial regression is used following the suggestion of previous research (e.g. Stewart, 2009).

8.3.3 Multinomial regression

The factors making continuous full-time employment more likely than interrupted trajectories may be different to those making continuous non-employment trajectories more likely than full-time trajectories during and after single motherhood. Multinomial logistic regression can account for this analytical puzzle (cf. Stewart, 2009, p. 492). Although multinomial regression modelling comes with certain requirements for the data, which are difficult to meet with the present restricted sample, the method is considered most suitable for addressing the second research question of this chapter. Type of employment trajectory during and after single motherhood is used as the polytomous nominal dependent variable, and the multinomial logit model estimates the odds of a person having a certain type of employment trajectory over the odds of having an alternative one. Hence, although the

_

⁷⁵ The analyses in this analytical step were mainly conducted with PASW Statistics (SPSS) 17.0 software. Some of the results were cross-checked and confirmed with Stata 11.

analysis is cross-sectional, the dependent variable refers to a process measured longitudinally. The statistical model, model fitting and methods of interpretation are outlined in the following.

Model notation and assumptions

The outcome variable of the multinomial regression is 'type of employment trajectory during and after single motherhood' and has eight values, which were derived from optimal matching and clustering analyses of employment sequences in Chapter 7. The variable categories mark the ideal-typical employment trajectories full-timers, employment-oriented, leavers, part-timers, part-time returners, gradual returners, casually employed and inactives as described in Table 7.3 above.

The notation for the multinomial logit regression is

$$\log \frac{\pi_{ij}}{\pi_{ij}} = \alpha_j + X_i \beta_j$$

where the log of the odds of being in one category (j) compared to a reference category (J) equals a constant value α_j plus a vector of regression coefficients (β_j) for j=1, 2, 3... J–1. The difference to a binary logistic regression is that there are J–1 equations and not just one, and that the probability distribution of the dependent variable is multinomial instead of binomial (Long and Freese, 2006). The multinomial equation contrasts each of the values of j against category J. Any category can be selected as the comparison category. In the present analysis continuous full-time employment (full-timers) is selected as the reference category, because it marks an ideal-type scenario for high labour market integration.

Being an extension of binary logistic regression, multinomial logistic regression shares several model assumptions but also has additional ones, which mainly concern sample size. This is because multinomial regression is

a maximum likelihood estimation method and uses multiple equations, both requiring large sample sizes. Assumptions shared with binary logistic regression are that i) the error term is unrelated to the independent variables; ii) errors are independent across cases (no relationship between cases); iii) the joint effect of all independent variables is relatively normally distributed (multivariate normality); iv) there is no multicollinearity between the independent variables; v) there are no outliers; and vi) the log odds of each response (type of employment trajectory) follows a linear model (linear relationship between independent variables and log odds of the dependent variable). Ideally, the sample additionally fulfils the criteria of a) having a minimum of N=10 cases per category of the dependent variable on each independent variable; b) not having widely divergent marginals per category, i.e. largely equal distribution of cases across categories of the dependent variable; c) no categories with zero frequencies on the dependent variable. In case these sample size criteria are not met, goodness-of-fit measures are to be treated with caution.

Model fit

Testing how well a multinomial logit model fits the data is not as straightforward as for OLS or other logistic regression models (Hosmer and Lemeshow, 1989; Long and Freese, 2006). For example, as there is no definitive test for multinomial regression, the risk to violate assumptions of non-multicollinearity between the independent variables is reduced by careful conceptual consideration of the variables included. Especially in cases of small sample sizes and where there is high variation between dependent and independent variables it is likely that subpopulations of the dependent variable fall below the required number of observations on values of independent variables. Where categories of the dependent variable have N<10 the problem of 'low frequency cells' occurs. Respective variables are likely to have disproportionately excessive standard errors and confidence

intervals. Model fit of multinomial logit regression models can be assessed on the basis of Deviance and Pearson chi-square statistics, but Hosmer and Lemeshow (1989) suggest running individual logistic regressions to draw on the test statistics from those estimations, such as the Likelihood Ratio Test and the Hosmer-Lemeshow statistics. Likelihood Ratio Tests are run for each included independent variable showing how much they contribute to the model in comparison to the null model (with no independent variables). As has been discussed previously in this thesis, the analysis of career trajectories during and after single motherhood faces severe sample size issues, which can also become a factor in the present analysis. One alternative to risking biased results due to low frequency cells is combining categories of the dependent variable, which would however trade-off the opportunity of comparing determinants for the different trajectory types. The following section presents the results of the analyses in particular consideration of the potentially limiting aspects to applying the selected methods.

8.4 Results

The results are discussed in regard of the hypotheses outlined in 8.2, firstly presenting descriptive statistics, secondly results of the linear regression and thirdly those of the multinomial regression.

8.4.1 Descriptive results

Table 8.1 shows percentages of women per category on the independent variables by trajectory group. Values of the independent variables vary considerably across the categories of the dependent variable. The bivariate analyses based on this table give a first insight into the relationships between the input factors and employment trajectory types. For one, the table indicates again how the distribution of trajectory types diverges in the two country contexts, which was discussed in more detail above. Secondly, the table suggests that early single motherhood is particularly common among

women who have a trajectory characterised by *gradual return* to the labour market during and after single motherhood (34 per cent experiencing single motherhood under age 25). Women in the *casually employed* category are also likely to be observed experiencing single motherhood aged younger than 25 years, while *full-timers* are especially unlikely to have an early single motherhood experience (2.6 per cent).

This is an indication for young single motherhood being an obstacle to full-time integration. As for the length of the single motherhood spell, *full-timers*, *part-timers* and *leavers*, are more likely than women in the other type categories to have spent no time co-parenting in the overall observed time period. Co-parenting is most common among women taking a trajectory characterised by low labour market involvement (*inactives*) with over 40 per cent of them being observed to be in a partnership more than half of the overall observed time. This seems to run counter to the idea that being in a partnership improves the conditions for the employment of mothers. As would be expected, types of trajectories that involve returning to the labour market and trajectories with low attachment are associated with the presence of preschool children more often than other trajectory types. This pattern seems to reflect the fact that family–employment reconciliation is more difficult with younger children.

As for the number of children in the household no clear pattern is visible in the distribution across the employment trajectory types. In all of them one child is the most common and three or more children the least, except for women in the *inactives* type, who are similarly likely to have two, three or more children (33.33 and 29.82 per cent respectively). For *full-timers*, *employment-oriented* and *part-timers* divorce is more common than for women in the other trajectory categories. This seems surprising against the background of other studies finding previously married women were in

relationships with traditional division of labour more often than others, which implied lower labour market integration overall.

Looking at the distribution of qualification types across categories of employment trajectory reveals a particularly high share of vocational qualifications among *part-timers* (over 60 per cent). High shares of those with no or low qualifications are observed for women whose employment trajectories during and after single motherhood are mainly characterised by *inactivity* or *casual employment*. This pattern reflects the higher labour market insecurity associated with low levels of marketable resources. Regarding the occupational classification of the first job for which information is available, part-timers and part-time returners are found to be strongly associated with service occupations. Women working in crafts are rare in the sample but shares are relatively high for full-timers and employment-oriented (almost 30 per cent and almost 20 per cent respectively). These could be indications for part-time compatibility given in service sector jobs but not in crafts. The most striking association is the one between elementary occupations and *inactive* trajectories. Partly, the fact that almost all of the women in employment trajectories with continuously low labour market attachment are also categorised in this occupational group is explained with the coding of the data. For women categorised as inactives there was often no available occupational information.

Table 8.1 Independent variables by trajectory category, mean values

	FT	EO	L	PT	PR	GR	CE	I
Country context								
British	35.1	51.6	5.0	28.2	71.6	0.08	58.0	40.4
German	64.9	48.4	95.0	71.8	28.4	20.0	42.0	59.7
	100	100	100	100	100	100	100	100
Single motherhood	timing							
< age 25	2.6	9.6	5.0	6.1	25.4	34.3	32.9	24.6
Age 25+	97.4	90.5	95.0	93.9	74.6	65.7	67.1	75.4
	100	100	100	100	100	100	100	100
Time spent in partne	ership							
No time	63.2	52.6	60.5	59.7	41.4	32.4	49.2	30.2
Less than half	34.2	32.2	26.3	25.0	41.4	41.2	28.0	28.3
More than half	2.6	15.1	13.2	15.3	17.2	26.5	22.9	41.5
	100	100	100	100	100	100	100	100
Whether has presch	ool chil	d						
No	90.9	75.2	77.5	72.5	50.8	51.4	44.1	63.2
Yes	9.1	24.8	22.5	27.5	49.3	48.6	55.9	36.8
	100	100	100	100	100	100	100	100
Number of own child	dren in i	hh						
1 child	54.6	54.1	52.5	49.6	43.3	54.3	61.5	36.8
2 children	33.8	37.6	30.0	38.2	40.3	25.7	20.3	33.3
3+ children	11.7	8.3	17.5	12.2	16.4	20.0	18.2	29.8
	100	100	100	100	100	100	100	100
Whether divorced								
Divorced	29.9	29.3	22.5	27.5	22.4	20.0	14.7	12.3
Other	70.1	70.7	77.5	72.5	77.6	80.0	85.3	87.7
-	100	100	100	100	100	100	100	100
Type of qualification								
No or low	46.8	42.0	47.5	28.2	46.3	51.4	61.5	80.7
Vocational	32.5	32.5	42.5	60.3	29.9	20.0	25.2	14.0
Academic	20.8	25.5	10.0	11.5	23.9	28.6	13.3	5.3
71044011110	100	100	100	100	100	100	100	100
Occupational group								
Elementary	6.5	8.9	27.5	15.3	22.4	22.9	42.0	98.3
Crafts	27.3	18.5	20.0	6.9	6.0	17.1	8.4	0.0
Services	31.2	40.1	20.0	49.6	53.7	37.1	39.2	1.8
Prof. & Ass.Prof	35.1	32.5	32.5	28.2	17.9	22.9	10.5	0.0
1 101. a A33.1 101	100	100	100	100	100	100	100	100
Whether born abroa		700	700	700	700	100	700	700
No No	63.6	70.7	57.5	80.2	74.6	91.4	76.9	38.6
Yes	36.4	29.3	42.5	19.9	25.4	8.6	23.1	61.4
163	100	100	100	100	100	100	100	100
Birth cohort	700	700	700	700	700	700	700	700
1940-49	13.0	10.8	7.5	9.2	7.5	5.7	10.5	22.8
1950-59	53.3	42.7	42.5	35.9	31.3	14.3	30.8	33.3
1960-69	29.9	38.2	37.5	42.8	41.8	54.3	35.0	29.8
	3.9	8.3	12.5	12.2	19.4	25.7	23.8	14.0
1970-81	100	100	100	100	100	100	100	100
Homo ownorchin of		100	100	100	100	100	100	100
Home ownership st		64.2	82 F	62.6	59.7	62.0	82.2	96.0
Renting	57.1	64.3	82.5	62.6		62.9	83.2	86.0
Owner-occupier	42.9	35.7	17.5	37.4	40.3	37.1	16.8	14.0
N (=707)	77	157	40	131	67	35	143	57

Notes: FT=Full-timers, EO=Employment-oriented, L=Leavers, PT=Part-timers, PR=Part-time returners, GR=Gradual returners, CE=Casually employed, I=Inactives.

The distribution of women born abroad indicates a polarisation pattern between continuous trajectories with high (*full-timers*) and low attachment (*inactives*). There are furthermore indications for a cohort effect in that women born more recently, in the 1960s and 1970s, seem to be most likely to have a trajectory of *casual employment* while among women of older cohorts *full-timers* and *employment-oriented* trajectories are more likely. The social class control indicator home ownership reveals that owner-occupiers are under-represented among the *leavers*, the *casually employed* and the *inactives*, confirming the expected pattern.

A further step of the descriptive analysis, for which the statistics are found in Appendix A8.1, has looked at the distributions of women across age bands by country. Again, small case numbers per category call for caution in terms of generalisation. Overall, labour market involvement marked by intermediate to high attachment during and after single motherhood seems to be most likely among women who were first observed in single motherhood when they were older than 25 and younger than 46. In West Germany this prime group is split across *full-timers*, *employment-oriented* and *part-timers*, while in Britain the bulk is in the *employment-oriented* group. These patterns are in line with the above-described higher regulated German labour market. Adding to the insights gained from descriptive analysis the following section discusses the results of the multivariate analysis.

8.4.2 The occurrence of non-employment

The first step in analysing factors associated with particular trajectory types in a multivariate setting is linear regression analysis with the occurrence of non-employment indicator as dependent variable. This step primarily addresses Hypothesis 1, which predicted that younger age at first observed single motherhood increases the risk of low labour market attachment. The analysis can also give an indication of whether the other hypotheses point in

the right direction, but are not useful in explaining particular trajectories. Table 8.2 summarises the results, displaying effects as beta coefficients, statistical significance and standard errors. The sample size falls below the 707 women included in the initial sample, because some of the indicators have missing cases. As noted above, standard errors are adjusted to account for the clustered data structure (several observations per individual), which results in conservative estimations. The R-square value is relatively high (for the social sciences), indicating that 34 per cent of the variance in nonemployment occurrence can be explained with the present model. The analysis provides evidence for Hypothesis 1, showing that single motherhood timing has a statistically significant negative effect on nonemployment occurrence. This means that with each additional year of age when a woman is first in single motherhood the occurrence of nonemployment in her subsequent career trajectory decreases. This finding supports the life stage hypothesis underpinning this thesis. Also in line with this outcome, having a preschool child increases the occurrence of nonemployment. The other family life indicators do not produce statistically significant results, but point in the expected direction.

As for the skill indicators, effects are also in the expected direction. Vocational and academic skills decrease non-employment occurrence in career trajectories more than do no qualifications or elementary skills. However, the effects are not statistically significant. This result may be due to social class factors, which is controlled by including the occupational group and home ownership status variables, which are closely connected with skill attainment. The genuine skill attainment effect on probabilities of entering employment observed in the analysis of Chapter 6 would here be absorbed by the complexity of trajectory types. Hypothesis 4 predicts better chances of full-time employment trajectories in higher status occupations, which can be supported by the present results. In the following section multinomial

regression analysis adds to these statements on factors associated with trajectory characteristics, providing further evidence for the hypotheses.

Table 8.2 Non-employment occurrence, linear regression with robust standard errors

		В		SE
Single motherhood timing (16–55)		-0.24	***	0.05
German context (Ref: British)		-0.90		0.52
Time spent in partnership (Ref: no time)	Less than half	-0.62		0.44
	More than half	0.65		0.49
Has preschool child (1/0)		1.32	**	0.48
Number of own children in hh (1–3)		0.38		0.26
Whether divorced (Ref: other)		-0.04		0.42
Type of qualifications (Ref.: none or low)	Vocational	-0.82		0.45
	Academic	-0.89		0.50
Occupational group (Ref.: Professionals &	Elementary	5.54	***	0.57
Assistant Professionals)	Crafts	0.01		0.61
	Services	0.89	**	0.40
Whether born abroad (Ref.: no)		0.17		0.54
Birth cohort (Ref.: 1940–49)	1950-59	-0.93		0.65
	1960-69	-3.56	***	0.88
	1970-81	-4.95	***	1.27
Owner-occupier (Ref.: renting)		-1.55	***	0.41
Constant		14.09		2.42
N		653		
R2		0.34		

Notes: * p<0.05; ** p<0.01; * p<0.001.

8.4.3 Who has a continuous full-time career?

Complementing the preceding analyses, this section uses multinomial logit regression for investigating factors suspected to be associated with having a particular employment trajectory during and after single motherhood. The model estimates the relative risk ratios for women having a certain type of employment trajectory during and after single motherhood compared to having an alternative one (relative log odds). In the present analysis, independent variables were entered in two blocks, one for family-related

characteristics and one for the educational and occupational background, nesting the two models, of which only the final model is discussed in the following. Birth cohort, home ownership status, migration status and country context were retained in both models. Inserting only the familyrelated independent variables, model fit statistics show no significant improvement to the null model, which only estimates the intercept.⁷⁶ Statistics on the model fit for the nested final model, including the educational and occupational variables, indicate that it is fitted sufficiently well. The likelihood ratio test of the overall final model shows a statistically significant (p<0.001, df=119) reduction of the -2 Log Likelihood compared to the null model with no independent variables. In order to further assess the utility of the model classification accuracy can be tested by comparing predicted membership in the outcome measure's categories based on the multinomial regression model to actual group membership. The statistics suggest that, in correctly predicting women's assignment to certain labour market trajectories, the final model is fitting better for some of the outcome categories (employment-oriented, part-timers, casually employed, inactives) than for others (full-timers, leavers, part-time returners and gradual returners). This means that membership in the latter categories is explained with additional factors unaccounted for by the current model. It should be noted that most of the categories for which the model provides less suitable explanations contain major transitions. One reason for this can be that those trajectory categories entail higher degrees of intra-group variation.

The Likelihood Ratio Tests for the single independent variables shows how much each contributes to the final model compared to the null model. Except

⁷⁶ The null hypothesis tested with the Likelihood Ratio Test is that there is no difference between the model without independent variables and the model in which independent variables were included.

for five variables (being divorced, having two children compared to one, having an early single motherhood experience, being born in the 1950s compared to being born in the 1940s and different partnership lengths) all others significantly (p<0.05) contribute to the model. Pearson and Deviance tests for the final model both have p-values greater than 0.05, which can cautiously be interpreted as an indication for good model fit.⁷⁷ In order to further assess the fit of the multinomial logit regression model Hosmer and Lemeshow (1989, p. 232) suggest running separate binary logistic regressions for each outcome category with the reference category as comparison group. Running separate models on the present data (see Appendix A8.2), the Hosmer-Lemeshow test statistics, contrasting how closely predicted and observed frequencies are matching, indicate satisfactory fit for most of these models. Only the model comparing *full-timers* to *inactives* shows a *p*-value <0.05, indicating a problem with the model fit. As indicated by these results coefficients of the *inactives* category in the subsequent analysis should be treated with particular caution. There is little variation on some of the independent variables in this trajectory category, pointing to a particularly homogenous group. For example, almost all of the *inactives* women are in the elementary occupations group and have low or no qualifications at all.

As described above, testing model fit of a multinomial logit model is difficult (Hosmer and Lemeshow, 1989; Long and Freese, 2006). Especially in such a case as the present one where the sample size is not very large (N=653) and where there is a large number of outcome categories and high variation between employment trajectory types and independent variables. Sample requirements are not fully met in this analysis as on all independent variables there are occurrences of 'low frequency cells' (N<10 per category of

_

⁷⁷ The null hypothesis of these tests, i.e. that the model adequately fits the data, cannot be rejected.

the dependent variable).⁷⁸ However, it is problematic to combine the eight categories of employment trajectory types, as for example suggested by Stewart (2009), because the employment biographies they reflect seem too different in that. This implies that results from the analysis have to be interpreted under certain reservations. For example, it is likely that variables with low frequency cells have excessive standard errors and confidence intervals, which does not allow for reliable generalisation. Rather than aiming at generalisation, the value of the present analysis lies in exploiting the (limited) available data as much as possible. The analysis serves as a tentative approach to understanding the role of certain factors in facilitating the development of particular employment trajectories during and after single motherhood.

In multinomial regression the parameter estimates are relative to the reference group, which is here set as *full-timers* (continuous full-time employment trajectories). That means that the estimated effects for each variable on the respective outcome category are to be understood in comparison to this reference group. The standard interpretation of the multinomial logit is that for a unit change on an independent variable the log odds of that outcome relative to the reference group is expected to change by the estimated effect size, given all other variables in the model are held constant. In the present analysis, the coefficients are expressed as relative risk ratios (RRR), which are easier to interpret and similar to odds ratios. Relative risk ratios express the ratio of the probability of being in the outcome category over the probability of being in the reference category

-

⁷⁸ SPSS determines 82.9 per cent of cells (dependent variable levels by subpopulations) with zero frequencies.

Table 8.3 presents the RRR coefficients and standard errors. As mentioned above, the country context variable has a mere control function in this analysis because they are not further decomposed. The analysis indicates that German and British women do not generally differ in their relative risks of being in other than the *full-timers* category; except for the *leavers* and *part-time returners* trajectories which, relative to the *full-timers* trajectory, seem to be more likely among German women. This confirms the findings from the descriptive analysis. Similarly, the cohort indicators are mainly controls, correcting for the different periods in which women in the sample are observed.

Hypothesis 2 predicted that single motherhood timing would lower chances of having a continuous full-time career during and after single motherhood. The analysis does however not provide any evidence to support this expectation; the probabilities of having one of the other trajectories are not statistically significant. On the other hand, women who had long periods of being partnered rather than remaining single most of the time show to be significantly more likely to have a different career trajectory than a *full-timers* one. This could indicate that being in a partnership does not support familyemployment reconciliation, but may rather relieve women from the need to attain market income. The relatively high standard errors in this category invite to caution with interpreting the results. On the other hand, supporting the idea that family-employment reconciliation is closely linked to childcare issues, having preschool children was seen to increase the probability of having a part-timers, a part-time returners, a casually employed and an inactives trajectory compared to having a full-timers one. As for the number of children, only having two children compared to one increases the probability of having a part-time returners trajectory. This could reflect the need for women in single motherhood with two children to stay in the labour market

for household maintenance, and that part-time employment provides one sustainable option.

The second block of variables regarding skills and class background were analysed for testing Hypotheses 3 and 4. The negative effect of low skills on full-time employment predicted in Hypothesis 3 does not find support in the present analysis. As in the previous analysis of non-employment occurrence in career trajectories, effects of qualification level seem to have largely been absorbed by class factors. This is with one exception. Women with vocational qualifications are more likely to have a continuous part-time than a full-time trajectory. As mentioned above, this could indicate better part-time familyemployment reconcilability in labour market segments requiring vocational skills. However, a further mechanism seems to be involved, because the analysis controls for occupations. For example, attaining vocational qualifications may also capture other characteristics of the woman, such as lower employment orientation, than attaining academic qualifications. In line with Hypothesis 4 occupational groups explained differences between women's probability of having a different career than a full-time trajectory during and after single motherhood. Namely, relative to professional and associate professional occupations elementary occupations increase the probabilities of having any of the trajectories with interruption or rupture as compared to having a continuous full-time one. Moreover, service occupations make it more likely to have a part-timers or a casually employed trajectory during and after single motherhood. These two trajectory types have previously been characterised as reflecting the attempt to find compromises in family-employment reconciliation. The findings now point to service occupations being the domain for such strategies.

Table 8.3 Multinomial logit results: relative risk ratios (RRR) for trajectory categories compared to reference category (full-timers)

	Employment- oriented vs.		Leavers vs.		Part-timers vs. full-		Part-time returners vs.		Gradual returners vs.		Casually employed vs.		Inactives vs. full-	
	full-tin	ners	full-ti	imers	timers fo		full-timers		full-timers		full-timers		timers	
_	RRR	SE	RRR	SE	RRR	SE	RRR	SE	RRR	SE	RRR	SE	RRR	SE
German (ref: British)	0.467	0.201	9.741	8.616	2.067	0.944	0.263	0.151	0.266	0.187	0.560	0.277	0.228	0.181
Young single motherhood (ref: age 25+)	2.068	2.061	0.736	0.956	0.987	1.016	1.570	1.684	3.751	4.142	5.021	5.108	4.494	5.654
Time spent in partnership (ref: no time)														
Less than half	1.067	0.353	0.708	0.357	0.947	0.348	1.203	0.519	1.420	0.760	0.731	0.285	0.853	0.488
More than half	6.557	5.244	4.168	3.943	7.954	6.503	6.705	5.855	9.460	8.761	8.997	7.461	36.644	34.778
Has preschool child (ref.: no)	2.524	1.417	4.286	3.241	3.167	1.832	5.843	3.669	2.407	1.666	7.891	4.788	7.558	6.131
Number of own children in hh (ref.: 1 child	1)													
2 children	1.329	0.441	0.935	0.474	1.645	0.589	2.548	1.137	1.513	0.839	0.809	0.328	1.437	0.894
3+ children	0.811	0.411	1.671	1.089	1.522	0.791	2.869	1.734	3.682	2.513	1.749	0.925	2.297	1.632
Whether divorced (ref: other)														
Divorced	0.937	0.328	1.172	0.634	0.741	0.276	0.794	0.370	0.829	0.476	0.603	0.261	0.702	0.486
Type of qualifications (ref.: none or low)														
Vocational	1.413	0.521	0.907	0.472	2.426	0.947	2.026	0.942	1.019	0.606	1.159	0.485	0.697	0.434
Academic	1.244	0.559	0.669	0.557	0.903	0.469	1.229	0.692	1.095	0.699	0.797	0.447	0.877	0.775
Occupational group (ref.: Prof.&Ass.Prof)														
Elementary	1.612	1.016	5.257	3.906	4.664	2.944	6.857	5.003	5.840	4.767	19.486	13.082	9.97E+07	5.89E+10
Crafts	0.855	0.400	0.755	0.502	0.519	0.291	0.714	0.540	1.566	1.238	1.102	0.685	0.413	401.371
Services	1.311	0.493	0.953	0.571	2.394	0.953	2.735	1.417	1.578	0.978	3.310	1.626	3.06E+05	1.81E+08
Born abroad (ref.: native-born)	0.831	0.355	0.765	0.459	0.417	0.196	1.169	0.658	0.274	0.241	0.322	0.165	2.186	1.730
Birth cohort (ref.: 1940-49)														
1950-59	0.865	0.406	1.290	0.977	0.723	0.378	0.614	0.406	0.360	0.352	0.564	0.300	0.180	0.131
1960-69	0.631	0.340	1.132	0.962	0.763	0.442	0.474	0.348	1.070	1.019	0.139	0.088	0.078	0.066
1970-81	0.336	0.338	2.617	3.166	1.143	1.137	0.867	1.021	1.003	1.352	0.083	0.088	0.036	0.051
Owner occupier (ref.: renting)	0.474	0.175	0.539	0.307	1.150	0.446	0.683	0.315	0.548	0.291	0.149	0.068	0.658	0.432

Notes: N=653; Pseudo-R²=0.22; Log-likelihood=-1002.693; p<0.05=grey shade; p<0.01=*italics*; p<0.001=**bold**.

The most explorative step of the present analysis involved testing the relatively crude indicator of minority background on employment trajectory type during and after single motherhood. The expectation summarised in Hypothesis 5 was that being from a minority background, i.e. being born abroad, has a positive effect on labour market attachment. This assumption could not be confirmed based on the analysis of the previous section. The multinomial regression analysis adds information in that it reveals a statistically significant negative relationship with one of the trajectory types. According to this finding, women who were born abroad are less likely than those born in the respective country of residence to have a career marked by interruptions, ruptures and change (casually employed) compared to a fulltime one. The coefficients for the other trajectory types were not statistically significant, but also point to less stable careers during and after single motherhood being less likely for women born abroad. Certainly, it should be kept in mind that the 'born abroad' indicator is a very crude measure that is likely to mask potential effects of different minority groups.

With these results the regression analysis supported some of the expectations developed in this thesis and gave some new insights on what determines particular types of employment trajectories during and after single motherhood. The concluding section will summarise the findings and contextualise them in the overall framework of this research project.

8.6 Summary

Based on the results of the previous chapter, the present one has investigated possible explanations for why women take different career tracks during and after single motherhood. The main starting point has been the life stage hypothesis running through this thesis, which predicts that women's biographical characteristics at the point of single motherhood set the

conditions for family employment reconciliation. In particular, the present chapter was concerned with consequences for employment trajectories. The combination of two such rich data sources as the BHPS and SOEP enabled the use of statistical methods for analysing the relationship between single motherhood and career trajectories. However, the data basis is still too limited to permit statistical analysis of how country differences play out for women's employment trajectories. The extent to which careers are structured by the contexts in which they are set was hence considered only indirectly.

With linear regression, the first analytical step of this chapter addressed the life stage assumption by considering factors associated with non-employment occurrence as an aggregate trajectory characteristic. The analysis found support for the hypothesis in that lower age at first single motherhood made non-employment more likely to occur in employment trajectories, as did having a preschool child. However, rather than providing evidence for the assumption that skill level matters most, indicators of social class background were seen to determine the shares of non-employment during and after single motherhood. This finding qualifies the results of Chapter 6 in that skill attainment does not stand out as a class-independent factor beyond the early career stage.

The second step of the analysis added to the picture by testing whether the respective characteristics observed at the time of first single motherhood make having a continuous full-time career less likely. Applying multinomial regression, the analysis did not find evidence to support the expectation that young age (under 25) at first single motherhood predicts particular career trajectories. There was evidence, however, that preschool children increase women's probability of having part-time or interrupted, unstable careers rather than full-time trajectories. This finding emphasises that single motherhood with young children can hinder the development of a full-time

career. Women seem to either compromise on the degree of involvement by engaging in part-time rather than full-time employment. Or they take time off for longer periods, compromising on career progression. A further track which is more likely among women with preschool children than full-time employment is continuous inactivity during and after single motherhood, indicating irreconcilability of family life and employment.

Besides these indications for family characteristics playing a role in shaping conditions of family–employment reconciliation, individual characteristics reflecting social hierarchies were important predictors of employment trajectories. That is, vocational qualifications turned out to make part-time employment trajectories more likely than continuous full-time ones. On the one hand this could reflect that, compared to maintaining a full-time employment career during and after single motherhood, vocational qualifications, rather, equip women for part-time trajectories on female-typical occupations. In addition, the results indicate that having a job categorised as elementary occupation is associated with interrupted employment trajectories rather than with working full-time during and after single motherhood. This finding suggests that conditions of family–employment reconciliation vary between occupational segments. For women in single motherhood elementary occupations do not seem to provide environments facilitating full-time employment but foster career instability.

In summary, the findings of this chapter support the idea that the combination of single motherhood with aspects of family life, skills and class background set the preconditions for women's career processes. Maintaining longer-term labour market attachment is generally more possible with increasing age at which women experience single motherhood, but less so with young children. Having young children is a particular obstacle to continuous full-time employment, often being associated with longer breaks,

unstable or continuously low attachment careers. This point in particular stresses the importance of infrastructure for reconciling family life and employment. Moreover, for women working in elementary occupations it is much more difficult to avoid non-employment than for those in the professions. Alternative trajectories to full-time employment ones are particularly part-time or interrupted part-time ones. This finding underlines the fact that institutional support for reconciliation would seem particularly beneficial to employment for women in lower status segments of the labour market. These ideas will be picked up in the following chapter, which summarises the main findings and draws overall conclusions from the present research.

Chapter 9 Conclusions and discussion

investigated how single motherhood affects women's employment careers in different institutional contexts. Against the background of overall increasing female labour market participation and pluralisation of family experiences since the 1960s, single motherhood has become a focus of much debate around women's dual role between family responsibility and labour market. In the UK, the question of employment in single motherhood is furthermore a strongly politicised issue that is interlaced with a class discourse. Research is inconclusive on the role of class in mediating labour market involvement in single motherhood. Employment rates of mothers who are single and of partnered mothers vary between countries, but how these differences can be explained remains a largely unsolved puzzle. A growing body of research discusses the employment behaviour of women in single motherhood compared to that of mothers in partnerships. However, only a few studies treat both family situations as what they often are, experiences of the same persons at different points in their lives. Accordingly, studies comparing employment processes among these women between countries are lacking. Addressing this gap, this thesis investigated the relationships of single motherhood and employment careers in the country contexts of Great Britain and Germany. The thesis contributes to disentangling issues of social inequalities and those of family dynamics analytically, methodologically and empirically, adding a novel perspective to the research on single motherhood and employment.

The analytical contribution is mainly that, in a life course perspective, logics of individual-level processes are conceptually linked with those of

institutional impacts in what was termed the 'life stage model of single motherhood'. Differences in career outcomes for mothers who are single, it was argued, can partly be explained with the biographical time point at which women experience single motherhood, and partly with the institutional conditions framing the situation. The methodological contribution of this thesis is, secondly, that the methods used to address the specific research questions are relatively new to the research area and enable novel perspectives on the subject matter. Both fixed effects regression and sequence analysis provide new insights to the effects of single motherhood on employment processes. As for the empirical contributions, the combination of theory and method in this thesis resulted in several findings, which can be summarised in the following key statements. Firstly, entering single motherhood at the early career stage has negative consequences on women's probability of transitioning into full-time employment regardless of their social class background and skill attainment level. The effect of single motherhood is generally not more negative compared to becoming mother in a partnership. These mechanisms are observable in both Britain and Germany. Secondly, there is considerable diversity in employment trajectories during and after single motherhood in both countries. The dominant patterns of these trajectories vary between Britain and Germany in ways that were expected considering the countries' labour market structures and welfare state settings. In Britain, employment trajectories are overall more fractured and unstable, while patterns in West Germany showed a tendency of tracking women more into full- and part-time careers with overall more continuity. Thirdly, mothers' age and children's age at first single motherhood are key factors in determining the amount of nonemployment in subsequent careers. The younger women are, the higher the risk of having longer periods of non-employment. Preschool children affect labour market attachment and the prospects of a continuous full-time career

negatively. The following paragraphs elaborate on the different types of contribution, reflecting on them in respect of the wider research context.

9.1 Conceptual contribution

The main conceptual contribution of this thesis to the existing literature is in the synthesis of approaches explaining differences in the employment of mothers who are single. As discussed in Chapter 3, the thesis draws heavily on theoretical principles applied in previous research on single motherhood, women's employment and welfare state regulations. However, going beyond that, the present approach systematises and integrates elements of these previous perspectives into one framework specifically for analysing employment careers of women in single motherhood. Assuming that family life develops on the basis of intergenerational dyads, the concept of single motherhood applied in this thesis acknowledges the changeability of the status. Combined with the perspective of employment as process, the conceptual view allows accounting for a diversity of patterns in labour market participation that develop during and after women are in the single motherhood situation.

The conceptual model, termed as 'life stage model of single motherhood' corresponds to the ideas of life course research on female work biographies. These mostly deal with influences of childbirth and childrearing on family-employment reconciliation, but do not usually consider single motherhood as a significant event in the life course. The model assumes that effects of experiencing single motherhood vary by the timing of single motherhood in the life course, and in the process of labour market integration respectively. This analytical approach enables viewing single motherhood as a biographical event or episode, the career effects of which depend on its coincidence with other factors such as, most notably, skill acquisition, family context and eligibility for state support. Underpinning this framework is the

idea that the narrow concept of single motherhood as a 'family type', which dominates public and academic debates, is misleading when it comes to explaining employment outcomes. The life stage model adds to existing perspectives especially by regarding the time dimension. Time, it is argued, can be key to understanding how being 'a single mother' is not associated with one particular labour market behaviour. What is more, the perspective seems to suggest that the distinction between life stages may be more crucial than the one between 'family types'.

Time is considered in two ways in the conceptual approach proposed in this thesis; on the one hand as an institutionally embedded point in the life course (input factor), and on the other hand as a crucial dimension of the career process (outcome). The framework expects that women experiencing single motherhood at a young age compared to later stages will have more difficulties in reconciling family and employment. A central mechanism assumed to be at work is that the single motherhood experience interferes in the degree to which acquiring marketable resources is possible. The expected causal chain is that with single motherhood the conditions for engaging in career building, either through skill attainment or work experience, shift in so far as women now face childcare, household and breadwinning responsibilities alone. The management of these tasks makes reconciliation more difficult, considering constraints in time and the need for income. Widening the analytical angle, single motherhood at an early career stage may be more detrimental to building a standard career than being mother and single at a later point, but likewise, having a child in a partnership at this early stage would also seem to complicate steady career progress. The analytical perspective, then, invites shifting the focus from 'the single mother' to structural conditions in which standard careers are developed, and their compatibility with different timings of motherhood.

It should be noted that the idea behind the conceptual model was not to develop a comprehensive framework for understanding all processes in family life and labour market involvement. Rather, the present approach provided the theoretical toolkit for analysing the effects on employment in the life course, considering family situations beyond the birth of a child. The life stage perspective can also be applied to other scenarios. For example, entering stepfamily constellations or living-apart-together relationships can be imagined to having different consequences if experienced at different points in the life course. The expected outcomes on employment processes would need to be defined respectively, which is beyond the scope of this thesis. However, the examples suggest that the developed theoretical framework could have a merit for other research puzzles. As for the present research, the usefulness of the theoretical perspective can also be demonstrated in reference to the methodology with which its concepts are applied in analyses.

9.2 Methodological contribution

In order to address its empirical aims, the thesis applied a quantitative longitudinal comparative approach, using different statistical techniques for the three analytical steps defined by the research questions. The field of single motherhood research is a relatively dynamic one in terms of emerging empirical studies. A wide range of studies using both qualitative and quantitative approaches examines the changing landscapes of family life. More and more often, time is included as a dimension of family life and employment in quantitative studies, which are increasingly able to draw on a growing basis of longitudinal individual- and household-level data sets. The improvement of data availability also makes the application of newer methodological approaches possible. The present methodological strategy was designed in response to the main limitations found to result from previous studies analysing employment of women in single motherhood.

These are briefly summarised in the following. Firstly, the common practice of comparing mothers who are single with partnered mothers masks the transitions between family constellations and the implications this can have for other life domains such as employment. The second main limitation is closely linked to the first one in that studies looking at current family constellations are unable to account for longer-term career developments. Thirdly, as of yet, only few studies have taken a cross-country comparative perspective when studying differences in employment careers of women with single motherhood experience. While the first limitation is mostly a symptom of cross-sectional analysis, all of the identified problems have to do with limited data availability. The methodological approach of this thesis, then, makes these limitations central to the empirical analysis.

Corresponding to the theoretical perspective, the methodological approach was designed to examine changes in family life and employment over time at different stages in the life course. Taking a comparative perspective between two country cases, the study allows for tentative interpretations of findings from the individual-level in reference to the context in which they are embedded, but not for actual statistical assessment of macro-level influences. The excellent individual-level panel survey data sources available for the selected countries, BHPS (Great Britain) and SOEP (West Germany) made quantitative analysis a suitable strategy. The thesis applies fixed effects methods, which are an important technique for making effective use of panel data for analysing associations. Sequence analysis, the other main method used, is a less established method. The technique has the unique advantage of enabling descriptive analysis of sequential processes over a longer period of time. Its results are used in further statistical analyses: linear and multinomial regression.

In the first step of the empirical analysis, the problem of separating out real effects of different family situations was addressed by applying panel regression techniques. Looking at a stage in the life course at which most people make their initial transition to the labour market, it was tested whether individual-level changes in family life and skill attainment altered the chances of entering employment. The fixed effects panel regression technique uses the longitudinal data in a way that approximates an experimental design, comparing statuses before and after change occurred. unobserved means time-invariant factors (i.e. unobserved heterogeneity) can be excluded as potential influences, because they are statistically controlled for. Hence, the main contribution of this approach is that it enables a distinction to be made between constant and changing characteristics in determining women's chances of entering employment. This enabled one of the on-going puzzles of research on employment of women in single motherhood to be addressed: namely, whether negative effects of single motherhood on employment, observed especially in the UK, are in fact reflecting the lower-social class origin (largely time-invariant) of many women in single motherhood.

In the second step of the empirical analysis, the methodological approach was directed at accounting for employment careers of women experiencing single motherhood as processes, and at making sense of the distribution of career patterns in a comparative perspective between Britain and West Germany. Sequence analysis enables taking a longitudinal perspective on processes by observing career trajectories as sequentially ordered employment states. Systematic description was achieved by means of measuring similarity between women's employment trajectories during and after single motherhood, clustering them into relatively distinct groups, and comparing trajectory types and their distribution in the two country contexts. The particular contribution of this endeavour was the combination of using

sequence analysis in a comparative design. In the German case, in particular, previous research had created several categorisations of career patterns. In using the same methodological approach on both data sources, the present approach facilitates comparability between women in the British and West German contexts. The main finding is that common patterns exist, but that they are distributed unevenly across women in the two countries. The third methodological contribution of this thesis was, then, that the results of the previous step were used in further analysis. Here, it was investigated what factors are associated with labour market attachment and which ones explain that careers diverge from a continuous full-time trajectory. Previous research has only rarely conducted this step, which may be seen as part of sequence analysis, again, often for reasons of limited data availability.

9.3 Main empirical contributions

The previous sections have already hinted at some of the empirical contributions of this thesis. This section summarises the key points again, focusing less on theoretical and methodological issues, but more on the substantive findings. In short, the study addressed three main research questions, each focusing on one aspect of how experiencing single motherhood affects women's employment careers. The first question concerned the early career stage and asked whether experiencing single motherhood limits chances of entering employment in the contexts of Britain and West Germany. This question is particularly relevant in light of the discussions around class and young motherhood, which are particularly prevalent in the British public and reflected in the academic discourse. Often in these debates young single motherhood appears as a 'scapegoat category' in which aspects of labour market involvement, economic deprivation and family life are mashed up. This thesis contributes to disentangling these issues in the first empirical step. The second question of this thesis was interested in the diverse forms of employment trajectories during and after

single motherhood and asked how similar these were, whether there were typical patterns and how these could be described both across and within country contexts. This question aims at disaggregating the category of 'single mothers', contributing to other research with similar purpose, but adding the comparative perspective. With the third question, factors associated with different trajectories were considered, asking what made women less likely to have a full-time employment trajectory during and after single motherhood and whether there were country differences. The question addresses the issue of what makes some mothers who are single more likely to develop a standard full-time career than others. Suggestions for how these questions may be answered based on the present research are summarised in the following subsections.

9.3.1 The early career stage

For the early career stage (ages 17–30), the results from fixed effects analyses demonstrated that entering single motherhood does have a negative effect on transitioning into employment beyond social class, but also that the effect was no different for having a child in a partnership. The results were similar for the two countries. These findings enrich the research landscape in two ways. For one, the fact that more women from lower social classes experience single motherhood more often does not seem to explain entirely why many studies find a negative association with employment. To the contrary, entering single motherhood has a negative effect on transitioning to full-time employment, even when time-invariant background characteristics such as social class, as well as skill attainment are controlled for. The analysis also indicated, however, that having a child in a partnership has similarly negative effects on entering employment in the early career phase. This provides evidence for contesting the assumption that it is merely single motherhood of young women, which is problematic in terms of labour market participation. Rather, young motherhood generally seems to increase the difficulties of family–employment reconciliation. On closer inspection, the analyses suggest that support with childcare can substantially relieve such problems, which flags the importance of accessibility to providers.

The second contribution of this empirical step is that, in addition to the unsurprising finding that skill attainment increases the probability of entering employment, attaining vocational qualifications has partially unexpected outcomes. The anticipated positive relationship between attaining specific skills in the West German contexts could not be observed for women at the early career stage. The expectation derived from the literature was that attaining vocational qualifications is beneficial in the established system of vocational occupational tracks in Germany. However, results showed the reverse for full-time employment, but a positive influence on part-time employment, supporting the idea of gendered patterns of working hours. Results for Britain were as expected, vocational qualifications did not contribute to explaining differences in women's probability of entering employment at the early career stage. The aspect of employment occupation played a further role in the third empirical step, which will be summarised in Subsection 9.3.3.

9.3.2 Employment trajectories

In the second empirical step of the thesis, patterns of employment careers during and after single motherhood in Britain and Germany were analysed with sequence analysis. The 10 to 18 years coinciding with and following from the individual single motherhood experience of 707 British and German women were considered. Eight characteristic groups of employment trajectories were identified. These were distributed unevenly across the country samples. Some evidence was found that supported the expectations about the British and the German labour market systems. For example, as was expected, among British women less stable trajectories and those with

marked transitions were more frequent compared to those of the German women. It was suggested that these patterns reflect the relative lack of institutional support for family–employment reconciliation in the British system. The comparatively large number of women with an unstable but employment-oriented trajectory, on the other hand, seemed to suggest that mobility between different employment statuses is a common strategy among British women. By contrast, stable trajectories were more frequent among the German women. However, a clearer tracking along the part-time and full-time divide was apparent compared to the British women. Explanations for a particular career development were evaluated in the third empirical step.

9.3.3 The diversity of trajectories

The question of what factors are associated with certain employment trajectories during and after single motherhood is especially relevant for evaluating causes of 'successful' labour market integration in a longer-term perspective. Consequently, the analyses of the third step were geared to assess deviations from continuously high labour market attachment, which would indicate proximity to a standard employment career. On the one hand, linear regression was used to analyse what made trajectories with more periods of non-employment more likely. On the other hand, multinomial regression was used to compare relative probabilities of having a different trajectory than the full-time one. Also owing to the low number of countries, the focus of this step was on the evaluation of individual-level explanations for trajectories rather than differences between countries. Addressing the life stage hypothesis, the analyses were particularly interested in testing age at single motherhood and children's age as input factors. The results provided evidence for supporting the life stage hypothesis in that younger age predicted a higher incidence of nonemployment. Similarly, having preschool children was seen to result in lower

labour market attachment. Results of the multinomial analyses provided partial evidence for the life stage hypothesis. Age at single motherhood did not predict why women had other trajectories than a full-time one. However, having children of preschool age was seen to diminish the chances of having a continuous full-time career. Single motherhood with preschool children made part-time trajectories, or those where women returned to part-time employment, more likely compared to full-time trajectories. Trajectories characterised by volatile employment patterns and continuous nonemployment trajectories were also more likely than full-time careers with preschool children. Having more than one child as well as having vocational qualifications as highest attainments was seen to determine having a parttime trajectory rather than a full-time one during and after single motherhood. This could reflect a particular strategy of combining high family responsibility with a specialised occupation such as some of those in the service sector, typically including public sector occupations, which allow for part-time involvement. In terms of occupational background in general, the results suggested that service or elementary occupations make almost any other type of trajectory more likely than continuous full-time employment.

9.4 Limitations and future research

Based on the research design of this thesis it has been possible to speculate about how micro-macro links affect the employment of women in single motherhood. It has to be noted, however, that the two-country setting neither enables making robust statements on such links nor allows generalising beyond the present research context. Statistical analysis of links between policies and individuals is difficult. Different approaches are possible, compromising either on the number of country contexts and the breadth of policy regulations that can be accounted for (e.g. difference-in-difference approaches; micro-simulation) or on the ability to analyse outcomes of

specific policies (e.g. multilevel-analysis). Both options are heavily dependent on the availability of the respective data. Oriented more at policy-evaluation the first option allows for improving the limited scope for making statements on institutional effects. Based on current data availability, however, it would be difficult to analyse policy effects on longer-term employment trajectories, which is why previous studies have mostly focused on transitions. As for increasing the number of countries with the second option, there are no international data available to date on the basis of which it would have been possible to address the questions of the present research project. The existing datasets such as the European Community Household Panel (ECHP) or the EU-SILC do not cover such long periods of time, as do the BHPS and the SOEP. Questions about trajectories, in particular, would be difficult to cover. Smaller sample sizes would restrict the scope of analytical possibilities.

A further option for approaching a better degree of generalisability of the results would be to increase the number of countries, and to account for their institutional settings in the same comprehensive way as has been done in this thesis. Particularly interesting cases, which would enhance the welfare regime perspective, are Scandinavian countries such as Sweden or Norway, for which comprehensive register data sets are available. The degree of comparability with the household panel surveys used in this study would have to be evaluated.

A further limitation, which has been touched on throughout the thesis, is the limited sample size of women with single motherhood experience in the surveys used, or in fact in any survey available to date. It would be desirable to compare a larger number of women in order to draw more generalisable conclusions on the consequences that different single motherhood situations have on employment careers. Quantitative research could add to the insights

that qualitative research has given into the various biographical narratives (e.g. Schneider et al. 2001). On a similar note, some authors have stressed the potential of sequence analysis in linking purely variable-centred quantitative with qualitative narrative research (Elliott, 2005; Halpin and Chan, 1998); that is, by looking at the sequences on a one-by-one basis, considering the wealth of data that has been collected on the individuals behind single sequences over the years of the quantitative panel surveys. Constructing 'stories' from life histories of individual cases can be used to help understanding linkages between different life domains (Graham, 2011, p. 69). Such narratives may be seen as a way to embrace both interest in the detail and generalisation (Elliott, 2005) and can be thought of as a future extension to the present research.

9.5 Closing remarks

Women in Britain and Germany today are relatively likely to experience single motherhood at some point in their lives. Partnership separation is not a female issue alone, but its consequences are strongly gendered especially if the ex-partners have a child together. In more than nine out of ten cases dependent children stay with their mothers after parental separation in Britain and West Germany. A trend which is occurring simultaneously is that an increasing share of women with and without children participates in the labour markets, which enables many of them to maintain their own households. This thesis has asked in what ways these two developments interact on the individual level and produce distinct patterns of employment careers.

The evidence this thesis provides regarding the negative implications of entering single motherhood at the early career stage in the British and West German contexts may seem unsurprising. However, the fact that this effect did not differ from having a child in a partnership was striking given that

public narratives in Britain usually imply that there is a particular problem with young single mothers. In addition, the finding invites thought about potentially existing structural obstacles to young motherhood, and about their possible implications for demographic issues or restrictions of female labour supply. A further finding provided evidence for contesting a stereotypical assumption surrounding differences between partnered and single motherhood, shifting the attention to the gendered division of labour. Namely, any differences in effects of co-partnering and single motherhood on entering employment in the early career stage were found to be mediated by support with childcare, and not by the partnership status alone. This leads on to the crucial question of who does the care work, and where the real differences lie between mothers who are single and mothers in a partnership. The results are in line with research on the gender division of household labour, which demonstrates that being in a partnership does not solve the issue of family—employment reconciliation for all women.

Last but not least, the empirical material on employment trajectories of women in single motherhood provided in this thesis is hitherto unprecedented. Few studies had evaluated employment processes, and less so in comparison between countries. The patterns found in the data indicate the huge variety in employment trajectories that follow from single motherhood. Certainly, reasons for career development are manifold and largely dependent on circumstances predating the single motherhood situation. However, the findings of this research suggest that consequences of experiencing single motherhood for employment vary with the life stage at which it is experienced. Hence, if policy aims at securing the long-term integration of women with children into the labour markets, strategies addressing single motherhood should imply measures of support that account for its life course timing.

Chapter 10 Appendix

Table A2.1: Typologies of women in single motherhood

Appendix A6.1 Coding of qualification variables (BHPS)

Table A6.2: Fixed effects part-time employment as dependent variable

Appendix A7.1 Optimal matching: comparing sequences

Table A8.1: Distribution of women across age bands by cluster type

Table A8.2: Single logistic regressions between pairs of clusters

Table A2.1: Typologies of women in single motherhood

Year	Authors	Country	Sample/method	Focus of typology	No.of types	Types
1991	Schoeningh et al.	DE	20 narrative/structured interviews with divorced, lower skilled single mothers	Identity/ making sense of separation	3	1) successful reorientation; 2) ongoing reorientation; 3) unsuccessful reorientation
1994	Mädje & Neusüss	DE	313 written interviews with single mothers on welfare benefits in West Berlin	ldentity/being on welfare	2	1) enabling; 2) constraining
1996	Mädje & Neusüss	DE	30 biographical interviews with single mothers on welfare benefits	Orientations/ strategies	6	1) Consolidated phoenix; 2) Consequent continuity; 3) Forced reorganisation; 4) Legitimate expectations; 5) Struggle and compromise; 6) Traditional/conventions
2001	Schneider et al.	DE	80 out of 130 biographical interviews: time from birth of child to interview (1999?); mothers and fathers	Family and work- biographies: decisions and circumstances	5 (+1)	Young never married; 2) Divorced after long marriage; 3) Widowed; 4) Multiple-dads-families; 5) High income single mothers; 6) Single fathers
2003	Ott & Strohmeier	DE	18 narrative/structured interviews with divorced or separated single mothers	Orientations	4	1) The determined; 2) The pragmatist; 3) The hopeful; 4) The hopeless
2007	Kull & Riedmueller	DE	81 women in single motherhood in 2002/03; SOEP data 1993- 2003	Labour market positions/ trajectories	9 (4)	A: Continuous employment status - A1) Labour market citizen; A2) Labour market distant; B: Successful returners (at least 2 yrs. non-empl.) - B1) returner after long family break, B2) returner after short family break, B3) returner after phase of qualification, B4) returner from unemployment; C: Labour market leavers - C1) Leavers into baby break, C2) Discouraged leaver, C3) Leaver into early retirement; D: No pattern
2009	Heimer et al.	DE	PASS (IAB) 2000/07, whole sample: 12,500 households; number of single mothers?	Labour market positions	6	1) In-work, regular, no benefits; 2) In-work, regular, benefits; 3) In-work, govt-funded, benefits; 4) In-work, govt-funded, no benefits; 6) Out-of-work, no benefits
2011	BMFSFJ	DE	quant. 364 single mothers; qual. 6x8 qual. Group interviews	Orientation/ Mentality	3	1) Partner-oriented perfectionists; 2) Flexible pragmatists; 3) Competent realists
2005	Klett-Davies	DE and UK	70 interviews with single mothers in London and Berlin	ldentities/ meaning	3	1) Pioneers; 2) Copers; 3) Strugglers
2009	Stewart	UK	British Lone Parent Cohort	Employment trajectories	9	1) Full-time stable (child>3.5); 2) Medium returners (stable FT child 3.5-6.5); 3) Late returners (stable FT after child aged 7); 4) Part-timers (only ever <16hrs); 5) Work-oriented (broken history but mostly working); 6) In and out (unstable empl. hist.); 7) Leavers (FT early then leaves); 8) Home with a blip into work; 9) Home throughout
2012	Ott et al.	DE	454 women in single motherhood with at least 3 waves labour market statuses; SOEP 1984-2009	Employment trajectories	4	Stable full-time; 2) Stable part-time; 3) Instable part-time; 4) Stable non-employed

Appendix A6.1 Coding of qualification variables (BHPS)

wQFACHI The definition of categories in terms of the input variables wQFA to wQFN and wQFEDA to wQFEDS is as follows, with respondents allocated to the highest category into which they fall, or into category 7 if no academic qualifications:

- 1. Higher Degree is held (wQFM)
- 2. 1st Degree (wQFL)
- 3. Higher National Certificate/Diploma (wQFH) or teaching qualifications (wQFJ)
- 4. A Levels (wQFEDJ), Scottish Higher Grades (wQFEDO), Scottish School Leaving Certificate Higher Grade (wQFEDR), Scottish Certificate of Sixth Year Studies (wQFEDP), Higher School Certificate (wQFEDH), Ordinary NationalCertificate/Diploma, BEC/TEC/BTEC National/General Certificate or Diploma (wQFG) or City & Guilds Certificate (Advanced/Final/Part II) (wQFE)
- 5. O Levels (pre 1975) (wQFEDF), O Level grades A–C (1975 or later) (wQFEDG), GCSE grades A–C (wQFEDE), CSE grade (wQFEDC), Scottish O Grades (pass or bands A–C or 1–3) (wQFEDL), Scottish School Leaving Certificate Lower Grade (wQFEDQ), School Certificate or Matric (wQFEDJ), Scottish Standard Grade Level 1–3 (wQFEDN) or City & Guilds Certificate (Craft/Intermediate/Ordinary/Part I) (wQFD)
- 6. CSE Grades 2–5 (wQFEDB), O Level grades D–E (wQFEDH), GCSE grades D–G (wQFEDD), Scottish SCE Ordinary Grade bands D–E or 4–5 (wQFEDK) or Scottish Standard Grade levels 4–7 (wQFEDM)

wQFVOC Coded 'Yes' if respondent has any of the following qualifications: a recognised trade apprenticeship (wQFB), a clerical or commercial qualification (wQFC), a nursing qualification (wQFI), City & Guilds Certificate (wQFD, wQFE, wQFF), Ordinary National Certificate/Diploma (wQFG), Higher National Certificate or Diploma (wQFH).

The data in this variable is up-dated each year to include the most recent qualifications of new entrants and existing panel members. The variable shows the current status of the respondent and there is no need for the user to add the recently acquired qualifications to the first, or any subsequent, iteration of this variable.

Table A6.2 Determinants of part-time employment, women 17-30 yrs., Great Britain, fixed effects logistic regression, odds ratios

	BHPS	5	SOEP		
	OR	SE	OR	SE	
Family life					
In partnership with child/ren	2.76 ***	0.05	0.73	0.41	
Single with child/ren	2.47 ***	0.08	0.41	0.37	
In partnership, no child	0.61 **	0.42	1.44	0.54	
Single, no child (ref)	(ref)		(ref)		
Age	1.07 ***	0.02	1.17 *	** 0.04	
Number of children	1.13	0.13	0.77	0.17	
Qualifications					
UK: No academic qualification	1.02	0.55			
UK: CSE	0.94	0.59			
UK: O-level	0.48 **	0.13			
UK: A-level	(ref)				
UK: Teaching, 1st or higher degree	2.43 ***	0.69			
DE: Left school without qualification			3.13	3.28	
DE: Hauptschul-degree			0.39	0.23	
DE: Realschul-degree			(ref)		
DE: Abitur/Fachabitur			0.71	0.48	
Contextual links					
DE: Child in any formal childcare			1.81 *	* 0.40	
UK: Joint childcare in couple	0.97	0.14			
Vocational qualifications	0.84	0.51	3.51 *	** 1.03	
N (individuals)		575		357	
n (person-years)		4564		1864	
pseudo R2		0.10		0.06	
Log likelihood	-15	31.38		-623.18	

Sources: BHPS, 1991-2008; SOEP 1991-2008.

Appendix A7.1 Optimal matching: comparing sequences

The following example illustrates the process of measuring distances between sequences. Displayed are two hypothetical sequences with elements indicating employment statuses (ED=education; FT=full-time employment; NE=non-employment) at six time points, which denote annual intervals. Person 1 starts off in education and then transitions into full-time employment for five subsequent years. Person 2 is also in education to begin with, but stays in it for two years, then is observed in full-time employment for an episode of two years and ends up in non-employment for two further years.

	0	X	0	0	X	X
Person 2:	ED	ED	FT	FT	NE	NE
Person 1:	ED	FT	FT	FT	FT	FT

The X in the bottom row indicates differences in the sequences, the zero marks no difference. One way of calculating the distance between these two sequences is to charge a penalty for each X-marked difference, which is referred to as substitution cost in sequence analysis terminology. There is, however, another way of aligning the sequences to make them more similar to each other than substituting the two diverging elements. The elements of the sequence could also be shifted, inserting gaps into the sequences as shown in the following illustration.

	0	_	0	0	_	_	_	_	
Pers. 2:	ED	ED	FT	FT				NE	NE
Pers. 1:	ED		FT	FT	FT	FT	FT		

In this case the difference is marked as a gap (-), called insertion or deletion (indel) costs in sequence analysis terminology. The Levenshtein distance

hence calculates the overall distance between two sequences as the sum of substitution and indel costs (Brzinsky-Fay et al., 2006, p. 449). Because there is more than one possible way of aligning the sequences another mathematical calculation is needed in order to decide on the 'most efficient' alignment. Brzinsky-Fay et al. (2006) propose using the Needleman-Wunsch algorithm, which requires quantifying the costs for one element of a string to diverge from the element at the same position in the string of comparison. Considering the dual role of substitution and indel costs in OM of defining the distance measure and helping to find the optimal alignment, this quantification requires careful consideration.

Two aspects have to be considered in the definition of substitution and indel costs. The first one is the question of whether to differentiate substitutions according to the nature of the elements, either based on theory or by empirical differentiation. For example, it could be argued that substituting an element of part-time employment by one of full-time employment should be less costly than replacing full-time employment with non-employment (see Scherer, 2001; and Stewart, 2007 for applications of this logic). Alternatively to this theoretical argumentation substitution costs can be differentiated empirically, for example by calculating transition costs between states, with more frequent transitions being less costly than less frequent ones. It is however relatively common not to differentiate substitution costs at all (e.g. Brzinsky-Fay, 2007). Both strategies retain an element of arbitrariness, and justification for them depends on the research.

The second aspect that needs to be considered is the relation between substitution and indel costs. Each substitution can be seen as the combination of two indel operations, as a substitution entails an insertion in one sequence and a deletion in the other (Brzinsky-Fay et al., 2006, p. 450). Setting indel costs at half of substitution costs is sensible, while setting indel costs higher

than half of the (highest) substitution cost prevents the Needleman-Wunsch algorithm from using indel operations altogether (Brzinsky-Fay et al., 2006; Macindoe and Abbott, 2004). As using indel operations means that distance calculations are based on procedures allowing for elements to be shifted within the sequence, it can be desirable to prevent that if the position of an element is theoretically important. For example, if the research interest is in comparing career sequences in the first five years after initial labour market entry, the order of the elements would matter and indel operations would potentially distort the results of the analysis in focusing on the relative order of the elements. If only the relative position of an element in the sequence is important indel costs should be about 1/10 of the highest substitution cost.

The comparison step in sequence analysis furthermore requires considering that the distance measures have to be standardised, if sequences of different length are compared. The procedure for doing this is to divide the calculated value by the length of either the sequence with the longer distance or the longest sequence in the dataset (Brzinsky-Fay et al., 2006, p. 450). Lastly, a decision is needed on whether the comparison should be performed on the basis of a reference sequence or else by comparing all sequences against all others. As with all other steps, the comparison against a reference sequence must be well reasoned theoretically. In fact, it is only in particular cases that the comparison against an ideal-typical reference sequence is justified.

Table A8.1: Distribution of women across age bands by cluster type

	German								British							
	under 25		26–35		36–45		46–55		under 25		26–35		36–45		46–55	5
Full-timers	4.2	(1)	9.8	(14)	17.1	(34)	8.3	(1)	1.1	(1)	9.52	(14)	14.5	(12)	0.0	(0)
Employment-oriented	12.5	(3)	21.7	(31)	20.6	(41)	8.3	(1)	11.8	(12)	25.17	(37)	36.1	(30)	33.3	(2)
Leavers	4.2	(1)	13.3	(19)	8.0	(16)	16.7	(2)	1.1	(1)	0	(0)	1.2	(1)	0.0	(0)
Part-timers	8.3	(2)	27.3	(39)	24.6	(49)	33.3	(4)	6.5	(6)	12.24	(18)	13.3	(11)	33.3	(2)
Part-time returners	16.7	(4)	6.3	(9)	2.0	(5)	8.3	(1)	10.8	(13)	13.61	(20)	14.5	(15)	0.0	(0)
Gradual returners	0.0	(0)	2.8	(4)	2.0	(3)	0.0	(0)	17.2	(12)	9.52	(14)	6.0	(2)	0.0	(0)
Casually employed	33.3	(8)	14.0	(20)	15.6	(31)	8.3	(1)	41.9	(39)	21.77	(32)	13.3	(11)	16.7	(1)
Inactive	20.8	(5)	4.9	(7)	10.1	(20)	16.7	(2)	9.7	(9)	8.16	(12)	1.2	(1)	16.7	(1)
N=	100	(24)	100	(143)	199	(199)	12	(12)	100	(93)	147	(147)	100	(83)	100	(6)

Sources: BHPS, waves A–R (1991–2008), N=329; SOEP, waves H–Y (1991–2008), N=378, own calculations; case numbers in parentheses.

Table A8.2: Single logistic regressions between pairs of clusters

	Cluster 1 (FT) vs. Cluster 2 (EO)		Cluster 1 (FT) vs. Cluster 3 (L)		Cluster 1 (FT) vs. Cluster 4 (PT)			Cluster 1 (FT) vs. Cluster 5 (PR)			Cluster 1 (FT) vs. Cluster 6 (GR)			Cluster 1 (FT) vs. Cluster 7 (CE)			Cluster 1 (FT) vs. Cluster 8 (I)				
	В	S.E.	Sig.	В	S.E.	Sig.	В	S.E.	Sig.	В	S.E.	Sig.	В	S.E.	Sig.	В	S.E.	Sig.	В	S.E.	Sig.
Divorced	-0.09	0.36	0.798	-0.11	0.57	0.848	-0.19	0.39	0.629	0.09	0.53	0.859	-0.57	0.75	0.447	-0.81	0.50	0.108	47.97	5310.51	0.993
preschool child	1.05	0.56	0.061	1.35	0.91	0.136	1.32	0.59	0.025	1.99	0.68	0.003	1.48	0.84	0.078	2.48	0.68	0.000	19.64	5871.77	0.997
Home ownership	-0.45	0.33	0.170	-1.07	0.56	0.057	-0.05	0.43	0.909	0.08	0.55	0.888	-1.34	0.71	0.059	-1.24	0.50	0.013	-1.22	1.53	0.426
Born abroad	-0.28	0.40	0.486	0.31	0.61	0.610	-0.43	0.50	0.395	-0.43	0.63	0.501	-3.40	1.20	0.005	-1.43	0.61	0.019	2.39	1.67	0.154
Vocational qual.	-0.08	0.36	0.826	-0.05	0.54	0.926	1.35	0.43	0.002	0.34	0.54	0.523	-1.16	0.78	0.141	0.10	0.46	0.830	-1.57	1.16	0.174
Academic qual.	0.25	0.44	0.562	-0.98	0.94	0.295	-0.12	0.57	0.841	-0.04	0.64	0.951	-0.30	0.85	0.724	-0.55	0.65	0.401	-14.52	2895.94	0.996
Early single m.	0.71	0.91	0.434	-0.59	1.90	0.755	0.05	1.04	0.961	2.43	1.33	0.067	20.72	17977.54	0.999	1.98	1.16	0.089	25.86	15024.15	0.999
Coparent (short)	-0.16	0.47	0.734	0.48	0.83	0.564	-0.12	0.55	0.822	-0.16	0.73	0.828	0.29	1.19	0.811	-0.16	0.62	0.800	0.02	1.32	0.988
Coparent (medium)	-0.19	0.53	0.722	0.80	0.90	0.374	0.10	0.61	0.866	0.14	0.80	0.857	1.16	1.21	0.337	-1.02	0.70	0.145	-0.20	1.63	0.904
Coparent (Iong)	-0.50	0.92	0.590	1.08	1.73	0.533	1.12	1.01	0.266	-0.48	1.67	0.772	-17.67	17977.54	0.999	-2.46	1.31	0.060	-15.25	13487.11	0.999
Elementary	0.54	0.64	0.405	1.10	0.78	0.159	1.71	0.67	0.010	1.91	0.84	0.024	3.67	1.24	0.003	2.65	0.72	0.000	69.69	9082.59	0.994
Crafts	-0.12	0.47	0.803	-0.83	0.72	0.249	-0.60	0.60	0.320	-0.61	0.93	0.512	1.22	0.99	0.220	0.24	0.65	0.711	3.91	10057.45	1.000
Services	0.41	0.37	0.267	-0.55	0.63	0.387	0.76	0.41	0.066	1.26	0.55	0.021	0.78	0.75	0.301	0.74	0.50	0.134	20.59	8075.36	0.998
2 children	0.31	0.33	0.355	-0.11	0.53	0.836	0.75	0.38	0.048	1.04	0.52	0.047	0.80	0.77	0.301	-0.49	0.47	0.293	1.35	1.47	0.358
3+ children	-0.08	0.52	0.871	0.33	0.73	0.649	1.27	0.57	0.027	1.79	0.71	0.011	1.30	0.95	0.171	0.27	0.59	0.653	-0.05	1.33	0.969
(Constant)	0.68	0.60	0.253	-0.88	1.01	0.382	-1.01	0.74	0.169	-2.27	0.96	0.018	-1.80	1.30	0.166	0.67	0.85	0.434	-69.49	9082.59	0.994

Notes: N=653.

Sources: BHPS, 1991-2008; SOEP 1991-2008.

Chapter 11 Bibliography

- Aassve, A., Billari, F.C., Piccarreta, R., 2007. Strings of Adulthood: A Sequence Analysis of Young British Women's Work-Family Trajectories. Eur J Population 23, 369–388.
- Abbott, A., 1990. A Primer on Sequence Methods. Organization Science 1, 375–392.
- Abbott, A., 1992. From Causes to Events. Sociological Methods & Research 20, 428 –455.
- Abbott, A., Hrycak, A., 1990. Measuring Resemblance in Sequence Data: An Optimal Matching Analysis of Musicians' Careers. The American Journal of Sociology 96, 144–185.
- Adamson, P., Bradshaw, J., Hoelscher, P., Richardson, D., 2007. Child Poverty and Perspective: An Overview of Child Wellbeing in Rich Countries, Innocenti Report Card. Unicef Innocenti Research Centre, Florence.
- Aisenbrey, S., Fasang, A.E., 2010. New Life for Old Ideas: The "Second Wave" of Sequence Analysis Bringing the "Course" Back Into the Life Course. Sociological Methods & Research 38, 420–462.
- Allison, P.D., 1984. Event History Analysis: Regression for Longitudinal Event Data. SAGE.
- Allison, P.D., 2009. Fixed effects regression models. SAGE, Los Angeles.
- Allmendinger, J., 1989. Educational Systems and Labor Market Outcomes. European Sociological Review 5, 231 –250.
- Andreß, H.-J., Borgloh, B., Bröckel, M., Giesselmann, M., Hummelsheim, D., 2006. The Economic Consequences of Partnership Dissolution—A Comparative Analysis of Panel Studies from Belgium, Germany, Great Britain, Italy, and Sweden. Eur Sociol Rev 22, 533–560.
- Baethge, M., Solga, H., Wieck, M., 2007. Berufsbildung im Umbruch: Signale eines überfälligen Aufbruchs. Friedrich-Ebert-Stiftung, Bonn.
- Bahle, T., 2008. The State and Social Services in Britain, France and Germany Since the 1980s. European Societies 10, 25–47.
- Bahle, T., Pfenning, A., 2001. Angebotsformen und Trägerstrukturen sozialer Dienste im europäischen Vergleich.
- Bambra, C., 2004. The Worlds of Welfare: Illusory and Gender Blind? Social Policy and Society 3, 201–211.
- Barnard, H., Turner, C., 2011. Poverty and Ethnicity: A Review of Evidence. Joseph Rowntree Foundation.

- Bastin, S., 2012. Dynamik alleinerziehender Mutterschaft. Partnerschaften in der frühen Elternbiografie, in: Huinink, J., Kreyenfeld, M., Trappe, H. (Eds.), Familie und Partnerschaft in Ost- und Westdeutschland: ähnlich und doch immer noch anders. Budrich, Opladen [u.a.].
- Beblo, M., Wolf, E., 2000. How Much Does A Year Off Cost? Estimating the Wage Effects of Employment Breaks and Part-Time Periods. ZEW Discussion Papers 00-69.
- Beck, U., 1986. Risikogesellschaft: Auf dem Weg in eine andere Moderne. Suhrkamp, Frankfurt am Main.
- Beck, U., 1994. The Debate on the "Individualization Theory" in Today's Sociology in Germany, in: Schäfers, B. (Ed.), Sociology in Germany: Development Institutionalization Theoretical Disputes. Verlag Leske Budrich, Opladen, pp. 191–200.
- Beck, U., Beck-Gernsheim, E., 2001. Individualization: Institutionalized Individualism and Its Social and Political Consequences. SAGE, London.
- Becker, G., 1981. A Treatise on the Family. Harvard University Press, Cambridge Mass.
- Becker, G.S., 1975. Human Capital: A Theoretical and Empirical Analysis, With Special Reference to Education, 2d ed. ed. National Bureau of Economic Research & Columbia University Press, New York.
- Becker, G.S., 1985. Human Capital, Effort, and the Sexual Division of Labor. Journal of Labor Economics 3, S33–58.
- Beck-Gernsheim, E., 2002. Reinventing the Family: In Search of New Lifestyles. Polity Press, Malden Mass.
- Bernal, R., Fruttero, A., 2008. Parental leave policies, intra-household time allocations and children's human capital. J Popul Econ 21, 779–825.
- Blau, F.D., Ferber, M.A., 1986. The Economics of Women, Men, and Work. Prentice-Hall, Englewood Cliffs, N.J.
- Blossfeld, H.-P., 1987. Labor-Market Entry and the Sexual Segregation of Careers in the Federal Republic of Germany. The American Journal of Sociology 93, 89–118.
- Blossfeld, H.-P., Hamerle, A., 1992. Unobserved Heterogeneity in Event History Models. Quality & Quantity 26, 157–168.
- Blum, S., Erler, D., 2012. Germany, in: International Review of Leave Policies and Related Research 2012. International Network of Leave Policies and Research, London.
- Blundell, R., Brewer, M., Shephard, A., 2005. Evaluating the Labour Market Impact of Working Families' Tax Credit Using Difference-in-Differences (HMRC Working Papers No. 4). HM Revenue and Customs, London, UK.
- BMAS, 2011. Alleinerziehende unterstützen Fachkräfte gewinnen (Report No. A858). Bundesministerium für Arbeit und Soziales, Berlin.
- BMFFJ, 2000. Familien ausländischer Herkunft in Deutschland. 6. Familienbericht (No. 14/4357). Berlin.

- BMFSFI, 2008a. Alleinerziehende in Deutschland.
- BMFSFJ, 2008b. Dossier: Kindergeld in Deutschland Familien wirksam fördern. Bundesministerium für Familie, Senioren, Frauen und Jugend, Berlin.
- BMFSFJ, 2010. Familien mit Migrationshintergrund. Berlin.
- BMFSFJ, 2011a. Lebenswelten und -wirklichkeiten von Alleinerziehenden. Bundesministerium für Familie, Senioren, Frauen und Jugend, Berlin.
- BMFSFJ, 2011b. Elterngeld und Elternzeit: das Bundeselterngeld- und Elternzeitgesetz. BMFSFJ, Berlin; Rostock.
- BMFSFJ, 2012. Alleinerziehende in Deutschland Lebenssituationen und Lebenswirklichkeiten von Müttern und Kindern (No. Ausgabe 28). Bundesministerium für Familie, Senioren, Frauen und Jugend, Berlin.
- Bode, I., 2003. The Organisational Evolution of the Childcare Regime in Germany: Issues and Dynamics of a Public-private Partnership. Annals of Public and Cooperative Economics 74, 631–658.
- Bonoli, G., 2005. The politics of the new social policies: providing coverage against new social risks in mature welfare states. Policy & Politics 33, 431–449.
- Bradbury, B., Jenkins, S., Micklewright, J. (Eds.), 2001. The dynamics of child poverty in industrialised countries. Cambridge University Press.
- Bradshaw, J., Kennedy, S., Kilkey, M., Hutton, S., Corden, A., Eardley, T., Holmes, H., Neale, J., 1996. The Employment of Lone Parents: A Comparison of Policy in 20 Countries. Family Policy Studies Centre/Joseph Rowntree Foundation, London.
- Bräuninger, B., Lange, A., Lüscher, K., 1996. Familienwissenschaftliche Rhetorik: eine explorative Analyse ausgewählter Texte (Working Paper Arbeitspapiere / Forschungsbereich Gesellschaft und Familie No. 20). Konstanz.
- Breen, R., 2005. Explaining Cross-national Variation in Youth Unemployment. European Sociological Review 21, 125–134.
- Breen, R., Cooke, L.P., 2005. The Persistence of the Gendered Division of Domestic Labour. Eur Sociol Rev 21, 43–57.
- Breen, R., Goldthorpe, J.H., 1997. Explaining Educational Differentials: Toward a Formal Rational Action Theory, in: Grusky, D. (Ed.), 2001, Social Stratification: Class, Race, and Gender in Sociological Perspective. Westview Press, Boulder, Colo., pp. 459–470.
- Breen, R., Jonsson, J.O., 2005. Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility. Annual Review of Sociology 31, 223–244.
- Breen, R., Luijkx, R., Müller, W., Pollak, R., 2009. Nonpersistent Inequality in Educational Attainment: Evidence from Eight European Countries. American Journal of Sociology 114, 1475–1521.
- Brewer, M., Crawford, C., Dearden, L., 2005. Reforms to Childcare Policy, in: Green Budget 2005. Institute for Fiscal Studies.

- Brüderl, J., 2006. Was kann familiensoziologische Theorie? Korreferat zum Beitrag von Günter Burkart. Zeitschrift für Familienforschung Journal of Family Research 18.
- Brüderl, J., 2010. Kausalanalyse mit Paneldaten, in: Handbuch Der Sozialwissenschaftlichen Datenanalyse. VS Verlag, Wiesbaden.
- Brugiavini, A., Pasini, G., Trevisan, E., 2010. Maternity and Labour Market Outcome: Short and Long Term Effects (MEA Discussion Paper Series No. 10222). Mannheim Research Institute for the Economics of Aging (MEA), University of Mannheim.
- Brzinsky-Fay, C., 2007. Lost in Transition? Labour Market Entry Sequences of School Leavers in Europe. European Sociological Review 23, 409 –422.
- Brzinsky-Fay, C., Kohler, U., Luniak, M., 2006. Sequence analysis with Stata. The Stata Journal 6, 435–460.
- Bundesagentur für Arbeit, 2012. Kindergeld [WWW Document]. URL http://www.arbeitsagentur.de/zentraler-Content/A09-Kindergeld/A091-steuerrechtliche-Leistungen/Allgemein/Kindergeld.html (accessed 12.11.12).
- Busemeyer, M., 2009. Asset Specificity, Institutional Complementarities and the Variety of Skill Regimes in Coordinated Market Economies. Socio-Economic Review 7, 375–406.
- Butler, J., 1990. Gender Trouble: Feminism and the Subversion of Identity. Routledge, New York.
- Catlett, B.S., McKenry, P.C., 1996. Implications of Feminist Scholarship for the Study of Women's Postdivorce Economic Disadvantage. Family Relations 45, 91–97.
- Chambaz, C., 2001. Lone-parent Families in Europe: A Variety of Economic and Social Circumstances. Social Policy & Administration 35, 658–671.
- Chevalier, A., Viitanen, T.K., 2003. The Long-run Labour Market Consequences of Teenage Motherhood in Britain. Journal of Population Economics 16, 323–343.
- Choo, H.Y., Ferree, M.M., 2010. Practicing Intersectionality in Sociological Research: A Critical Analysis of Inclusions, Interactions, and Institutions in the Study of Inequalities. Sociological Theory 28, 129–149.
- Clasen, J., 2011. Converging Worlds of Welfare? British and German Social Policy in the 21st Century. Oxford University Press, Oxford; New York.
- Clasen, J., Clegg, D., 2006. Beyond Activation: Reforming European Unemployment Protection Systems in Post-Industrial Labour Markets. European Societies 8, 527–553.
- Clasen, J., Clegg, D., 2011. Unemployment Protection and Labour Market Change in Europe: Towards "Triple Integration"?, in: Clasen, J., Clegg, D. (Eds.), Regulating the Risk of Unemployment: National Adaptations to Post-industrial Labour Markets in Europe. Oxford University Press, Oxford; New York.

- Connolly, S., Gregory, M., 2008. Moving Down: Women's Part-Time Work and Occupational Change in Britain 19912001. The Economic Journal 118, F52–F76.
- Conway, E., 2010. Poor Cows or Dangerous Beasts? The Representation of "Underclass" Women in Broadsheet Newspapers: Media Portrayels, Political Identity and Policy. Presented at the SPA Annual Conference 2010, Lincoln.
- Cooke, L.P., Baxter, J., 2010. "Families" in International Context: Comparing Institutional Effects Across Western Societies. Journal of Marriage and Family 72, 516–536.
- Cooke, L.P., Sayer, L.C., 2012. The Context of Relative Equality: Comparing Educational Gradients in the Gendered Division of Labor in Three Liberal Markets. LIS Working Paper Series.
- Cornelißen, W., Rusconi, A., Becker, R. (Eds.), 2011. Berufliche Karrieren von Frauen: Hürdenläufe in Partnerschaft und Arbeitswelt, 1. Aufl. ed. VS Verlag für Sozialwissenschaften, Wiesbaden.
- Craig, L., Mullan, K., 2011. How Mothers and Fathers Share Childcare A Cross-National Time-Use Comparison. American Sociological Review 76, 834–861.
- Crompton, R., 2008. Class and Stratification. Polity Press, Cambridge, UK; Malden, MA.
- Crouch, C., 2008. Change in European Societies since the 1970s. West European Politics 31, 14.
- Culpepper, P.D., 2007. Small States and Skill Specificity Austria, Switzerland, and Interemployer Cleavages in Coordinated Capitalism. Comparative Political Studies 40, 611–637.
- Dahrendorf, 1968. Gibt es noch Klassen? Die Begriffe der "sozialen Schicht" und "sozialen Klasse" in der Sozialanalyse der Gegenwart, in: Seidel, B., Jenkner, S. (Eds.), Klassenbildung und Sozialschichtung. Wissenschaftliche Buchgesellschaft, Darmstadt.
- Dale, A., Lindley, J., Dex, S., 2006. A Life-Course Perspective on Ethnic Differences in Women's Economic Activity in Britain. European Sociological Review 22, 459–476.
- Daly, M., 2010. Shifts in Family Policy in the UK Under New Labour. Journal of European Social Policy 20, 433 –443.
- Daly, M., 2011. Family Policy: Striving for Sustainability, in: Clasen, J. (Ed.), Converging Worlds of Welfare? British and German Social Policy in the 21st Century. Oxford University Press, Oxford; New York, pp. 75–90.
- Daly, M., Lewis, J., 2000. The Concept of Social Care and the Analysis of Contemporary Welfare States. The British Journal of Sociology 51, 281–298.
- Daly, M., Rake, K., 2003. Gender and the Welfare State. Polity, Oxford. Daycare Trust, 2012. Childcare Costs Survey 2012.

- Deißinger, T., 2001. Zum Problem der historisch-kulturellen Bedingtheit von Berufsbildungssystemen Gibt es eine "Vorbildfunktion des deutschen Dualen Systems im europäischen Kontext?, in: Berufliche Bildung zwischen nationaler Tradition und globaler Entwicklung: Beiträge zur vergleichenden Berufsbildungsforschung. Nomos-Verl.-Ges., Baden-Baden, pp. 13–36.
- Department for Education, 2012. Provision for Children Under Five Years of Age in England: January 2012. Department for Education.
- Department for Work and Pensions, 2012. Family Resources Survey UK.
- Destatis, 2010. Alleinerziehende in Deutschland. Ergebnisse des Mikrozensus 2009. Statistisches Bundesamt, Wiesbaden.
- Destatis, 2011. Datenreport 2011.
- Destatis, 2012a. Geburten in Deutschland. Statistisches Bundesamt, Wiesbaden.
- Destatis, 2012b. Hochschulen Bestandene Prüfungen. Statistisches Bundesamt, Wiesbaden.
- Dex, S., Joshi, H., 1999. Careers and Motherhood: Policies for Compatibility. Cambrige Journal of Economics 23, 641–659.
- DfES, 2009. Provision for Children Under Five Years of Age in England: January 2009. Department for Education and Skills.
- Directgov, 2012a. Children and Tax Credits [WWW Document]. URL http://www.direct.gov.uk (accessed 7.23.12).
- Directgov, 2012b. Free Early Years Learning for Three and Four Year Olds [WWW Document]. URL http://www.direct.gov.uk (accessed 7.23.12).
- Directgov, 2012c. Changes to Income Support for Lone Parents [WWW Document]. URL http://www.direct.gov.uk (accessed 4.20.12).
- Drobnič, S., 2003. Ties Between Lives. Dynamics of Employment Patterns of Spouses, in: Heinz, W., Marshall, V. (Eds.), Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations. Aldine de Gruyter, New York, pp. 259–278.
- Duncan, A., 1991. The Dependence of Labour Supply Behaviour on Family Composition The Case of the Single Parent, in: Hutton, J., Hutton, S., Pinch, T., Shiell, A. (Eds.), Dependency to Enterprise. Routledge.
- Duncan, S., 2007. What's the Problem with Teenage Parents? And What's the Problem with Policy? Critical Social Policy 27, 307–334.
- Duncan, S., Edwards, R. (Eds.), 1997. Single Mothers in an International Context: Mothers or Workers? UCL Press, London; Bristol Pa.
- DWP, 2005. Income Support Quarterly Statistical Enquiries. Department for Work and Pensions.
- DWP, 2010a. Families with Children in Britain: Findings from the 2008 Families and Children Study (FACS), DWP Research Report RR656 (RR 656). London.
- DWP, 2010b. Lone Parent Obligations. Department for Work and Pensions, Research Report 632.

- Ebbinghaus, B., 2005. When Less is More: Selection Problems in Large- N and Small- N Cross-National Comparisons. International Sociology 20, 133–152.
- Edwards, Duncan, S., 1996. Rational Economic Man or Lone Mothers in Context? The Uptake of Paid Work, in: Silva, E.B. (Ed.), Good Enough Mothering?: Feminist Perspectives on Lone Motherhood. Routledge, pp. 114–129.
- Elliott, J., 2005. Using Narrative in Social Research: Qualitative and Quantitative Approaches. Sage Publications Ltd.
- Enders-Dragässer, U., Sellach, B., 2002. Weibliche Lebenslagen und Armut am Beispiel von allein erziehenden Frauen, in: Hammer, V., Lutz, V.H.R. (Eds.), Weibliche Lebenslagen und soziale Benachteiligung: theoretische Ansätze und empirische Beispiele. Campus Verlag, pp. 18–44.
- England, P., Farkas, G., 1986. Households, Employment, and Gender: A Social, Economic, and Demographic View. Aldine Publishing Company.
- Erikson, R., Goldthorpe, J.H., 1992. Trends in Class Mobility: The Post-War European Experience, in: Grusky, D. (Ed.), 2001, Social Stratification: Class, Race, and Gender in Sociological Perspective. Westview Press, Boulder, Colo., pp. 344–372.
- Ermisch, J., Francesconi, M., 2000. The Increasing Complexity of Family Relationships: Lifetime Experience of Lone Motherhood and Stepfamilies in Great Britain. European Journal of Population/Revue européenne de Démographie 16, 235–249.
- Ermisch, J., Francesconi, M., 2001. Family structure and children's achievements. Journal of Population Economics 14, 249–270.
- Ermisch, J., Pevalin, D.J., 2003. Who Has a Child as a Teenager? (No. 2003-30). ISER Working Paper Series, Essex, UK.
- Ermisch, J., Pevalin, D.J., 2005. Early motherhood and later partnerships. Journal of Population Economics 18, 469–489.
- Esping-Andersen, G., 1990. The Three Worlds of Welfare Capitalism. Princeton University Press, Princeton N.J.
- Esping-Andersen, G., 1999. Social Foundations of Postindustrial Economies. Oxford University Press, Oxford; New York.
- Estévez-Abe, M., 2005. Gender Bias in Skills and Social Policies: The Varieties of Capitalism Perspective on Sex Segregation. Social Politics: International Studies in Gender, State & Society 12, 180–215.
- Estévez-Abe, M., 2006. Gendering the Varieties of Capitalism: A Study of Occupational Segregation by Sex in Advanced Industrial Societies. World Politics 59, 142–175.
- Estévez-Abe, M., Iversen, T., Soskice, 2001. Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State, in: Hall, P., Soskice, D. (Eds.), Varieties of Capitalism. Oxford University Press, Oxford.

- Eurostat, 2010. Eurostat Quality Profile: Formal Childcare by Duration and Age Group.
- Eurostat, 2012a. Marriage and Divorce Statistics.
- Eurostat, 2012b. Employment Rates by Sex, Age Groups, Highest Level of Education Attained and Household Composition.
- Eurostat, 2012c. Employment Rates by Sex, Age Groups and Highest Level of Education Attained.
- Eurostat, 2012d. Formal Childcare by Age Group and Duration.
- Eurostat, 2013. Mean Equivalised Net Income.
- Eurydice, 2010. Organisation of School Time in Europe. Primary and Secondary Education 2010/11 School Year. European Commission, Brussels.
- Eurydice, 2012. Compulsory age of starting school in European countries [WWW Document]. URL http://www.nfer.ac.uk/ (accessed 7.24.12).
- Evans, M., Harkness, S., Ortiz, R.A., 2004. Lone Parents Cycling Between Work and Benefits. DWP Research Report ALL.
- Evans, T., Thane, P., 2011. Lone Mothers. Women's History Review 20, 3–9.
- Evers, A., Lewis, J., Riedel, B., 2005. Developing child-care provision in England and Germany: problems of governance. Journal of European Social Policy 15, 195–209.
- Fagnani, J., 2012. Recent Reforms in Childcare and Family Policies in France and Germany: What Was at Stake? Children and Youth Services Review 34, 509–516.
- Ferragina, E., Seeleib-Kaiser, M., Tomlinson, M., 2012. Unemployment Protection and Family Policy at the Turn of the 21st Century: A Dynamic Approach to Welfare Regime Theory. Social Policy & Administration no–no.
- Finn, D., Gloster, R., 2010. Lone Parent Obligations A Review of Recent Evidence on the Work-related Requirements Within the Benefit Systems of Different Countries (Research Report No. 632). Department for Work and Pensions, Norwich.
- Foster, E.M., 1993. How Should Sociologists Treat Becker's "Treatise on the Family"? Sociological Forum 8, 317–329.
- Francesconi, M., van der Klaauw, W., 2007. The Socioeconomic Consequences of "In-Work" Benefit Reform for British Lone Mothers. Journal of Human Resources 42, 1–31.
- Fraser, N., 1997. After the Family Wage. A Postindustrial Thought Experiment, in: Justice Interruptus: Critical Reflections on the "Postsocialist" Condition. Routledge, pp. 41–68.
- Freeth, S., Fong, J., 2011. Experience of Using Childcare and Claiming the Childcare Element of Working Tax Credit, HM Revenue and Customs Research Report. HM Revenue and Customs, London, UK.
- Gallie, D., Paugam, S., 2000. The Experience of Unemployment in Europe: The Debate, in: Gallie, D., Paugam, S. (Eds.), Welfare Regimes and the

- Experience of Unemployment in Europe. Oxford University Press, Oxford [England]; New York.
- Gangl, M., 2003. The Structure of Labour Market Entry in Europe: A Typological Analysis, in: Müller, W., Gangl, M. (Eds.), Transitions from Education to Work in Europe. Oxford University Press.
- Gangl, M., 2006. Scar Effects of Unemployment: An Assessment of Institutional Complementarities. American Sociological Review 71, 986–1013.
- Gerlach, I., 2009. Familienpolitik. VS Verlag für Sozialwissenschaften.
- Giddings, L., Dingeldey, I., Ulbricht, S., 2004. The Commodification of Lone Mothers' Labor: A comparison of US and German Policies. Feminist Economics 10, 115–142.
- Gierull, B., 2002. Allein erziehende Migrantinnen (in der Familienselbsthilfe). VAMV Landesverband NRW, Essen.
- Giesselmann, M., Windzio, M., 2012. Regressionsmodelle zur Analyse von Paneldaten. VS Verlag für Sozialwissenschaften.
- Gingerbread, 2010. Single Parents and Childcare. Gingerbread, Policy Briefing, London.
- Gingerbread, 2012. Gingerbread Statistics [WWW Document]. URL http://www.gingerbread.org.uk/content.aspx?CategoryID=365 (accessed 7.25.12).
- Goerne, A., 2012. Towards Greater Personalisation of Active Labour Market Policy? Britain and Germany Compared (PhD Dissertation). University of Edinburgh, Edinburgh.
- Gold, T., 2011. The Right Has Chosen Its Scapegoat The Single Mum. And She Will Bleed. the guardian.
- Goldthorpe, J.H., 1987. Family Life in Western Societies: A Historical Sociology of Family Relationships in Britain and North America. Cambridge University Press, Cambridge; New York.
- Goldthorpe, J.H., 1996. Class Analysis and the Reorientation of Class Theory: The Case of Persisting Differentials in Educational Attainment. The British Journal of Sociology 47, 481–505.
- Gornick, J.C., Meyers, M.K., 2005. Families that Work: Policies for Reconciling Parenthood and Employment. Russell Sage Foundation.
- Gornick, J.C., Meyers, M.K., Ross, K.E., 1997. Supporting the Employment of Mothers: Policy Variation Across Fourteen Welfare States. Journal of European Social Policy 7, 45 –70.
- Gospel, H., 1995. The Decline of Apprenticeship Training in Britain. Industrial Relations Journal 26, 32–44.
- Gottschall, K., Bird, K., 2003. Family Leave Policies and Labor Market Segregation in Germany: Reinvention or Reform of the Male Breadwinner Model? Review of Policy Research 20, 115–134.
- Gov.uk, 2012a. Benefits [WWW Document]. URL https://www.gov.uk/browse/benefits (accessed 12.4.12).

- Gov.uk, 2012b. Maternity Leave [WWW Document]. URL https://www.gov.uk/maternity-leave/overview (accessed 12.4.12).
- Gov.uk, 2013. Child Benefit [WWW Document]. URL https://www.gov.uk/child-benefit (accessed 4.1.13).
- Graham, H., 2011. Capable of Change? The Impact of Policy on the Reconciliation of Paid Work and Care in Couples with Children (PhD Dissertation). University of Edinburgh, Edinburgh.
- Graham, H., McDermott, E., 2006. Qualitative Research and the Evidence Base of Policy: Insights from Studies of Teenage Mothers in the UK. Journal of Social Policy 35, 21–37.
- Gregg, P., Harkness, S., 2003. Welfare Reform and Lone Parents in the UK. The Centre for Market and Public Organisation Working Paper 03.
- Gregg, P., Harkness, S., Smith, S., 2009. Welfare Reform and Lone Parents in the UK. The Economic Journal 119, 38–65.
- GROS, 2011. Vital Events Reference Tables 2010 Section 3: Births.
- Guo, J., Gilbert, N., 2007. Welfare State Regimes and Family Policy: A Longitudinal Analysis. Int J Soc Welfare 16, 307–313.
- Hall, P., Soskice, D., 2001. Varieties of Capitalism. The Institutional Foundations of Comparative Advantage. Oxford University Press,, Oxford.
- Halpin, B., Chan, T.W., 1998. Class Careers as Sequences: An Optimal Matching Analysis of Work-Life Histories. European Sociological Review 14, 111–130.
- Hancioglu, M., Hartmann, B., 2012. What Makes Single Mothers Expand or Reduce Employment? (No. 446). SOEPpaper 446, DIW Berlin, The German Socio-Economic Panel (SOEP), Berlin.
- Hannan, D., Raffe, D., Smyth, E., 1996. Cross-National Research on School to Work Transitions: An Analytical Framework, in: Werquin, P. (Ed.), Comparative Analysis of School to Work Transitions.
- Hansen, K., Hawkes, D., Joshi, H., 2009. The Timing of Motherhood, Mothers' Employment and Child Outcomes, in: Kneale, D., Coast, E., Stillwell, J. (Eds.), Fertility, Living Arrangements, Care and Mobility. Springer Netherlands, Dordrecht, pp. 59–80.
- Haux, T., 2011. Lone Parents and the Conservatives: Anything New? Social Policy Review 147–164.
- Haux, T., 2012. Activating Lone Parents: An Evidence-Based Policy Appraisal of Welfare-To-Work Reform in Britain. Social Policy and Society 11, 1–14.
- Hawkesworth, M., 1997. Confounding Gender. Signs 22, 649–685.
- Heeringa, S.G., 2012. Methodology of Longitudinal Surveys. Public Opin Q.
- Heimer, A., Knittel, T., Steidle, H., 2009. Vereinbarkeit von Famile und Beruf für Alleinerziehenden.
- Herrmann, H., 2001. Liebesbeziehungen Lebensentwürfe: eine Soziologie der Partnerschaft, Erstaufl. ed. Telos, Münster.

- Hobcraft, J., Kiernan, K., 2001. Childhood Poverty, Early Motherhood and Adult Social Exclusion. British Journal of Sociology 52, 495–517.
- Hoffman, S.D., Maynard, R.A., 2008. Kids Having Kids: Economic Costs & Social Consequences of Teen Pregnancy. The Urban Insitute, Washington.
- Holdsworth, C., Dale, A., 1997. Ethnic Differences in Women's Employment. Work Employment Society 11, 435–457.
- Hollstein, B., 2003. Netzwerkveränderungen verstehen. Zur Integration von Struktur- und akteurstheoretischen Perspektiven. Berliner Journal für Soziologie 13, 153–174.
- hooks, bell, 2000. All About Love: New Visions. William Morrow, New York.
- Hosmer, D.W., Lemeshow, S., 1989. Applied logistic regression. Wiley, New York
- Hox, J., 2010. Multilevel Analysis: Techniques and Applications. Routledge.
- Hox, J.J., Maas, C.J.M., 2005. Sufficient Sample Sizes for Multilevel Modeling. Methodology 1, 86–92.
- Huinink, J., Kreyenfeld, M., Trappe, H. (Eds.), 2012. Familie und Partnerschaft in Ost- und Westdeutschland: ähnlich und doch immer noch anders. Budrich, Opladen [u.a.].
- Iannelli, C., Raffe, D., 2007. Vocational Upper-Secondary Education and the Transition from School. European Sociological Review 23, 49–63.
- IFS, 2012. The Institute For Fiscal Studies Benefit Tables [WWW Document]. URL http://www.ifs.org.uk/fiscalFacts/benefitTables (accessed 12.11.12).
- ILO, 2004. ISCO International Standard Classification of Occupations [WWW Document]. URL http://www.ilo.org/public/english/bureau/stat/isco/index.htm (accessed 6.27.12).
- INSM, ELTERN, 2010. Kindergarten-Monitor 2010: Das kosten Kitas in deutschen Städten. INSM and ELTERN.
- ISER News, 2012. Only Half of British Children Still Living With Both Parents At 15.
- Iversen, T., Soskice, D., 2001. An Asset Theory of Social Policy Preferences. American Political Science Review 95, 875–893.
- Jaehrling, K., Erlinghagen, M., Kalina, T., Mümken, S., Mesaros, L., Schwarzkopf, M., 2012. Arbeitsmarktintegration und sozio-ökonomische Situation von Alleinerziehenden. Ein empirischer Vergleich: Deutschland, Frankreich, Schweden, Vereinigtes Königreich (BMAS Forschungsbericht). BMAS, Berlin.
- Jaquette, J.S., 1982. Women and Modernization Theory: A Decade of Feminist Criticism. World Politics 34, 267–284.
- Jenkins, S., Symons, E., 2001. Child Care Costs and Lone Mothers' Employment Rates: UK Evidence. The Manchester School 69, 121–147.

- Kaelble, H., 2007. Sozialgeschichte Europas: 1945 bis zur Gegenwart. Bundeszentrale f. politische Bildung, Bonn.
- Kalton, G., Kasprzyk, D., McMillen, D., 1989. Nonsampling Error in Panel Surveys, in: Kasprzyk, D., Duncan, G., Kalton, G., Singh, M.P. (Eds.), Panel Surveys. Wiley, New York.
- Kaspiew, R., Gray, M., Weston, R., Moloney, L., Hand, K., Qu, L., Family Law Evaluation Team, 2009. Evaluation of the 2006 Family Law Reforms. Australian Institute of Family Studies, Melbourne.
- Kerckhoff, A.C., 1995. Institutional Arrangements and Stratification Processes in Industrial Societies. Annual Review of Sociology 21, 323–347.
- Kerckhoff, A.C., 2000. Transition from School to Work in Comparative Perspective, in: Hallinan, M.T. (Ed.), Handbook of the Sociology of Education. Springer US, pp. 453–474.
- Kiernan, K., 1992. The Impact of Family Disruption in Childhood on Transitions Made in Young Adult Life. Population Studies 46, 213– 234.
- Kiernan, K., 1997. Becoming a Young Parent: A Longitudinal Study of Associated Factors. The British Journal of Sociology 48, 406–428.
- Klein, T., Braun, U., 1995. Der berufliche Wiedereinstieg von Muettern zwischen abnehmendem Betreuungsaufwand und zunehmender Dequalifizierung. Zeitschrift fuer Soziologie 24, 58–68.
- Klett-Davies, M., 2005. The Diversity of State Benefit Dependent Lone Mothers: The Use of Type Categories As an Analytical Tool. Sociological Research Online 10.
- Kohli, M., 1985. Die Institutionalisierung des Lebenslaufs: Historische Befunde und theoretische Argumente. Kölner Zeitschrift für Soziologie und Sozialpsychologie 37, 1–29.
- Kohli, M., Albertini, M., 2008. The Family as a Source of Support for Adult Children's Own Family Projects: European Varieties, in: Saraceno, C. (Ed.), Families, Ageing and Social Policy: Intergenerational Solidarity in European Welfare States. Edward Elgar Publishing.
- Konietzka, D., Kreyenfeld, M., 2005. Nichteheliche Mutterschaft und soziale Ungleichheit im familialistischen Wohlfahrtsstaat. KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie 57, 32–61.
- König, W., Lüttinger, P., Müller, W., 1988. A Comparative Analysis of the Development and Structure of Educational Systems. Methodological Foundations and the Construction of a Comparative Educational Scale. CASMIN Working Paper 12.
- Korpi, W., 2000. Faces of Inequality: Gender, Class and Patterns of Inequalities in Different Types of Welfare States (LIS Working Paper No. 224). Luxembourg Income Study, Luxembourg.
- Krause, P., Möhring, K., Zähle, T., 2009. Erwerbsverläufe beim Übergang in den Ruhestand. WSI Mitteilungen 11, 1–11.

- Kreyenfeld, M., 2010. Uncertainties in Female Employment Careers and the Postponement of Parenthood in Germany. Eur Sociol Rev 26, 351–366.
- Kreyenfeld, M., Hank, K., 2000. Does the Availability of Child Care Influence the Employment of Mothers? Findings from Western Germany. Population Research and Policy Review 19, 317–337.
- Kröger, T., 2011. Defamilisation, Dedomestication and Care Policy: Comparing Childcare Service Provisions of Welfare States. International Journal of Sociology and Social Policy 31, 424–440.
- Krüger, D., Potts, L., 2011. Alleinerziehende Migrantinnen in Deutschland-Leben im Spannungsfeld von Armut und Selbstbestimmung. BZgA Forum 1, 40–43.
- Krüger, H., 2003. Berufliche Bildung. Der deutsche Sonderweg und die Geschlechterfrage. Berliner Journal für Soziologie 13, 497–510.
- Krüger, H., Lévy, R., 2001. Linking Life Courses, Work, and the Family: Theorizing a Not So Visible Nexus between Women and Men. Canadian Journal of Sociology Cahiers canadiens de sociologie 26, 145.
- Kull, S., Riedmüller, B., 2007. Auf dem Weg zur Arbeitsmarktbürgerin? Neue Konzepte der Arbeitsmarktpolitik am Beispiel allein erziehender Frauen. edition sigma, Düsseldorf.
- Langeheine, R., van de Pol, F., 1994. Discrete-Time Mixed Markov Latent Class Models, in: Dale, A., Davies, R.B., Economic and Social Research Council (Great Britain) (Eds.), Analyzing Social and Political Change: A Casebook of Methods. Sage Publications, pp. 170–197.
- Leisering, L., Schumann, K., 2003. How Institutions Shape the German Life Course, in: Heinz, W., Marshall, V. (Eds.), Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations. Aldine de Gruyter, New York, pp. 193–210.
- Leitner, S., 2003. Varieties of Familialism: The Caring Function of the Family in Comparative Perspective. European Societies 5, 353–375.
- Leitner, S., Lessenich, S., 2007. (In-)dependence As Dependent Variable: Conceptualizing and Measuring "De-familization", in: Clasen, J., Siegel, N. (Eds.), Investigating Welfare State Change: the "Dependent Variable Problem" in Comparative Analysis. Edward Elgar, Cheltenham UK; Northampton MA.
- Lenz, K., 2009a. Haben Familien und Familiensoziologie noch eine Zukunft?, in: Burkart, G. (Ed.), Zukunft der Familie: Prognosen und Szenarien. Barbara Budrich.
- Lenz, K., 2009b. Soziologie der Zweierbeziehung: Eine Einführung. VS Verlag.
- Lévy, R., 1977. Der Lebenslauf als Statusbiographie: die weibliche Normalbiographie in makrosoziologischer Perspektive. F. Enke, Stuttgart.
- Lewis, J., 1989. Lone Parent Families: Politics and Economics. Journal of Social Policy 18, 595–600.

- Lewis, J., 1999. The "Problem" of Lone Motherhood in Comparative Perspective, in: Clasen, J. (Ed.), Comparative Social Policy: Concepts, Theories, and Methods. Blackwell Publishers, Oxford; Malden Mass.
- Lewis, J., 2009. Work-family Balance, Gender and Policy. Edward Elgar, Cheltenham; Northampton MA.
- Lewis, J., Hobson, B., 1997. Introduction, in: Lewis, J. (Ed.), Lone Mothers in European Welfare Regimes: Shifting Policy Logics. J. Kingsley Publishers, London; Philadelphia Pa., pp. 1–20.
- Lewis, J., Knijn, T., Martin, C., Ostner, I., 2008. Patterns of Development in Work/Family Reconciliation Policies for Parents in France, Germany, the Netherlands, and the UK in the 2000s. Soc Pol 15, 261–286.
- Lietzmann, T., 2009. Warum es Alleinerziehende besonders schwer haben (IAB-Kurzbericht No. 12/2009). Nürnberg.
- Lijphart, A., 1975. The Comparable-Cases Strategy in Comparative Research. Comparative Political Studies 8, 158–177.
- Lister, R., 1994. "She Has Other Duties": Women, Citizenship and Social Security, in: Baldwin, S., Falkingham, J. (Eds.), Social Security and Social Change: New Challenges to the Beveridge Model. Harvester Wheatsheaf, New York; London, pp. 31–44.
- Lister, R., 2000. Gender and the Analysis of Social Policy, in: Lewis, Gewitz, S., Clarke, J. (Eds.), Rethinking Social Policy. Open University in association with SAGE Publications, London; Thousand Oaks, CA.
- Lister, R., 2006. Children (But Not Women) First: New Labour, Child Welfare and Gender. Critical Social Policy 26, 315 –335.
- Lohmann, H., 2009. Konzept und Messung von Defamilisierung in international vergleichender Perspektive, in: Pfau-Effinger, B., Magdalenić, S.S., Wolf, C. (Eds.), International Vergleichende Sozialforschung. VS Verlag für Sozialwissenschaften, Wiesbaden.
- Long, J.S., Freese, J., 2006. Regression Models for Categorical Dependent Variables Using Stata. StataCorp LP, College Station, Tex.
- Ludwig-Mayerhofer, W., Solga, H., Leuze, K., Dombrowski, R., Künster, R., Ebralidze, E., Fehring, G., Kühn, S., 2011. Vocational Education and Training and Transitions into the Labor Market. Zeitschrift für Erziehungswissenschaft 14, 251–266.
- Luhmann, N., 2008. Liebe: eine Übung. Suhrkamp, Frankfurt am Main.
- Lund, M., 1986. The Politics of a National Minimum Income: The Poor Law Coalition in Postwar Britain, in: Ashford, D., Kelley, E.W. (Eds.), Nationalizing Social Security in Europe & America. Greenwich, Conn.
- Lynn, P., 2006. Quality Profile: British Household Panel Survey Waves 1 to 10. ISER, Colchester.
- Lyonette, C., Kaufman, G., Crompton, R., 2011. "We Both Need to Work" Maternal Employment, Childcare and Health Care in Britain and the USA. Work Employment Society 25, 34–50.
- Machin, S., Vignoles, A., Centre for the Economics of Education (Great Britain), 2006. Education Policy in the UK. Centre for Economic

- Performance, London School of Economics and Political Science, London.
- Macindoe, H., Abbott, A., 2004. Sequence Analysis and Optimal Matching Techniques for Social Science Data, in: Hardy, M., Bryman, A. (Eds.), Handbook of Data Analysis. Sage Publications, London; Thousand Oaks, CA.
- MacInnes, J., 2006. Work-life Balance in Europe: A Response to the Baby Bust or Reward for the Baby Boomers? European Societies 8, 223–249.
- Mädje, E., Neusüss, C., 1994. Lone Mothers on Welfare in West Berlin: Disadvantaged Citizens or Women Avoiding Patriarchy? Environment and Planning A 26, 1419 1433.
- Mädje, E., Neusüss, C., 1996. Frauen im Sozialstaat: zur Lebenssituation alleinerziehender Sozialhilfeempfängerinnen. Campus, Frankfurt a. M.
- Mahoney, J., 2003. Comparative Historical Analysis in the Social Sciences. Cambridge University Press, Cambridge UK; New York.
- Mandel, H., Semyonov, M., 2005. Family Policies, Wage Structures, and Gender Gaps: Sources of Earnings Inequality in 20 Countries. American sociological review. 70, 949.
- Mandel, H., Shalev, M., 2009. Gender, Class, and Varieties of Capitalism. Social Politics: International Studies in Gender, State & Society 16, 161–181.
- Manser, M., Brown, M., 1980. Marriage and Household Decision-Making: A Bargaining Analysis. International Economic Review 21, 31–44.
- Marsden, D., 1969. Mothers Alone. Poverty and the Fatherless Family. Allen Lane, London.
- Marsden, D., Ryan, P., 1990. Institutional Aspects of Youth Employment and Training Policy in Britain. British Journal of Industrial Relations 28, 351–369.
- Marsh, A., 2001. Helping British Lone Parents Get and Keep Paid Work, in: Lone Parents, Employment and Social Policy: Cross-national Comparisons. Policy Press, Bristol, pp. 11–36.
- Marshall, V., Mueller, M., 2003. Theoretical Roots of the Life Course, in: Heinz, W., Marshall, V. (Eds.), Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations. Aldine de Gruyter, New York, pp. 3–32.
- Mayer, K.U., 1998. Lebensverlauf, in: Schäfers, B., Zapf, W. (Eds.), Handwörterbuch zur Gesellschaft Deutschlands. Leske + Budrich, Opladen, pp. 438–451.
- Mayer, K.U., 2009. New Directions in Life Course Research. Annual Review of Sociology 35, 413–433.
- Mayer, K.U., Müller, W., 1989. Lebensverläufe im Wohlfahrtsstaat, in: Weymann, A. (Ed.), Handlungsspielräume: Untersuchungen zur Individualisierung und Institutionalisierung von Lebensläufen in der Moderne. F. Enke, pp. 41–60.

- Mayer, K.U., Solga, H., 2008. Skill Formation. Cambridge University Press.
- McDaniel, S., Bernard, P., 2011. Life Course as a Policy Lens: Challenges and Opportunities. Canadian Public Policy 37, 1–13.
- McKay, S., 2003. The Dynamics of Lone Parents, Employment and Poverty in Great Britain. Sociologia e Politica Sociale 2.
- McLanahan, S., 2004. Diverging Destinies: How Children Are Faring Under the Second Demographic Transition. Demography 41, 607–627.
- McLaughlin, E., Glendinning, C., 1994. Paying for Care in Europe: Is There A Feminist Approach?, in: Hantrais, L., Mangen, S. (Eds.), Family Policy and the Welfare of Women, Cross-National Research Papers. Loughborough, pp. 52–69.
- Mill, J.S., 1858. A System of Logic, Ratiocinative and Inductive. Harper & Bros., New York.
- Millar, J., 2008. Work is Good for You: Lone Mothers, Children, Work and Well-being. Presented at the Kela 2008, Helsinki.
- Millar, J., Ridge, T., 2001. Families, Poverty, Work and Care: A Review of the Literature on Lone Parents and Low-Income Couple Families (Research Report No. 153). DWP Department for Work and Pensions, Leeds.
- Millar, J., Rowlingson, K. (Eds.), 2001. Lone Parents, Employment and Social Policy: Cross-National Comparisons. Policy Press, Bristol.
- Mincer, J., Polachek, S., 1974. Family Investment in Human Capital: Earnings of Women. Journal of Political Economy 82.
- Misra, J., Budig, M.J., Moller, S., 2007. Reconciliation policies and the effects of motherhood on employment, earnings and poverty. Journal of Comparative Policy Analysis: Research and Practice 9, 135–155.
- Misra, J., Moller, S., Strader, E., Wemlinger, E., 2012. Family Policies, Employment and Poverty Among Partnered and Single Mothers. Research in Social Stratification and Mobility 30, 113–128.
- Mitterauer, M., 1982. The Family as an Historical Social Form, in: The European Family: Patriarchy to Partnership From the Middle Ages to the Present. University of Chicago Press, Chicago, pp. 1–24.
- Moen, P., 2003. Linked Lives: Dual Careers, Gender, and the Contingent Life Course, in: Heinz, W., Marshall, V. (Eds.), Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations. Aldine de Gruyter, New York, pp. 237–258.
- Mokhtar, C., Platt, L., 2010. Lone Mothers, Ethnicity and Welfare Dynamics. Journal of Social Policy 39, 95–118.
- Moss, P. (Ed.), 2010. International Review of Leave Policies and Related Research 2010, Employment Relations Research Series. Department for Business, Innovation and Skills, London.
- Moss, P., 2012. International Review of Leave Policies and Related Research 2012. International Network of Leave Policies and Research, London.
- Müller, W., Gangl, M., 2003. Transitions from Education to Work in Europe. Oxford University Press.

- Müller, W., Jacob, M., 2008. Qualifications and the Returns to Training Across the Life Course, in: Skill Formation. Cambridge University Press, pp. 126–172.
- Münch, U., 2007. Familien-, Jugend- und Altenpolitik, in: Ruck, M., Boldorf, M. (Eds.), 1957-1966 Bundesrepublik Deutschland: Sozialpolitik im Zeichen des erreichten Wohlstandes, Geschichte der Sozialpolitik in Deutschland seit 1945, Vol. 4. Nomos Verlag, Baden-Baden, pp. 549–609.
- Naumann, I., 2006a. Childcare Politics in the West German and Swedish Welfare States from the 1950s to the 1970s (Doctoral Thesis). European University Institute, Florence.
- Naumann, I., 2006b. Childcare politics in West Germany and Sweden Since World War II: Historical Cleavages, Social Compromises, and Policy Outcomes. Presented at the ESPAnet Conference, Bremen.
- Naumann, I., 2011. Towards the Marketization of Early Childhood Education and Care? Recent Developments in Sweden and the United Kingdom. Nordic Journal of Social Research 2.
- O'Brien, M., Moss, P., 2010. United Kingdom, in: International Review of Leave Policies and Related Research 2010, Employment Relations Research Series. Department for Business, Innovation and Skills, London.
- O'Brien, M., Moss, P., 2012. United Kingdom, in: International Review of Leave Policies and Related Research 2012. International Network of Leave Policies and Research, London.
- O'Reilly, J., MacInnes, J., Nazio, T., Roche, J.M., 2009. The United Kingdom: From Flexible Employment to Vulnerable Workers, in: Vosko, L.F., MacDonald, M., Campbell, I. (Eds.), Gender and the Contours of Precarious Employment. Routledge.
- OECD, 2001. OECD Employment Outlook. Organisation for Economic Cooperation and Development, Paris.
- OECD, 2011. Doing Better for Families. OECD, Paris.
- OECD, 2012a. OECD Family Database [WWW Document]. URL http://www.oecd.org/document/4/0,3343,en_2649_34819_37836996_ 1_1_1_1_1,00.html
- OECD, 2012b. Benefits and Wages: OECD Indicators [WWW Document]. URL http://www.oecd.org/els/benefitsandwagesoecdindicators.htm (accessed 4.1.13).
- Okin, S.M., 1994. Gender Inequality and Cultural Differences. Political Theory 22, 5–24.
- ONS, 2010. Live births in England and Wales by Characteristics of Mother, Statistical Bulletin. Office for National Statistics, London.
- ONS, 2012a. Families and Households. Office for National Statistics, London.
- ONS, 2012b. Lone Parents with Dependent Children (Statistics New Release). Office for National Statistics, Newport.

- Oppenheimer, V.K., 1994. Women's Rising Employment and the Future of the Family in Industrial Societies. Population and Development Review 20, 293–342.
- Orloff, A., 1993. Gender and the Social Rights of Citizenship: The Comparative Analysis of State Policies and Gender Relations. American Sociological Review 58, 501–518.
- Orloff, A., 2002. Women's Employment and Welfare Regimes: Globalization, Export Orientation and Social Policy in Europe and North America. United Nations Research Institute for Social Development, Geneva.
- Ostner, I., 1997. Lone Mothers in Germany Before and After Unification, in: Lewis, J. (Ed.), Lone Mothers in European Welfare Regimes: Shifting Policy Logics. J. Kingsley Publishers, London; Philadelphia Pa., pp. 21–49.
- Ostner, I., 2010. Farewell to the Family As We Know It: Family Policy Change in Germany. German Policy Studies 6, 211–244.
- Ott, N., Hancioglu, M., Hartmann, B., 2012. Dynamik der Lebensform "Alleinerziehend" (BMAS Forschungsprojekt No. 421). BMAS, Bochum.
- Ott, N., Strohmeier, K.P., Kosmann, M., Neubauer, J., Schultz, A., Wunderlich, H., 2003. Alleinerziehende im Sozialhilfebezug (No. A346). ZEFIR Bochum, BMAS Forschungsprojekt.
- Parys, J., Schwerhoff, G., 2010. Efficient Intra-Household Allocation of Parental Leave (IZA Discussion Paper No. 5113). Institute for the Study of Labor (IZA).
- Peplar, M., 2002. Family Matters: A History of Ideas About Family Since 1945. Longman, London; New York.
- Pfau-Effinger, B., 2005. Welfare State Policies and the Development of Care Arrangements. European Societies 7, 321–347.
- Philipps, M., 2011. Britain's Liberal Intelligentsia Has Smashed Virtually Every Social Value. Mail Online.
- Pickvance, C., 2007. Housing and Housing Policy, in: Baldock, J., Manning, N., Vickerstaff, S. (Eds.), Social Policy. Oxford University Press.
- Plantenga, J., Remery, C., Siegel, M., Sementini, L., 2008. Childcare Services in 25 European Union Member States: The Barcelona Targets Revisited. Comparative Social Research 25, 27–53.
- Pollock, G., 2007. Holistic Trajectories: A Study of Combined Employment, Housing and Family Careers by Using Multiple-Sequence Analysis. Journal of The Royal Statistical Society Series A 170, 167–183.
- Pollock, G., Antcliff, V., Ralphs, R., 2002. Work Orders: Analysing Employment Histories Using Sequence Data. International Journal of Social Research Methodology 5, 91–105.
- Protsch, P., Dieckhoff, M., 2011. What Matters in the Transition From School to Vocational Training in Germany: Educational Credentials, Cognitive Abilities or Personality? European Societies European Societies 13, 69–91.

- Przeworski, A., Teune, H., 1970. The Logic of Comparative Social Inquiry. Wiley-Interscience, New York.
- Reynolds, J., 2008. The Single Woman: A Discursive Investigation, 1st ed. Routledge, London; New York NY.
- Riedel, B., Hüsken, K., Fuchs-Rechlin, K., 2011. Kita vor Ort: DJI-Betreuungsatlas nimmt regionale Ungleichheiten unter die Lupe. Forum Jugendhilfe 3, 38–41.
- Robson, K., Berthoud, R., 2003. Teenage Motherhood in Europe: A Multi-Country Analysis of Socioeconomic Outcomes. European Sociological Review 19, 451–466.
- Rosenfeld, R.A., 1992. Job Mobility and Career Processes. Annual Review of Sociology 18, 39–61.
- Rosenfeld, R.A., Trappe, H., Gornick, J.C., 2004. Gender and Work in Germany: Before and after Reunification. Annual Review of Sociology 30, 103–124.
- Rowlingson, K., McKay, S., 1998. The Growth of Lone Parenthood: Diversity and Dynamics. Policy Studies Institute, London.
- Rowlingson, K., McKay, S., 2005. Lone Motherhood and Socio-Economic Disadvantage: Insights from Quantitative and Qualitative Evidence. The Sociological Review 53, 30–49.
- Rubery, J., 2009. How Gendering the Varieties of Capitalism Requires a Wider Lens. Social Politics: International Studies in Gender, State & Society 16, 192–203.
- Ryan, P., 2001. The School-to-Work Transition: A Cross-National Perspective. Journal of Economic Literature 39, 34–92.
- Sackmann, R., Wingens, M., 2003. From Transitions to Trajectories: Sequence Types, in: Heinz, W., Marshall, V. (Eds.), Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations. Aldine de Gruyter, New York, pp. 93–116.
- Sainsbury, D., 1996. Gender, Equality, and Welfare States. Cambridge University Press, Cambridge [England]; New York NY.
- Sainsbury, D., 1999. Gender and Welfare State Regimes. Oxford University Press.
- Sartori, G., 1970. Concept Misformation in Comparative Politics. The American Political Science Review 64, 1033–1053.
- Sartori, G., 1991. Comparing and Miscomparing. Journal of Theoretical Politics 3, 243–257.
- Saxonberg, S., 2013. From Defamilialization to Degenderization: Toward a New Welfare Typology. Social Policy & Administration 47, 26–49.
- Sayer, L.C., Gornick, J.C., 2012. Cross-national Variation in the Influence of Employment Hours on Child Care Time. Eur Sociol Rev 28, 421–442.
- Scherer, S., 2001. Early Career Patterns: A Comparison of Great Britain and West Germany. European Sociological Review 17, 119 –144.

- Scherer, S., 2005. Patterns of Labour Market Entry Long Wait or Career Instability? An Empirical Comparison of Italy, Great Britain and West Germany. European Sociological Review 21, 427–440.
- Schier, M., Bathmann, N., Hubert, S., Nimmo, D., Proske, A., 2011. Wenn Eltern sich trennen: Familienleben an mehreren Orten. Auf einen Blick. DJI Online Thema 2011/12.
- Schmitt, C., 2008. Labor Market Integration and the Transition to Parenthood
 A Comparison of Germany and the UK. DIW Berlin Discussion
 Paper 808.
- Schneider, N., Krüger, D., Lasch, V., Limmer, R., Matthias-Bleck, H., 2001. Alleinerziehen: Vielfalt und Dynamik einer Lebensform. Juventa Verlag Gmbh.
- Schneider, N., Naderi, R., Ruppenthal, S., 2012. Familie in Deutschland nach dem gesellschaftlichen Umbruch, in: Huinink, J., Kreyenfeld, M., Trappe, H. (Eds.), Familie und Partnerschaft in Ost- und Westdeutschland: ähnlich und doch immer noch anders. Budrich, Opladen [u.a.].
- Schober, P.S., 2011. Maternal Labor Market Return, Parental Leave Policies, and Gender Inequality in Housework (SOEPpaper No. 422). DIW Berlin, The German Socio-Economic Panel (SOEP).
- Schöningh, I., Aslanidis, M., Faubel-Diekmann, S., 1991. Alleinerziehende Frauen: zwischen Lebenskrise und neuem Selbstverständnis. Leske + Budrich, Opladen.
- Schwarzkopf, M., 2009. Doppelt gefordert, wenig gefördert: alleinerziehende Frauen in der Grundsicherung für Arbeitsuchende. Edition Sigma, Berlin.
- Scottish Government, 2007. Growing Up in Scotland: Use of Childcare by Parents of Young Children [WWW Document]. URL http://www.era.lib.ed.ac.uk/handle/1842/3106 (accessed 7.29.10).
- Sefton, T., Evandrou, M., Falkingham, J., 2011a. Family Ties: Women's Work and Family Histories and their Association with Incomes in Later Life in the UK. J. Soc. Pol. 40, 41–69.
- Sefton, T., Evandrou, M., Falkingham, J., Vlachantoni, A., 2011b. The Relationship Between Women's Work Histories and Incomes in Later Life in the UK, US and West Germany. Journal of European Social Policy 21, 20–36.
- SGB II, 2005.
- Shavit, Y., Müller, W., 1998. From School to Work: A Comparative Study of Educational Qualifications and Occupational Destinations. Clarendon Press; Oxford University Press, Oxford; New York.
- Shavit, Y., Müller, W., 2000a. Vocational Secondary Education, Tracking, and Social Stratification, in: Hallinan, M.T. (Ed.), Handbook of the Sociology of Education. Springer US, pp. 437–452.
- Shavit, Y., Müller, W., 2000b. Vocational Secondary Education. Where Diversion and Where Safety Net? European Societies 2, 29–50.

- Siaroff, A., 1994. Work, Welfare and Gender Equality: A New Typology. Sage Modern Politics Series 35, 82.
- Simmel, G., 1895. Soziologie der Familie. Vossische Zeitung, Sonntagsbeilagen 26-27.
- Simmel, G., 1958. (1908) Soziologie. Untersuchungen über die Formen der Vergesellschaftung. Duncker & Humblot, Leipzig.
- Skew, A., 2009. Leaving Lone Parenthood: Analysis of the Repartnering Patterns of Lone Mothers in the U.K. (PhD Thesis). University of Southampton, Southampton.
- Skew, A., Evans, A., Gray, E., 2009. Repartnering in the United Kingdom and Australia. Journal of Comparative Family Studies 40, 561–585.
- Skinner, C., Davidson, J., 2009. Recent Trends in Child Maintenance Schemes in 14 Countries. Int J Law Policy Family 23, 25–52.
- Skinner, C., Finch, N., 2006. Lone Parents and Informal Childcare: A Tax Credit Childcare Subsidy? Social Policy & Admin 40, 807–823.
- Sky News, 2011. PM: Tackling Gangs New National Priority. Sky News Online.
- Slater, T., 2013. The Myth of "Broken Britain": Welfare Reform and the Production of Ignorance. Antipode 45.
- Smith, A., Williams, D., 2007. Father-friendly Legislation and Paternal Time Across Western Europe. Journal of Comparative Policy Analysis 9, 175–192.
- Smith, P., Gilby, N., Dobie, S., Hobden, S., Sullivan, L., Williams, M., 2011. Childcare and Early Years Survey of Parents 2010. Department for Education Reserach Report DFE-RR221.
- Smyth, E., 2005. Gender Differentiation and Early Labour Market Integration Across Europea. European Societies 7, 451–479.
- Smyth, E., Steinmetz, S., 2008. Field of Study and Gender Segregation in European Labour Markets. International Journal of Comparative Sociology 49, 257–281.
- Sodermans, A.K., Matthijs, K., Swicegood, G., 2013. Characteristics of joint physical custody families in Flanders. Demographic Research 28, 821–848.
- SOEP, 2010. Socio-economic Panel (SOEP) (2010), Data for Years 1984 2009, Version 26.
- SOEP Group, 2001. The German Socio-Economic Panel (GSOEP) After More Than 15 Years, in: Holst, E., Lillard, E., Diprete, T. (Eds.), Proceedings of the 2000 Fourth International Conference of German Socio-Economic Panel Study Users (GSOEP 2000), Vierteljahrshefte Zur Wirtschaftsforschung (Quarterly Journal of Economic Research). Berlin.
- Solga, H., 2008. Lack of Training: Employment Opportunities for Low-Skilled Persons from a Sociological and Microeconomic Perspective, in: Mayer, K.U., Solga, H. (Eds.), Skill Formation. Cambridge University Press.

- Spieß, M., 2008. Gewichte und Hochrechnung mit dem SOEP.
- Statistische Ämter des Bundes und der Länder (Ed.), 2009. Auswirkungen auf Kindertagesbetreuung und Schülerzahlen im Bund und in den Ländern, Demografischer Wandel in Deutschland. Statistisches Bundesamt, Wiesbaden.
- Statistische Ämter des Bundes und der Länder, 2011. Kindertagesbetreuung regional. Ein Vergleich aller 412 Kreise in Deutschland. Statistisches Bundesamt, Wiesbaden.
- Steele, F., Sigle-Rushton, W., Kravadal, Ø., 2009. Consequences of Family Disruption on Children's Educational Outcomes in Norway. Demography 46, 553–574.
- Stewart, K., 2007. Employment Trajectories for Mothers in Low-skilled Work: Evidence from the British Lone Parent Cohort. CASEpaper, Centre for Analysis of Social Exclusion, London School of Economics and Political Science 122.
- Stewart, K., 2009. Employment and Wage Trajectories for Mothers Entering Low-skilled Work: Evidence from the British Lone Parent Cohort. Social Policy & Administration 43, 483–507.
- Stone, A., 2007. An Introduction to Feminist Philosophy. Polity, Cambridge; Malden, MA.
- Strickland, P., 1998. Working Families Tax Credit and Family Credit (No. 98/46), House of Commons Library Research Paper. London.
- Tarrow, S., 2010. The Strategy of Paired Comparison: Toward a Theory of Practice. Comparative Political Studies Comparative Political Studies 43, 230–259.
- Taylor, M., Brice, J., Buck, N., Prentice-Lane, E., 2010. British Household Panel Survey User Manual: Volume A: Introduction, Technical Report and Appendices. University of Essex, Colchester.
- Taylor-Gooby, P., 2004. New Risks and Social Change, in: New Risks, New Welfare: The Transformation of the European Welfare State. Oxford University Press, Oxford; New York, pp. 1–28.
- Thelen, K., 1999. Historical Institutionalism in Comparative Politics. Annual Review of Political Science 2, 369–404.
- Tomlinson, J., Olsen, W., Purdam, K., 2009. Women Returners and Potential Returners: Employment Profiles and Labour Market Opportunities—A Case Study of the United Kingdom. Eur Sociol Rev 25, 349–363.
- Trost, J., 1988. Conceptualising the Family. International Sociology 3, 301 308.
- Trost, J., 1999. Family as a Set of Dyads. Marriage & Family Review 28, 79–91.
- Tsoukala, P., 2007. Gary Becker, Legal Feminism, and the Costs of Moralizing Care. Columbia Journal of Gender and Law 16, 357.
- Van Voorhis, R., Gilbert, N., 2001. Introduction, in: Gilbert, N., Van Voorhis, R. (Eds.), Activating the Unemployed: A Comparative Appraisal of Work-oriented Policies, International Security Series. Transaction Publishers, New Brunswick, N.J., pp. vii–xiii.

- Vermunt, J.K., 2001. Event History Analysis, Selectivity, in: Smetser, N.J., Baltes, P.B. (Eds.), International Encyclopedia of the Social and Behavioral Sciences. Elsevier, Oxford, pp. 7956–7962.
- Wagner, G.G., Frick, J.R., Schupp, J., 2007. The German Socio-Economic Panel Study (SOEP): Scope, Evolution and Enhancements (SOEPpaper No. 1). DIW Berlin, The German Socio-Economic Panel (SOEP).
- Wasoff, F., Jamieson, L., 2005. Solo-living Across the Adult Lifecourse: Full Research Report (End of Award Report No. RES-000-22-0531). ESRC, Swindon.
- Wheelcock, J., Jones, K., 2002. "Grandparents Are the Next Best Thing": Informal Childcare for Working Parents in Urban Britain. Journal of Social Policy 31, 441–463.
- Williamson, O.E., 1973. Markets and Hierarchies: Some Elementary Considerations. The American Economic Review 63, 316–325.
- Wincott, D., 2006. Paradoxes of New Labour Social Policy: Toward Universal Child Care in Europe's "Most Liberal" Welfare Regime? Social Politics: International Studies in Gender, State & Society 13, 286–312.
- Wingerter, C., 2011. Der Eintritt junger Menschen in das Erwerbsleben. Ergebnisse der Arbeitskräfteerhebung 2009. Wirtschaft und Statistik 98–117.
- Wolbers, M.H.J., 2007. Patterns of Labour Market Entry: A Comparative Perspective on School-to-Work Transitions in 11 European Countries. Acta Sociologica 50, 189–210.
- Wolf, K., Grgic, M., 2009. Kindertagesbetreuung im europäischen Vergleich: Die Chancen von EU-SILC und die aktuellen Grenzen. DJI Deutsches Jugendinstitut, München.
- Wrohlich, K., 2004. Child Care Costs and Mothers' Labor Supply: An Empirical Analysis for Germany (Discussion Papers of DIW Berlin No. 412). DIW Berlin, German Institute for Economic Research.
- Zagel, H., Kadar-Satat, G., Jacobs, M., Glendinning, A., 2013. The Effects of Early Years' Childcare on Child Emotional and Behavioural Difficulties in Lone and Co-Parent Family Situations. Journal of Social Policy 42, 235–258.
- Zartler, U., Beham, M., Kromer, I., Leitgöb, H., Weber, C., Friedl, P., 2011. Alleinerziehende in Österreich. Lebenslagen und Armutsrisiken (Sozialpolitische Studienreihe Band 7). Bundesministerium für Arbeit, Soziales und Konsumentenschutz, Wien.