

## **Assimilation Over the Life Course?**

Early Labour Market Careers of Second-Generation Turks in Germany

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**Jörg Hartmann**  
geboren am 30.09.1982 in Rostock

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1. Gutachter/in: Prof. Dr. Karin Kurz
2. Gutachter/in: Prof. Dr. Steffen Kühnel
3. Gutachter/in: Prof. Dr. Frank Kalter

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## Part I

### INTRODUCTION & BACKGROUND





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## INTRODUCTION

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The recent surge of arriving migrants and refugees in Germany has placed migration and integration at the centre of public debate and policy discussions. As the general public and policy makers try to come to terms with the new reality of immigration, questions of short-term policy requirements, such as how to handle the large influx of refugees and migrants, give way to questions focusing on long-term issues such as how to integrate those who will remain into the German society and into the labour market. As a heated public debate rages on, the insights of migration scholars into the mechanisms and prerequisites of migrant assimilation have become increasingly valuable and necessary.

Scholars of migration have answered questions of migrant assimilation in various ways. Classic theories of assimilation expect migrant groups to inevitably amalgamate into the mainstream society and achieve social mobility over a number of generations (Park, 1928, 1950; Warner and Srole, 1945). More recent theories, such as segmented assimilation theory, predict several assimilation outcomes according to the characteristics of the migrants and the receiving country's institutional settings (Portes and Zhou, 1993). Among others, these include the more pessimistic outcome of permanent assimilation into the lower strata of a society. New assimilation theory defends the expectation of classic assimilation theory that migrants will eventually assimilate into the mainstream society but depart from the concept of a

core culture into which migrants assimilate and introduce the concept of boundary-blurring (Alba, 2010; Alba and Nee, 2003, 1997)

One characteristic feature of these theories is their common understanding of assimilation as a predominantly intergenerational process. For instance, Park (1928) engraved an intergenerational perspective into the concept of the race-relations cycle, and other, more recent theories, such as segmented and new assimilation theory (Alba and Nee, 1997; Portes and Zhou, 1993) explicitly adopt an intergenerational perspective on assimilation as they compare the assimilation success of the second generation to that of their parent generation. At their core, these theories agree that if assimilation occurs, it takes place predominantly between subsequent migrant generations.

This dissertation focuses on an additional temporal dimension of assimilation. As the main argument, I put forward that the life course presents an additional and critical temporal dimension of migrant assimilation. Associated with this argument is the critique of assimilation theories' emphasis on intergenerational assimilation for its lack of a systematic assessment and understanding of migrants' life courses. As I will demonstrate throughout this dissertation, the disregard of migrants' life courses presents a conceptual weakness that obstructs important temporal processes and mechanisms of migrant assimilation.

Over the course of this thesis, I will substantiate these claims both theoretically and empirically. In the first part of this dissertation, I will discuss assimilation theories and show how a life course perspective on migrant assimilation provides a more detailed and adequate understanding of the temporal processes and mechanisms of assimilation. This part concludes that assimilation or segmentation may occur over the life courses of migrants; that life course principles - such as linked lives or the endogenous causality of the life course - present adequate means to conceptualise these developments; and that the life courses of the parent generation have profound effects on the assimilation outcomes of their children. Thus, this part will illustrate that life

courses not only present an interesting subject for assimilation studies, but that they also affect intergenerational assimilation outcomes.

The main and second part of this dissertation seeks to empirically demonstrate the prolificacy of adopting a life course perspective for studies of migrant assimilation. For this purpose, I present three empirical studies that assess second-generation Turkish migrants' labour market assimilation over the course of their early careers in Germany. The decision to study second-generation Turks in Germany is motivated by the fact that they are the largest and most disadvantaged migrant group in Germany, and they have begun to enter the labour market over the last decades in considerable numbers (Kalter and Granato, 2001). Being the largest and most disadvantaged migrant group in Germany, they represent the most interesting migrant group for studying the development of ethnic labour market inequalities over the course of a career. In addition, Germany represents an interesting case insofar as it is known for its rather rigid intergenerational mobility regime (Müller and Pollack, 2004); hence, intragenerational upward mobility may compensate for second-generation Turks disadvantage at labour market entry. In addition, there is currently no research which specifically focuses on the early labour market careers of second-generation Turkish migrants.

There are several ways in which studies on migrants' early labour market careers can contribute to our understanding of their assimilation processes. One possibility includes a re-examination of the classical hypothesis of middle-class assimilation from a life course perspective, asking whether or not migrants pursue middle-class careers. The first study seeks to answer this question, thereby offering a more solid answer to the question than traditional cross-sectional studies that examine migrants' labour market outcomes only at one point throughout their career. As the study demonstrates, second-generation Turkish migrants have greater difficulties in pursuing middle-class careers, and this holds true especially for second-generation Turkish women. Lower host country-specific capital, such as education or language skills, are major contributors to their disadvantages.

Employment and income transitions are another important aspect of migrants' labour market assimilation. In fact, they present the very events through which migrants' labour market outcomes may become more or less similar to those of the native population. The second study examines these transitions for second-generation Turkish men in Germany, also taking into account their development over the course of their early careers. It concludes that second-generation Turkish men have higher unemployment and income mobility risks than native-born German men. Over the course of their early labour market careers, their lower chances of re-employment and higher risks of upward income mobility become more similar to those of native-born German men, while their higher unemployment risks remain at the same level. Again, missing host country-specific capital plays a major role for second-generation Turkish men's lower labour market outcomes. Further, this study shows how the resulting cumulative effects impact the success of their second-generation Turkish men over the course of their early career.

A third, and arguably the most important aspect of migrant assimilation over the course of their labour market careers, includes the development of their labour market outcomes in comparison to those of the native-born population. The third study focuses on this aspect and examines whether second-generation Turkish women's chances of securing employment, being unemployed, and being a homemaker converge to those of native-born German women over the course of their early careers. The study finds that second-generation Turkish women are more likely to be a homemaker and less likely to be employed than native-born German women; however, over the course of their early careers, their probability of finding employment and being a homemaker become similar to that of native-born German women. This development seems largely driven by the different timing of family related events, such as childbirth, which causes native-born German women to become a homemaker at a later stage in their career.

Taken together, the studies conducted in this dissertation illustrate the possible benefits and opportunities of applying a life course perspective

on migrant assimilation. By focusing on different aspects of labour market assimilation, the studies contribute to our understanding of the importance of life course events, such as income and employment transitions or family-related events, such as marriage and childbirth, on migrants' labour market outcomes. Further, they emphasise the importance of the timing of life course events for ethnic labour market disadvantages and the role of life course mechanisms such as cumulative advantages. Above all, the studies demonstrate that assimilation outcomes are not static but vary over the life course, thus making a strong case for further advances in life course studies on migrant assimilation. As questions of migrant assimilation become more urgent, a better and more concise understanding of these temporal processes and mechanisms is needed. With this dissertation I hope to contribute to such an endeavour.

This dissertation is structured as follows. Chapter 2 discusses classic and recent assimilation theories with the aim of illustrating the shortcomings that result from the little attention paid to life course processes. Chapter 3 builds on this critique and, after introducing the life course approach, presents arguments and empirical findings of how a life course perspective can contribute to studies of migrant assimilation. The chapter is followed by the empirical part of this dissertation, which begins with an introduction of the three studies conducted as part of this research. In the studies, I apply the principles established in the first part of this dissertation and examine the early labour market careers of second-generation Turkish migrants in Germany. Chapters 8 and 9 summarise and discuss the findings of the empirical studies.



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## A RETROSPECT ON ASSIMILATION THEORIES

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Sociological theory has seen a variety of migrant assimilation theories emerging over the past century. Since their beginnings in the early 20th century, assimilation theories have aimed at understanding the mechanisms and outcomes of migrant adaptation to their host societies. In these theories, intergenerational progress has been a central and common theme and, one may add, rightfully, because new generations often drive societal change as the starting conditions for assimilation differs for second-generation migrants who were raised in the host country. There is, however, a puzzling conceptual gap in how assimilation theories explain developments in migrants' assimilation outcomes over generations. As I will show in this chapter, this gap results from the theories' focus on intergenerational change and disregard of the life course as a temporal dimension of assimilation.

This chapter sets out at briefly developing an understanding of the concept of assimilation that is used throughout this dissertation. After introducing the canonical and most recent assimilation theories – segmented assimilation theory and new assimilation theory – I discuss how the proposed explanations of assimilation fall short of explaining the temporal aspects that underlie every assimilation process. Thus, this chapter serves as the starting point for the following chapter, in which I will outline how a life course perspective contributes to studies of migrant assimilation.



## 2.1 THE CONCEPT OF ASSIMILATION

Since its popularisation at the beginning of the 20th century, assimilation as an academic concept has seen a variety of definitions, critiques, refinements, and competitors. Early scholars such as Park and Burgess viewed assimilation largely as acculturation, by which they meant that migrants “are incorporated [...] in a common cultural life” (Park and Burgess, 1969, p. 735), a progress which Park considered irreversible. Warner and Srole described assimilation as the overcoming of migrants’ deficits by learning the “superior” cultural traits of the host society (Warner and Srole, 1945). Like Warner and Srole, Gordon maintained an ethnocentric view of assimilation and assumed a unidirectional process in which migrants adopt the cultural patterns of the white Protestant Anglo-Saxon middle-class (Gordon, 1964).

These early formulations of assimilation have been criticised for their ideological and ethnocentric bias as well as for their inability to perceive societies as consisting of heterogeneous groups (Rumbaut, 1997a,b). Proponents of segmented assimilation theory argue against the notion of a homogenous society and conceive societies as “consisting of segregated and unequal segments” (Zhou, 1997, p. 984). Yet, by claiming that migrants and their descendants socioeconomically adapt and acculturate into different strata of the host society (Portes and Zhou, 1993), they implicitly retain notions of a deficit model for those assimilating into the lower ranks of a society.

Alba and Nee attempt to overcome these critiques by a definition that takes the heterogeneity of societies into account and avoids one-sidedness and ethnocentric assumptions. They define assimilation as the “decline, and as its endpoint the disappearance, of an ethnic/racial distinction and the cultural and social differences that express it” (Alba and Nee, 1997, p. 863). Later formulations redefine assimilation in terms of boundary crossings: the authors perceive boundaries to be attached to concrete social and cultural differences between groups (Alba and Nee, 2003). They explicitly state that in their view, assimilation may have divergent outcomes for different groups and that it

“proceeds incrementally, usually as an intergenerational process” (Alba and Nee, 2003, p. 38). Even so, they maintain that mainstream assimilation will be the norm.

Recently, Wimmer went further and criticised the concept of ethnic groups as “peoples each distinguished by a unique culture (1), held together by communitarian solidarity (2), and bound by shared identity (3)” (Wimmer, 2009, p. 246). In his view, both minorities and the majority define boundaries through interactions on multiple levels and according to a specific situation. Like Alba and Nee, Wimmer perceives assimilation as a process of changing or declining ethnic boundaries.

A common theme among the proposed definitions of assimilation is the distinction between socioeconomic and cultural adaptation. While being more prevalent in earlier definitions of assimilation, even more recent definitions regard the disappearance of ethnic boundaries, at least to some extent, as a consequence of migrants’ ability to achieve similar socioeconomic outcomes as the majority population. While recognizing that other dimensions of assimilation are at least equally important, assimilation in this thesis is considered mainly as socioeconomic assimilation, in particular with regard to labour market outcomes.

Throughout this dissertation, I follow what Esser (2004) defines as the social structure aspect of assimilation, and refer to migrant assimilation as the process of increasing distributional similarity in the labour market outcomes between the children of migrants and native-born Germans. This definition of assimilation is unproblematic insofar as it does not imply an ethnic or cultural core or mainstream society into which migrants assimilate. Rather, distributional equality may also occur by changing native-born Germans labour market outcomes. Further, because migrant groups will be defined empirically in terms of their parents’ country of origin or nationality, the definition avoids the fallacies of what Wimmer calls “Herder’s social ontology” which equates ethnic groups with a common culture, solidarity, and identity (Wimmer, 2009). Finally, by focussing on distributional similarity, the

heterogeneous nature of migrant groups and the native population are taken into account.

The term assimilation itself has been contested in the European literature on migration and integration and has often been replaced by the term “integration”, mostly because of the ethno-centric usage of the term assimilation in earlier decades. Having defined assimilation in strictly distributional terms, I use the term assimilation throughout this dissertation, as it is the commonly agreed on term in international research on that matter.

## 2.2 CLASSIC ASSIMILATION THEORIES

While the concepts presented in this section are often considered as classic theories of assimilation, I argue that they are more appropriately characterised as descriptions, frameworks, or categorisations. Yet, and even though they have often been criticised (see Alba and Nee, 1997; Rumbaut, 1997b), they mark significant achievements in migrant assimilation theory and set the stage for more recent theories as they evolve the concept of assimilation, distinguish between its various forms and stages and describe the process of assimilation. Therefore, it is not surprising to find one common feature of their account - their focus on intergenerational progress - still present in more recent theories, and it is therefore instructive to introduce them briefly.

In the early twentieth century, after two decades of unprecedented European migration to the United States, sociologists of the Chicago School, such as Park and Burgess, advanced the first conceptual framework of migrant assimilation (Park, 1928, 1950; Park et al., 1925). Most famous for the “race-relations cycle”, they proposed four steps of inter-ethnic relations, which every immigrant group has to pass through in order to assimilate. After the initial contact, the newcomers engage in a competitive relationship with the majority population over resources such as jobs or power. Over the course of generations, this struggle ends in the phase of accommodation, where groups settle on a

common understanding of the existing power relations. During the last phase, assimilation emerges after individuals establish social contacts across group-boundaries, thus blurring ethnic distinctions.

Warner and Srole (1945) proposed another early model of assimilation. Their account explicitly considers social upward mobility in education and occupation as the principle means for assimilation. Further, they view the rate of assimilation to depend on factors such as social class origin, phenotypical appearance, ethnocultural disparity and the strength of discrimination towards different races. Consequently, they argue that African Americans have the greatest difficulties in terms of assimilating into American society. Besides their strong ethno-centric view on assimilation, it is noteworthy that their account introduces interaction effects between institutional factors and group characteristics into assimilation theories; furthermore, they expect each successive migrant generation to be more assimilated into American society.

Milton Gordon's (1964) framework of assimilation includes a description of the different dimensions of assimilation. These dimensions, which are still relevant, include: acculturation, identificational assimilation, marital assimilation and structural assimilation. Gordon considers acculturation, understood as the migrants' adaptation to the cultural patterns of the white American middle-class, to typically come first. However, Gordon does not claim that other forms of assimilation follow automatically; rather he considers Anglo-conformity to be one outcome besides cultural pluralism and a melting pot scenario. In contrast to acculturation, Gordon considers structural assimilation to lead to other forms of assimilation as immigrant group members penetrate the cliques and institutions of the majority population, thus learning their ways, gaining resources and becoming more accepted.

Through their concept of "straight-line" assimilation, Gans (1973) and Sandberg (1973) explicitly attach explanatory power to intergenerational change itself. In their view, successive immigrant generations find themselves confronted with a particular set of difficulties with regard to their place and opportunities in the host country society. As they attempt to settle

these difficulties, each successive immigrant generation recedes further from its ethnic origins and adopts its ways more to the host society. In that way, the “straight-line” approach sees generations as the driving force behind assimilation; the complete assimilation of immigrant groups into the mainstream society is deemed inevitable.

### 2.3 SEGMENTED ASSIMILATION THEORY

In the early 1990s, the children of post-1960 immigrants in the United States began to complete their education and enter the labour market. At the sight of their different national origins compared to the largely European immigrants that had arrived in earlier decades, scholars of migrant assimilation started to discuss whether their integration into American society will follow the same mechanisms and lead to the same outcome of mainstream assimilation which canonical theories of assimilation claimed was inevitable after several generations.

In what became known as segmented assimilation theory, Portes and Zhou (1993) argue that post-1960 immigration markedly differs from earlier immigration with regard to its composition of immigrants as well as its historical and macroeconomic context. Most importantly, they claim that migrants are more at risk of discrimination than previous immigrants because they are more easily distinguished by their physical appearance, in particular their non-white skin colour, and because opportunities for social upward mobility that existed in the 1950s and 1960s had given way to an hour-glass economy where intermediate jobs are more scarce, leaving migrants with low paid jobs and little opportunities for upward mobility.

### 2.3.1 *Assimilation Outcomes*

In light of these differences, Portes and Zhou set out to develop a theory that accounts for these differences. In addition to classical mainstream assimilation, segmented assimilation theory assumes two assimilation outcomes for post-1960 immigrants. The first addition is "downward assimilation", which Portes and Zhou (1993) define as "assimilation into the underclass" accompanied by poverty. Downward assimilation is often, but not necessarily, accompanied by "dissonant acculturation", defined as the "abandonment of their parents' language and culture" (Portes and Rumbaut, 2006, p. 267). While immigrants' children learn English and American ways, the cultural gap between them and their parents widens. As a result, intergenerational conflicts between children and their parents widen and cause further parent-child alienation (Rumbaut, 2005).

The second addition to mainstream assimilation put forward by segmented assimilation theory is "selective acculturation", which Portes and Zhou (1993) understand as being above-average economic achievement accompanied by the preservation of both the origin culture and the community's solidarity. In this case, immigrant youth retain close ties to their family and ethnic community and, given that the family and ethnic community hold values that facilitate educational success like discipline, gain an advantage over their majority peers.

### 2.3.2 *Mechanisms of Intergenerational Socioeconomic Assimilation*

In order to explain the different assimilation outcomes, segmented assimilation theory reverts to the interplay of a set of individual and institutional factors that work in favour or against successful mainstream assimilation. Among the individual factors, immigrants and their families' motivation, abilities and resources are expected to contribute to socioeconomic advancement. However,

because immigrants with very similar capacities take very different paths of socioeconomic mobility, the receiving context is the most decisive factor – and the one over which immigrants have the least control (Portes and Rumbaut, 2006). The three most important contexts are government policies, labour market conditions, and the characteristics of their own ethnic community. These contexts are considered to vary according to different time periods and location.

The three receiving contexts affect assimilation outcomes in a similar fashion: they all provide or limit immigrants' opportunities for gaining resources. In this respect, Governments achieve this via legal means, by either adopting an exclusional, passively accepting, or a supportive policy of immigration. The labour market, responding to a country's overall economic situation, provides employment and income opportunities. However, in the presence of discrimination, these opportunities may be restricted. The ethnic community alleviates the hardships caused by discrimination and provides employment opportunities, information, and a sense of identity and belonging to migrants.

Segmented assimilation theory assumes that the socioeconomic chances of the second migrant generation are mainly determined by the interplay of the human, financial, cultural and social capital of their parents, and obstacles such as persistent racial discrimination, bifurcated labour markets, and the adaption to inner-city lifestyles (Portes and Zhou, 1993; Waters et al., 2010). Because post-1960 immigrants' children physically appear to be largely non-white, persisting prejudices block their educational success and upward social mobility, thwart their social acceptance and deter them from holding high aspirations for their future. Bifurcated labour markets offer increasingly fewer jobs in middle-income positions and place the second generation in unstable and low paid jobs with little chances for upward social mobility. Proponents of segmented assimilation theory fear that deviant lifestyles of marginalised inner-city youth will attract immigrant's children to gang violence and drug use and adversely affect their educational success (Portes and Rumbaut, 2006). What is more, exposure to inner-city youth culture will

prompt immigrant youth to believe in blocked mobility opportunities and to adopt a stance of resisting mainstream society and culture (Zhou, 1997).

According to the theory, these difficulties experienced by the second generation can be alleviated by the human, financial and social capital of their parents (Portes and Rumbaut, 2006, p. 266). Parents with high education and income have more resources to invest into their children's education, e.g., by sending them to private tuition. Also, parents with higher occupations can provide more valuable social contacts, a home in the suburbs, and they can reinforce bonds with their family and ethnic community by visiting their home countries during the summer vacation. In addition, intact families shield their children from street gangs and drug use; furthermore, ethnic communities that enforce values beneficial for success help in confronting obstacles in school and the transition to work. Accordingly, children of parents with high human and social capital and from closely-knit ethnic communities may overcome the obstacles imposed on them by the host society and even outperform their majority peers, thus pursuing the path of mainstream assimilation or "selective acculturation". In contrast, the children of immigrant families with low levels of human and social capital and loose-knit ethnic communities with little solidarity are vulnerable against discrimination, inner-city youth culture, and academic failure. As a consequence, they are at risk of assimilating "into the adversarial stance of impoverished groups confined to the bottom of the new economic hourglass" (Portes and Zhou, 1993, p. 84-85) or, in other words, they run the risk of "downward assimilation" and "dissonant acculturation".

#### 2.4 NEW ASSIMILATION THEORY

In response to segmented assimilation theory, Alba and Nee (1997) have developed a competing theory in which they contest the hypotheses of downward assimilation and selective acculturation. They further argue that post-1960 immigration does not vary from previous immigration to the



extent assumed by segmented assimilation theory; they propose an alternative account named new assimilation theory.

#### 2.4.1 *Assimilation Outcomes*

Alba and Nee (2003) envisage migrant assimilation as a multilevel and multigenerational process that takes place on a social, cultural, and cognitive dimension and has divergent outcomes. In their view, assimilation is completed when cognitive categories of ethnic distinctions lose their relevance or, in other words, social boundaries between ethnic groups disappear. With regard to socioeconomic assimilation, they oppose segmented assimilation theory and purport that mainstream assimilation is the norm. Even so, they admit that both downward assimilation and selective acculturation is taking place in the United States, but consider these outcomes to be of marginal empirical importance.

#### 2.4.2 *Boundary Changes*

According to their definition of assimilation, Alba and Nee put forward three mechanisms of how social and ethnic boundaries change: boundary crossing, boundary shifting, and boundary blurring (also see Alba 2010). Boundary crossing refers to individual's moving from one group to another without any changes to the boundary itself, thus being an individualistic assimilation strategy. Its success depends on the forms and values of an immigrant's capital, racial appearance, and geographic location. Accordingly, Alba and Nee ascribe this mechanism primarily to highly educated human capital migrants. Boundary shifting implies a redefinition of ethnic boundaries so that ethnic groups formerly excluded now become included. In their formulation of new assimilation theory, Alba and Nee do not propose any explanations for boundary shifting.

Instead, most care is put into explaining what they regard as the most important assimilation mechanism: boundary blurring, which they define as a decline in the perceived distinctiveness of ethnic boundaries. When minority and majority group members sustain equal-status contact on a substantial scale, categories of ethnic distinctions will eventually become less relevant and even perceptions of physical features associated with race will fade. Because cognitive categories of ethnic distinctions rest on perceived social and cultural differences, declining socioeconomic and cultural differences between minority and majority groups are a prerequisite for boundary blurring to occur.

### 2.4.3 *Mechanisms of Socioeconomic Assimilation*

New assimilation theory's concept of socioeconomic assimilation includes mechanisms at the individual and group level and mechanisms at the level of society. Building on new institutionalist theory, Alba and Nee propose four mechanisms of socioeconomic assimilation. First, at the individual level, they envisage migrants as self-interested and purposive actors who act according to culturally shaped mental models. These cultural beliefs include customs, norms, laws, ideology, and religion. In general, they assume that migrants seek to take advantage of opportunities that improve their life chances and well-being. Agents do not act according to the rationality assumed in neoclassical economical models. Rather, they have only limited cognitive capacities, limited knowledge about their opportunities and restrictions and they are embedded in institutional environments – an assumption they call “context-bound rationality” (Alba and Nee, 2003, p. 38).

Second, network mechanisms such as rewards or punishments enforce informal rules that provide guidelines for collective action. Based on the individual's pursuit for a better life and the rationale that collaboration improves success chances, collective actions are a means to maximise the group's welfare and chances of social upward mobility. According to the

theory, strong social norms and collectivist strategies are especially prevalent when migrant groups experience societal hostility or isolation, e.g., labour migrants with little human-cultural capital who face strong discrimination (Alba and Nee, 2003, p. 42ff.). In their absence, migrants, especially those with better education, may pursue individualistic patterns of social mobility, thus embracing the chances for social upward mobility that the host society offers.

Third, new assimilation theory predicts that migrants and their descendants will assimilate at varying rates into the host society depending on the amount of social, financial, and human capital they can leverage. With regard to assimilation over generations, new assimilation theory explicitly focuses on the transfer of capital from the parent generation to their children.

Fourth, at the macro-level, the institutional environment provides incentives or deterrents for assimilation and, therefore, determines whether purposive action and network mechanisms work in favour of assimilation or segregation. Institutional mechanisms include federal rules for affirmative action and their enforcement, economic growth, opportunities for upward social mobility and racist ideologies. As an example, institutional mechanisms may promote equal rights and, if migrants bring sufficient amounts of capital to seize their opportunities, it may pave the path toward assimilation.

## 2.5 CRITIQUE

In the light of these explications, assimilation theories have produced important insights into migrants' assimilation outcomes and into the mechanisms at the micro- and macro-level that shape their assimilation success. For the purposes of this dissertation, it is important to highlight that the theories consider upward social mobility as a vital prerequisite for assimilation, and they propose a number of explanations as to why migrants' socioeconomic assimilation may or may not be successful. They place emphasis on the nature of the receiving context, the power migrants can leverage by collective group

action, the institutional barriers in the host society, the society's enforcement of equal rights, economic growth, migrants' capital, cultural differences, and the location of residence.

Yet, when considering these theories and their adequacy for understanding intergenerational assimilation, there is an apparent lack of attention directed towards the temporal dimension of the life course. As the summaries of assimilation theories have highlighted, they consider two temporal dimensions of assimilation, the first of which is historical and the second is intergenerational. Both temporal dimensions are important in their own right, not least because institutional settings vary over time and because assimilation progress over generations is a common empirical finding. However, when speaking of assimilation as a process, this process is ultimately characterised by the actions and events that take place over the individuals' life courses. What is more, these actions and events follow different rules than historical or intergenerational changes. For instance, graduating from school, entering the workforce, marriage, having children, or income increases are important means and outcomes of assimilation. They take place within specific historical and institutional settings, e.g., education systems or labour market regulations within a country, which restrict a person's opportunities, offer specific sets of alternatives, or impose a specific order of events. In addition, these events commonly follow a certain order, and can only be understood in the context of previous experiences and future plans. As assimilation theories rarely take notice of the life course as a temporal dimension with its own set of rules and mechanisms, their understanding of migrant assimilation processes is limited in several ways.

First, besides assimilation over generations and historical time, the life course is an important temporal dimension of assimilation that is worth studying. As numerous studies have demonstrated, important indicators of assimilation such as crime risk, income, or poverty have been found to vary considerably and systematically over a life span (Cheng, 2014; Rank and Hirschl, 2001; Walsemann et al., 2008). Furthermore, research has demonstrated the unique

effects of the life course, in particular with regard to the timing and duration of events, especially on labour market outcomes (Blossfeld, 1986). Thus, if or how migrants improve their assimilation outcomes over their life span relative to the native-born population is itself a question of interest. Indeed, life course studies have already established that occupational status differences between social groups may persist or increase across the life course (Hillmert, 2011), and income inequalities may grow (Cheng, 2014; Fernandez-Mateo, 2009), thus illustrating the potential findings and mechanisms that may also apply to the assimilation of ethnic minority groups.

Second, if assimilation takes place over the life span, more explicit and systematic explications of the linkages between the life course and the various assimilation mechanisms that assimilation theories have established seem desirable. Arguments such as the roles of the different receiving contexts, the role of the ethnic community, or the role of the individual's different forms of capital all point towards life course events, such as graduation from school, labour market entry or marriage. Nevertheless, assimilation theories do not systematically or explicitly link them to such events nor do they take established life course principles such as the life course's path-dependent nature into account. Without such links, potentially important mechanisms that govern assimilation processes over the life course remain obscured.

Third, assimilation theories' disregard for the life course also limits their ability to explain intergenerational assimilation outcomes. As I will demonstrate in Chapter 3, life course events and processes of the parent generation have distinct implications for the assimilation chances of the next generation. The mechanisms that cause these effects partly differ from the mere inheritance or investment models that the segmented and new assimilation theory proposes for explaining intergenerational assimilation. For instance, parents' partner choice, divorce, income trajectories, or poverty episodes have distinct effects on their children's success chances. Moreover, the underlying explanations also include arguments about the role of emotional stress, quality of parenting, or more general arguments on child development. As these

arguments explicitly link children's outcomes to their parent's life course events, neglecting the life course bears the risk of missing these potentially important explanations of intergenerational assimilation outcomes.

Forth, because assimilation theories focus on intergenerational progress rather than on progress over an individual's life span, the empirical literature on migrant assimilation has rarely adopted genuine longitudinal methods. Rather, statistics often employ cross-sectional data and methods and resort to measurements of ethnic inequality that indicate assimilation outcomes rarely at more than one point over the life course (see, for instance, Alba and Nee 2003; Alba and Waters 2011; Portes and Rumbaut 2006; for exceptions, see Dale 2006; Kogan 2003, 2004). Thus, empirical studies have rarely assessed migrant assimilation outcomes over the life span, and whether the measurements of these outcomes remain valid if measured at a different age or time period.

What is more, commonly found comparisons between the first- and second-generation migrant's assimilation outcomes that are based on cross-sectional data and methods are likely to confound cohort, period, and life course effects and to produce biased outcomes. In this regard, the same critique applies as the one voiced by critics of intergenerational social mobility research decades ago. In a rather polemical analogy, Sørensen remarks that with such data "one would seem to have information about the birthplaces of a sample and about the same people's burial places. [...] what is believed to be a destination is in fact an observation of a person's location at some point in time during a process of intragenerational mobility" (Sørensen, 1986, p. 76-77). Thus, cross-sectional data and methods bear the risk of comparing categories of first- and second-generation migrants that include respondents who entered at very different historical times, that partly overlap with regard to their age or who are at very different life stages. While this risk can be amended by studying successive cohorts, without including life course effects the results are still likely to remain biased.

In conclusion, assimilation theories' disregard of a systematic inclusion of the temporal dimension of the life course leaves explanations of

intergenerational assimilation processes rather abstract and little connected to the underlying temporal processes. Thus, questions such as how migrants' labour market outcomes develop over the course of their careers compared to native-borns or how family- or labour market-related events over the life course affect their assimilation outcomes remain unanswered. As answers to these questions would certainly improve our understanding of assimilation processes, the inclusion of a life course perspective into theories of assimilation seems a promising undertaking.

# 3

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## COMBINING LIFE COURSE AND ASSIMILATION THEORY

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The previous chapter highlighted how assimilation theories have neglected the life course as a temporal dimension of assimilation. The chapter stressed that including a life course perspective into assimilation studies would offer us a better understanding of assimilation outcomes over the life span, as well as its mechanisms and impact on the subsequent migrant generation. Furthermore, such an examination would further improve the measures of assimilation outcomes in empirical studies.

This chapter aims to show how a life course perspective on assimilation can become a substantive and important contribution to assimilation theories. For this purpose, the next section introduces the life course approach in order to better understand its concepts and principles. In the following sections, I present previous theoretical concepts and empirical studies that link migration and integration to the life course, discuss the mechanisms of how assimilation outcomes may vary over the life span between ethnic groups, and how life course events and processes of the parent generation may shape the lives of their children. This chapter concludes with recommendations of how migrant assimilation can be studied from a life course perspective.



### 3.1 THE LIFE COURSE APPROACH

The life course approach emerged in the 1970's in part out of Elder's (1974) effort to understand the impact of historical events on family relations and family lives. In his study, Elder demonstrated that historical events affect individuals and their family relations at all stages of their lives, thus highlighting the importance of age as a temporal dimension for sociological studies. Since then, a common denominator of life course studies has been a focus on the characteristics and transitions between states in human lives over a long stretch of their life span (Elder et al., 2003; Mayer, 2009). The life course itself is commonly conceptualised as a sequence of transitions that are embedded in the institutional and historical context (Bengtson et al., 2005) and it is assumed to be generated by its unique set of rules (Kohli, 2009).

Nevertheless, and despite its long history, the life course approach does not represent a concise theory. Rather, it can be thought of as a direction of research that is guided by a common set of principles. These principles are discussed below as they aim at improving our understanding of the structure and logic of life courses.

**STRUCTURE OF THE LIFE COURSE:** First, the life course approach considers life courses to be structured by institutions, meaning that the life course consists of a perceived sequence of stages that are separated by institutionally defined transitions (Kohli, 2007). As Mayer and Müller (1989) argue, the emergence of the modern welfare state and its penetration into nearly all domains of life brought about the institutions that separate the life course into distinct stages, e.g., the introduction of pension schemes created the life stage of retirement (Göckenjan, 2000). Moreover, by enforcing legal norms, such as compulsory schooling, labour market regulations, and retirement schemes, the state has created a normative and ordered sequence of the life course that is structured around labour market work (Hogan, 1978; Kohli, 2007). By passing through these stages, persons are bound to the specific obligations and rights

of each domain and, therefore, must adhere to its specific logic in their actions and choices (Elder, 1975; Kohli, 1978; Mayer and Müller, 1989).

**HISTORICAL TIME AND LOCATION:** Second, lives are shaped by their historical context and location-specific circumstances (Blossfeld, 1986; Elder, 1975). Both aspects define a person's socialisation, personality or world views as well as the institutional and cultural opportunities and restrictions they confront at any given age (Elder and Giele, 2009). In this way, the historical context and location have a profound impact on a person's actions and decisions with potentially long-lasting consequences. For instance, Blossfeld (1985) found that successive birth cohorts differ in their first occupational position according to the economic conditions at the time they enter the labour market, and furthermore, these differences persist throughout their careers.

**TIMING OF EVENTS:** A third principle states that the timing of transitions or events over the course of a person's life has implications on later events. Transitions or events mark changes from one state to another or, in life course terminology, mark the beginning and end of an episode in a particular domain of life, e.g., job loss marks the end of an employment episode and the beginning of an episode of unemployment. From a theoretical perspective, the timing of an event or transition determines a person's resources, opportunities and restrictions at that time and, hence, has consequences on the person's decision-making process (Furstenberg, 2005). For instance, when considering the timing of childbirth, having children at an already consolidated stage of a professional career may offer better opportunities of labour market re-entry; however, it also increases the health risks of both the mother and the child and may violate normative expectations about the ideal age of childbirth. Empirical research has contributed numerous examples regarding the importance of timing. For instance, the timing of marriage is reported to influence household composition (Pittman and Blanchard, 1996); in addition,

the timing of labour market re-entry after motherhood affects women's future career choices (Aisenbrey et al., 2009).

**ENDOGENOUS CAUSALITY:** Forth, episodes and transitions over the course of a life are interconnected. On the individual level, a person's past experiences shape their personal development, determine their access to resources and impact their future opportunities (Blossfeld, 1990; Hogan, 1982). On the structural level, their access to educational tracks and occupational careers is tightly restricted by institutional entry requirements, which enforce an order and causality between past and later life episodes (Mayer, 1987). In this way, earlier decisions, resources or positions within social hierarchy determine a person's present and future opportunities.

**LINKED LIVES:** Fifth, the principle of linked lives states that lives are embedded in social relationship that affect each other, and often individuals experience societal change through the impact it has on their contacts. For instance, new relationships can change lives by providing access to another job, illness of close relatives may prompt individuals to give up their job in order to provide home care, or more childcare facilities may prompt single mothers to resume market work.

**DOMAINS OF LIVES** Sixth, lives consist of multiple interdependent domains, such as work and family, and that lives are interconnected (Elder et al., 2003). For instance, couples need to balance work and family life together and the way they manage their lives impacts their labour market careers. Other examples include the impact on family or friends when a person starts a new job in a new location. Because people are interconnected and the various domains of life tend to affect other domains, a person's life course is profoundly shaped by the repercussions of events in their life and in the lives of those close to them (Burton and Bengtson, 1985).

INTERPLAY OF ACTION AND STRUCTURE: At last, the life course approach considers life courses to be shaped by the interplay of individual actions and social structure (Elder et al., 2003; Hitlin and Elder, 2006; Settersten and Gannon, 2005). While not endorsing any particular theory of action, the life course approach assumes that individuals exert control over their own lives, satisfying their needs and meeting their goals by making decisions according to their resources, restrictions, and opportunities. Thus, individual actions and decisions are not passively determined by past experience or the historical and institutional context, but by the subjectively made choices between alternatives as individuals perceive them.

### 3.2 PREVIOUS WORK ON MIGRATION, INTEGRATION, AND THE LIFE COURSE

Given these principles, not all of them are new to assimilation theories. For instance, Gordon's dimensions of assimilation Gordon (1964) already resemble the concept of different domains of life. In addition, assimilation theories have discussed the importance of the historical and institutional context at great length but labeled it receiving context (Alba and Nee, 1997; Portes and Zhou, 1993). Moreover, Alba and Nee's (2003) emphasis on the role of ethnic boundaries for migrant adaptation is reminiscent of the principle of the interplay of action and social structure and the importance of institutions. And finally, assimilation theories have highlighted the roles of individual and collective resources as well as that of the ethnic community (Alba and Nee, 2003; Zhou, 1997).

Recently, a number of empirical studies on young migrant's life courses have been published that demonstrate how a life course perspective can be applied to study their assimilation outcomes (cp. Wingers et al., 2011). For instance, Söhn (2011) illustrates how the timing of migration affects the education chances of migrant children and how institutions shape educational success.

She finds that later timing of migration generally has detrimental outcomes on the school success of migrant children and that this is largely caused by the German education system which sorts children early into the different educational tracks.

Focusing on transition into vocational training, Aybek (2011) finds that having a migration background has a negative impact on the transition into vocational training and that the time period in which transitions occur is rather narrow. Similar results have been reported by Diehl et al. (2009), who find that migrant youths experience greater difficulties of entering vocational training, even when their qualifications are equal. In addition, migrant youths have lower chances of entering the educational training program of their choice.

The role of institutional structures is analysed by Kogan et al. (2011) and Tucci (2011). Kogan and colleagues show how ethnic communities and the welfare system shape the labour market outcomes of Jewish immigrants from the former Soviet Union in Germany and in Israel. With Israel having a less protective welfare system and more established Russian Jewish communities, they find that Jewish immigrants from the former Soviet Union experience higher unemployment risks in Germany but better access to high qualified professional, managerial, and technical jobs. Tucci examines how institutional structures affect the individual life courses of North African immigrants in France and Turkish immigrants in Germany. In general, she finds that Germany's stratified education system hampers the status attainment process of Turkish migrant at an early stage of their life, while North African immigrants in France have better educational opportunities but find it harder to make the transition into the labour market.

In another study, de Valk (2011) examines migrants youths pathways into adulthood in the Netherlands. Being characterised by the timing of leaving education, leaving the parental home, starting union formation and having a first child, she finds that these pathways do not vary much between Dutch and second-generation migrants. However, while the pathways' heterogeneity and order is largely the same, the timing of these transitions vary between Dutch

and second-generation migrants. The move out of the parental home is studied by Windzio (2011). In addressing the concept of linked lives, he reports that Turkish migrants' move out of the parental home is closely linked to marriage, while entering vocational training or tertiary education are the predominant causes for German youth.

In sum, these studies demonstrate how a life course perspective can broaden our understanding of migrant assimilation. Yet, while these studies apply life course principles such as timing or the role of institutions and assess important transitions and life trajectories, they provide little systematic understanding of the endogenous causality of life courses and the mechanisms that cause ethnic disadvantages to increase or decrease over a life course. In addition, no study focuses on early labour market careers. In what follows, I discuss such mechanisms, how they affect migrant assimilation, and how the life courses of one migrant generation affect the life chances of their children.

### 3.3 MECHANISMS OF LABOUR MARKET ASSIMILATION OVER THE LIFE COURSE

The presented life course principles add to our understanding of assimilation processes in two ways: First, they offer explanations regarding whether and how assimilation processes take place over the life span. Second, they direct our attention to the life courses of one generation and how we can link them to the socioeconomic destination of their children.

This section presents mechanisms through which labour market assimilation processes over the life span may be facilitated or impeded. Drawing on the principles of the life course approach as well as on assimilation theories, I argue that three mechanisms may potentially increase or decrease ethnic labour market inequalities over the course of a career: cumulative advantage, increasing host country-specific capital, and between-group differences in the timing, frequency, and impact of life course events.

### 3.3.1 *Cumulative Advantages*

In its most basic definition, the concept of cumulative advantages refers to growing inequalities over time. DiPrete and Eirich (2006) distinguish two basic forms of cumulative processes that differ regarding the underlying mechanisms: the strict form and the Blau-Duncan form.

In the strict form, future inequalities strictly depend on current accumulation. For instance, in the classic example of wealth accumulation, growing wealth inequalities over time result from initially unequal wealth and unequal returns on the current stock of capital due to compound interest rates. With regard to the development of migrants' labour market outcomes over the course of their careers, similar principles apply. As proponents of human capital theory (Becker, 1975) have argued, employment and income chances largely depend on a person's productivity, education, skills, and work experience. Based on this idea, Mincer (1974) has argued that income increases are gained when a person increases their work experience and when this investment yields a positive rate of return. Beyond human capital, employment or jobs in higher position may also be an asset insofar as they provide valuable job contacts (Lin, 2002). As a result, those with lower initial employment chances, higher unemployment risks, or initially lower status positions will have less means to invest into future rewards, thus increasing the gap in comparison to those with better initial employment chances.

In the second form, between-group inequalities may increase even when initial conditions are equal. In what DiPrete and Eirich (2006) call the Blau-Duncan form of cumulative advantages, increasing inequalities may occur due to the direct effects of belonging to a particular group, i.e., women or an ethnic minority, and due to lower returns of a status variable, such as education for members of that group. This form of cumulative advantages can directly be linked to the concept of discrimination proposed by assimilation theories. In this regard, increasing labour market inequalities between a migrant group and the majority population may occur due to persistent and direct discrimination;

for example, permanently lower employment chances or income despite equal qualifications or migrants' lower returns on education on account of lower quality of schooling due to ethnic group membership (DiPrete and Eirich, 2006).

### 3.3.2 *Increasing Host Country-Specific Capital*

In contrast to the effects of cumulative disadvantages, increasing host country-specific capital over the course of a career may work in favour of migrant assimilation. Building on human capital theory, Chiswick and colleagues (Chiswick, 1978; Chiswick et al., 2005) argue that migrants invest into host country-specific capital, such as job-training, language skills, credentials or other means, to increase their productivity and, as a consequence, their chances to access employment and a higher income.

While this argument is in relation to first generation migrants, it may hold true for the second generation as well. Even though most second-generation migrants have acquired educational certificates in the host country, members of ethnic groups that have made little progress in the labour market may lack important skills and resources that allow them to proceed as well as their native-born peers. Over time, they may improve their skills and abilities in order to catch up to the native-born population through further education or on-the-job training. Further, enduring employment in companies outside their own ethnic community may lead to increased language skills and valuable contacts. In this way, second-generation migrants may catch up to the native-born population with regard to their employment and income prospects.



### 3.3.3 *Timing, Impact, and Frequency of Life Course Events*

The life course principles of timing and linked lives offer another mechanism through which assimilation over the life course may be affected. The basic mechanism is rather simple: given life course events have consequences on the subsequent labour market career of individuals, we may observe systematic differences in the labour market careers of a migrant group and the majority population if the average frequency, impact, or timing of the event differ between the two groups.

One example of such an event is childbirth. Empirical research has produced a large number of studies that demonstrate the negative effects of childbirth on women's employment and income chances (Ejrnaes and Kunze, 2013; Fitzenberger et al., 2013; Schönberg and Ludsteck, 2014). In addition, later childbirth has been found to have a less negative effect on their careers, including women with lower educational attainments, mainly because they have already established themselves in the labour market at a later age (Greenstein, 1989; Miller, 2011; Troske and Voicu, 2011; Wilde et al., 2010).

Given these findings, we may expect increasing ethnic disadvantages over the life course if migrant women tend to give birth at a younger age or more often than native-born women. In addition, the same results will hold true if migrant women are less likely to return to the labour market after childbirth, all else being equal. In contrast, if migrant women tend to give birth later, less often, or are more likely to return to the labour market after childbirth than native-born women, we may expect this to work in favour of migrant women's labour market outcomes.

While childbirth is one example of the impact of life course events on women's later career outcomes, other events may have similar effects. For instance, marriage may have stronger negative consequences on the labour market careers of migrant women in comparison to native-born women due to more traditional gender roles; furthermore, the timing, frequency and effects

of divorce may affect the careers of migrant men and women differently than those of native-born men and women. However, while these considerations provide possible mechanisms for migrant assimilation over the course of a career, their impact has yet to be empirically examined.

### 3.4 THE LIFE COURSE AND INTERGENERATIONAL ASSIMILATION

Besides the processes that facilitate or impede assimilation over the life course, the life course perspective draws attention to how life course processes and events affect intergenerational assimilation outcomes. On the micro level, parents' life course events and processes may directly impact their children's education and labour market outcomes. On the macro-level, between-group differences in intergenerational social mobility may result from the groups' different characteristics of life course events, such as marriage and childbirth. In the following two sections, I discuss each aspect in more detail.

#### 3.4.1 *Parents' Life Courses and their Effects on their Children's Prospects*

When considering the effect of parent's life courses on their children's socioeconomic success, it is useful to distinguish between parents' time-constant resources, parents' time-varying resources, and parents' life course events. Parents' time-constant resources include their education and social origin or ethnic group membership; these both permanently affect children's development. Parents' time-varying resources include their income, employment position or the number of children they have. As these resources may change over the parents' life course, they provide a direct link between the parents' life course development and their children's socioeconomic destination. Parents' life course events present an intermediate influence. While events such as residential relocation or divorce designate changing environments or statuses over the life course, they typically occur not more

than a few times at most over the life course and are likely to be constant thereafter.

### *Time-Constant Effects*

Parent's socioeconomic status, social class, and education level significantly affect their children's educational achievement, with children of more advantaged social class backgrounds typically performing better in school (Barker and Coley, 2007; Breen et al., 2009, 2010; Bukodi and Goldthorpe, 2013; Sieben, 2001). In the social sciences, research on this topic has a long tradition. The most prominent theories that seek to explain these effects are Bourdieu's theory of class-based cultural reproduction of social inequalities (Bourdieu and Passeron, 1971, 1977) and Boudon's (1974) distinction between primary and secondary effects of social origin.

According to Bourdieu, educational inequalities result from the inheritance of the parent's class-specific habitus. The habitus denotes a system of embodied dispositions like taste, perceptions or preferences, which become visible in a person's actions and practices; further, they are derived from the person's position within the social class hierarchy. As children inherit their parent's habitus, and hence their linguistic and cultural skills, through socialisation (Bourdieu, 1983), they gain important skills for their educational pursuits. Because the distinguished linguistic and cultural skills of higher classes are highly rewarded in schools, children of highly educated, culturally competent parents have an advantage over those of a lower class background. In that way, social inequality is reproduced through the inheritance of a class-specific habitus and institutionally ingrained selection mechanisms that prefer higher-class cultural practices.

Boudon's (1974) main contribution is the distinction between the primary and secondary effects of social origin. The former denote the family's influence on their children's cognitive abilities and school performances through creating stimulating learning environments or organising extra tuition. The secondary

effects denote parents' educational choices at transition points, e.g., choosing higher or lower school tracks. The main argument concerning social inequality purports that parents' education choices depend not only on their children's school performances but also on the parent's social origin. These social origin-specific preferences for certain levels of education can be explained by parents' motivation to preserve their current social status and rational choice models (Becker, 2004; Esser, 1999). On the one hand, families of higher-class background choose higher school tracks because they seek to preserve their social status. On the other hand, families of lower social class background have typically limited resources and more unstable employment conditions. According to rational choice models, this situation biases their preferences towards strategies that are successful in the near future and prevent them from committing to less secure long-term plans (Becker, 2000; Goldthorpe, 2007).

Empirically, studies generally confirm that parent's cultural resources positively affect their children's abilities and school success (Andersen and Hansen, 2012; DiMaggio, 1982; Jaeger, 2011; Kloosterman et al., 2011). In addition, studies assessing the role of secondary effects have found a significant impact, although the strength of the effect differs between countries (cp. Neugebauer and Schindler, 2012).

Both the segmented and new assimilation theory generally conform to these arguments with regards to the role of social origin. In particular segmented assimilation theory has emphasised the role parents' cultural capital has on their children's assimilation outcomes, claiming that children's rejection of the mainstream culture leads to dissonant behaviour and poor school performance (Portes and Rumbaut, 2006). The effects of social origin on children's assimilation outcomes are also supported by the empirical literature (cp. Heath et al., 2008), even though the effects of acculturation that segmented assimilation theory proposes have been empirically questioned (Waters et al., 2010).

*Time-Varying Effects*

**INCOME INCREASES:** Parent's income increases can have positive effects on children's educational outcomes. From an investment or human capital perspective (Becker, 1975, 1981), this may be due to parent's increased capacity to support their children's learning efforts through extra tuition, better schools, stimulating activities or better learning materials. Parents with increasing incomes may also desire to secure their newly acquired social status and increase their investments into their children's education. As parents play a decisive role at important transitions during their children's school career, they may therefore be more inclined to choose higher education tracks for their children rather than lower school tracks. Thus, increasing income may directly influence what Boudon (1974) distinguishes as primary and secondary effects of social background.

Other effects of increasing income may include increased quality of parenting. Parents with increased income experience lower levels of stress and disruption, leading to less violent behaviour, better decision making and more balanced, responsive and supportive relationships with their children (Chase-Lansdale and Pittman, 2002; McLeod and Shanahan, 1993; Sampson and Laub, 1994). Finally, increased income may allow parents to substitute full-time employment for part-time employment and spend more time with their children, resulting in better supervision and support and stronger parent-child relationships.

Several longitudinal studies report improved educational outcomes for children whose parents experienced income increases. For instance, Akee et al. (2010) examined the effects of exogenous income increases using governmental transfers. Using data from the Great Smoky Mountains Study of Youth, they found that an increase of \$4000 per year in household income for the poorest families resulted in an additional year in schooling. Further, they found that children who stay longer in households with increased income receive a number of benefits and are less likely to commit crimes. In addition, their

results show that the poorest households benefit the most from income increases. Their results further indicate that increased household income improves the quality of parent-child interactions and that this effect leads to decreasing criminal behaviour and better school performance.

Duncan et al. (2011) use data from four studies conducted in the United States with more than 8,000 observations. Applying instrumental variable methods, they report that annual income increases significantly improves children's school performance. While their results are not generalizable because the study includes only single-parent children, other studies such as the one conducted by Dahl and Lochner (2012) avoid this shortcoming and report significantly better math and reading test scores when the household income increases. Morris et al. (2001) report that family income increases lead to consistently lead to better school achievements and improved social behaviour.

While studies on income increases consistently report positive effects on children's school performances, it should be noted that the general effects of parental income on children's education outcomes seem to be limited if other family characteristics are taken into account. For instance, Bratti (2002) has found a statistically significant but small effect of parental income but strong effects for long-term parental characteristics, such as parental education and social class. Sacerdote (2007) reports similar results, having found that family size is more important than income. For Germany, Schneider (2004) and Tamm (2008) report little to no causal effects of parents' income on their children's education outcomes.

**POVERTY EPISODES:** In contrast to parents' income increases, episodes where parents struggle to meet basic needs, such as food, clothing and shelter have detrimental and long-lasting effects on children's development and social mobility outcomes. Childhood poverty is linked to such diverse outcomes as lower physical health, lower cognitive abilities, lower school achievement, detrimental behavioural patterns, or teenage pregnancy (Brooks-Gunn and

Duncan, 1997). While all of these outcomes have potential negative effects on a child's future labour market prospects, the effects of childhood poverty episodes on educational achievements seem particularly important for a child's labour market success.

Theoretically, poverty decreases parents' capacity to directly invest into their children's future by offering learning activities, better schools, or a beneficial neighbourhood and learning environment. In addition, parents may be more pessimistic about their children's chances of success in light of their low financial resources, especially in the case of repeated poverty episodes. On another note, poverty also affects children's development; as a major stressor, it can lead to dysfunctional parenting behaviour (Conger et al., 2000). This includes cut backs of consumption goods and services, harsh punitive parenting practices or less responsive parenting (McLoyd et al., 1994).

Mayer (1997), using PSID and NLSY data, shows that parents in poor households spend less on food and engage less in stimulating learning activities; moreover, their children have lower education outcomes than children from non-poor families. Yeung et al. (2002) show how decreasing family income leads to maternal depressive effects, more punitive parenting behaviour, and lower test scores in cognitive tests. Other results suggest that poverty episodes have a significant, but small effect on children's education outcomes (Haveman and Wolfe, 1994, 1995; Teachman et al., 1997). However, poverty experiences in early childhood have a much stronger effect on children's educational outcomes than experiences in adolescence (Duncan et al., 1998). Empirical studies undertaken in Germany have found that poverty episodes have a significantly negative effect on children's education chances, especially at a young age (Gebel, 2011; Groh-Samberg, 2009).

**NUMBER OF CHILDREN:** A child's education and labour market outcomes may be affected by the number of siblings they have. Theoretically, the dilution model (Blake, 1981, 1989) claims that children's education and labour market outcomes decrease with the number of siblings because of parent's finite

resources. Economists have argued for the same type of quality-quantity trade-off where each additional child decreases the amount of resources per child parents can invest (Becker and Lewis, 1973).

Empirically, the negative correlation of a higher number of children with their education and labour market outcomes has been supported by a plethora of studies (Björklund et al., 2004; Downey, 1995, 2001; Hanushek, 1992; Lawson and Mace, 2009; Steelman et al., 2002). Even so, the causality of the effect has been questioned more recently by methodologically more advanced studies (Guo and VanWey, 1999). According to the aforementioned studies, the reported correlation is partly due to endogeneity effects or selection biases. Studies indeed show that families with fewer children are typically from more advanced social backgrounds in comparison to families with a larger number of children (Downey, 2001); in addition, much of the sibling effects reflects parental characteristics (Iacovou, 2001; Jaeger, 2008). More recent studies that apply instrumental variable methodologies do not uniformly support the causal relationship (Åslund and Grönqvist, 2010; Conley and Glauber, 2006).

### *Life Course Events*

**DIVORCE:** According to Lansford (2009), divorce typically results in a drop in household income, with disrupted parenting practices, and with severe emotional stress for parents as well as their children. Regarding decreasing household income (also see Hetherington et al., 1998), women are typically left with the combined burden of market work and raising children. As a result, a sizeable share of single mothers in Germany lives below the poverty line, especially if child-support payments prove to be an unreliable source of income (Christopher et al., 2002; Corak, 2004). The consequences of divorce may necessitate a change of neighbourhood or school, and lead to less supportive relationships or investments into the children's education. Further, empirical studies support the claim that divorce disrupts parenting practices in that it complicates supervising, disciplining and affectionate behaviour and increases



parent-child conflicts (Buchanan et al., 1996; Hetherington and Cox, M.: Cox, R., 1979; Hetherington and Stanley-Hagan, 1999; Short, 2002). Finally, divorce places parents and children under severe emotional stress and increases their risks for depression or anxiety (Menaghan and Lieberman, 1986; Wallerstein, 1991). In such circumstances, children often do not receive the parenting and support they need to be successful in school.

Empirical evidence generally suggests that children whose parents have divorced achieve lower education outcomes in comparison to children of married parents (Amato, 2001; Amato and Keith, 1991; Emery et al., 1999). However, this finding has been contested by some scholars with more sophisticated longitudinal research designs, e.g., Sun and Li (2001) who have found that lower academic achievement after divorce can almost entirely be accounted for by academic achievement prior to divorce. In another longitudinal study, Allison and Furstenberg (1989) have found the effects of divorce on children's academic achievement to be minor. Even so, there seems some consensus that divorce does have detrimental effects on education outcomes, especially on younger children (Lansford et al., 2006), but that the long-term effects are negligible (Lansford, 2009).

**RESIDENTIAL RELOCATION:** Parents may move to another city or area due to employment or other reasons, thus creating either opportunities or risks for their children's education outcomes. On the one hand, risks may arise if the quality of education in the new location does not match that of the former school, or if the new neighbourhood does not provide a beneficial learning environment. In addition, relocation is a disruptive experience for children, forcing them to establish new relationships and to adjust to a new environment. As this often implies emotional stress and insecurity, children's school performances may suffer, at least temporarily; the move may have long-term consequences if the relocation happens during a critical time of their educational career. On the other hand, residential relocation may offer better education, an improved neighbourhood and learning environments for

children, especially if the previous conditions had detrimental effects on their education outcomes.

Empirical research on the effects of residential relocation is scarce. Ladd and Ludwig (1997) find that children's education outcomes improve if their parents relocate to a new area with better educational opportunities. In addition, Wood (1993) reports that children who frequently move show more behavioural problems including failing a grade than those who do not move frequently.

### *Summary*

In light of these explications, there is compelling evidence that parents' life courses affect their children's socioeconomic destination. Parents' increasing incomes may have positive effects on children's school performances, while poverty episodes cause economic hardship and stress for children and negatively impact their educational achievements. In addition, parents' life course events, such as divorce or residential relocation, negatively affect their children in a significant manner. At the same time, parents' social origin impacts their children's education chances from the very start of their educational career. In this way, parents' life courses appear closely connected to their children's development, affecting their education outcomes; consequently, this impacts their labour market careers later in life.

Whether these mechanisms work in the same way for migrants and non-migrants has not been studied, with the only exception being the effects of social origin. Yet, there is no apparent reason why these mechanisms would not apply to migrants. In conclusion, we may therefore suspect that migrant groups with above-average achievements in their labour market careers and strong family norms increase their children's socioeconomic assimilation chances.

### 3.4.2 *The Intergenerational Reproduction of Social Inequality*

In addition to the direct effects of parents' life courses on their children's socioeconomic destination at the micro-level, between-group differences in the parent generation's partner choice, marriage, and fertility at the macro-level have implications for their children's intergenerational mobility chances.

Scholars of intergenerational mobility have highlighted these implications in recent years (Hillmert, 2013; Maralani and Mare, 2005; Mare, 2011). These authors argue that mechanisms of intergenerational social status transmission, such as socialization and the transfer of social, cultural and financial capital, are conditional on partner choice, marriage and children. Because they are socially selective processes whose outcomes vary by educational level or occupational status (Blossfeld, 2009; Blossfeld and Timm, 2003), between-group differences in partner choice, marriage and fertility decisively affect the socioeconomic composition of the group's next generation and their mobility chances. For instance, in a scenario with two groups, where one group has a higher than average socioeconomic status but a fertility level not sufficient to reproduce the group's size, and the other group has a lower than average socioeconomic status and higher fertility rates, the latter group's children will find more chances for upward mobility, as the size of the former group's children generation is not sufficient to fill all higher status vacancies. Through mechanisms similar to this, the demographic and socioeconomic characteristics of a group have consequences for its descendants' inherited resources as well as for the number of vacancies and the level of competition for resources that the next generation will face.

Including partner choice, marriage and childbirth into studies of intergenerational mobility also has methodological advantages. As Hillmert (2013) points out, traditional studies of intergenerational mobility observe a particular birth cohort and ask for their parent generation's socioeconomic position, education or social class. By comparing the observed responses from the sampled population to that of their parents, these studies disregard

childless persons in the parent generation and produce biased results of intergenerational mobility. In order to account for this selectivity bias, Hillmert proposes to include partner choice, marriage and childbirth into studies of intergenerational mobility. According to the steps he proposes, studies of intergenerational mobility first locate individuals within the social stratification hierarchy of their cohort, then assess who has a partner, who marries whom and who has children, and finally assess how their children's social destination compares to that of their parents. If these steps are followed, measures of intergenerational mobility remain unbiased.

Thus, life course events are an important aspect when studying between-group differences in intergenerational mobility. On the one hand, they draw attention to the conditionality of social status transmission processes and offer explanations on the group-level for between-group differences in intergenerational mobility outcomes. On the other hand, they remind us that adequate measures of intergenerational mobility between groups need to account for the selectivity bias that occurs when childless persons are excluded from the sample. As migrant groups often display different marriage and fertility rates than the native-born population (Holland and de Valk, 2013), including these life course events is important for studies of intergenerational migrant assimilation.

### 3.5 IMPLICATIONS FOR STUDIES OF MIGRANT ASSIMILATION

The arguments and findings presented so far make a strong case for adopting a life course perspective on migrant assimilation. They first highlight that assimilation is a process that takes place over the life span and that follows its own unique set of rules. Further, the arguments and findings illustrate that parents' life courses have consequences for their children's socioeconomic assimilation outcomes. Thus, by adopting a life course perspective and linking life courses to socioeconomic assimilation outcomes, the previous

sections demonstrate how including the life course gives us a more detailed understanding of assimilation processes.

Studies on migrant assimilation have overwhelmingly focused on intergenerational assimilation outcomes, thus ignoring the potential benefits of studying migrants' life courses. Therefore, and in order to systematically include a life course perspective into studies of migrant assimilation, this section presents an approach for studying migrant assimilation from a life course perspective. The presented approach comprises two steps which remotely follow the procedure proposed by Hillmert (2013): (1) the study of the life courses of the parent generation, (2) linking the parent generation's life courses to their children's socioeconomic outcomes.

### 3.5.1 *Step 1: Studying Migrants' Life Courses*

A first step includes the study of migrants' life courses. As discussed in section 2.5, indicators such as crime risk, income, or poverty vary over the life span (Cheng, 2014; Rank and Hirschl, 2001; Walsemann et al., 2008), giving reason to assume that migrants' particular disadvantages are also subject to change. In addition, the study of migrants' life courses may link the various assimilation mechanisms proposed by assimilation theories to the temporal dimension of the life course where they take place. Moreover, it avoids the methodological shortcomings of assessing assimilation outcomes at only point over the life span.

These arguments make a compelling case for studying migrants' life courses. In order to fully leverage the potential of the life course approach for studies of migrant assimilation, studies on the topic must answer two main questions:

- (1) Do migrants assimilate over their life span?
- (2) What mechanisms drive their eventual assimilation or segmentation over their life span?

Assimilation theories offer only limited assistance in answering these questions. Instead, the life course principles outlined in sections 3.1 and 3.3 emphasise the key aspects that are needed to answer the questions. First, migrants' life courses should be followed over a considerable time period. While this demand seems obvious, it often proves to be difficult due to the high data requirements that such an approach demands. In any case, the life span under study should be long enough to reveal potential developments of ethnic disadvantages.

Second, studies need to consider the various institutional settings that occur over the life course. These settings are specific to the stage of life, historical time and location, and the domain of life under study. As shown in section 3.1, the life course approach emphasises the normative order of education, labour market work, and retirement of modern life courses, it highlights the role of historical time and location for life course outcomes, and it considers the various domains of life such as family and employment to be interconnected. As the institutional rules vary between different life stages, locations, or domains of life, generic arguments about the role of the receiving context or human capital proposed by assimilation theories need to be connected to the specific life stages, historical times, locations, or domains of life. In that way, the life course perspective complements the arguments proposed by assimilation theories and additional domain-specific sociological or related theories; for example, labour market theories, can be consulted to address domain-specific questions. As a result, the hypotheses obtained will be more substantial and explicit and will assist to enhance our understanding of assimilation processes.

Third, studies on the life courses of migrants' can draw on the mechanisms of cumulative advantages, increasing capital, and timing as discussed in section 3.3. These principles and mechanisms directly aim at the development of assimilation outcomes over the life span; they emphasise the endogenous causality of life courses and can be applied to a variety of life domains and topics, including education and labour market outcomes.

I will demonstrate the application of these principles in Chapters 5, 6 and 7. These chapters present studies that examine migrants' assimilation progress in a specific domain of life and at a certain life stage - employment in the labour market. These studies fruitfully combine assimilation theories, life course principles, and labour market theories. For instance, these studies include the principle of linked lives by assessing the impact of events of family formation; furthermore, they include migrant-specific theories of labour market disadvantages and examine the relevance of cumulative advantages. In this way, they attempt to provide a comprehensive picture of the outcomes and mechanisms of migrants' assimilation over their early career.

### 3.5.2 *Step 2: Linking Migrants' Life Courses to Intergenerational Assimilation*

The second step builds on the study of migrant parents' life courses and seeks to explain the assimilation outcomes of their children. The main questions that need to be answered are those of traditional assimilation theories:

- (1) Does assimilation occur over subsequent migrant generations?
- (2) Which individual or institutional factors facilitate or impede assimilation progress over generations?

Studies of intergenerational assimilation often apply insufficient methodologies to answer these questions. As argued in section 2.5, measuring the assimilation outcomes of parents and their children at one point over the course of their lives and undertaking comparisons runs the risk of inadequate generational categories that overlap with regard to the respondents' age or the historical context. In addition, the common practice of sampling the second generation and assessing their assimilation progress by comparing their progress to that of their parents yields biased results of intergenerational mobility (see section 3.4.2). Finally, assimilation theories have offered little systematic reasoning about the impact of parents' life courses on their

children's socioeconomic outcomes on account of their disregard of life course processes (see section 2.5).

These shortcomings can be amended by learning from life course studies and studies of intergenerational social mobility. First, as discussed in section 3.4.1, the life courses of parents' potentially affect the socioeconomic outcomes of their children. By including parents' life course events and processes into studies of intergenerational assimilation, these arguments can be empirically tested and discussed for their relevance regarding processes of intergenerational assimilation. In this way, the arguments about the causes of intergenerational migrant-specific disadvantages proposed by assimilation theories can be complemented by arguments of social mobility research and life course studies.

Second, as discussed in section 3.4.2, studies of intergenerational assimilation need to start with representative samples of the parent generation. In that way, a representative picture of the parent generation's socioeconomic situation can be gained. In order to compare the assimilation progress of the second generation to that of the parent generation, studies must be aware of the importance of socially selective processes such as partner choice, marriage and childbirth for status transmission processes. As demographic characteristics often differ between migrant groups and the native-born population, disregarding these aspects may lead to biased results of intergenerational mobility. Lastly, studies of migrant assimilation need to study the intergenerational process of successive cohorts. In this way, they avoid comparing generations whose members overlap with regard to their age.

### 3.6 SUMMARY & OUTLOOK

The arguments presented in Chapters 2 and 3 make a compelling case for adopting a life course perspective on migrant assimilation; furthermore, they illustrate how such a combined perspective can be realised in empirical



studies. As illustrated in Chapter 2, disregarding migrants' life courses has detrimental consequences for assimilation theories' ability to account for migrant assimilation processes, as they miss both an important temporal dimension of assimilation and potentially important mechanisms of intra- and intergenerational assimilation.

This chapter introduced life course principles and explicated these potential mechanisms. Among them, parents' life course events and processes, such as income increases, may have positive effects on children's assimilation chances because it increases the parents' capacity to provide resources and stimulating learning environments, while poverty episodes, relocation or divorce may have detrimental effects on children due to lower resources or increased levels of stress. From a macro-perspective, section 3.4.2 illustrated how events of family formation affect a groups' intergenerational socioeconomic mobility chances by determining the groups' size, resources, and vacant positions.

Taken together, studying migrants' life courses and linking them to socioeconomic assimilation outcomes provides additional mechanisms and explanations of ethnic disadvantages to those already proposed by assimilation theories. What is more, focussing on the life course offers greater insights into the temporal processes of migrant assimilation. In the next section, I build on these considerations through three empirical studies that highlight migrants' assimilation outcomes over a short span of their lives; the potential mechanisms that affect their lives are discussed.

Part II

EMPIRICAL STUDIES



# 4

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## INTRODUCTION TO THE EMPIRICAL STUDIES

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The following Chapters 5, 6 and 7 present three empirical studies that build on the previous considerations and address the early labour market careers of second-generation Turks in Germany. Thus, out of the two steps outlined in section 3.5, the following studies will concentrate on the first one and will not attend to processes of intergenerational assimilation. This decision is motivated by the lack of empirical studies on migrants' labour market careers (see section 4.1.3), while more studies exist that address migrants' intergenerational assimilation outcomes (e.g. Algan et al., 2010; Herwig and Konietzka, 2012; Kalter and Granato, 2001; Kalter et al., 2007). In addition, the previous chapter concluded that studying migrants' life courses is a first and necessary step to examining the impact of their life courses on their children's assimilation outcomes. As only few studies exist that focus on migrants' labour market careers, the following studies seek to fill this gap.

This chapter serves as an introduction to the empirical studies. The following section presents the history and labour market situation of the group under study: second-generation Turks in Germany, and reviews the empirical literature on migrants' labour market careers. Thereafter, I introduce the three empirical studies and compare their scopes, data sources and methods.

#### 4.1 SECOND-GENERATION TURKS IN GERMANY

##### 4.1.1 *Historical Background*

Throughout western and northern Europe, the economic boom cycle beginning in the 1950's led to large scale recruitment of unskilled workers from Italy, Spain, Portugal, Greece, Yugoslavia and, most importantly for Germany, from Turkey. By 1970, Sweden was home to about 0.35 million labour migrants (Westin, 2003), and Belgium's migrant population had increased to almost 0.7 million (Phalet and Swyngedouw, 2003). Further, by 1977, France employed more than 1.5 million foreign nationals, Switzerland more than 0.5 million and Germany almost 2 million foreign nationals (Martin and Miller, 1980).

Germany signed the first recruitment agreement with Italy in 1955 (Bade, 1992). Subsequently, large scale recruitment started in 1961 after the German Democratic Republic closed its borders to prevent emigration to western Germany. These migrants, or guest workers, as they were labelled, were needed to fill labour shortages in the industry and worked predominantly in unskilled and semi-skilled positions. Contrary to expectations, a large share of guest workers stayed after their contracts ended in the aftermath of the 1973 oil crisis and, due to family reunions, the foreign born German population reached 5.5 million in 1990 (Statistisches Bundesamt, 2015). In the following years, the declining demand for unskilled labour due to large-scale economic restructuring led to mass unemployment among guest workers.

Nevertheless, Bender and Seifert argue that in 1996, the occupational positions of male guest workers from the former Yugoslavia and Spain had become similar to those of native-born German men, the first time this had occurred since the mid-70's (Bender and Seifert, 1996). However, they also report that foreign women experienced only little occupational upward mobility and the strongest labour market disadvantages during the same period. Seifert (1997) reports that in 1993, 60 per cent of the foreign population

was still employed in unskilled and semi-skilled positions and that their occupational mobility was relatively low. Further, he reports that the wages of migrants were lower than that of native-born Germans; moreover, foreign-born women assumed positions in the service economy, albeit to a lesser extent than native-born German women.

Among guest workers, those of Turkish origin have been the most disadvantaged group in the German labour market. The vast majority worked in unskilled and semi-skilled positions, in particular Turkish women, and they were more often unemployed (Bender and Seifert, 1996). Further, they earned the lowest salary of all migrant groups in the mid-80s; however, by the early 90s their salaries had increased (Seifert, 1997).

#### 4.1.2 *Labour Market Outcomes of the Second Turkish Generation*

In virtually all countries with a sizeable share of unskilled first-generation immigrants, second-generation migrants have been able to improve their labour market situation compared to their parents (for France, Germany, and the UK see Algan et al., 2010; for the United States see Luthra and Waldinger, 2010; Park et al., 2014; for Austria see Herzog-Punzenberger, 2003; for Germany see Granato and Kalter, 2001; for Sweden see Hammarstedt and Palme, 2012; for a more pessimistic view on France, see Simon, 2003).

Even so, strong labour market disadvantages persist for the second generations of the most disadvantaged migrant groups in virtually all Western countries that experienced large post-world war migration inflows. In the US, second-generation Puerto Ricans and Mexicans are more at risk of unemployment and poverty (Luthra and Waldinger, 2010; Park et al., 2014; Waldinger and Feliciano, 2004); in the UK, second-generation Black Caribbean, Pakistani and Bangladeshi men and women earn lower wages and are more at risk of unemployment (Algan et al., 2010; Berthoud, 2010); in Sweden, non-European second-generation migrants have lower income and

employment chances (Behtoui, 2013; Hammarstedt and Palme, 2012; Rooth and Ekberg, 2003); in Austria, despite not facing strong employment disadvantages, second-generation Turkish men and women find themselves at the bottom end of the occupational hierarchy (Herzog-Punzenberger, 2003); in Belgium, second-generation Turkish and Moroccan men and women are more at risk of unemployment (Timmerman et al., 2003); in France, second-generation Maghrebis and Turkish men and women earn less than natives, are less often employed, and are more likely to work in unskilled or semiskilled occupations (Algan et al., 2010; Silberman, 2011; Silberman and Fournier, 2008).

In 2011, Germany was home to 1.5 million second-generation Turkish men and women (Statistisches Bundesamt, 2012); they are the group with the lowest education outcomes and greatest labour market difficulties among second-generation migrants. There is ample evidence to attest that second-generation Turkish men and women's educational attainment is lower than that of native-born Germans. In terms of school performance, they have lower reading and math skills (Dustmann et al., 2012), their share of those graduating from school with Abitur is considerably lower (Kristen and Granato, 2007), and they are less likely to attend vocational training (Fincke, 2009). However, despite these difficulties, evidence suggests that due to their familiarity with the German vocational system and their educational motivation they are more likely than Germans to enter tertiary education (Kristen et al., 2008).

Despite having made progress in the labour market compared to their parents (Algan et al., 2010; Milewski, 2013), second-generation Turkish men and women have lower incomes than native-born Germans (Algan et al., 2010), are less likely to be employed (Algan et al., 2010; Kalter, 2006), occupy lower occupational positions (Granato and Kalter, 2001; Höhne and Koopmans, 2010; Kalter, 2006), and are more often and for a longer period of time unemployed (Uhlendorff and Zimmermann, 2006; Worbs, 2003).

### 4.1.3 *Studies on Migrants' Labour Market Careers*

Despite the number of studies that focus on migrants' labour market outcomes, the labour market careers of migrants have not yet attracted much interest from scholars of migrant assimilation. Some studies focussing on first generation migrants apply a career perspective (Kogan, 2006; Kogan and Weißmann, 2013); in this context, the duration since migration is commonly used to measure time effects on labour market outcomes, such as income or occupational mobility (Chiswick, 1978; Chiswick et al., 2005). Yet, to the best of my knowledge, no studies exist that examine the development of second-generation migrants' labour market outcomes from a life course perspective.

Even so, studies that focus on other ethnic minorities provide insights into the potential developments and disadvantages second-generation migrants may experience. In the UK, black women have higher rates of economic activity across their life course than white women; this is the case even after childbirth and for single mothers (Dale et al., 2006). For African Americans in the United States, Miech et al. (2003) have found that African American workers' socioeconomic status is lower at labour market entry and that their disadvantages increase significantly over their life course. They conclude that market forces and government programs are not sufficient to decrease ethnic labour market disadvantages over the life course. On another note, Thomas et al. (1994) argue that earnings disparities between white and black males increase as they enter middle adulthood stage and decrease at later life stages. The authors propose that this finding is due to white males retreating from employment and relying more on their accumulated wealth – an option black males do not have because of their lower earnings.

Further studies report that income differences between black and white men increase across their careers (Maume, 2004; Tomaskovic-Devey et al., 2005). Willson (2003) reports a similar finding for black women, stating that their incomes grow significantly less than those of white women. She also points out the different role of marriage for black and white women. While white women



gain financial security from marriage, black women neither enjoy the benefits of marriage nor the penalties involved in marriage dissolution. Higher risks of unemployment and occupational downward mobility have been reported for African Americans (McBrier and Wilson, 2004; Wilson, 2005). Studies also report that African Americans have lower chances of reaching managerial positions because they rely more on human capital credentials rather than social contacts – the preferred route of white men (McBrier and Wilson, 2004; Wilson, 2005).

#### 4.2 AIMS & SCOPES OF THE STUDIES

The studies presented in Chapters 5 to 7 examine the early labour market careers of second-generation Turkish men and women in Germany. Germany is an interesting case for studies of migrants' career assimilation outcomes as it has a sizeable share of migrants and its intergenerational mobility regime is rather rigid (Müller and Pollack, 2004). In this context, assimilation over the course of a career may offer an alternative path and compensate low intergenerational upward mobility chances. This holds especially true for the largest and most disadvantaged group of second-generation Turkish men and women.

While all three studies share the focus on second-generation Turkish migrants' early labour market careers, each study targets a different aspect of labour market assimilation over the course of a career. The first study seeks to explain the hypothesis of mainstream assimilation on a more solid methodological basis than previous studies. Typically, studies of migrants' labour market assimilation measure labour market outcomes at a specific age or historical time. This procedure, however, risks that the results depend on the timing and measurement because labour market outcomes are likely to change over the course of a career. By adopting a life course perspective and taking migrants' entire early labour market career into account, the first study avoids

this shortcoming. The obtained results show that second-generation Turkish men and women have much lower chances of pursuing a stable middle-class career than native-born Germans and other second-generation migrants; in addition, the gap is particularly large for second-generation Turkish women.

The second study aims to examine second-generation Turkish men's disadvantages of pursuing a middle-class career; more specifically, the study investigates their employment and income transitions. Employment and income transitions mark the events by which migrants' labour market careers become more similar or different to those of native-born German men; thus, they are the events through which middle-class assimilation takes place. Because employment and income mobility risks typically vary over the course of one's career, the study also examines the development of these risks throughout this period. In addition, the study investigates the effects of life course events such as marriage and childbirth on men's employment and income mobility risks, and examines the role of life course mechanisms such as cumulative disadvantages. The study concludes that second-generation Turkish men's employment and income mobility risks differ considerably from those of native-born German men and that their higher upward income mobility chances decline over the course of their careers. Further, the study shows that these differences are due to second-generation Turkish men's lower host country-specific capital and its cumulating effects.

According to the first study, second-generation Turkish women are more likely to be homemakers and less likely to be employed. The third study explicitly targets the development of second-generation Turkish women's likelihood of employment, unemployment, and being a homemaker over the course of their early career. Thus, instead of examining transitions, the study investigates yearly changes in women's employment status; consequently, it addresses life course developments from a different perspective than the second study. By examining employment chances, unemployment risks and the risks of being a homemaker, the study focuses on the most prevalent labour market statuses of second-generation Turkish women. In addition, the

study asks for the role of family formation events, gender roles and life course processes, such as cumulative disadvantages. In short, the results show that second-generation Turkish women are more likely to be a homemaker throughout their early labour market career, while native-born German women approach their level of being a homemaker over the course of their early careers due to their later timing of marriage and childbirth.

Taken together, the three papers aim at providing a comprehensive perspective on second-generation Turkish men and women's labour market disadvantages, the development over the course of their careers, and the specific underlying causes and processes of their labour market disadvantages. By adopting a life course perspective, focussing on life course events and processes as causes of ethnic disadvantages, they seek to expand current knowledge on second-generation Turkish migrants in Germany and expand the theoretical and empirical scope of migrant assimilation studies in general.

#### 4.3 COMPARISON OF DATA AND METHODS

##### 4.3.1 *Data*

All three papers use the German Socioeconomic Panel (GSOEP) as their primary data source (Wagner et al., 2007). The GSOEP is a longitudinal household panel study that began in 1984 and provides annual as well as monthly data on a wide range of topics. It is the only long-term longitudinal German panel study covering migration and labour market related topics. Moreover, it is especially suited for studying employment careers of migrants because it oversamples the migrant population. The first paper utilizes GSOEP data from 1984 to 2010, while the other two papers, which were started later, also employ data for 2011.

Further, all three papers focus on respondents living in western Germany because only few second-generation Turkish migrants live in eastern Germany; also, the economic conditions between western and eastern Germany differ. Thus, including second-generation Turks from eastern Germany would not only add little value in terms of case numbers, it may lead to estimation biases due to (unobserved) regional effects.

The groups under study vary between the three papers. Paper one comprises both men and women and differentiates between native-born German, second-generation Turkish, and second-generation non-Turkish migrants. With the aim of assessing second-generation Turkish migrants' overall career disadvantages, it sets the starting point for the comprehensive examination of their labour market careers. The subsequent papers consider only the careers of second-generation Turkish migrants and native-born Germans. Studying second-generation Turkish migrants' labour market careers in depth requires examining men and women separately, mostly because their labour market careers differ substantially. Thus, the second paper focuses on second-generation Turkish men and the third paper on second-generation Turkish women.

All three papers focus on respondents aged between 18 and 35 and exclude those with too few years under observation for panel balancing reasons. The upper age limit reflects second-generation Turkish migrants' young average age and the correspondingly low case numbers above the age of 35. Second-generation migrants are defined as those who were born in Germany and have at least one parent who was either born in Turkey or is a Turkish national. Further, those who migrated from Turkey to Germany before the age of six are classified as second-generation migrants. These constraints lead to potentially problematic case numbers of 143 male and 112 female second-generation Turkish respondents in the first paper. For the subsequent papers, the analysis builds on 216 second-generation Turkish men and 204 second-generation Turkish women.

#### 4.3.2 *Comparison of Estimation Methods*

Given the different aims and scopes of the three studies, they apply different statistical methods.

##### *Study 1*

The first study aims at assessing second-generation migrants' mainstream assimilation over the course of their early labour market careers. To achieve this, I construct measures of dissimilarity for each individuals' career and compare it to a reference sequence that denotes a stable middle-class career. This study applies sequence analysis for obtaining measures of dissimilarity between individual careers and the reference sequence.

Sequence analysis provides metrics on the dissimilarity of trajectories such as labour market careers. Dissimilarity metrics characterise careers by a single measure of their dissimilarity to a reference sequence and can be utilised for regression analysis. Thus, dissimilarity metrics are a purely descriptive method. A number of methods have been proposed to obtain a dissimilarity measure; optimal matching (OM) was the first and became the most popular (Abbott and Forrest, 1986). OM measures dissimilarity in terms of the costs of transformations needed to turn one sequence into another. This procedure has been criticised in the literature, most notably because cost assignments are theoretically hard to justify (Levine, 2000); in addition, there is a lack of additional properties like duration or direction of time (Wu, 2000) and a lack of meaningful interpretations of the resulting measure (Elzinga, 2007). For these reasons, paper one applies the longest common subsequence (LCS) method (Elzinga, 2007). LCS compares subsequences and assumes that sequences are more equal when they have long subsequences in common. It constructs a dissimilarity measure by counting the minimum number of states that have to be removed from two sequences in order to make them completely equal.

For example, given the states EH (Employed High Income), EL (Employed Low Income), U (Unemployed), ED (Education), O (Other) and the three sequences<sup>1</sup>

$$\begin{aligned} x &= EH\ EH\ EH\ EH\ EH\ EH \\ y &= EH\ U\ EH\ U \\ z &= EL\ EL\ U\ U \end{aligned} \tag{4.1}$$

the longest common subsequence of  $(x, y)$  is  $u = EH\ EH$  with length 2. For  $(x, z)$ , the longest common subsequence is  $u = \emptyset$  with a length of 0, and the longest common subsequence for  $(y, z)$  is  $u = U\ U$  with length 2.

Because LCS avoids the assignment of transformation costs, it avoids some of the pitfalls of OM or its successors, such as the Hamming dissimilarity measure (Lesnard, 2008). Further, in contrast to other proposed approaches, such as the DT method (Dijkstra and Taris, 2005), the LCS uses all substantial information in a sequence and does not discard states. However, as with most dissimilarity measures developed for sequence analysis, there is no immediate sociological interpretation of the results.

For the purpose of measuring the extent to which careers resemble a stable middle-class career, I define a reference career that encompasses continuous employment with gross hourly earnings above the median and above two-thirds of the median gross hourly earnings. Hence, as seen in the example above, the LCS metric counts the months a person is employed with a salary above the income threshold. With each individual's dissimilarity measured against the reference sequence, the resulting distribution of the dissimilarity index for each ethnic group unveils their disadvantages in reaching middle-class positions over the course of their early careers.

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<sup>1</sup> for another example, see Elzinga (2007), p. 14

In a final step, in order to explore the causes of between-group differences, the dissimilarity measure is used as a dependent variable and analysed with regression analysis. The distribution of the dissimilarity measures can be approximated by a Poisson distribution; such data is usually analysed using Poisson (or log-linear) models. In general, Poisson regression models have the form

$$\log(\mu_i) = \boldsymbol{\beta}'\mathbf{x}_i \quad (4.2)$$

with  $\mu_i = E(Y_i)$ ,  $\mathbf{x}_i$  being a set of explanatory variables, and with

$$E(y_i) = \text{Var}(y_i) \quad (4.3)$$

However, two problems arise when applying log-linear models to the data: 1) the analysis has to deal with biases caused by heteroskedasticity and b) log-linear models cannot estimate zero values of the dependent variable. Both problems are relevant for dissimilarity measures, in particular because zero values account for a substantial part of their distribution (ca. 20 percent). The solution is to use Poisson pseudo-maximum-likelihood method (PPML), a special case of the generalised linear model framework (Santos Silva and Tenreyro, 2006, 2011). In this case, the assumption that the conditional mean equals the conditional variance is relaxed to the assumption that

$$E(y_i) \approx \text{Var}(y_i) \quad (4.4)$$

and the model is estimated using a pseudo-maximum-likelihood method. In practice, the assumption that the conditional mean is proportional to the conditional variance is unlikely to hold, and standard errors are therefore based on the Eicker-White (Eicker, 1963; White, 1980) robust covariance estimator.

In contrast to Poisson models with maximum-likelihood estimators, pseudo-maximum-likelihood estimators provide consistent estimates without assuming that the density is correctly specified, e.g. when the data contains excessive zero values. Further, estimates remain consistent in the presence

of heteroskedasticity. In addition, this approach does assume only a single data-generating process, whereas alternatives such as Tobit regression, Hurdle models or Zero-Inflation models assume two data-generating processes which is theoretically hard to justify for the given distance metrics.

PPML has been criticised by Martin and Pham (2008) in that it does not prove to be robust to the joint problem of heteroskedasticity and zero values, while other studies find that PPML is less affected by heteroskedasticity than other estimators, such as feasible generalised least squares (Martínez-Zarzoso, 2013). Even so, PPML is the best solution available and study one uses PPML to test hypotheses about the causes of second-generation Turkish migrants' difficulties to assimilate into the middle-class.

### *Study 2*

Rather than measuring early career assimilation outcomes with a single index, the second study asks for the employment and income mobility risks of second-generation Turkish men in Germany. By studying employment and income transitions, the study directly aims at the events that determine second-generation Turkish men's labour market success or failure. For studying transitions, event-history models are best suited as they assess the risk that a transitions occurs given that the subject is still at risk. Because the shape of the baseline hazard function is not immediately obvious in the case of employment and income transitions, the study applies Cox regression models (Cox, 1972).

While event-history models have the advantage of directly examining events of labour market assimilation, the models applied in the study have several shortcomings. As I will discuss below, Cox models are not well suited to account for serial correlation and unobserved heterogeneity in the case of repeated events over time. Because this limits their applicability to study the development of employment and income mobility risks over time, I also discuss the approach I adopted to circumvent this limitation.



In general, Cox proportional hazard models have the form

$$h(t|\mathbf{x}) = h_0(t)e^{\beta'\mathbf{x}} \quad (4.5)$$

with  $h(t|\mathbf{x})$  being the hazard rate,  $h_0$  the baseline hazard that is left unestimated, and  $\mathbf{x}$  a set of explanatory variables. In contrast to parametric models, Cox models avoid a specification of the baseline hazard function by restricting the analysis to those times where failures occur and, hence, cause the baseline hazard to drop out of the equation (Kalbfleisch and Prentice, 2002). This feature, however, also causes a loss in efficiency compared to parametric models, which do not know such a restriction.

Besides being less efficient than parametric models, Cox models assume the proportionality of hazard rates for any two observations over time,

$$\frac{h(t|\mathbf{x}_i)}{h(t|\mathbf{x}_j)} = \frac{h_0(t)e^{\beta'\mathbf{x}_i}}{h_0(t)e^{\beta'\mathbf{x}_j}} = \frac{e^{\beta'\mathbf{x}_i}}{e^{\beta'\mathbf{x}_j}} \quad (4.6)$$

for subjects  $i$  and  $j$  and assuming that  $\mathbf{x}_i$  and  $\mathbf{x}_j$  do not change over time. As equation 4.6 demonstrates, only if the proportional hazard assumption holds the baseline hazards drop out of the equation. If the assumption does not hold, estimates are likely to be biased. In the study, the proportional hazard assumption has been validated using the Thernau-Grambsch test (Box-Steffensmeier and Zorn, 2001).

With regard to study 2, transitions into employment and higher income may be correlated, thus violating standard assumptions of event-history models. This situation is best dealt with using event-history models with competing risks (Fine and Gray, 1999), which estimate cause-specific hazards. Cause-specific hazards denote the conditional probability that subject  $i$  dies in a specific interval from cause  $k$ , given that the subject survived until then. In this case, the cause-specific hazard rate is denoted by

$$h_k(t|\mathbf{x}) = h_{k,0}(t)e^{\beta'_k\mathbf{x}} \quad (4.7)$$

where  $h_{k,0}(t)$  describes the cause-specific baseline hazard for event type  $k$  and  $\beta_k$  denotes the vector of coefficients for the  $k^{\text{th}}$  event type.

Further, the second study aims at studying the development of transitions over the course of the early career. To achieve this, the study needs to take repeated events into account and must deal with two problems. First, error terms are correlated at the person-level in the case of repeated events. As this violates standard regression assumptions, one can account for this by applying either variance-corrected models in gap time formulation (Gail et al., 1980; Prentice et al., 1981) or conditional frailty models (Box-Steffensmeier and de Boef, 2006). Both models produce accurate estimates on account of event dependence, with conditional frailty models having the additional advantage of accounting for unobserved heterogeneity. Unfortunately, semi-parametric conditional frailty models have not been sufficiently implemented in major statistical software packages yet and, hence, the paper relies on variance-corrected models in gap time formulation. This approach estimates hazards since the previous event and, therefore, allows the baseline hazard to vary with each event. In addition, the model adjusts the covariance matrix of the estimators to account for the within-person correlation. However, despite producing accurate estimates for repeated events, estimates for variance-corrected models may be biased towards zero in the presence of unobserved heterogeneity (Box-Steffensmeier and Zorn, 2002). While Therneau and Grambsch (2000) argue that this bias may be tolerable, the analysis may underestimate second-generation Turkish men's labour market disadvantages.

Second, it is desirable to control for unobserved heterogeneity at the person level. As already mentioned, conditional frailty models for semi-parametric models are not available, and the study therefore resorts to estimating robust standard errors in order to obtain efficient inference statistics. However, this procedure may result in inefficient estimates in particular for time-varying variables such as the interaction effect of ethnic group origin with time since labour market entry, and the according estimates should be interpreted accordingly.

*Study 3*

Given the limitations of the second study, the third study applies logistic hybrid random-effects models that are better suited for studying the development of ethnic labour market inequalities over the course of the early career. Thereby, they allow for a more thorough examination of the mechanisms of career assimilation such as cumulative advantages or the effects of timing. This is especially important for the examination of women's labour market careers as, e.g., the timing of birth is an important cause for women's labour market dropout. Without consistent estimates of yearly changes in women's probabilities of becoming employed, unemployed, or homemakers, the effects of timing may not be fully reliable.

Hence, the third study emphasizes a different aspect of labour market assimilation over the course of a career than the second study. Rather than focusing on the risks of events of labour market assimilation, the third study focuses on the development of early labour market careers. While each are important aspects of career assimilation which require their own analytical methods, the different methods do not allow for directly comparing the labour market careers of second-generation Turkish men and women. However, this limitation is partly alleviated by the first study, which provides comparable results on second-generation Turkish men and women's labour market careers.

In what follows, I briefly introduce logistic hybrid random-effects models and discuss their assumptions and shortcomings. In general, logistic random effects models have the form

$$\log \left( \frac{P(Y_{it} = 1)}{1 - P(Y_{it} = 1)} \right) = \beta_0(t) + \beta_1 x_{1it} + \dots + \beta_k x_{kit} + \gamma_1 z_{1i} + \dots + \gamma_j z_{ji} + u_i \quad (4.8)$$

for time  $t = 1, \dots, T$ , subjects  $i = 1, \dots, n$ , time-varying covariates  $x_1, \dots, x_k$  with coefficients  $\beta_1, \dots, \beta_k$ , time-invariant covariates  $z_1, \dots, z_j$  with coefficients  $\gamma_1, \dots, \gamma_j$ , and a unit-specific error term  $u_i$  (called unobserved heterogeneity)

which is assumed to be normally distributed and to be independent of the variables in the model.

The assumption that unobserved heterogeneity is uncorrelated to the model variables is rather strong and, in case the assumption is violated, the model produces biased estimates of the time-varying estimates. To obtain unbiased estimates of the time-varying variables, one can include the unit-specific means of the time-varying variables as additional variables (Allison, 2009). In this way, the model controls for unobserved heterogeneity by including another characteristic of each individual which causes the person-specific mean values to account for unobserved heterogeneity, leaving the estimates of the time-varying variables unbiased.<sup>2</sup>

The model for this hybrid approach then is as follows

$$\begin{aligned} \log \left( \frac{P(Y_{it} = 1)}{1 - P(Y_{it} = 1)} \right) &= \beta_0(t) + \beta_1 x_{1it} + \dots + \beta_k x_{kit} \\ &+ \beta_{k+1} \bar{x}_{k+1;it} + \dots + \beta_{k+k} \bar{x}_{k+k;it} \\ &+ \gamma_1 z_{1i} + \dots + \gamma_j z_{ji} + u_i \end{aligned} \quad (4.9)$$

As a result, the time-varying estimates are similar to fixed-effects estimates and the unit-specific means resemble between-effects.

While this approach combines the advantages of fixed- and random-effects models, recent studies have demonstrated some of its shortcomings. For instance, Goetgeluk and Vansteelandt (2008) have shown that hybrid models produce consistent estimates in the linear case but also that they can produce slightly biased estimates for logistic dependent variables. In another study, Brumback et al. (2010) show that estimates of logistic are consistent as long as the unobserved heterogeneity is a linear function of the time-varying variables in the model. If this condition is not fulfilled, the estimates of logistic hybrid random-effects models are not consistent. However, Brumback et al. (2010)

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<sup>2</sup> For a formal explanation, see Andreß, Golsch and Schmidt (2013).

report that the bias is usually rather small. Even so, Brumback and He (2011) find that in extreme cases the bias can be as much as 45%.

What is more, logistic random-effect models use likelihood functions to estimate probabilities and exclude cases whose dependent variable is time-constant. In the sample, this excludes about 40 percent of native-born Germans and 36 percent of second-generation Turkish women. In order to obtain the labour market chances also of those whose labour market status does not change over time, the study first assesses their employment chances one year after leaving the education system, by applying simple logistic regression models.

Finally, logistic models have been discussed in recent years as logistic regression estimates depend on unobserved heterogeneity even if it is unrelated to the variables in the model; consequently, odds ratios cannot be interpreted as substantive effects and cannot be compared across models (Allison, 1999; Mood, 2010). The study solves this by applying Mood's recommendation of estimating average marginal effects, which are only marginally affected by unobserved heterogeneity.

#### 4.3.3 *Missing Data*

All three studies deal with missing data by using multiple imputations; small differences are mainly imposed by the different statistical software used for paper one. The analysis in paper one is carried out with R and the Amelia II package is used to conduct multiple imputation on missing values for education, the number of German friends, and language skills (Honaker et al., 2011). In contrast to STATA's mi command, Amelia II uses an adjusted bootstrap-based EM algorithm that is able to provide standard errors – a critical prerequisite for multiple imputations that is missing in standard EM algorithms (Dempster et al., 1977). As with all multiple imputation methods, this procedure requires that the data is missing at random. While it assumes

that the complete data is multivariate normal, it has been shown that the model also works well with categorical data (Schafer, 1997; Schafer and Olsen, 1998).

Papers two and three, which use STATA, conduct multiple imputations with STATA's `mi` command (StataCorp, 2013) for public sector employment, the share of native-born German friends, the language spoken at home, religion and frequency of attending religious events. Because multivariate imputation proved impractical for the current data set, the data is imputed sequentially using univariate conditional distributions. This method allows for the simultaneous imputation of variables of different types (Rubin, 1987).

In all papers, the number of imputations has been set to 20. Given that the number of missing values never exceeds 40 percent, one practical advice is to follow Rubin (1987) who states that the asymptotic relative efficiency is roughly 90 percent for only two imputations compared to infinite imputations. With recommendations generally differing (Royston et al., 2009; van Buuren et al., 1999), the use of 20 imputations is theoretically justifiable and a good practical solution.

The longitudinal structure of panel data requires some modifications in order to preserve the information contained in the data structure. A general solution is to transform the data into wide format (IDRE, 2015). In contrast to a long format, which contains person-years in each row, the wide format contains only a single row per person and ensures that responses at one time are taken into account when predicting missing values at another time.



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## STUDY 1: MIDDLE-CLASS ASSIMILATION OF SECOND-GENERATION TURKS IN GERMANY

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### 5.1 INTRODUCTION

In the last decade, the question of whether the second generation assimilates into different segments of the host society or into the mainstream middle class has received much attention in the academic field. Proponents of new assimilation theory argue that the second generation will slowly experience upward mobility and social integration into mainstream middle-class society, with downward mobility being an exception (Alba and Nee, 2003). On the other hand, proponents of segmented assimilation theory argue that outcomes differ strongly for the second generation, with downward assimilation into the lower ranks of society being one possibility for those with fewer parental resources (Portes et al., 2005; Portes and Rumbaut, 2001; Portes and Zhou, 1993).<sup>1</sup>

Empirical evidence on labour-market assimilation outcomes of the second generation in Europe suggests that most ethnic groups do assimilate into the middle class. Compared to their parents' generation they have made

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<sup>1</sup> This study has been published as: Hartmann, J. (2014). *Do Second-Generation Turkish Migrants in Germany Assimilate into the Middle Class?* Ethnicities. Online first. doi: 10.1177/1468796814548234.



considerable progress, even though they still experience a wide range of labour market disadvantages (Heath et al., 2008). One group with particularly strong labour market disadvantages are second-generation Turks. As Heath et al. (2008) report for Austria, Belgium, Germany, and the Netherlands, second-generation Turkish migrants have less access to salariat positions and are at greater risk of unemployment. In Germany, the country with the biggest population of second-generation Turks in Europe, their labour market disadvantages have been found to be particularly severe. For the 1.5 million second-generation Turks in Germany (Statistisches Bundesamt, 2012), Algan et al. (2010) find that they have the greatest difficulties finding employment and earn less, and Kalter (2005, 2006) and Granato (2003) find that they have the lowest access to employment and salariat positions and the greatest risk of unemployment. While most of these studies ascribe their labour market disadvantages to their lower educational qualifications, their lower labour market success has also been attributed to lower language skills and lower host country-specific social capital (Kalter, 2006). However, there is evidence of intergenerational upward mobility and a weakening link between educational and occupational outcomes that work in favour of the second generation (Herwig and Konietzka, 2012; Kalter et al., 2007).

Nevertheless, middle-class assimilation of the second Turkish generation has not been thoroughly tested so far. As most studies use static indicators of labour market success such as employment status, social class, or income, they fail to account for the changing and time-dependent nature of labour market outcomes. For instance, initial advantages may accumulate over the course of the career (DiPrete and Eirich, 2006; Hillmert, 2011), and previous unemployment histories may increase the risk of later unemployment (Bender et al., 2000). By ignoring the various consecutive states of individual employment careers, static measures only partially describe the complexity of ethnic labour market inequalities. What is more, the duration and frequency of unemployment episodes are important dimensions of labour market inequality that have not been assessed so far. Assimilation, then, must be understood as an ongoing and path-dependent process and a thorough test of new

and segmented assimilation theory should therefore consider assimilation outcomes as the result of an ongoing, time-dependent process.

Additionally, previous research on ethnic labour market disadvantages has neglected the effects of family formation and focused primarily on individual resource deficits of migrants. Nonetheless, there is a general consensus that having children or being married affects employment careers (Fouarge et al., 2010; Grunow et al., 2006; Kenjoh, 2005). As people marry or have children, they adjust their career plans to their new situation. The resulting employment patterns differ, depending on the timing of family formation, and social, economic, or cultural circumstances. Considering that social, economic, and cultural differences exist between the second-generation Turks and native-born Germans, it is not surprising that their timing of family formation and the resulting employment patterns differ from the majority of the population. For example, women of Turkish origin have been found to spend more time doing household work than their German peers and to give birth sooner (Huschek et al., 2011; Milewski, 2007; Phalet and Schönplflug, 2001; Steinbach, 2009). Furthermore, there is evidence of ethnic differences regarding the age of marriage and the number of children (de Valk, 2006; Milewski, 2010). Accordingly, as family formation greatly affects employment careers in the long run, the long-term effects of these ethnic differences on labour market assimilation need to be taken into account.

This article aims to thoroughly test the hypothesis of mainstream, middle-class assimilation for second-generation Turkish men and women in Germany by asking whether they permanently hold middle-class positions over the course of their early employment career. Thus, this study overcomes the limitations of previous studies that neglected the temporal dimension of assimilation and fail to account for the complexity of labour-market assimilation outcomes. Also, this study contributes to the existing literature of labour-market assimilation by assessing the effects of family formation on labour-market outcomes. Focusing on the children of Turkish migrants and other classic labour migrant groups in Germany, the following questions are

addressed: firstly, what are the main differences between the early labour market careers of second-generation Turkish men and women in terms of employment and wage status when compared to native-born Germans? Secondly, do second-generation Turkish migrants assimilate into middle-class society by pursuing a stable middle-class career to the same extent as do native-born Germans? And thirdly, can any ethnic differences be fully explained by individual resources or do events of family formation explain their employment disadvantages?

In the next section, I outline the major arguments for the labour-market disadvantages of second-generation migrants. In order to address the first research question, I then provide descriptive career characteristics such as the number and duration of episodes in different employment statuses. The question of middleclass assimilation is then addressed by constructing a reference career sequence composed of continuous employment in middle- and higher-wage categories which is then used to compare it to the labour-market careers of all ethnic group members. As it turns out, second-generation Turkish migrants have rather large impediments to a stable middle-class career, which is mainly due to more frequent and longer unemployment spells as well as, in the case of women, household activities and childcare. In the last step, I test the reasons for these disadvantages using regression analysis. Lower education levels and language skills turn out to be the main causes of their failure to pursue stable middle-class careers.

## 5.2 ACCOUNTING FOR DIFFICULTIES OF MIDDLE-CLASS ASSIMILATION OVER THE LIFE COURSE

Failure to reach middle-class positions is largely a consequence of low employment and income chances. Two of the most prominent explanations for ethnic employment and income disadvantages in the literature have been educational attainment and language proficiency (Alba and Nee, 1997;

Nee and Sanders, 2010; Portes et al., 2009). As proponents of human capital theory have argued, investing in education and language skills increases productivity and competitiveness and, thus, the likelihood of finding employment (Chiswick, 1978). It is further argued that employers cannot profoundly assess the productivity of job candidates for cost reasons and, therefore, rely on educational certificates as a proxy (Arrow 1973; Spence 1973). Thus, education increases productivity, with educational certificates serving as important signals to employers about the candidate's productivity. Therefore, it is assumed that higher educational attainment leads to better employment and income chances in the labour market. Indeed, there is ample evidence that little educational success is a risk factor for unemployment (Brauns et al., 1999; Manzoni, 2012; Portes, 1995b; Wilke, 2005) and that lower language proficiency has negative effects on access to salariat positions (Kalter, 2006). Moreover, since the German education system is highly standardised and stratified, educational certificates are especially important for a future career (Allmendinger, 1989; Müller et al., 1998). Individuals are channelled into specific occupational tracks with little mobility between occupations and those with little education and no vocational training are at risk of finding themselves in unskilled, manual positions with little security and fewer rewards (Allmendinger and Dietrich, 2003; Gangl, 2002; Gießelmann, 2009). As studies have repeatedly demonstrated, second-generation migrants have lower chances of receiving vocational training (Diehl et al., 2009), lower speaking and reading skills (Dustmann et al., 2012), lower transition rates to the Gymnasium, and lower chances of completing the Abitur (Kristen and Granato, 2007). Therefore, a number of studies have attributed their lower labour market success to their lower human capital and language skills (Buchholz and Kurz, 2008; Granato, 2003; Heath et al., 2008; Kalter, 2006; Kalter et al., 2007; Konietzka and Seibert, 2003). Due to their lower qualifications, I expected to find that second-generation migrants do not reach middle-class positions to the same extent as native-born Germans.

Related to missing skills is another form of minority-specific deficit that has consequences for employment and income chances: lower host country-specific

social capital and strong ties to ethnic networks. Social capital is generally understood as resources that are accessible through social relations. By providing valuable information, social capital is generally considered helpful in finding employment or achieving higher income (Granovetter, 1974). The quality or income of jobs found through social relations depends on the quality of the resources that a person is connected to: persons connected to others with greater income, status, or power are expected to fare better than those who are only poorly connected (Lin, 1999; Montgomery, 1991). For second-generation migrants, this yields two implications: firstly, strong ties to the ethnic community can provide secure jobs and income. However, as these links give access only to the generally limited resources of their own ethnic community, these might hamper assimilation (Wiley, 1967). Secondly, as the value of resources provided by members of the host society is generally greater, the chances for upward mobility are better if one's social network contains bridges to the host society. The available empirical evidence is generally supportive of both arguments. Bridging social capital has a positive effect on employment, status, and income, while the effects of one's own ethnic social contacts are found to be limited, if not negative (Hagan, 1998; Kanas et al., 2012; Lancee, 2010, 2012). In Germany, the composition of the second generation's social networks is biased towards their ethnic peers (Haug, 2003), and accordingly I expected to find that second-generation migrants are less successful in pursuing a stable middle-class career.

Apart from individual resources, events of family formation greatly influence employment and income chances over the course of the career. The most prominent theory dealing with the effects of marriage and childbirth is commonly referred to as new home economics (Becker, 1981). Based on the principle that spouses specialise in those activities in which they yield comparative advantages over their partner, it is assumed that men usually specialise in market labour activities due to their greater income, while women specialise in household work. Thus, to the benefit of both partners, labour is divided according to human capital and labour market returns. Empirically, a number of studies have confirmed this hypothesis. For example,

after marriage, men increase their labour-market participation due to their new family responsibilities (Manzoni, 2012), while women are more likely to drop out of the labour market (Drobnic et al., 1999). However, this effect has decreased since the 1940s (Buchholz and Grunow, 2006; Grunow et al., 2006) and dropout rather takes place at childbirth. Also in line are findings that higher education increases women's labour-market attachment (Buchholz and Grunow, 2006), that re-entry rates of married mothers after childbirth are lower than those of single mothers (Drasch, 2013), and that fathers have a better labour-market position with higher income than men without children (Pollmann-Schult and Diewald, 2007; Trappe and Rosenfeld, 1998, 2000), while a large share of mothers do not return to the labour market after childbirth (Engelbrech, 1997; Engelbrech and Jungkunst, 2001; Kenjoh, 2005). These findings have implications for second-generation migrants, as they enter marriage and parenthood at a younger age and are likely to have more children (Milewski, 2007, 2010; Soehl and Yahirun, 2011). Second-generation mothers might therefore leave the labour market sooner and for a longer period of time. On the other hand, second-generation fathers can be expected to increase their labour-market participation and income and, thus, attain middle-class positions more easily than single, second-generation men.

There is an additional reason as to why events of family formation contribute to ethnic, labour-market inequalities. According to the Fishbein and Ajzen (1975) model that links individual attitudes with subsequent behaviour, cultural differences that foster traditional role models increase the effects of childbirth and marriage and put pressure on mothers to not join or re-enter the labour market (Steiber and Haas, 2010). In Germany, research suggests that second-generation migrants, especially those of Turkish origin, have lesser egalitarian gender attitudes than nativeborns who favour traditional female domain of childcare and routine household tasks (Bernhardt et al., 2007; Huschek et al., 2011; Phalet and Schönplflug, 2001). Accordingly, marriage and childbirth should increase the success in reaching a middle-class position for second-generation men and increase ethnic penalties for second-generation women.

Finally, both segmented and new assimilation theory stress the importance of discrimination for assimilation failure (Alba and Nee, 1997; Portes, 1995a; Portes and Rumbaut, 2006). In their view, a hostile and discriminating environment blocks occupational mobility and makes it difficult to translate human capital into appropriate labour-market success. For the labour market, various mechanisms of discrimination have been suggested. In his theory on 'tastes of discrimination', Becker (1957) assumes that employers prefer workers of their own ethnic origin and that foreign workers induce mental costs on employers. According to Becker, these costs cause employers to hire workers of their own ethnicity. However, as firms act in competitive markets, this form of discrimination should decrease in the long run, because such acts decrease the firms' productivity and competitive advantage. Another form of discrimination, statistical discrimination, takes place when the assessment of the job candidate's productivity is associated with high costs. In trying to avoid these costs, employers assess a candidate's productivity according to less expensive ascriptive characteristics like ethnic group membership. Given that the employer considers the minority group's average productivity to be lower than the majority's average productivity, migrant workers whose productivity is above the average are disadvantaged (Aigner and Cain, 1977; England, 1992; Phelps, 1972). However, statistical discrimination explains only individual discrimination. If the minority's average productivity is indeed lower and correctly assumed by employers, then there is no discrepancy between the ethnic group's labour market outcomes and their actual level of productivity. Related to this form of discrimination are stereotypes. Stereotypes cause decision makers to filter information in a way that preserves their expectations and they come into effect in situations where individual characteristics are not easily observable and several demands compete for attention (Darley and Gross, 1983; Dovidio and Gaertner, 2000; Gilbert and Hixon, 1991). Labour market discrimination has also been conceptualised as a form of class struggle and social closure. Here, existing ethnic inequalities are deliberately reproduced by the majority population by excluding minority members from valuable social resources like well-paid jobs (Roscigno et al., 2007).

Even though discrimination has been an extensively debated issue in migration research and is a possible explanation of middle-class assimilation failure, statistical proof is hard to obtain. This is due mostly to its treatment as a 'residual' within the popular frameworks of status attainment and human capital discrimination. Consequently, this article cannot directly test the discrimination hypothesis and treats discrimination as one of the possible explanations for middle-class assimilation failure if all other considered explanations fail. In the German case, however, studies show that labour-market disadvantages for second-generation migrants can almost completely be explained by their lack of individual resources such as education, language skills, and social capital (Kalter, 2006).

### 5.3 DATA AND METHODS

For the purpose of studying middle-class assimilation, I used the German Socioeconomic Panel data set (GSOEP, cp. Wagner et al. 2007). It is particularly suited to the study of career processes of migrants, as it is the only data source in Germany containing monthly employment data since 1984 and over-sampling the German immigrant population. Using the data from 1984 to 2010, I constructed a sample containing individuals with at least 24 months of valid monthly employment data. I excluded those individuals whose labour-market entry month could not be identified due to data limitations. Likewise, I excluded respondents from eastern Germany, since almost no second-generation migrants in the sample live there and the economic conditions are different from the western part. Overall, the sample contained 4618 individuals, including 255 of Turkish origin and 691 children of labour migrants from other countries (see table 5.1). In the GSOEP data set, panel attrition is higher among second-generation migrants than among native-born Germans. However, my own calculations show that panel attrition is not higher among those second-generation migrants with marginal careers and panel



attrition should, therefore, not bias second-generation men's disadvantages.<sup>2</sup> The month of entry into the labour market is operationalised as the month respondents leave the education system or military/community service for the first time for more than 3 months. This limitation was set in order to rule out employment spells during vacations and other short-term interruptions of educational sequences. Furthermore, I analyse only the first 6 years after labour market entry because the data does not contain sufficient numbers of second-generation migrants for further years.

**Table 5.1.** *Case numbers*

	Gender		Sum
	Male	Female	
<b>Ethnic group</b>			
German	1751	1921	3672
2nd Generation Turks	143	112	255
2nd Generation Other	363	328	691
Total	2257	2361	4618

Source: SOEP (1984-2010).

In order to assess early career differences, I differentiate between five labour market statuses: employment in the middle- and higher-wage categories, employment in the low-wage category, unemployment, education, and other, while the latter comprises household activities and maternity leave. Dividing employment into two subcategories has the advantage of introducing an additional dimension that distinguishes between the middle and lower ranks of society and, thus, is able to test whether second-generation migrants assimilate into the mainstream middle class. As there is no authoritative income threshold for dividing lower-class positions from higher-class positions, I apply two definitions and assign people to lower-class positions when their

<sup>2</sup> Kroh (2013) shows that panel attrition for GSOEP sample B, the sample that contains most second-generation migrants, is indeed greater than attrition in other samples that contain native-born Germans. Own calculations for the subsample used in this study confirm his findings. They also show that respondents with marginal careers do not have a greater risk of leaving the panel, and the effect of having a marginal career on the risk of leaving the panel does not vary between ethnic groups.

gross hourly earnings are: (a) below the median gross hourly earnings; and (b) below two-thirds of the gross hourly median earnings. These definitions emphasise not so much the generated income for consumption but rather the potentially obtainable income and the individual's value in the labour market, which closely corresponds to education and social and cultural capital. Thus, this approach helps to study the labour-market success of men and women independent of their partner and avoids the biases generated by varying working hours, household labour division, and joint taxation of married couples. It has to be noted, however, that women can benefit from their partner's income to some extent in their class attainment and that other measures, like equivalent household incomes, might produce results more in favour of second generation assimilation.

As a first step, and related to the first question of the main differences in the early employment career between native-born Germans and second-generation migrants, I compare employment sequences of second-generation migrants and native-born Germans with respect to the number and duration of episodes in a particular labour-market status using sequence analysis. This technique also allows for comparing employment sequences with a reference sequence and provides a clear picture of the degree of dissimilarity between the groups and the reference sequence. In the second step and related to the second research question of a stable middle-class career, I compare the labour-market careers of second-generation migrants and native-born Germans to a labour-market career that resembles continuous employment with earnings above: (a) the median; and (b) two-thirds of the median gross hourly earnings. The comparison to the reference sequence is accomplished by generating a distance measure using Elzinga's longest common subsequence (LCS) metric for categorical time series data (Elzinga, 2007).<sup>3</sup> This technique assumes that sequences are similar if they have long subsequences in common

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<sup>3</sup> Gaps were excluded from all sequences. The inclusion of gaps adds a new state to the sequence, which automatically results in an overestimation of distances, whereas the exclusion of gaps reduces the sequence length. The previous and resulting average sequence lengths are distributed equally across all ethnic categories, so that between-group differences in distance scores are not affected.

and captures how well subsequences of one person are matched with sub-sequences of the reference sequence. In more practical terms, the LCS dissimilarity metric answers the question of what the minimum number of states is that have to be removed from both sequences in order to make them completely equal. Thus, the distance measure is 0 for a career that perfectly resembles 6 years of middle-class employment. It must be noted that dissimilarity metrics only serve comparative purposes between groups and have no sociological interpretation. Each month a person is not holding a middle-class position, e.g. is unemployed or has a low-income job, increments the distance measure by two points, whereas missing months increment the distance score by one point. Thus, a worker permanently holding low-income positions or who is unemployed will reach the maximum distance score. By using the LCS metric, I avoided the shortcomings of the standard Optimal Matching or Dijkstra and Taris metric, such as arbitrary operation costs or discarding of states (Aisenbrey and Fasang, 2010). Because a greater degree of dissimilarity can result not only from unemployment or low-wage employment but also from education and household work, and since these statuses increment the distance score to the same extent, a greater distance to the reference sequence cannot be interpreted as downward assimilation. Instead, it must strictly be interpreted as a greater distance to a stable middle-class career. The hypothesis of ethnic difficulties to assimilate into the mainstream middle class is confirmed when the average distance score of the second generation is greater than those of native-born Germans.

The third step, related to the third research question of the causes of middle-class assimilation failure, comprises regression analysis in order to account for the causes of ethnic employment inequalities. Using the distance to continuous employment in middle- and upper-income categories as the dependent variable, I applied Poisson pseudo-maximum-likelihood regression techniques. This model is designed to deal with zero-inflated dependent variables, as is the case with the distance measure used here, and does not have to specify the full distribution of the dependent variable (Burger et al., 2009; Martínez-Zarzoso, 2013; Santos Silva and Tenreyro, 2006). Missing data

were dealt with by the bootstrap expectation-maximization (EM) multiple imputation algorithm (Honaker et al., 2011). All analyses were conducted on the basis of monthly employment data.

Ethnic group membership was assessed on the basis of the nationality and place of birth of the respondents as well as their parents. I included individuals in the second generation if they migrated to Germany themselves before the age of 6 from one of the major guest-worker-sending countries (i.e. Turkey, Italy, Spain, Portugal, Greece, and ex-Yugoslavia), or if the respondent was born in Germany and at least one parent migrated to Germany and was born in one of the guestworker-sending countries or claims to hold their nationality. Unfortunately, the data contained only sufficient case numbers for Turks. Therefore, second-generation migrants of Spanish, Portuguese, Italian, Greek, and ex-Yugoslavian origin were put into one category. Even though a more detailed categorisation would be desirable, I am able to separate the Turkish group that fares worst in the labour market from those of European origin that have better labour-market outcomes and are more similar to native-born Germans (Kalter et al., 2007). The resulting categories, then, are 'native-born Germans', 'second-generation Turks', and 'second-generation Others'. The combination of such diverse groups as second generation Iberians, Greeks, and Italians does not permit general conclusions about their labour-market outcomes and assimilation progress. In this study, this group is used exclusively to compare the second-Turkish-generation's labour-market success to the average labour-market success of non-Turkish, second-generation migrants in order to gain an additional perspective on their relative assimilation success. First-generation migrants were not included in the analysis, since their career trajectories are too different from those of the second generation. Human capital was measured as educational attainment and language proficiency. For educational attainment, I used the CASMIN scheme (Brauns et al., 2003) and took the respondent's highest educational degree before labour-market entry. Furthermore, I use inadequate education as the reference category and include a category for missing data. Vocational training is contained in several of the original CASMIN categories. Therefore,

and due to its distinguished importance in the German labour market, I constructed a dummy variable for vocational training. This helps to attain a clearer hierarchical order of the other educational categories and separate the effect of vocational training. After recoding the CASMIN scheme, I attained five categories: inadequate education (no school certificate), lower secondary school degree, middle school degree, maturity degree allowing for tertiary education, and tertiary degree. Regarding language skills, I merged the self-reported proficiency in written and spoken German into one variable for parsimony reasons. For native-born Germans, no data for language skills were given and I assumed that native speakers were perfectly fluent in spoken and written German. To measure the amount of host country-specific social capital, I used the percentage of German friends among the three closest friends. The percentage was measured before labour-market entry in order to avoid causality problems. In case data before labour-market entry were not available, I used data closest to this point of time. One shortcoming of this approach is that changes in the ethnic composition of social networks over time could not be considered. However, data limitations did not allow for a more precise approach. Furthermore, historical macroeconomic conditions vary considerably and affect the employment and income chances of each labour-market entry cohort. Because the share of labour-market entrants varies between the ethnic groups for a given time period and is likely to bias estimation results, I created labour-market entry cohorts to account for these differences. At last, I constructed variables for time married and the number of children. Marriage was measured in terms of the percentage of time respondents were married during the observation period. As with marriage, the percentage of time in which the respondents had at least one or two children was measured. To rule out cases where respondents still lived at home, only children in the household up to age 15 were considered.

## 5.4 THE STRUGGLE TO ATTAIN STABLE MIDDLE-CLASS POSITIONS

Table 5.2 presents the main descriptive differences in the early labour-market careers of second-generation migrants and native-born Germans. The results reveal that the careers of second-generation Turkish men and women differ greatly from those of native-born Germans, while there are almost no differences for other second-generation migrants. Second-generation Turkish men are more frequently, and for a longer period of time unemployed, while their frequency and time spent in employment and low-wage employment are lower than for native-born Germans. However, only their lower number of middle-class employment spells at the median income threshold are significantly lower than those of native-born German men. Second-generation Turkish women are less frequently, and for a shorter period of time, in middle-class employment positions and education, but have longer and more frequent episodes of unemployment and other activities, e.g. household labour and maternity leave. Also, at the lower two-thirds median income threshold, they are more often employed in the low-wage sector during their early career. For non-Turkish, second-generation migrants, no significant differences were found, indicating that the average, second-generation migrants of non-Turkish origin have similar employment patterns to native-born Germans.

In the next step, I calculated the distances to a stable middle-class career based on the LCS metric. The distances themselves have no immediate sociological interpretation. Rather, they represent an abstract degree of dissimilarity to a stable middle-class career which can be used to compare between-group differences. The cumulative distance distributions are represented in Figures 5.1 and 5.2. Depending on the income threshold for middle-class positions, roughly 10% (median income threshold) or 18% (two-thirds median income threshold) of all considered groups (including native-born Germans) have a distance of zero to a stable middle-class career, indicating that among all these groups the same share of men is pursuing a stable middle-class career. Naturally, as the median income threshold excludes

more individuals from middle-class positions than the lower threshold, this threshold produces greater distances. Regardless of the income threshold, the distances for the average, second-generation non-Turkish men are similar to native-born German men, while the distances for second-generation Turkish men are greater: their share of those with only small distances to a stable middle-class career is lower and their share of men with greater distances to a stable middle-class career is greater than in other groups. Thus, perfect middle-class assimilation occurs for the same proportion of second-generation Turkish and non-Turkish men as for native-born German men. For the most part, however, second-generation Turkish men have greater difficulties in pursuing a stable middle-class career than any other group.

For women, Figure 5.2 shows disadvantages for all ethnic groups regardless of the chosen middle-class criteria. The proportion of second-generation women having a stable middle-class career is lower compared to native-born German women. Likewise, the proportion of those with careers that closely resemble a stable middle-class career is lower for second-generation women, and this finding holds true especially for second-generation Turkish women. Accordingly, the second-generation Turkish women's share of those with careers rather distant from a stable middle-class career is the highest. Most strikingly, a large proportion of second-generation Turkish women pursue a career that has no similarities to a stable middle-class career at all, as can be seen at the maximum distance in Figure 5.2. Thus, second-generation Turkish women especially, have greater difficulties in assimilating into the middle class, and their success in middle-class assimilation is lower than the average success of second-generation non-Turkish women.

**Table 5.2.** *Description of the employment careers of second-generation migrants and native-born Germans.*

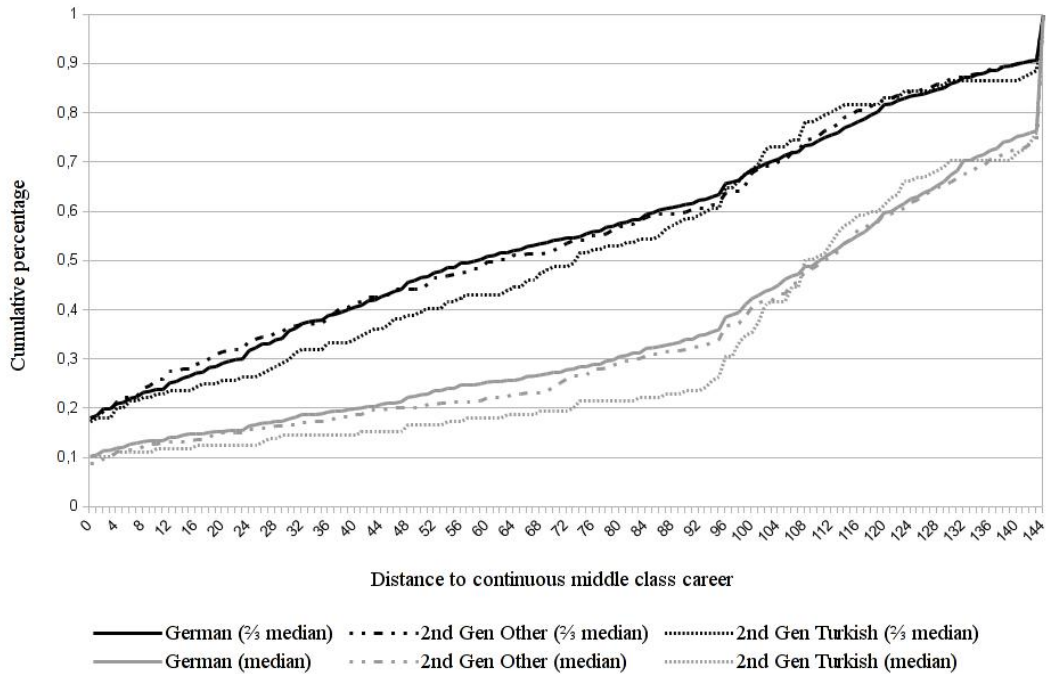
Ethnic group	2nd Else		2nd Turkish		Germans	
	Men	Women	Men	Women	Men	Women
<b>Nr of diff. states</b>	0.83	0.87	0.87	0.97	0.85	0.86
<b>Duration in</b>						
Employment						
Median	16.37	7.73 **	14.39	5.42 **	17.62	10.62
Median 2/3	30.02	22.21	30.03	19.07 *	32.09	25.15
Employment low						
Median	25.37	29.00	25.25	30.03	24.02	28.91
Median 2/3	9.67	14.51	9.60	16.38	9.55	14.38
Unemployment	4.78	4.02	8.91 **	5.49 *	3.87	3.35
Education	6.96	5.78	5.34	2.79 *	6.86	4.72
Other	2.58	7.63	1.97 *	14.88 **	3.42	9.08
<b>Nr of episodes in</b>						
Employment						
Median	0.63	0.48	0.55 *	0.38 *	0.69	0.52
Median 2/3	1.03	0.83	0.97	0.71 *	1.08	0.89
Employment low						
Median	0.71	0.75	0.71	0.90	0.68	0.80
Median 2/3	0.30	0.40	0.29	0.56 *	0.30	0.43
Unemployment	0.57	0.40	0.68 *	0.66 *	0.50	0.43
Education	0.36	0.36	0.27 **	0.18 *	0.40	0.31
Other	0.25	0.52	0.21	0.68 *	0.30	0.48

Source: SOEP (1984-2010).

Notes: \*: Significance &lt;.05; \*\*: Significance &lt;.01.



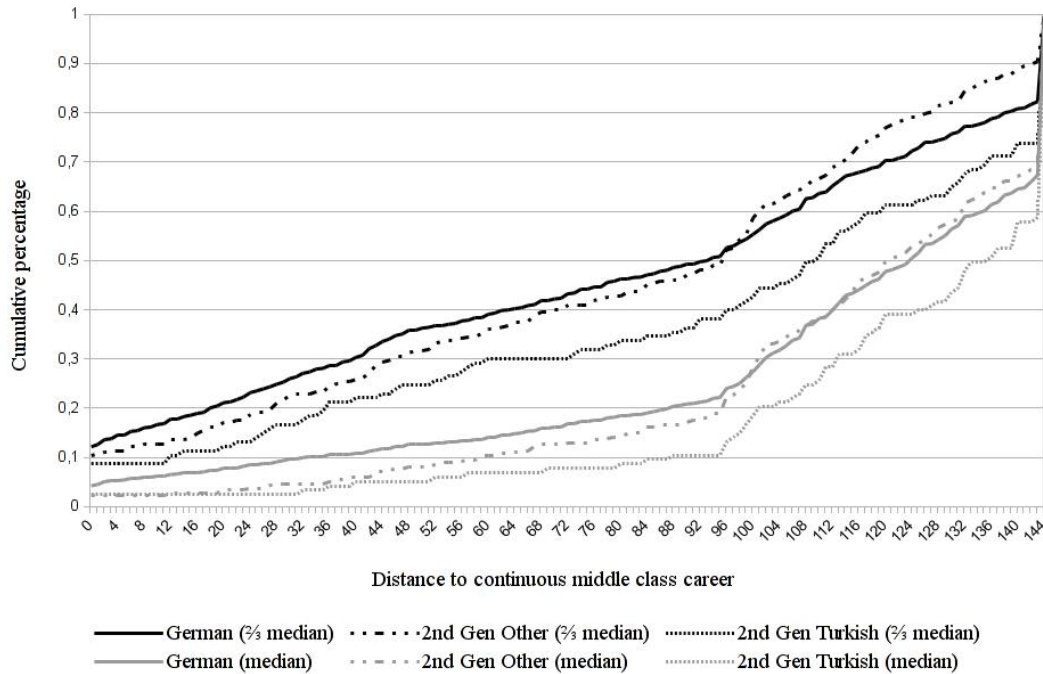
**Figure 5.1.** *Distance to continuous employment for men by ethnic group*



Source: SOEP (1984-2010).

So far, analysis has shown that the second Turkish generation has difficulties in pursuing a stable middle-class career. In the next step, I look into the causes of these difficulties. Regression analysis for both middle-class definitions is carried out in nine different models to test the arguments derived earlier in the theory section. Table 5.3 presents the results for men and the median income threshold middle-class definition.<sup>4</sup> The first model simply displays the group differences with no further variables controlled for. According to the results obtained so far, second-generation Turkish men have a greater average distance to a stable middle-class career than native-born German men, while average, second-generation non-Turkish men have only small disadvantages. The second model takes macro-economic conditions into

<sup>4</sup> The corresponding tables for the two-thirds median income threshold are presented in the appendix in tables A.1 and A.2

**Figure 5.2.** *Distance to continuous employment for women by ethnic group*

Source: SOEP (1984-2010).

account by controlling for the labour-market entry cohort. Compared to the first model, ethnic disadvantages grow, caused by the larger proportion of second-generation migrants in the sample entering the labour market in the economically more thriving period between 1990 and 2000, while there is a greater share of native-born Germans entering the labour market in a period of little economic growth in the years after 2000. Models 3 and 4 account for human capital differences between the ethnic groups. Better education in general enhances the chances, although maturity certificates without vocational training have a negative effect on career chances. Most importantly, controlling for education accounts for all second-generation men's disadvantages in middle-class assimilation. Likewise, controlling for language skills significantly lowers second-generation Turkish men's disadvantages, while there is a minor increase in ethnic disadvantages when the proportion

of native German friends among the best three friends is considered in model 5. Models 6–9 take events of family formation into account. The proportion of time having children or being married during the observation period have a decreasing effect on the distance to a stable middle-class career, but hardly affect second-generation men's disadvantages. In order to test whether children or marriage has different effects on labour-market outcomes for second-generation migrants and native-born Germans, models 7 and 9 include interaction terms for ethnicity, marriage, and children. Interestingly, having children has a slightly greater decreasing effect on the distance score for second-generation Turkish men than for native-born German men and being married decreases second-generation men's distance to a continuous middle-class career more than it does for native-born German men. The results are largely confirmed by the results based on the two-thirds median income threshold for middle-class positions (summarised in Table 5.5). Nevertheless, there are two notable differences: firstly, applying the two-thirds median income threshold increases second-generation men's disadvantages in pursuing a stable middle-class career compared to native-born German men because the share of second-generation men with lower income is greater than the share of native-born German men. And secondly, the second-generation men's ability to pursue a stable middle-class career is less affected by their lower language proficiency, most likely because then attaining a middle-class position depends less on employment in better paid jobs which require better language skills.

Table 5.4 presents the regression results based on the median income middle-class definition for women. The results show significantly greater distances to a stable middle-class career for all second-generation women when no further variables are controlled for. In contrast to men, and even though more second-generation women were entering the labour market in the more favourable period between 1990 and 2000, ethnic disadvantages remain constant when the labour-market entry cohort is added to the model. When controlling for educational differences between the ethnic groups, model 3 indicates that better education has a decreasing effect on the distance score. However, the educational level explains the greater

distances only for the combined groups of second-generation non-Turkish women. The disadvantages of second-generation Turkish women remain significant even when, in addition to education, language proficiency, the share of native-born German friends, and their time being married or having children are taken into account. In fact, second-generation Turkish women's disadvantages only become insignificant when an interaction term is added to the model that assumes that marriage or having children puts additional disadvantages on second Turkish generation women compared to native-born German women (models 7, 9). Indeed, model 9 shows that marriage increases second-generation Turkish women's distance to a stable middle-class career more than for native-born German women. Lowering the income threshold of having a middle-class position to two-thirds median income increases the disadvantages for second-generation women because their share at the bottom of the income hierarchy is larger than that of native-born German women (Table 5.5). Furthermore, language proficiency has a much stronger effect on second-generation Turkish women's disadvantages and, in combination with education, reduces them to an insignificant level (model 4).

In sum, second-generation migrants have greater difficulties in pursuing stable middle-class careers than native-born Germans, and the difficulties for second-generation Turkish men and women exceed those of their average, non-Turkish second-generation counterparts. The greater difficulties of second-generation Turkish men can be completely attributed to their lower educational qualifications. Accordingly, the hypothesis about the effects of education can be confirmed for men, while the hypotheses about the role of host country-specific social capital and the effects of family formation on ethnic disadvantages must be rejected. For second-generation Turkish men, the importance of language proficiency for their disadvantages depends on the chosen income threshold. At the median income threshold, language proficiency significantly reduces ethnic disadvantages, while the effect is less pronounced at the lower income threshold. In the case of women, their lower education, language proficiency, and host country-specific social capital reduce their disadvantages for pursuing a stable middle-class career,

but only explain them at the lower-income threshold level. At the higher median-income threshold, the specific effects of marriage and childbirth on second-generation Turkish women have to be taken into account to explain their disadvantages. While prior research suggested that these differences can be caused by their more traditional gender role values, the data are not sufficient to look into the actual causes in more detail. Furthermore, even though discrimination can lower second-generation migrants' middle-class assimilation, the results demonstrate that discrimination is not a major factor. However, the methodological approach of this study does not permit a straightforward test of discrimination and, therefore, does not allow any conclusions about negative effects of discrimination on middle-class assimilation. Furthermore, discrimination may be important at earlier stages of the life course, e.g. in school, and affect second-generation migrants' assimilation outcomes indirectly.

**Table 5.3.** Men, regression of distance to continuous middle-class employment, medium income threshold.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
(Intercept)	4.55 **	4.54 **	4.63 **	5.13 **	5.15 **	5.25 **	5.30 **	5.16 **	5.14 **
<i>Ethnic group</i>									
2nd Turkish	0.06 **	0.08 **	0.01	-0.07 **	-0.05 **	-0.04 **	0.08 **	-0.05 **	-0.04 *
2nd Else	0.02 **	0.03 **	-0.02 **	-0.06 **	-0.06 **	-0.06 **	-0.07 **	-0.07 **	-0.06 **
<i>Cohorts</i>									
Cohort 1990s		-0.11 **	-0.09 **	-0.09 **	-0.09 **	-0.09 **	-0.09 **	-0.10 **	-0.09 **
Cohort 1995s		0.00	-0.04 **	0.04 **	0.04 **	0.05 **	0.05 **	0.05 **	0.06 **
Cohort 2000s		0.06 **	0.09 **	0.09 **	0.09 **	0.09 **	0.09 **	0.08 **	0.08 **
Cohort 2005s		0.02 **	0.04 **	0.04 **	0.04 **	0.03 **	0.03 **	0.02 **	0.02 **
<i>Education</i>									
Missing			-0.18 **	-0.17 **	-0.17 **	-0.17 **	-0.17 **	-0.16 **	-0.15 **
Lower Secondary			-0.04 **	0.05 **	0.05 **	0.05 **	-0.05 **	0.04 **	-0.05 **
Middle School			0.00	0.01	0.01	0.00	0.01	0.02	0.02
Maturity			0.01	0.02	0.02	0.01	0.02	0.01	0.01
Tertiary			-0.47 **	-0.46 **	-0.46 **	-0.46 **	-0.46 **	-0.41 **	-0.42 **
Vocational training			-0.02 **	-0.02 **	-0.02 **	-0.02 **	-0.02 **	0.00	0.00
Language skills				-0.10 **	-0.11 **	-0.13 **	-0.14 **	-0.11 **	-0.11 **
German friends					0.01	0.01	0.01	0.01	0.01
Children									
Children x Turkish						-0.08 *	-0.07		
Children x Else							0.01		
Marriage									
Marriage x Turkish								-0.19	-0.17 **
Marriage x Else									-0.11 **
N	2257	2257	2257	2257	2257	2257	2257	2257	2257

Source: SOEP (1984-2011).  
Significance levels of the two-tailed t-tests: \* < .05; \*\* < .01.

**Table 5.4.** Women, regression of distance to continuous middle-class employment, medium income threshold.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
(Intercept)	4.70 **	4.80 **	4.78 **	4.89 **	4.90 **	4.86 **	4.86 **	4.90 **	4.90 **
<i>Ethnic group</i>									
2nd Turkish	0.10 **	0.09 **	0.06 **	0.05 **	0.03 *	0.03 *	-0.03	0.03 *	0.01
2nd Else	0.03 **	0.03 **	0.01 **	0.00	0.00	0.02	0.02	-0.01	0.00
<i>Cohorts</i>									
Cohort 1990s		-0.09 **	-0.08 **	-0.08 **	-0.08 **	-0.09 **	-0.09 **	-0.08 **	-0.08 **
Cohort 1995s		-0.08 **	-0.07 **	-0.07 **	-0.07 **	-0.07 **	-0.07 **	-0.07 **	-0.07 **
Cohort 2000s		-0.14 **	-0.11 **	-0.11 **	-0.11 **	-0.11 **	-0.11 **	-0.11 **	-0.11 **
Cohort 2005s		-0.22 **	-0.19 **	-0.19 **	-0.19 **	-0.19 **	-0.19 **	-0.19 **	-0.20 **
<i>Education</i>									
Missing			-0.01	0.00	0.00	0.01	0.01	0.00	0.00
Lower Secondary			0.05	0.06 **	0.06 **	0.06 **	0.06 **	0.06 **	0.06 **
Middle School			0.02	0.03 *	0.04 **	0.04 **	0.04 **	0.03 *	0.03 *
Maturity			0.10 **	0.10 **	0.10 **	0.11 **	0.11 **	0.10 **	0.10 **
Tertiary			-0.20 **	-0.19 **	-0.19 **	-0.19 **	-0.19 **	-0.19 **	-0.19 **
Vocational training			-0.03 **	-0.03 **	-0.03 **	-0.03 **	-0.03 **	-0.03 **	-0.03 **
Language skills				-0.02	-0.02	-0.02	-0.01	-0.02	-0.02
German friends					-0.01	-0.01	-0.01	-0.01	-0.01
Children						0.03 **	0.04 **		
Children x Turkish						0.09	0.09		
Children x Else						-0.05 *	-0.05 *		
Marriage								-0.01	0.00
Marriage x Turkish									0.11 **
Marriage x Else									-0.05 **
N	2361	2361	2361	2361	2361	2361	2361	2361	2361

Source: SOEP (1984-2011).

Significance levels of the two-tailed t-tests: \* &lt; .05; \*\* &lt; .01.

**Table 5.5.** *Coefficients of ethnic differences in distance to continuous middle class employment using 2/3 median income middle class definitions.*

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Men									
2nd Turkish	0.06 **	0.14 **	0.00	0.01	0.04	0.07 *	0.18 **	0.05 *	0.03
2nd Else	0.00	0.04 **	-0.04 **	-0.03 *	-0.02	-0.02	-0.02	-0.03 *	0.00
Women									
2nd Turkish	0.17 **	0.18 **	0.07 **	-0.01	-0.04	-0.05	-0.13 **	-0.02	-0.06 **
2nd Else	0.05 **	0.06 **	0.00	-0.03 *	-0.05 **	-0.04 *	-0.03	-0.04 *	-0.03

Source: SOEP (1984-2011).  
 Significance levels of the two-tailed t-tests: \* < .05; \*\* < .01.



## 5.5 DISCUSSION AND CONCLUSION

In Europe, second-generation Turks experience strong labour-market disadvantages and Germany hosts their largest community of 1.5 million. Starting from the assumptions of new assimilation theory that ethnic minorities assimilate into the mainstream middle-class society in the long run, I asked whether second-generation Turkish men and women in Germany pursue stable middle-class careers. To answer this question, I used a life-course approach and attained a measure of dissimilarity to a stable middle-class career, which I then used to compare the second Turkish generation to native-born Germans.

Overall, the findings show that the second generation in Germany has greater difficulties in pursuing a stable middle-class career than native-born Germans, and this holds true in particular for second-generation Turkish men and women. Most notably, second-generation Turkish men experience longer and more frequent unemployment episodes than native-born Germans, while second-generation Turkish women also have less frequent and shorter middle-class employment spells and a much higher propensity to spend time in the household or on maternal leave. Evidence that the second Turkish generation assimilates into the low-wage sector can only be found for second-generation Turkish women who enter the low-wage sector more often than native-born German women. Accordingly, the employment careers of second-generation Turkish men and women resemble a stable middle-class career much less than those of native-born Germans.

The main reasons for the second-generation Turkish men's struggle to pursue a stable middle-class career are their lower educational qualifications and lower rates of vocational training. Together these explain all second-generation Turkish men's disadvantages in pursuing a stable middle-class career. This result underscores the role of human capital and confirms the results of previous studies (Buchholz and Kurz, 2008; Granato, 2003; Heath et al., 2008; Kalter, 2006; Kalter et al., 2007; Konietzka and Seibert, 2003). In addition, the results indicate that their lower host

country-specific social capital contributes to their disadvantages. The results for second-generation women are mixed. Their lower education, language proficiency, and host country-specific social capital contribute to their labour-market disadvantages, but only explain them at a rather narrow definition of low income. With a less narrow definition of low income, marriage and childbirth have a greater negative effect on second-generation Turkish women than on native-born German women. Together with their lower education, lower language proficiency, and lower share of native-born German friends, these additional disadvantages account for second-generation Turkish women's greater difficulties in pursuing a stable middle-class career. Although the underlying causes remain unclear, recent findings suggest that less egalitarian gender role models might be at work (Huschek et al., 2011). Discrimination is not directly tested in this study, and even though it is likely to impair second generation's chances of middle-class assimilation, the results show that discrimination is not a major factor and that arguments are not necessary to account for second-generation Turks' difficulties in assimilating into the middle class.

This study adds to existing knowledge in two notable ways: firstly, the second Turkish generation's lower degree of assimilation into the middle class holds true for their entire early employment career and is not just a temporary phenomenon that occurs at some stage of their employment career. Thus, this study generalises and consolidates previous findings on second-generation Turks' assimilation progress. Secondly, second-generation Turkish women have much greater difficulty than men in assimilating into the middle class and the causal mechanisms differ between men and women. In particular, this study adds evidence that married, second-generation Turkish women have greater difficulty in assimilating into the middle class than married, native-born German women. Thereby, this study highlights the need for future research to address minority women's assimilation progress separately and with special attention to family-related events.

While this study raises concerns about permanent downward assimilation, it does not compare ethnic inequalities over generations and covers only the first years after labour-market entry. Whether the second Turkish generation's lower degree of assimilation into the middle class is indeed permanent, or whether their situation improves as they grow older and new cohorts enter the labour market, remains to be answered by future research. A further limitation of this study concerns the choice of middle-class assimilation as a reference for assimilation success. While this choice is perfectly in line with new assimilation theory, a critical test of segmented assimilation theory also requires a test for downward assimilation. However, the applied method does not permit straight conclusions about downward assimilation because the distance to a stable middle-class career also grows when respondents enter employment statuses such as education where no income is generated, but that do not necessarily point to downward assimilation. Even so, sequence analysis is perfectly suited to address downward assimilation by choosing a reference career that includes only unemployment episodes or employment episodes with little income. Finally, it was not possible to obtain a more origincountry-specific picture of second-generation migrants. Although I was able to analyse the most disadvantaged ethnic group in Germany, those of Turkish origin, separately, no distinction could be made between other second-generation groups such as Italians, Greeks, or ex-Yugoslavs. Other second-generation groups might perform quite differently from what was displayed in the broad 'other second generation' category, and empirical evidence suggests that those of Spanish origin are, indeed, more successful (Kalter et al., 2007).

Even though this study provides insights into labour-market careers and assesses ethnic labour market inequalities from a life-course perspective, a number of questions regarding intra-generational assimilation remain open. Most notably, downward assimilation of the second generation in Germany remains a matter little researched. Similarly, little is known about the downward and upward mobility risks of the second generation over the course of their career; therefore, we know little about whether ethnic labour-market inequalities grow or decline over the course of the second-generation's

employment career. As intergenerational assimilation and career progress are intertwined topics, the study of these questions would contribute greatly to our knowledge on the mechanisms of assimilation.



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## STUDY 2: ASSIMILATION OVER THE LIFE COURSE? THE CAREER MOBILITY OF SECOND-GENERATION TURKISH MEN IN GERMANY

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### 6.1 INTRODUCTION

In recent years, scholars worldwide have studied the ethnic labour-market assimilation processes of second-generation migrants (Algan et al., 2010; Heath et al., 2008). In an effort to understand migrant assimilation, most of these studies either have used an intergenerational perspective, through which they compare the labour-market success of first- and second-generation migrants, or have relied on cross-sectional data and methods. Although these approaches to assimilation conform to classic and more recent theories of assimilation, they overlook the importance of mechanisms that produce ethnic inequality at the level of individual labour-market careers. Accordingly, little is known about whether second-generation migrants' labour-market disadvantages exist throughout their careers, and whether these inequalities persist, grow or decline throughout this period. In this paper, I aim to address these deficits and to study second-generation Turkish men's labour-market inequalities in Germany over the course of their careers.

How ethnic inequalities develop over the course of migrants' careers is an important topic because these inequalities strongly influence the assimilation

outcomes of the next migrant generation. This is evidenced by the fact that children's educational success and labourmarket opportunities are strongly influenced by their parents' resources. Parents earn resources that they pass on to their children, and growing ethnic disadvantages over the course of the parents' careers can impact the amount of resources they are able to offer to their children. Thus, migrant children's likelihood of achieving a level of labour-market success similar to that of native-born children decreases, and their risk of becoming permanently assimilated into the underclass—as suggested by segmented assimilation theory - increases (Portes et al., 2005; Portes and Rumbaut, 2001; Portes and Zhou, 1993). By contrast, parents who are able to close the ethnic gap in labour-market outcomes over the course of their careers gain more resources to invest in their children's education. Additionally, they may be more optimistic about their children's educational success and may enhance their children's educational prospects (Halle et al., 1997). Thus, assimilation over the course of migrants' careers can alleviate their assimilation difficulties, even in countries with strict intergenerational mobility regimes that strongly link social origin to labour market success.

In this study, second-generation Turkish men's labour-market disadvantages are assessed by comparing their upward and downward income transitions, as well as their unemployment and re-employment transitions, with those of native-born German men. As income and employment are key resources for social integration and participation, and important determinants of living standards, health and life expectancy (Kroh, 2013; Lampert and Kroll, 2006), any ethnic disadvantages in employment or income-mobility opportunities substantially affect a group's capacity to assimilate into the host society.

Income and employment transitions represent the essential processes through which assimilation in employment and income is achieved: if members of initially disadvantaged minority groups overcome unemployment or experience income increases to a greater extent than majority members, the group as a whole nears the employment and income outcomes of the majority population.

This study addresses the following questions:

- (1) Do second-generation Turkish men in Germany have higher risks of downward income mobility, lower risks of upward income mobility, higher unemployment risks and lower re-employment opportunities compared with native-born German men?
- (2) Do any employment or income-mobility disadvantages increase, decline, or persist over the course of their careers?
- (3) If any such disadvantages exist, how can they be explained? In particular, what roles do education, language skills, social networks, family formation, the labour-market sector, the improvement of host country-specific capital and the cumulative effects of previous disadvantages play?

The study is organised as follows. The first section presents an overview of the theoretical literature on ethnic labour-market inequalities and derives hypotheses concerning the research questions. After presenting the empirical strategy in the following section, I report results concerning the development of ethnic labour market and income inequalities over the course of second-generation Turkish men's careers and their unemployment, re-employment, and upward and downward income mobility. The final section summarises the results and draws conclusions regarding the situation of second-generation Turkish men in Germany.

## 6.2 THEORETICAL CONSIDERATIONS AND EMPIRICAL FINDINGS

To study second-generation Turkish men's employment and income-mobility disadvantages over the course of their careers, this paper adopts a life-course perspective. Within the life-course approach, careers are considered age-related sequences of states and events that are driven by the interplay of agency and social structure (Elder et al., 2003; Wingens et al., 2011). These considerations



easily allow for the integration of labour market theories and theories of action. In what follows, I rely on the idea that actors shape their life courses according to their preferences, resources and the opportunities and restrictions in their surrounding environment. According to the life-course approach, preferences, resources, opportunities and restrictions are constantly shaped by events in several domains of life, such as family or the labour market; furthermore, they must also be understood as the results of previous decisions, events, and experiences.

According to these ideas, ethnic labour market disadvantages may arise from a lack of host country-specific resources, such as human and social capital. To study the development of ethnic employment and income-mobility disadvantages over the course of a career, the life-course approach offers two opposing mechanisms that this paper will examine: the concept of cumulative disadvantages, in which labour market disadvantages grow because of earlier disadvantages, and the idea that improving host country-related capital can improve labour market outcomes over the course of a career. Thus, in what follows, I will present a set of classic resource-based arguments and extend them in two ways. First, I will examine the role of often-neglected family formation events. Second, I will explore mechanisms that may increase or decrease ethnic labour market inequalities over the course of a career.

Among explanations of ethnic labour market disadvantages, human capital arguments have found particularly strong empirical support (Becker, 1975; Mincer, 1974, also see section 5.2). According to these arguments, higher educational credentials are an important determinant of employment opportunities and income. Furthermore, higher education confers a competitive advantage and increases the likelihood of promotions and upward mobility through changes between firms (Spilerman, 1986). By contrast, employees with lower educational credentials are at greater risk of downward mobility and unemployment. Their lower levels of education render them easily replaceable, and their jobs are threatened by technological advancement. Empirical studies overwhelmingly confirm the significant effect of education

on labour market entry (Buchholz and Kurz, 2008), upward mobility opportunities (Kurz et al., 2006; Wolbers et al., 2011), and the risk of downward mobility (Hillmert, 2011; Kurz et al., 2006). These findings imply greater unemployment risks, higher risks of downward income mobility, and fewer chances of upward income mobility for second-generation men compared with native-born German men, particularly for those of Turkish origin because their educational achievements are lower than that of native-born German men (Alba et al., 1994; Kristen and Granato, 2007).

As with education, language skills affect migrants' labour market chances. Language skills are necessary to attain information on job openings and to communicate with potential employers (Dustmann and Fabbri, 2003). Language skills have been empirically found to increase employment chances (Aldashev et al., 2009; Dustmann and Fabbri, 2003) and to decrease unemployment duration (Höhne and Koopmans, 2010). In Germany, studies have reported poor language skills among second-generation Turkish men, a finding that may partly explain their lower labour market outcomes (Diehl and Schnell, 2006).

From a life-course perspective, low initial human capital may cause increasing employment and income-mobility disadvantages over the course of a career. According to the concept of cumulative disadvantages, as described by DiPrete and Eirich (2006), labour market careers can be understood as path-dependent processes where success depends on previously gained resources. Because a person with low initial human capital has lower employment and income chances at labour market entry, that person will gain fewer resources than another person with higher initial human capital. Given that both persons invest their gained resources in future labour market success and the returns on their investments are equal, the gap between the two will grow because of the exponential nature of returns on investments. Thus, the negative effects of second-generation Turkish men's lower human or social capital may accumulate over the course of their careers.

However, arguments about resource-based ethnic labour market disadvantages can also work in favour of second-generation Turkish men. According to Chiswick et al. (2005), second-generation Turkish men may improve their labour market outcomes compared with those of native-born German men if they increase their human capital over time, thus reducing the gap between themselves and the majority population. Thus, I argue that increasing education levels and language skills may lead to increased employment stability and upward mobility opportunities.

Apart from human capital deficits, the lower labour market outcomes of second-generation migrants have been linked to their lower host country-specific social capital (Kalter, 2006, also see section 5.2). Social networks are generally argued to provide valuable information on job openings, career opportunities and employers' expectations (Burt, 1992; Granovetter, 1974), and these networks are also perceived to reduce screening costs for employers (Granovetter, 1974; Montgomery, 1991). Accordingly, a number of empirical studies report that well-connected employees are more likely to find employment and to attain higher incomes or status (Behtoui and Neergaard, 2011; Brandt, 2006; McDonald and Elder, 2006; Parks-Yancy, 2006), although the positive effect of informal social networks on income is also contested (Antoninis, 2006; Mouw, 2003; Pellizzari, 2010). With regard to migrants' employment and income mobility opportunities, the relevant question is whether they primarily have contact with members of the host society or with their ethnic community. Within their ethnic community, the probability of attaining valuable information on employment positions or positions with greater stability and income is likely to be limited insofar as members of ethnic minorities often occupy lower and more unstable jobs compared with the majority population. By contrast, contact with members of the majority population can improve labour market outcomes if members of the majority population occupy higher positions within the social hierarchy and have information of higher value. Additionally, exclusion from majority-population networks can hinder employees in terms of promotion opportunities. Thus, contact that bridges ethnic groups has generally been

found to have a positive influence on migrants' employment status, income, and socioeconomic status, whereas few benefits have been found for migrants that primarily maintain bonds within their ethnic community (Kanas et al., 2012; Lancee, 2010, 2012; Lancee and Hartung, 2012). In Germany, the composition of second-generation migrants' networks is strongly biased towards co-ethnic peers (Haug, 2003). Because Turkish migrants in Germany typically occupy lower positions than native-born Germans in the social hierarchy, fewer social bonds with the majority population decrease second-generation Turkish men's access to stable and well-paying jobs. Therefore, I expect more unstable jobs with higher unemployment risks, fewer re-employment opportunities and lower upward income mobility for second-generation Turkish men with low social capital compared with native-born German men.

As with human capital, lower initial bridging social capital may increase second-generation Turkish men's labour market disadvantages over the course of their careers because of the associated cumulative effects. Given that second-generation Turkish men's low initial bridging social capital lowers their employment and income chances compared with those of native-born German men, they have fewer chances of gaining valuable social contacts in the workplace. In the workplace, employers evaluate important characteristics for promotion - such as loyalty, leadership potential, and good character - in informal interactions. For second-generation Turkish men, missing out on such opportunities results in their greater reliance on formal credentials for labour market success and in fewer employment and income chances, while the native-born population are increasingly able to invest in and profit from their social networks (Baldi and McBrier, 1997; Wilson et al., 1999). As a result, the employment and income disadvantages caused by second-generation Turkish men's low initial bridging social capital may accumulate over the course of their careers.

According to life-course theory, labour market success over the course of a career may be influenced by events occurring in other life domains; marriage

and childbirth are among the most important of these events. Four main arguments have been put forward that seek to explain why married men and fathers attain higher incomes and have better employment opportunities than single men and men without children. First, spouses or parents may turn to traditional patterns in the division of household labour, thus allowing men to devote more time to market work and thereby increasing their productivity. Several explanations for this traditional division of labour have been proposed, among them the specialization of tasks between partners due to their comparative advantages, as stated in the theory of 'new home economics' (Becker, 1981); another explanation is the greater bargaining power of men, who see the division of household tasks as the result of negotiations (Bittman et al., 2003; Coltrane, 2000). Second, men may devote more effort to their jobs because they anticipate additional financial burdens or responsibilities after marriage or childbirth (Gorman, 2000). Third, employers may positively differentiate fathers or husbands for the same reasons (Hersch and Stratton, 2000; Korenmann and Neumark, 1991). Finally, married men or fathers may be more willing to accept higher-wage jobs with adverse conditions (Reed and Harford, 1989). In Germany, Trappe and Rosenfeld (1998, 2000) have found that fathers have higher incomes than men without children, and Pollmann-Schult and Diewald (2007) have found that fatherhood increases upward occupational mobility and income. In another study, Pollmann-Schult (2011) has found that married men enjoy higher pay even if self-selection processes are taken into account and concludes that this increased pay is largely the result of their increased efforts at work due to the higher financial demands of family life. Because second-generation Turkish men in Germany are more likely to be married and have children and because they have more children than native-born German men (Milewski, 2007; Soehl and Yahirun, 2011), they should experience greater labour market success, with lower unemployment, fewer downward income-mobility risks, and a greater likelihood of employment and upward income mobility.

Furthermore, ethnic labour market disadvantages may arise at the aggregate level because of a migrant group's lower share of employees in the public

sector. The public sector is characterised by internal labour markets and, according to dual labour market theory, offers secure employment, higher incomes, and superior upward-mobility opportunities (Doeringer and Piore, 1971). The vacancy competition model proposed by Sørensen (1977) and White (1970) explains these improved opportunities: vacancies within an organization create opportunities for upward mobility, and a person filling one of these vacancies creates a new vacancy by leaving his or her former position. In Germany, empirical results are mixed. Hannan et al. (1990) have found that wage changes due to job changes are significantly lower in sectors characterised by internal labour markets than in other sectors. Studying the employment careers of west German men, Kurz et al. (2006) have found that employment in the public sector has no effect on upward career mobility as measured by occupational status, however, it lowers downward-mobility and unemployment risks. According to Seifert (1998), second-generation Turkish men in Germany are largely absent from the public sector, which I expect contributes to their higher risks of unemployment and downward income mobility.

Finally, I argue that second-generation Turkish men's employment and income disadvantages relative to native-born German men increase over the course of their careers, not only because they start with fewer resources to invest in future success but also because of the detrimental effects of their higher unemployment risks. Because unemployment episodes may devalue human capital (Heckman and Borjas, 1980) or result in stigma effects (Berkovitch, 1990), such episodes have been empirically found to cause further unemployment, income losses and downward mobility (Gangl, 2006; Kuhn, 2002; Ruhm, 1991). Given second-generation Turkish men's higher unemployment risks (Kogan, 2003; Worbs, 2003), I expect that second-generation Turkish men's unemployment episodes lead to increasing risks of unemployment and downward income mobility as well as fewer opportunities for re-employment and upward income mobility compared with those of native-born German men over the course of their careers.

On a final note, discrimination is an often-discussed cause of ethnic labour-market disadvantages; empirical research has provided some evidence of its negative effect on minorities' labour-market outcomes in Germany (Kaas and Manger, 2012). However, while recognizing the potential importance of discrimination, the analytic strategy and data that this study uses does not allow for a direct examination of discrimination.<sup>1</sup>

This study will test the following hypotheses:

- (H1) *Lacking host country-specific capital hypothesis*: Second-generation Turkish men's lower levels of education, inferior language skills, and less-valuable social networks contribute to their higher risks of unemployment and downward income mobility, and to their reduced chances of re-employment and upward income mobility compared with native-born German men.
- (H2) *Family formation hypothesis*: Second-generation Turkish men's higher likelihood of being married and having children increases their upward income-mobility chances and re-employment risks, and reduces their downward-income and unemployment risks relative to native-born German men.
- (H3) *Public sector hypothesis*: Second-generation Turkish men's lower likelihood of being employed in the public sector increases their risks of unemployment and downward income mobility, and decreases their chances of re-employment and upward income mobility.

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<sup>1</sup> In quantitative studies, a common test for the negative effects of discrimination on ethnic labour-market chances involves examining whether significant ethnic disadvantages remain in a regression model that includes all theoretically derived explanatory variables. If so, the residual disadvantages are considered to be caused by discrimination. Although this approach seems to offer a solution to the problem of the difficulty of measuring discrimination with quantitative methods, discrimination may just be one among other unknown and unmeasured factors that explain the remaining ethnic disadvantages in regression models. Thus, unless data sources contain direct measures of discrimination, quantitative studies cannot directly test for the effects of discrimination.

- (H4) *Hypothesis of cumulative disadvantages*: Given that second-generation Turkish men have lower host country-specific human and social capital at labour-market entry - which causes higher risks of unemployment or downward income mobility -, and given that these higher risks further increase their unemployment, re-employment and income-mobility disadvantages, their risks of unemployment and downward income mobility increases and that their chances of re-employment and upward income mobility decreases compared with those of native-born German men over the course of their careers.
- (H5) *Hypothesis of improving host country-specific capital*: Second-generation Turkish men's chances of employment and income mobility becomes similar to that of native-born Germans when the host country-specific capital improves over the course of their careers.

### 6.3 DATA AND METHODS

To study the development of ethnic labour-market inequalities over the course of a career, I analyse 27 waves between 1984 and 2011 of the GSOEP (see section 5.3). Because the dataset does not contain sufficient case numbers for second-generation men older than 35, I exclude these men. Women are excluded from the analysis because their labour-market careers differ from those of men, especially with regard to underlying mechanisms and dynamics (Scherer, 2001). Furthermore, Germans living on former German Democratic Republic (GDR) territory are excluded because there are very few Turkish migrants in the former East Germany and economic conditions are different to the western part of the country. In addition, I exclude respondents with fewer than 24 months of valid observations for panel-balancing reasons and those who entered the labour market before 1984 because nearly all second-generation migrant men entered the labour market after 1984. Self-employment episodes are also excluded because



income in such circumstances can vary considerably from month to month. However, these exclusions may result in slight overestimations of ethnic disadvantages, as self-employed migrants are a more positively selected group than self-employed Germans in terms of education and income (Özcan and Seifert, 2000).

Within the category of second-generation Turkish men, I include those who migrated from Turkey to Germany before the age of six, and those who were born in Germany and have at least one parent who was either was born in Turkey or qualifies as a Turkish national. Because I am interested in second-generation Turkish men, all other second-generation migrants are excluded. Overall, the sample includes 8,563 employed men, 216 of which are second-generation Turks.

I use two indicators to measure labour market outcomes: employment status and income. Employment status is measured monthly and coded into three categories: employed, unemployed, and other activities, including educational activities. Income is measured in terms of individual gross monthly labour market earnings, which are adjusted for inflation. In contrast to hourly income, monthly income measures the overall value of a person's labour for an employer in a given month and provides a better approximation of living standards than hourly income. Gross income is selected because marriage strongly affects net income in Germany due to joint taxation; therefore, net income levels typically vary between married and unmarried persons.

As this paper focuses on transitions as the main processes of assimilation over the course of a career, I use Cox proportional hazard models for competing risks. The Cox proportional hazard model belongs to the class of survival models and is especially suited for transitions in which the shape of the underlying hazard function is unknown (Cleves et al., 2010). Because events such as income moves or unemployment are mutually exclusive, the events are modelled as competing risks (Fine and Gray, 1999).

Panel attrition is higher among second-generation migrants than among native-born Germans, especially among those with lower incomes and more periods of unemployment.<sup>2</sup> The problem of panel attrition in event-history analyses has seldom been addressed and has not been solved in an adequately satisfactory manner. For the GSOEP, Fertig and Schurer (2007) conclude that attrition bias plays only a minor role when assessing migrants' labour market assimilation. If it had any effect, attrition bias would lead to an underestimation of ethnic disadvantages, as survey dropout is related to lower labour market outcomes. To minimise any attrition effects, I apply the solution proposed by Pyy-Martikainen (2013), who finds that using all available data and initial weights is the safest choice to avoid estimation results that are biased by panel attrition in event-history analyses. For persons who enter the panel in later years, I used their weights at panel entry.

For all transitions, the observation window begins when respondents start their first job, defined as the first job after leaving the education system for more than six months. If the starting month of the first job was unknown, the first period was dropped to avoid left-censoring. The following transitions are analysed: (1) the transition from employment to unemployment, (2) the transition from unemployment to employment, (3) upward income mobility, and (4) downward income mobility. All event-history analyses were conducted based on monthly data, and in cases in which only annual data were available, the variables were converted into monthly data based on additional monthly variables, such as the interview month or the month of job change. Because no consensus exists about the extent to which income must change to be considered an upward or downward move, and as estimates vary according to their respective definitions, the results for upward and downward mobility are reported for an increase in income of at least 10 or 20 percent relative to the current level. The time a person is at risk is reset after a transition

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<sup>2</sup> Kroh (2013) studies panel attrition in the GSOEP data in detail. The migrant sample B, which contains most of the second-generation migrants, has greater panel attrition than the samples containing native-born Germans. My calculations, using probit and event-history models, confirm that second-generation men with low education levels and incomes are more at risk of leaving the panel than are native-born men.

into or out of employment for employment and unemployment transitions, and after upward or downward income transitions for income transitions. As transitions into self-employment are of no interest to this study, they are treated as right-censored. For transitions from unemployment to employment, respondents enter the risk set when they become unemployed.

As for the independent variables, education is measured as the highest education certificate held in any given month using four categories: basic education, general education, intermediate education, and maturity certificate. To account for the specific significance of vocational degrees in the German labour market, I create a categorical variable for further education that distinguishes between vocational training, tertiary education, and no vocational or tertiary education.

According to Dustmann and van Soest (2002), the self-reported measurement of language proficiency included in the GSOEP is quite noisy; I thus measure language skills in a categorical variable in terms of whether German is the predominant language spoken at home. Native-born German men are categorised as native speakers and included in the reference group.

Host country-specific social capital is measured by the number of native-born German friends among the individual's three best friends upon labour market entry, and missing years are filled with information from the nearest available years.

Monthly information on marital status and the number of children are taken directly from calendar data provided by the GSOEP, and episodes overlapping with job spells are split. The labour market segment is operationalised by respondents' employment in the public sector or the private sector.

To test for the effects of previous employment on respondents' careers, I include the number and duration of previous unemployment episodes, the number of previous job changes, and the duration of previous employment since labour market entry as a measure of work experience.

Furthermore, I construct a variable for the labour market entry cohort to take into account the varying macro-economic conditions at labour market entry. Discrimination cannot be directly measured. Rather, as in all studies with similar research designs, discrimination remains a possible explanation if others fail to fully account for ethnic labour market disadvantages. Finally, missing values for the share of native-born German friends and public sector employment were addressed using STATA's multiple-imputation (MI) procedure adjusted for longitudinal data (IDRE, 2015; Rubin, 2004). For all three variables, the share of missing values was below 40%.

The sample characteristics are presented in Table 6.1. The labour market entry cohorts contain reasonably similar shares of native-born German men and second-generation Turkish men. Examining the distribution of human and social capital confirms expectations regarding second-generation Turkish men's lower labour market outcomes: on average, second-generation Turkish men have a lower share of higher education and vocational training, whereas their share of incomplete and general education is rather high. Regarding the commonly used language, approximately 37 percent of second-generation Turkish men speak mostly German, and approximately 20 percent state that German is their native language. In addition, the share of native-born German friends among second-generation Turkish men's three best friends is lower than that of native-born German men. Second-generation Turkish men also marry at a younger age, have children earlier, and have more children by the time they reach the age of 30. Further, they are less likely to work in the public sector. The next set of variables captures key factors for labour market entry and employment stability. Overall, the results reveal that second-generation Turkish men's careers begin at a younger age and are much more unstable than those of native-born German men. As seen in Table 6.1, second-generation Turkish men's number of unemployment episodes is higher, the duration of unemployment episodes is longer, the number of job changes is higher, and their work experience after five years in the labour market is somewhat lower. In addition, approximately 15 percent of second-generation Turkish men improve their education, language skills, or share of native-born German

friends over the course of their careers, significantly more than the 6 percent of native-born German men who do so. In summary, the descriptive findings confirm previous studies on second-generation Turkish men's human and social capital disadvantages, their earlier family formation, and their less stable labour market careers.

#### 6.4 SECOND-GENERATION TURKISH MEN'S EMPLOYMENT AND INCOME-MOBILITY DISADVANTAGES AND THEIR DEVELOPMENT OVER THE COURSE OF THEIR CAREERS

In a preliminary step, I compare second-generation Turkish men's employment and income-mobility risks to those of native-born German men. Because I am interested in the effects of group-specific characteristics over the course of their careers, regardless of their age at labour market entry or historical labour market conditions, I ascertain second-generation Turkish men's unemployment, employment, and income-mobility risks from a base model (M1) that controls for age at labour market entry and labour market entry cohort. For income transitions, it is necessary to account for different transition rates at different income levels, e.g., due to ceiling effects (cp. Carroll and Mayer, 1986). Therefore, I include their current income level in these models.

Table 6.2 presents the coefficients for belonging to the second-generation Turkish group (level) and the coefficients for the interaction effects of being Turkish and the time since labour market entry (slope), with native-born German men as the reference category. Controlling for the interaction effect, the level effect is time-constant and can be interpreted as second-generation Turkish men's mobility (dis)advantages at labour market entry. The slope parameter represents changes in second-generation Turkish men's mobility risks over time relative to changes in native-born German men's mobility risks. As such, the slope parameters indicate whether second-generation Turkish

men's employment and income risks diverge from or converge towards those of native-born German men over the course of their careers.

Because our primary concern is the effects of ethnic origin and their interaction with time and because presenting the full estimation results for six independent variables would be more distracting than elucidating, I only report the level and slope effects of ethnic origin for each model. (The full results of the competing risks Cox regressions are shown in Tables B.1 through B.8 in the appendix.)

In the base model, M1, in Table 6.2, we see that at the beginning of their labour market careers, second-generation Turkish men have significantly higher risks of unemployment (0.741) and downward income moves (0.473 and 0.549) compared with native-born German men, when age at labour market entry, labour market entry cohort and income are controlled for. In addition, second-generation Turkish men's upward income-mobility chances are higher than those of native-born German men (0.448 and 0.478), and their chances of re-entering employment are significantly lower (-0.422) than those of native-born German men.

After labour market entry, neither second-generation Turkish men's greater unemployment nor their higher downward income-mobility risks change significantly over the course of their careers compared with those of native-born German men. However, second-generation Turkish men's initially higher upward income-mobility chances decrease over the course of their career (-0.094 and -0.116) and their initially lower re-employment chances improve significantly compared with those of native-born German men (0.071), indicating that their re-employment chances become more similar to those of native-born German men.

**Table 6.1. Descriptive Results**

	Germans	2nd Gen Turks	
<b>N</b>	5368	216	
<b>Months under Observation</b>	73.76	66.20	**
<b>Labour Market Entry Cohort</b>			
Cohort 1984	20.32	21.30	
Cohort 1990	18.27	25.46	**
Cohort 1995	30.18	28.70	
Cohort 2000	19.97	14.81	*
Cohort 2005	11.25	9.72	
<b>Education (%)</b>			
Education basic	3.10	11.27	**
Education general	38.37	57.75	**
Education intermediate	25.68	16.43	**
Education maturity	32.94	14.55	
<b>Vocational Education</b>			
Tertiary occupational education	22.29	5.63	**
Vocational Training	55.96	42.12	**
<b>Language Spoken at Home (%)</b>			
Native Germans	100.00	20.62	**
Mostly Germans	0.00	36.96	**
Mostly Turkish	0.00	11.67	**
Both Languages	0.00	30.74	**
<b>Number of German Friends Among Best 3 Friends</b>	2.94	1.20	**
<b>Age at Marriage</b>	33.31	27.19	**
<b>Age at Birth of 1st child</b>	28.02	25.08	**
<b>No. of Children at Age 30</b>	1.40	1.93	**
<b>Public Sector Job (%) at Age 25</b>	24.10	7.00	**
<b>Age at 1st Job</b>	24.99	22.35	**
<b>No. of Unemployment Episodes</b>	0.61	1.06	**
<b>Unemployment Duration (months)</b>	4.97	9.95	**
<b>No. of Job Changes</b>	1.11	1.33	**
<b>Work Experience After 5 Years (months)</b>	42.85	39.49	**
<b>Improving Capital (%)</b>	5.92	15.46	**

Source: SOEP (1984-2011).

Significance levels of the two-tailed t-tests: \* < .05; \*\* < .01.

**Table 6.2.** Coefficients for the dummy variable for belonging to the group of second-generation Turkish men (reference: native-born German men) and its interaction effects with the time since labour market entry (denoted as slope). Competing risks Cox proportional hazards model.

	Unemployment		Re-Employment		Income Up 10%		Income Up 20%		Income Down 10%		Income Down 20%	
	Level	Slope	Level	Slope	Level	Slope	Level	Slope	Level	Slope	Level	Slope
<b>Base Model</b>												
M1: Origin + Age + Cohort (+Inc.)	0.741 *	0.018	-0.422 *	0.071 *	0.448 *	-0.094 *	0.478 **	-0.116 *	0.473 *	0.054 *	0.549 **	0.049
<b>Lacking Host Country-Specific Capital Hypothesis</b>												
M2: M1 + Education	0.405 *	0.005	-0.427 *	0.087 *	0.158 *	-0.056	0.152	-0.075	0.246	0.055	0.314	0.050
M3: M2 + Language	0.278	0.002	0.031	0.078 *	0.141 *	-0.057	0.165	-0.080	0.243	0.057	0.307	0.055
M4: M3 + Friends	0.232	-0.005	0.055	0.079 *	0.155 *	-0.057	0.172	-0.080	0.268	0.057	0.302	0.054
<b>Family Formation Hypothesis</b>												
M5: M2 + Marriage + Children	0.410 *	0.006	-0.473	0.096 *	0.104 *	-0.061	0.099	-0.080	0.227	0.057	0.303	0.052
<b>Public Sector Hypothesis</b>												
M6: M2 + Sector	0.404 *	0.005	-	-	0.157	-0.056	0.152	-0.075	0.235	0.055	0.307	0.050
<b>Hypothesis of Cumulative Disadvantages</b>												
M7: M1 + Initial Capital + CA	-0.081	-0.105 *	0.203 *	0.117 *	0.091 *	-0.054	0.035	-0.091	0.127	0.037	0.451	0.015
<b>Hypothesis of Improving Host Country-Specific Capital</b>												
M8: M1 + (Edu + Lang + Friend)	0.720 **	0.021	-0.340	0.073 *	-0.011 *	-0.075	-0.045	-0.094	0.301	0.060	0.347	0.061

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.



### 6.5 EXPLAINING SECOND-GENERATION TURKISH MEN'S EMPLOYMENT AND INCOME-MOBILITY DISADVANTAGES

Models M2 through M8 in Table 6.2 illustrate what happens to second-generation Turkish men's employment and income-mobility disadvantages when the variables that test the various hypotheses are taken into account. In general, if a specific set of explanatory variables explains second-generation Turkish men's disadvantages, the origin effects should move closer to parity with those of native-born German men compared with a model that does not include these variables. Thus, if the origin effects are zero in a given model, the set of included variables explain all the second-generation Turkish men's disadvantages.

In model M2, I add education to the independent variables already included in model M1. As a result, second-generation Turkish men's higher unemployment risks relative to those of native-born German men decrease from 0.741 in model M1 to a still significant 0.405 in model M2. In addition, second-generation Turkish men's higher downward income-mobility risks become more similar to those of native-born German men (0.246 and 0.314), and this holds also true for the higher upward income-mobility opportunities (0.158 and 0.152). In the case of second-generation Turkish men's downward income-mobility risks at the 10 percent level, the differences compared with native-born German men become statistically insignificant.

As education considerably reduces second-generation Turkish men's employment and income-mobility disadvantages, and because education is correlated with the remaining independent variables, models M3 through M6 include education.

Models M3 and M4 test whether language skills and the share of native-born German friends, as two other forms of host country-specific capital, have additional explanatory power. When the commonly used language at home (M3) is added to model M2, second-generation Turkish men's greater

unemployment risks become more similar to those of native-born German men (0.278), and their lower re-employment chances disappear completely (0.031). Second-generation Turkish men's upward and downward income-mobility risks compared with those of native-born German men do not change when the commonly used language at home is included. Adding the share of native-born German friends (M4) to model M3 slightly reduces second-generation Turkish men's relatively higher unemployment risks (0.232) and slightly increases their re-employment chances (0.055); however, it changes very little regarding their income-mobility risks.

Do these results support the hypothesis H1 about lacking host country-specific capital? Clearly, second-generation Turkish men's lower education and language skills largely explain their higher unemployment risks, higher upward and downward income-mobility risks and lower re-employment chances. Thus, these results support the hypothesis that lacking host country-specific capital contributes to second-generation Turkish men's lower labour market opportunities.

Model M5 tests whether second-generation Turkish men's higher likelihood of being married and having children has a positive influence on their employment and income-mobility chances. If so, once marital status and fatherhood are controlled for, second-generation Turkish men's disadvantages should increase compared to those in model M2. However, including marital status and fatherhood does not have any noticeable effect on any of the considered transitions. Second-generation Turkish men's unemployment risks compared with those of native-born German men change from 0.405 in model M2 to 0.410 in model M5, and their higher downward income-mobility risks even decrease to a small extent. Thus, these results do not provide any support for hypothesis H2 that second-generation Turkish men's employment and income mobility is positively affected by their higher likelihood of being married and having children.

Does second-generation Turkish men's relatively low employment in the public sector contribute to their higher unemployment risks and downward

income-mobility risks and decrease their re-employment and upward income-mobility chances? Model M6 provides the answer to this question. When public sector employment is included, neither second-generation Turkish men's higher unemployment and downward income-mobility risks nor their upward income-mobility chances change compared with the results in model M2. Their unemployment risks relative to native-born German men are 0.405 in model M2 and 0.404 in model M6, and their downward income-mobility risks change slightly from 0.246 and 0.314 in model M2 to 0.235 and 0.307 in model M6. Hence, the results provide no evidence that second-generation Turkish men's relatively low share of public sector employees contributes to their higher unemployment and downward income-mobility risks; thus, the public sector hypothesis (H<sub>3</sub>) must be rejected.

I now turn to mechanisms that affect the development of ethnic employment and income-mobility disadvantages over the life course, starting with the cumulative effects of initial disadvantages. Model M7 includes variables that measure education level at labour market entry, the language spoken at home at labour market entry, the share of native-born German friends at labour market entry, the cumulative number of unemployment years, the number of unemployment episodes, work experience, and the number of previous job changes, as well as the variables included in model M1. According to the argument of cumulative disadvantages, second-generation Turkish men's lower initial capital and more disadvantaged previous labour market career should impede their future career development and, hence, the level and slope of their relative employment and mobility risks. Thus, if the aforementioned variables have the expected effect, their effects are partly included in with second-generation Turkish men's level and slope estimates. Accordingly, if these variables are controlled for, we should see second-generation Turkish men's level and slope parameters become more similar to those of native-born German men, i.e., they should near 0.<sup>3</sup>

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<sup>3</sup> It should be noted that this approach produces rather conservative estimates since initial capital is assumed to have a linear relationship with second-generation Turkish men's level and slope estimates. This is justified by the fact that initial capital directly affects a person's unemployment and work experience and that a cumulated version of these variables are

Indeed, model M7 in Table 6.2 shows that second-generation Turkish men's higher unemployment risks disappear completely (-0.081) and that their unemployment risks decrease substantially in comparison to those of native-born German men over the course of their careers (-0.105). Thus, the cumulative effects of second-generation Turkish men's initially lower host country-specific capital increases their unemployment risks over the course of their careers compared with those of native-born German men. Likewise, when the cumulative effects of their initially lower host country-specific capital is taken into account, second-generation Turkish men's lower re-employment chances become similar to those of native-born German men (0.203); furthermore, they improve more than those of native-born German men over the course of their careers (0.117). For second-generation Turkish men's income-mobility chances, the slope parameters for upward income move decline less in model M07 (-0.054 and -0.091) than in model M01 (-0.094 and -0.116). There is, however, no change compared to model M4 where host country-specific capital has been taken into account, indicating that initial resource disadvantages have an insignificant effect on the development of upward income mobility disadvantages. Thus, the results support hypothesis H4 only in that the cumulative effects of second-generation Turkish men's initial disadvantages in host country-specific capital lead to increasing unemployment risks and decreasing re-employment chances over the course of their careers.

Finally, I focus on the effect of increasing host country-specific capital over the course of second-generation Turkish men's careers on their employment and income-mobility chances. As reported earlier, second-generation Turkish men are able to improve their host country-specific capital to a larger extent than native-born German men; according to the hypothesis about improving host country-specific capital, the improvement should lead to lower unemployment and downward income-mobility risks, as well as higher re-employment and upward income-mobility chances over the course of

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included in the model. An alternative approach is presented in study 3, where an interaction effect of initial capital and time since labour market entry is included in the model.

second-generation Turkish men's careers. Model M8 controls for improving education, language skills and the share of native-born German friends by adding variables to model M1 that capture the differences between two adjunct episodes for any of the three variables. If second-generation Turkish men's improvement of host country-specific capital has any effect on their employment and income-mobility risks over the course of their careers, the slope parameters in model M8 should become more dissimilar from those of native-born German men compared with those in model M1. The results in Table 6.2 do not support this claim. In fact, none of the slope parameters in model M8 changes significantly compared with those in model M1, and the hypothesis of improving host country-specific capital (H5) is rejected.

## 6.6 CONCLUSION

This paper began with the argument that career developments play an important role in migrant assimilation. As minorities' employment and income-mobility risks relative to those of the majority population may lead to growing, persisting, or declining employment and income disadvantages over the course of their careers, a better understanding of these processes is essential for a better understanding of migrant assimilation outcomes. This study then examined whether second-generation Turkish migrants experience employment and income-mobility disadvantages and, if so, how these disadvantages develop over the course of their careers.

The results reveal that second-generation Turkish men in Germany have considerably higher unemployment and income-mobility risks as well as lower re-employment chances at labour market entry compared with those of native-born German men. Over the course of their careers, second-generation Turkish men's initially lower re-employment chances improve compared with those of native-born German men; further, their upward income mobility

advantages declined and their initially higher unemployment risks persisted throughout their careers.

In addition, the results confirm that missing host country-specific capital plays a major role in second-generation Turkish men's employment and income-mobility disadvantages; therefore, the results confirm previous studies on this matter (Kalter, 2006). In particular, second-generation Turkish men's lower education and language skills account for a large share of their employment and income-mobility disadvantages. Any positive effects of second-generation Turkish men's higher likelihood of being married or having children on their employment and income-mobility disadvantages could not be confirmed; the same holds true for the supposedly negative effects of second-generation Turkish men's low share of public sector employees. From a career perspective, the results show that the development of second-generation Turkish men's unemployment risks and re-employment chances are affected by the cumulative effects of their initially low host country-specific capital.

This study has several limitations. First and foremost, this study is limited by low case numbers. While the slope estimates of second-generation Turkish men's unemployment and income-mobility risks point to increasing disadvantages over the course of their careers, the effects are not significant; as a result, this study cannot confirm claims of increasing ethnic inequalities over the course of their careers. However, this finding does not rule out such conclusions either. In addition, higher case numbers would allow for more conclusive results with regard to the effects of marriage and fatherhood on second-generation Turkish men's employment and income-mobility disadvantages. Furthermore, this study covers only second-generation Turkish men aged 35 and younger; it does not provide any insights into the development of their disadvantages beyond the of age 35; nor does it cover the development of migrant women's disadvantages.

How do these outcomes contribute to our understanding of Turkish migrants' assimilation in Germany? Clearly, second-generation Turkish men's higher downward income-mobility risks over the course of their careers lead

to an increasing gap between their absolute income levels and those of native-born German men. In addition, except for an increase in re-employment opportunities over the course of their careers, there is little evidence that second-generation Turkish men's employment and income situations improve. Thus, ethnic labour market inequalities exist over the course of employees' careers, and in the case of second-generation Turkish men in Germany, these inequalities do not positively influence their assimilation. This finding is important for theoretical approaches considering the assimilation outcomes of minority groups over generations and should receive more theoretical attention in future research.

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## STUDY 3: ASSIMILATION OR SEGMENTATION? THE LABOUR MARKET CAREERS OF SECOND-GENERATION TURKISH WOMEN IN GERMANY

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### 7.1 INTRODUCTION

Recent studies overwhelmingly agree that in Germany, second-generation Turkish women in particular have low labour market outcomes. Despite having better employment opportunities and positions than their mothers (Algan et al., 2010; Milewski, 2013), second-generation Turkish women are less often employed compared with native-born German women (Holland and de Valk, 2013) and other second-generation migrant women (Algan et al., 2010); in addition, they face a higher risk of unemployment, are more likely to be housewives, and hold occupational positions that on average have a low status (Fincke, 2009; Haug, 2002; Luthra, 2013). Given that native-born German women's labour market participation rates and their likelihood of returning to their jobs after childbirth has increased considerably over the last several decades (Buchholz and Grunow, 2006; Fagan et al., 2003), second-generation Turkish women's low labour market outcomes are particularly troubling.

Few studies have addressed the labour market outcomes of second-generation Turkish women in Germany. In one such study, Luthra (2013) finds that such outcomes can be partly explained by Turkish women's



lower human capital levels and higher likelihood of being married and having children. These results are in line with studies of second-generation Turkish men that find that Turkish men's lower host country-specific capital (e.g., language skills and educational attainments) largely explains their low labour market outcomes (Kalter, 2006). In addition, Köbrich León (2013) finds that a Muslim identity negatively affects migrant women's labour force participation.

Additionally, we have little knowledge beyond the cross-sectional approach used in previous research. In particular, we know little about whether second-generation Turkish women's labour market disadvantages increase, persist or decrease during their careers. In addition, we do not know what mechanisms are responsible for these disadvantages. Thus, the effects of life-course mechanisms, such as improved host country-specific capital or the cumulative effects of previous labour market disadvantages, on second-generation Turkish women's labour market outcomes remain unclear.

In this study, I aim to assess second-generation Turkish women's chances of being employed, unemployed or a homemaker. For this purpose, a lower likelihood of employment, a higher risk of unemployment, and being a homemaker are considered disadvantages because they reduce the family income, leading to greater dependence on a single breadwinner, welfare payments or relatives. Furthermore, these conditions imply that the family will receive lower pension payments in the long run; this is also true for native-born German women and those who chose to become homemakers.

Specifically, this study addresses the following questions:

- (1) How do second-generation Turkish women's chances of being employed or unemployed or working as homemakers differ from those of native-born German women in their first year after leaving the education system?

- (2) How do second-generation Turkish women's chances of being employed or unemployed or working as homemakers change each year after leaving the education system compared with native-born German women?
- (3) What roles do host country-specific capital, family formation events, traditional gender roles, and processes - such as cumulative advantages and increasing host country-specific capital - play?

## 7.2 LITERATURE REVIEW AND THEORETICAL BACKGROUND

To study second-generation Turkish women's careers, I adopt a life-course approach and combine it with traditional labour market theories. With the life-course approach, career decisions are understood as taking place on multiple occasions over time, and are embedded in local, institutional and historical contexts. Additionally, domains of life, such as the family, may compete with labour market ambitions, and decisions are often linked to significant others (Elder et al., 2003; Heinz et al., 2009). This approach easily integrates the classical economic view of labour market outcomes resulting from supply and demand with traditional economic theories of action. Below, I rely on the idea that individuals base their labour market decisions on their options and preferences. While their options are based on their individual resources and the types of jobs available, their preferences, which are shaped by cultural values and beliefs, restrict the set of acceptable options (Lindenberg, 1989).

Under such circumstances, ethnic labour market disadvantages may arise from a lack of host country-specific resources. From a life-course perspective, ethnic labour market disadvantages may increase over the course of a career because of (un-)favourable events and the development of cumulative disadvantages. Alternatively, increasing levels of host country-specific resources may facilitate assimilation over the course of a career. Below, I discuss

each of these mechanisms, beginning with arguments about the effects of a lack of host country-specific resources.

Similar to men, human capital arguments may explain lower labour market outcomes for women (see section 6.2). Indeed, empirical studies generally support the role of human capital for women's labour market chances. Higher education has been found to positively affect women's employment likelihood (Buchholz and Grunow, 2006; Pettit and Hook, 2005), lower their unemployment risk (Wilke, 2005), and decrease their likelihood of dropping out of the labour market (Grunow et al., 2006). Further, language skills have been found to increase employment opportunities (Aldashev et al., 2009; Dustmann and Fabbri, 2003) and decrease unemployment duration (Höhne and Koopmans, 2010). Recent studies report that second-generation Turkish women in Germany have lower education (Kristen and Granato, 2007) and worse language skills (Dustmann et al., 2012) compared with native-born German women. Because education and language skills are important prerequisites for employment throughout all stages of one's career, I suspect that second-generation Turkish women's lower education and poorer language skills contribute to their lower levels of full-time employment and their greater risk of unemployment or working as a homemaker.

From a longitudinal perspective, resource-based ethnic inequalities can change in two directions over the course of a career. First, migrants' skills and language proficiency may increase to a greater extent than those of native-born individuals over time, thus reducing the gap between migrants and the majority population and improving migrants' labour market outcomes (Chiswick et al., 2005). Second, initially low resources may create labour market disadvantages that cumulate over the course of a career (DiPrete and Eirich, 2006). Because lower resources at labour market entry increases unemployment risk, and because unemployment episodes may carry social stigma effects (Berkovitch, 1990) or devalue human capital (Heckman and Borjas, 1980), small initial disadvantages may cumulate over the course of a career. Because second-generation Turkish women have lower host country-specific capital,

greater unemployment risk, and a lower history of work in the market at labour market entry, their human capital will decrease over time, resulting in an increased risk of unemployment or engagement in household activities over the courses of their careers.

Analogous to men, social capital is an additional individual resource that affects women's labour market outcomes (see section 6.2). For second-generation Turkish migrants in Germany, bridging social contacts should be especially valuable because Turkish migrants on average occupy lower labour market positions than do native-born Germans. However, because the social networks of second-generation Turkish women in Germany are biased towards their own ethnic peers (Haug, 2003), I suspect that the limited number of bridging ties among second-generation Turkish women contribute to their lower levels of employment participation. The career implications of changes in bridging social capital are similar to those of changes in human capital: increasing bridging social capital over the course of a career result in declining employment disadvantages, while decreasing social capital, e.g., due to unemployment episodes that cut relations to native-born Germans, result in increased employment disadvantages over the course of a career.

In addition to individual resources, women's participation in the labour market may be affected by such events as childbirth and marriage. According to the new home economics theory (Becker, 1981), partners specialise in either household or market work to maximise the household's utility. As a result, the partner with the highest comparative advantage engages in market work, and the other partner specialises in child-care and household tasks. Additionally, gender role models have been found to influence employment decisions (Pfau-Effinger, 1998, 1999), and women with more traditional gender role values are more likely to become homemakers. Accordingly, childbirth and having children at home have been found to negatively affect women's employment (Pettit and Hook, 2005). However, while marriage has also been found to lower women's labour force participation, recent studies have found that this effect has significantly declined for recent cohorts

in Germany (Grunow et al., 2006). Nevertheless, I expect both marriage and childbirth to contribute to second-generation Turkish women's lower likelihood of being employed and higher likelihood of being homemakers for two reasons. First, second-generation Turkish women are more likely to marry and give birth at a younger age than native-born German women (Hamel et al., 2012; Milewski, 2007); therefore, they are more likely to drop out of the employment market. Second, second-generation Turkish women's more traditional gender role attitudes (Diehl and Koenig, 2011) make a transition to non-employment more likely after childbirth and marriage compared with native-born German women. Regarding second-generation Turkish women's labour market careers, their employment disadvantages may decline over time because native-born German women are more likely to be employed at the beginning of their careers and have children later (Hamel et al., 2012). In addition, second-generation Turkish women's more traditional gender role attitudes may compel them to drop out of the labour market after marriage and, hence, earlier than native-born German women, who are more likely to drop out of the labour market when they have children. This may create a scenario in which a greater number of native-born German women drop out of the labour market later in comparison to second-generation Turkish women and approach similarly low employment levels.

Closely related to gender role values are religious beliefs. In the case of second-generation Turkish women, it is argued that Muslim faith is related to more traditional gender role values either because Islam relates gender differences to symbolic boundaries of what is sacred and impure, and creates gender hierarchies according to this distinction (Brinkerhoff and MacKie, 1985) or because the specific content of Islam enforces traditional gender role values (Heaton and Cornwall, 1989). However, Islamic scripture allows for both modern and traditional interpretations; given that the largest German Muslim associations agree with modern gender role values to varying degrees (Deutsche Islam Konferenz, 2013), I argue that strong religious beliefs and frequent attendance of mosque services enforce social networks that sustain traditional gender role values that are inherited from the origin country culture.

Regarding labour market outcomes, empirical studies have confirmed that greater religiosity, especially among Muslims, is related to more traditional gender role values (Diehl and Koenig, 2011; Inglehart and Norris, 2003). Accordingly, strong religious beliefs have been found to reduce female labour market participation rates (Heineck, 2004; Höhne and Koopmans, 2010), especially for Muslim women (Köbrich León, 2013; Pastore and Tenaglia, 2013).

Following the above arguments, this study will test the following hypotheses:

- (H1) *Hypothesis of initial disadvantages*: Compared to native-born German women, second-generation Turkish women in Germany are less likely to be employed in the year subsequent to leaving the education system, and more likely to be unemployed or work as homemakers due to:
- a) their lower levels of host country-specific human and social capital,
  - b) their earlier marriage and childbirth, higher numbers of children, and greater likelihood of marriage,
  - c) their greater religiosity and Muslim faith.
- (H2) *Differences in family-formation-patterns hypothesis*: Over the course of their careers, second-generation Turkish women's likelihood of being employed or unemployed or working as homemakers increasingly resemble those of native-born German women because native-born German women enter into marriage and motherhood later in their careers than second-generation Turkish women.
- (H3) *Improving host country-specific capital hypothesis*: Improved host country-specific capital (e.g., better education, improved language skills or more extensive social capital) among second-generation Turkish women contributes to the convergence of their likelihood of being employed or unemployed or working as homemakers in comparison to native-born German women over the course of their careers.

(H4) *Cumulative disadvantages hypothesis*: The cumulative effects of second-generation Turkish women's lower initial host country-specific capital and frequent episodes of unemployment and household activities decrease their likelihood of being employed and increase their likelihoods of being unemployed or working as homemakers over their careers compared with native-born German women.

### 7.3 DATA AND BACKGROUND

Similar to the previous study, this study uses data from the GSOEP between 1984 and 2011 (Kroh, 2013). Because this study aims to compare second-generation Turkish women and native-born German women, I exclude men, first-generation migrants, and other second-generation migrants from the sample. Because Turkish migrants, for historical reasons, live almost exclusively in western Germany, and because economic conditions in eastern Germany differ from those in the west, I only consider women in western Germany. By definition, a woman is categorised as second-generation Turkish if she was born in Germany and at least one of her parents migrated to Germany from Turkey. Women who were born in Turkey but migrated to Germany before the age of six are also classified as second-generation Turks. Additionally, I only include respondents with at least five years of valid observations for panel-balancing reasons. Finally, I only follow women's careers between the ages of 18 to 35, with the upper limit reflecting limited case numbers. Overall, the sample comprises 4,453 women, 204 of which are second-generation Turks.

The research questions used are intended to determine second-generation Turkish women's chances of being employed, unemployed or working as a homemaker. Because the mechanisms that lead a person to become homemakers may differ depending on whether one is unemployed or employed, and because I aim to disentangle these different factors, I

construct three dependent dummy variables: a) being employed versus being unemployed, b) being employed versus being a homemaker, c) being a homemaker versus being unemployed. As an additional benefit, this design allows us to determine whether second-generation Turkish women's lower likelihood of employment is related to a higher risk of unemployment or whether they choose to become homemakers.

The first research question concerning second-generation Turkish women's likelihood of being employed, being unemployed or working as a homemaker in the first year after leaving the education system is cross-sectional and is examined using logistic regression models for each of the three constructed dependent variables. In general, a person is defined as having left the education system (including vocational training and tertiary education) when she is absent for more than six months. For this analysis, only data relating to the year subsequent to leaving the education system are used.

To study the second research question, which concerns the development of such inequalities over the course of second-generation Turkish women's careers, I define development as a change in the probability of becoming employed, unemployed or working as a homemaker for two consecutive years. One challenge of such an approach is to eliminate the effects of unobserved heterogeneity from time-varying variables, as such effects might otherwise bias the estimates. To obtain unbiased estimates, particularly for the variable that denotes yearly changes in women's probabilities of becoming employed, unemployed or a homemaker, logistic hybrid random-effects models are the most accurate solution (Allison, 2009). Hybrid random-effects models combine the advantages of fixed- and random-effects models in that they produce estimates for time-varying variables that are unbiased by unobserved heterogeneity while allowing the inclusion of time-constant variables, such as ethnic origin. To achieve that, hybrid random-effects models include the person-specific means of time-varying variables. The effect of all unobserved heterogeneity is then inherited by the person-specific means without biasing the time-varying estimates. In addition, logistic hybrid random-effects models



precisely answer the research question of how inequalities develop over the course of a career by examining how one additional year of education affects a group's likelihood of becoming employed, unemployed or working as a homemaker compared with another group.

Because the dependent variables for the logistic and logistic hybrid random-effects models are dummy variables, I use a logistic link function and report average marginal effects (Mood, 2010). In general, average marginal effects capture how much the population average probability of an event changes, given a change in an independent variable, while holding all other variables at their sample values. In all logistic hybrid random-effects models, time is measured in years since leaving the education system; further, as the chances of being employed, unemployed, and working as a homemaker do not develop in a linear fashion over time, all models include time squared. Missing values (the share of missing values never exceeds 20 percent) are imputed using multiple imputation adjusted for longitudinal data (IDRE, 2015; Rubin, 2004).

Tables 7.1 and 7.2 provide an overview of the sample and the covariates. Because the data are longitudinal, the time-varying covariates are displayed separately for ages 25 and 30 years. On average, the native-born German women in the sample are older than the second-generation Turkish women; also, native-born German women are older when they enter the labour market. Furthermore, because of the survey's sampling strategy, the groups' labour market entry cohorts differ.

Educational attainment is coded into the following four categories: inadequate education, general education, intermediate education, and maturity level. Second-generation Turkish women's share in the inadequate and general education categories is higher at age 25 (16.28% and 43.02%) and age 30 (9.38% and 48.80%) than that of native-born German women. Additionally, maturity level is not as common among second-generation Turkish women (16.28% and 20.11%) as among native-born German women (20.94% and 29.93%). In Germany's labour market, vocational education is of special importance, and the survey captures information on whether respondents have

completed vocational training or tertiary education. Apparently, the shares of second-generation Turkish women in the sample who had received vocational training (46.56% and 46.23%) and tertiary education (3.23% and 8.70%) at age 25 is considerably lower than those of native-born German women. During their careers, a greater proportion of native-born German women improve their education than do second-generation Turkish women.

According to Dustmann and van Soest (2002), the self-reported measure of language proficiency included in the GSOEP is not fully reliable. I therefore measure language skills in terms of whether German is the predominant language spoken at home. Because the GSOEP does not provide information on this for native-born German women, I assume that they only speak German at home. Only a minority of second-generation Turkish women exclusively speak Turkish at home (14.12% and 18.84% at ages 25 and 30, respectively), and the largest proportion speaks both languages. During their careers, a considerable share of Turkish women, 42%, reports improving their language skills.

To assess the amount of bridging social capital possessed by respondents, the survey offers information on the nationalities of a respondent's three best friends. This measure neglects naturalised migrants and may underestimate the amount of bonding social capital. Second-generation Turkish women's share of native-born German friends among their best three friends is considerably lower than that of native-born German women. However, the share of native-born German friends increases for a substantial portion (24%) of second-generation Turkish women.

The survey contains information on partnership status and children for each year. Notably, second-generation Turkish women marry and have children at younger ages than native-born German women. In addition, they rarely live in consensual unions (4.70% and 5.73% at ages 25 and 30, respectively) compared with native-born German women (43.80% and 27.21%, respectively), and the share of married women (70.58% at age 25, 72.74% at age 30) is considerably higher than for native-born German women (34.13% at age 25, 60.17% at age 30). The number of children in the household is measured by the

number of children below age three and six. This distinction accounts for the specific needs of small children, the German childcare context, and German school-entry arrangements, all of which place restrictions on women's labour market participation. At age 25, second-generation Turkish women have more children below ages three and six in their households (0.42 and 0.58 children) than do native-born German women (0.29 and 0.36 children). However, at age 30, the gap in the number of children below age three nearly disappears (0.45 and 0.50 children).

To approximate the extent of traditional gender role values, I use information on respondents' religious faith and frequency of religious service attendance. In the sample, second-generation Turkish women are predominantly Muslim (88.89%), whereas native-born German women are predominantly Christian (85.43%). The groups do not differ greatly in terms of their frequency of attending religious services.

The cumulative effects of previous careers are covered by the percentage of years under observation spent in employment, unemployment or working as a homemaker. Rather than absolute numbers, this measure reflects ethnic groups' differing durations in the labour market due to their differing ages at labour market entry. At ages 25 and 30, second-generation Turkish women have experienced less time in employment and more time unemployed than have native-born German women. At both ages, second-generation Turkish women have been homemakers far longer than native-born German women.

**Table 7.1.** *Sample Statistics: Variables Measured as Time-Constant*

	Germans	Turks	
N	4005	204	
Mean Age at Labour Market Entry	29	26	**
<b>Labour Market Entry Cohort</b>			
Cohort 1981-1985	26.84	11.23	**
Cohort 1986-1990	12.90	22.47	**
Cohort 1991-1995	11.26	19.10	*
Cohort 1996-2000	8.83	14.60	
Cohort 2001-2005	28.93	18.53	**
Cohort 2006-2010	9.63	12.92	
Cohort >2010	1.57	1.12	
<b>Religion (%)</b>			
Christian	85.43	1.19	**
Muslim	0.00	88.09	**
Other	0.08	0.00	
None	14.48	10.71	**
<b>Age at 1st Marriage</b>	29	24	**
<b>Improving Host Country-Specific Capital (%)</b>			
Education	11.98	8.91	**
Language Skills	-	42.39	**
Share of Native-Born German Friends	0.01	24.12	**

Source: SOEP (1984-2011).

Significance levels of the two-tailed t-tests: \* < .05; \*\* < .01.

## 7.4 EMPIRICAL RESULTS

### 7.4.1 *Second-Generation Turkish Women's Likelihoods of Being Employed, Unemployed or Working as Homemakers Subsequent to Leaving the Education System*

I begin the analysis by comparing second-generation Turkish women's likelihoods of being employed, unemployed or working as homemakers after leaving the education system with those of native-born German women. The logistic regression models that I estimate compare second-generation Turkish women with native-born German women. Because I seek to make a general comparison between the two groups, taking into account possible cohort and

**Table 7.2.** *Sample Statistics: Variables Measured as Time-Varying*

	At Age 25			At Age 30		
	Germans	Turks		Germans	Turks	
<b>Education</b>						
Inadequate	2.43	16.28	**	1.40	9.38	**
General	29.83	43.02	**	30.16	48.80	**
Intermediate	46.81	24.42	**	38.51	20.31	**
Advanced	20.94	16.28	**	29.93	20.11	**
<b>Vocational Education</b>						
None	16.25	50.22	**	7.05	45.07	**
Vocational Training	68.30	46.56	**	68.75	46.23	**
Tertiary Education	15.56	3.23	**	24.30	8.70	*
<b>Language Spoken at Home (%)</b>						
Only German	100.00	15.29	**	100.00	20.29	**
Mostly German	-	27.06	**	-	17.39	**
Mostly Turkish	-	14.12	**	-	18.84	**
Both	-	43.53	**	-	43.48	**
<b>Share of German friends (%)</b>	97.12	34.23	**	97.39	29.76	**
<b>Partnership Status</b>						
Married	34.13	70.58	**	60.17	72.74	**
Consensual Union	43.80	4.70	**	27.21	5.73	**
No Partner	22.06	24.70	**	12.59	21.51	**
<b>% Women with Children Age &lt;3</b>	29.16	42.85	*	45.80	50.20	
<b>% Women with Children Age &lt;6</b>	36.10	58.16	**	63.34	85.71	*
<b>Frequency of Attending Religious Services (%)</b>						
At Least Weekly	6.06	6.52		6.13	8.70	
Monthly	8.40	9.48		9.67	5.80	
Less Than Monthly	36.10	25.00	*	38.28	33.33	
Never	49.49	48.69	*	45.92	52.17	
<b>Labour Market Experience ((%) of Years under Observation</b>						
Employment Experience	69.82	56.02	**	66.78	53.18	**
Unemployment Experience	4.81	6.49		3.45	7.53	**
Homemaker Experience	16.66	29.32	**	21.70	30.73	**

Source: SOEP (1984-2011).

Significance levels of the two-tailed t-tests: \* < .05; \*\* < .01.

age effects, I include the market entry cohort, age, and squared age in all models. Model M01 in Table 7.3 reports second-generation Turkish women's average marginal effects of being employed, unemployed or working as a homemaker, with the aforementioned variables taken into account and with native-born German women serving as a reference group.<sup>1</sup> Given presenting a

<sup>1</sup> The corresponding log odds of the logistic regression models are presented in table C.1.

large number of concise regression models creates a practical problem, the text presents estimation results only for the main variable of interest – belonging to the group of second-generation Turkish women – and reports the complete average marginal effects and estimation results for each model in Tables C.3 to C.8 in the appendix. The estimates for model Mo1 can be interpreted as second-generation Turkish women's labour market disadvantages relative to those of native-born German women.

In model Mo1, second-generation Turkish women are more likely to be unemployed or work as homemakers than be employed compared with native-born German women (-0.031 and -0.161); moreover, they are also more likely to work as homemakers than to be unemployed (0.133). These findings support hypothesis 1.

To test the hypotheses concerning the causes of second-generation Turkish women's disadvantages at labour market entry, I develop multiple models for each of the previously outlined arguments. If the arguments hold and explain some of the disadvantages experienced by second-generation Turkish women, I expect the average marginal effects for second-generation Turkish women to move towards or beyond parity with those for native-born German women, that is, towards 0. Models Mo2 to Mo7 in Table 7.3 report the average marginal effects of belonging to the group of second-generation Turkish women compared with native-born German women, as determined in the various models used to test the hypotheses.

Do second-generation Turkish women's lower levels of host country specific human and social capital lower their likelihood of employment, and increase their likelihood of unemployment or working as a homemaker? Models Mo2 to Mo4 incrementally add education, the commonly spoken language at home, and the share of native-born German friends to the variables included in model Mo1. In general, higher education positively affects employment and negatively affects unemployment and the probability of being a homemaker, while the effects of the language spoken at home and the share of native-born German friends are not significant (see Tables C.3 to C.5). The results in Table

7.3 show that, in contrast with model Mo1, second-generation Turkish women's lower likelihood of being employed rather than unemployed compared with native-born German women is fully explained by their lower education levels (-0.022 in contrast to -0.031 in model Mo1). Furthermore, their higher likelihood of working as a homemaker rather than being employed is reduced (-0.121 in contrast to -0.161 in model Mo1); this also holds for their higher likelihood of working as a homemaker rather than being unemployed (0.117 in contrast to 0.133 in model Mo1). Controlling for language ability, as in model Mo3, further reduces second-generation Turkish women's differences compared with native-born German women with respect to all three dependent variables (-0.015, -0.115, 0.102). When the share of native-born German friends is controlled for in model Mo4, only second-generation Turkish women's odds of being employed begin to resemble those of native-born German women (-0.007), while their differences with native-born German women increase in terms of both the odds of being employed versus being a homemaker (-0.119) and the odds of being a homemaker versus being unemployed (0.128). Thus, partly supporting hypothesis 1a, second-generation Turkish women's lower education levels and poorer language skills explain some of their lower employment chances and higher likelihood of working as homemakers, while their lower host country-specific social capital has mixed effects on their disadvantages.

Next, I test for effects of second-generation Turkish women's higher likelihood and earlier timing of marriage and childbirth on their probabilities of being employed, unemployed or working as homemakers. Generally, marriage and having children positively affect one's chances of being a homemaker and negatively affect one's chances of being employed (see Table C.4). With partnership status controlled for in model Mo5, second-generation Turkish women's odds of being employed rather than being a homemaker relative to native-born German women become insignificantly small (-0.061), and this also holds for second-generation Turkish women's greater odds of working as homemakers rather than being unemployed (0.076). Thus, second-generation Turkish women's higher likelihood of being married and

their earlier timing of marriage contribute to their lower likelihood of being employed and their higher likelihood of working as homemakers. When children are controlled for, as in model Mo6, second-generation Turkish women's average marginal effects less closely resemble those of native-born German women. This suggests that native-born German women with children are more likely to become homemakers than second-generation Turkish women in the year after leaving the education system. Thus, hypothesis 1b is only partly confirmed; also, it appears that married second-generation Turkish women are more likely to become homemakers after leaving the education system than native-born German women. In contrast, native-born German women with children are more likely to become homemakers than second-generation Turkish women.

What are the effects of second-generation Turkish women's predominantly Muslim faith on their likelihood of being employed or working as homemakers after leaving the education system? Women with Muslim faith are more likely to be unemployed or work as homemakers than they are to be employed, and they are more likely to be unemployed than they are to work as homemakers (see Tables C.3 to C.5). Additionally, those who attend religious events frequently are less likely to be employed than unemployed and more likely to be homemakers than unemployed. This finding supports the argument that religious individuals are more likely to observe traditional divisions of household labour. Compared with model Mo6, second-generation Turkish women's lower likelihood of being employed increase to insignificant levels in model Mo7 (0.027 and -0.056), suggesting that traditional Muslim values partly account for their lower employment chances and higher likelihood of being unemployed and working as homemakers. As those with Muslim faith are less likely to be homemakers than unemployed, second-generation Turkish women's higher odds of being homemakers rather than unemployed increase (0.113).

Overall, the results confirm the expectation that second-generation Turkish women are less likely to be employed and more likely to be homemakers



and unemployed than native-born German women after leaving the education system. Hypotheses 1a and 1b are partly supported by the results: low education levels and poor language skills contribute to second-generation Turkish women's lower employment chances and greater likelihood of working as homemakers relative to native-born German women. The effect of second-generation Turkish women's lower host country-specific social capital is less clear. In addition, second-generation Turkish women's greater likelihood and earlier timing of marriage contribute to their greater likelihood of becoming homemakers after leaving the education system. However, their higher number of children does not have a similar effect. Regarding hypothesis 1c, second-generation Turkish women's predominantly Muslim faith and presumably more traditional gender role values contribute to their lower employment chances and higher likelihood of being homemakers instead of employed, but not to their higher likelihood of being homemakers instead of unemployed.

**Table 7.3.** *Average marginal effects of being a second-generation Turkish women compared with being a native-born German women at labour market entry, based on logistic regression models (the full models are in the appendix in Tables C.3 to C.8).*

Model and Expl. Variables	Emp vs. Unemp	Emp vs. HH	HH vs. Unemp
Mo1: Origin + Age + Age <sup>2</sup> + Coh.	-0.031 *	-0.161 **	0.133 *
Mo2: Mo1 + Education	-0.022	-0.121 **	0.117 *
Mo3: Mo2 + Language	-0.015	-0.115 **	0.102 *
Mo4: Mo3 + % Friends	-0.007	-0.119 **	0.128 *
Mo5: Mo4 + Partnership Status	-0.008	-0.061	0.076
Mo6: Mo5 + Children	-0.011	-0.069 *	0.080
Mo7: Mo6 + Religion	0.027	-0.056	0.113 *

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

#### 7.4.2 *The Development of Second-Generation Turkish Women's Likelihood of Becoming Employed, Unemployed or Homemakers During their Early Careers*

Having ascertained second-generation Turkish women's lower labour market participation at the beginning of their careers, I now turn to the development of their likelihood of being employed, unemployed or homemakers over the course of their careers compared with native-born German women.

The analyses are conducted using logistic hybrid random-effects models. For each model, Table 7.4 reports the average marginal effects of the interaction between belonging to the group of second-generation Turkish women and time since labour market entry (slope), as well as the average marginal effects of belonging to the group of second-generation Turkish women (level). The slope parameter compares changes in the likelihood of second-generation Turkish women becoming employed, unemployed or working as homemakers for each additional year in the labour market with the same changes among native-born German women. The level parameters can be interpreted as second-generation Turkish women's initial labour market disadvantages. They differ from the effects of belonging to the group of second-generation Turkish women in Table 7.3 partly because, in contrast to the logistic regression models, the hybrid logistic regression models include only women whose labour force status changes over time. Notably, this excludes 41.32% of native-born German women and 35.89% of second-generation Turkish women in the sample. As further tests show, the distribution of labour force statuses within ethnic groups does not change when those with constant labour force statuses are dropped. In addition, while second-generation Turkish women's average marginal effects on the dependent variables varies between the logistic regression and the logistic hybrid panel regression models, the direction and interpretation remain the same. Models Mo1 present second-generation Turkish women's average marginal effects of being employed, unemployed and homemakers compared with native-born German women, controlling for the labour market entry cohort, time since labour market entry and time squared since labour

market entry. (The average marginal effects and log odds for all models in Table 7.4 are presented in Tables C.9 to C.18 in the appendix.) In addition, Figures 7.1 to 7.3 present the predicted probabilities of employment, unemployment and being a homemaker, as derived from model Mo1.

How do second-generation Turkish women's chances of becoming employed develop over their careers compared with native-born German women? Figure 7.1 shows that the probability of becoming employed decreases for both native-born German and second-generation Turkish women and that this decrease is larger for native-born German women than for second-generation Turkish women. As a result, second-generation Turkish women's employment chances increasingly resemble those of native-born German women during their careers. This finding is confirmed by the slope parameters for model Mo1 in Table 7.4. While there is no sign of convergence over time between second-generation Turkish women and native-born German women's likelihoods of becoming employed when unemployment is the reference category (-0.001), second-generation Turkish women's initially lower likelihood of becoming employed in contrast to working as a homemaker significantly increases over the courses of their careers compared with native-born German women (0.011). In other words, native-born German women are more likely to become homemakers as their careers proceed than second-generation Turkish women (who already have a higher propensity to become homemakers after leaving the education system).

According to Figure 7.2, second-generation Turkish women's overall unemployment risks do not differ from those of native-born German women, and increase slightly and insignificantly relative to those of native-born German women. When we disentangle these findings and consider the estimates in model Mo1 in Table 7.4, we observe that second-generation Turkish women are more likely to become unemployed than to become employed (-0.005), and less likely to become unemployed than to become homemakers (0.030) compared with native-born German women. Further, we see that second-generation Turkish women's unemployment risk relative to

their risk of becoming a homemaker increases over the course of their careers relative to native-born German women (-0.005); this slightly increases their overall unemployment risk.

Do second-generation Turkish women's likelihoods of becoming homemakers increasingly resemble those of native-born German women during their careers? Figure 7.3 shows that second-generation Turkish and native-born German women's probabilities of becoming homemakers increasingly resemble each other mainly because native-born German women's likelihood of becoming homemakers increases more than that of second-generation Turkish women five years after they leave the education system. In support of this finding, model Mo1 in Table 7.4 shows that second-generation Turkish women's likelihood of becoming employed rather than working as a homemaker increases relative to native-born German women (0.011), which in turn suggests that native-born German women are more likely to become homemakers than to remain employed over time compared with second-generation Turkish women. In addition, second-generation Turkish women's probability of working as homemakers rather than becoming unemployed decreases over time (-0.005) compared with native-born German women.

**Table 7.4.** Average marginal effects of the interaction between being a second-generation Turkish woman and time since labour market entry compared with the average marginal effects of the interaction between belonging to the group of native-born German women and time since labour market entry, based on logistic hybrid random-effects panel regression models (the full models are provided in Tables C.9 to C.18 in the appendix).

Model and Explanatory Variables	Emp vs. Unemp		Emp vs. HH		HH vs. Unemp	
	Slope	Level	Slope	Level	Slope	Level
<b>Development Over The Course of the Career</b>						
Mo1: Origin + Time + Time2 + Cohort	-0.001	-0.005 *	0.011 **	-0.139 **	-0.005 **	0.030 *
<b>(H2) Differences in the Family-Formation-Pattern Hypothesis</b>						
Mo2: Mo1 + Partnership + Number of children <sup>1</sup>	-0.001	-0.008 *	0.009	-0.072	-0.007 **	0.002 *
<b>(H3) Improving Host Country-Specific Capital Hypothesis</b>						
Mo3: Mo1 + Education + Language + Social capital <sup>2</sup>	-0.001	0.002	0.011 **	-0.101 **	-0.004 **	0.043 *
Mo4: Mo1 + Education + Language + Social capital (constant) <sup>3</sup>	-0.001	-0.000	0.012 **	-0.115 **	-0.005 **	0.036 *
<b>(H4) Cumulative Disadvantages Hypothesis</b>						
Mo5: Cumulative Disadvantages <sup>4</sup>	0.000	0.005	0.014 **	0.004	0.001	0.012

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

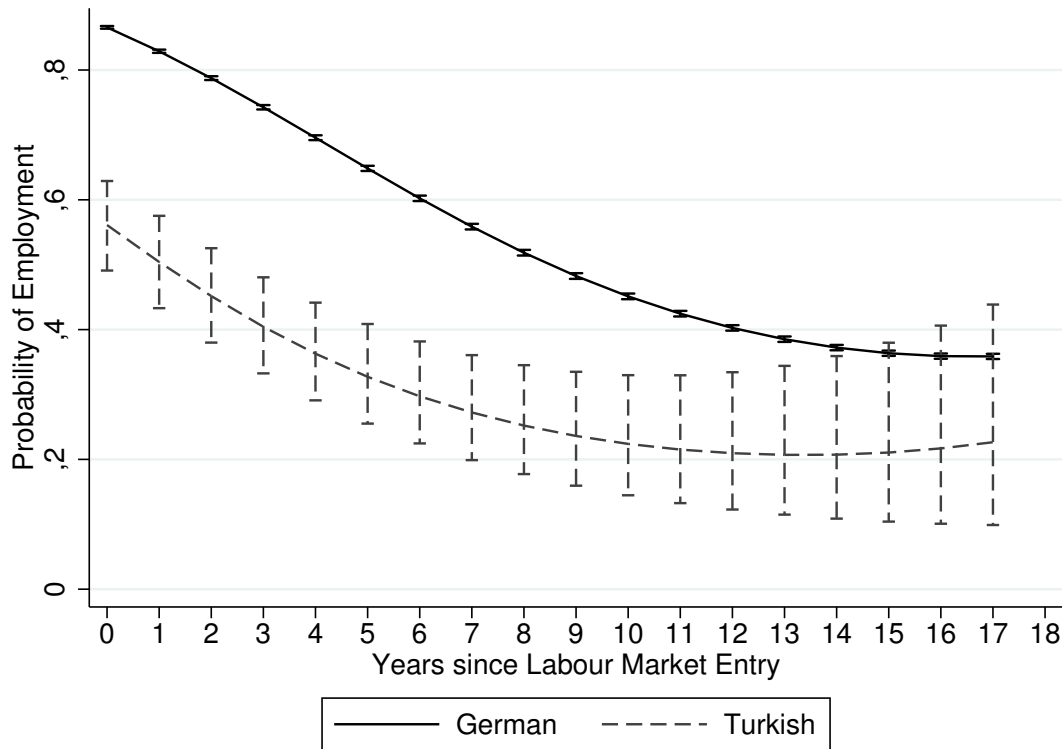
<sup>1</sup>In addition to the independent variables included in Model Mo1, partnership status and the number of children below age 3 and 6 were used. The full table is reported in the appendix in Table C.10.

<sup>2</sup>In addition to the independent variables included in model Mo1, the independent variables were educational level, commonly spoken language at home, and the share of native-born German friends. The full table is reported in the appendix in Table C.11.

<sup>3</sup>In addition to the independent variables included in Model Mo1, educational level, the commonly spoken language at home, and the share of native-born German friends were included. All of the variables were fixed at this value after the respondent left the education system. The full table is reported in the appendix in Table C.12.

<sup>4</sup>In addition to the independent variables included in Model Mo1 educational level after leaving the educational system, we evaluated the effects of language skills after leaving the educational system, share of native-born German friends after leaving the education system, the interactions of these variables with time since entering the labour market and the previous number of years of employment, unemployment, and work as a homemaker. The full table is reported in the appendix in Table C.13.

**Figure 7.1.** Predicted probabilities of employment for native-born German women and second-generation Turkish women, adjusted for years since labour market entry, years since labour market entry squared, and labour market entry cohort.

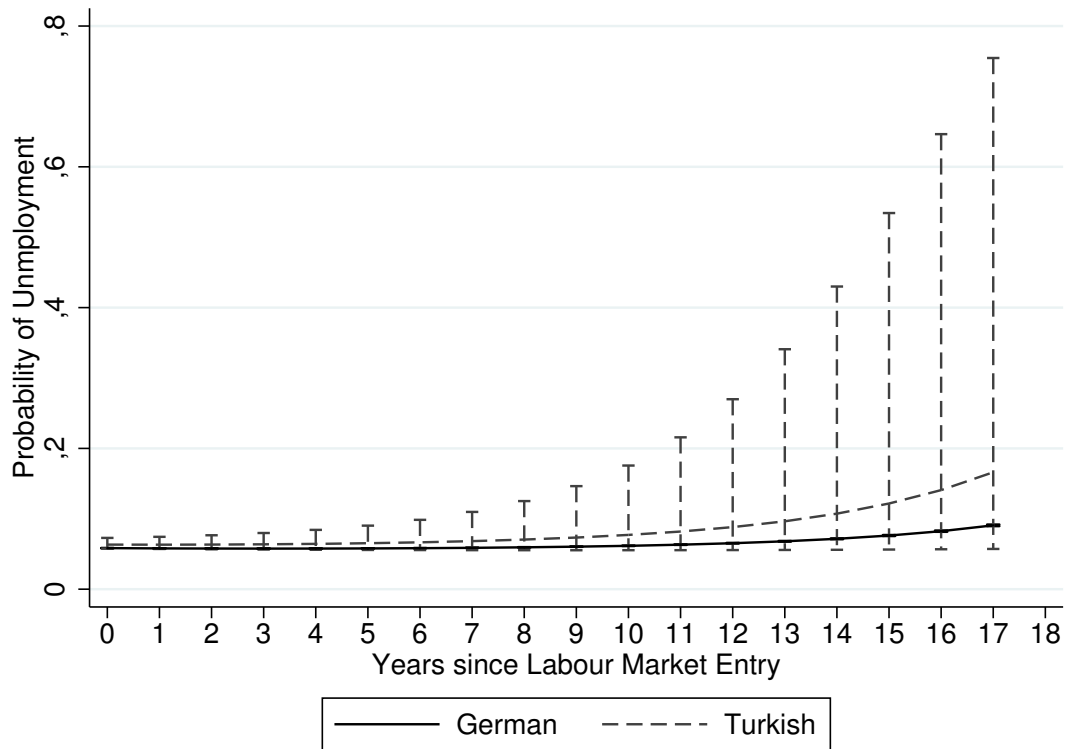


Source: SOEP (1984-2011).

#### 7.4.3 Assimilation Over The Life Course: Family Events, Cumulative Disadvantages and Improving Capital

From model M01 in table C.2, I ascertain that second-generation Turkish women's likelihood of becoming employed and their likelihood of becoming homemakers increasingly resemble those of native-born German women over the courses of their careers. I now consider processes that affect assimilation

**Figure 7.2.** *Predicted probabilities of unemployment for native-born German women and second-generation Turkish women, adjusted for years since labour market entry, years since labour market entry squared, and labour market entry cohort.*

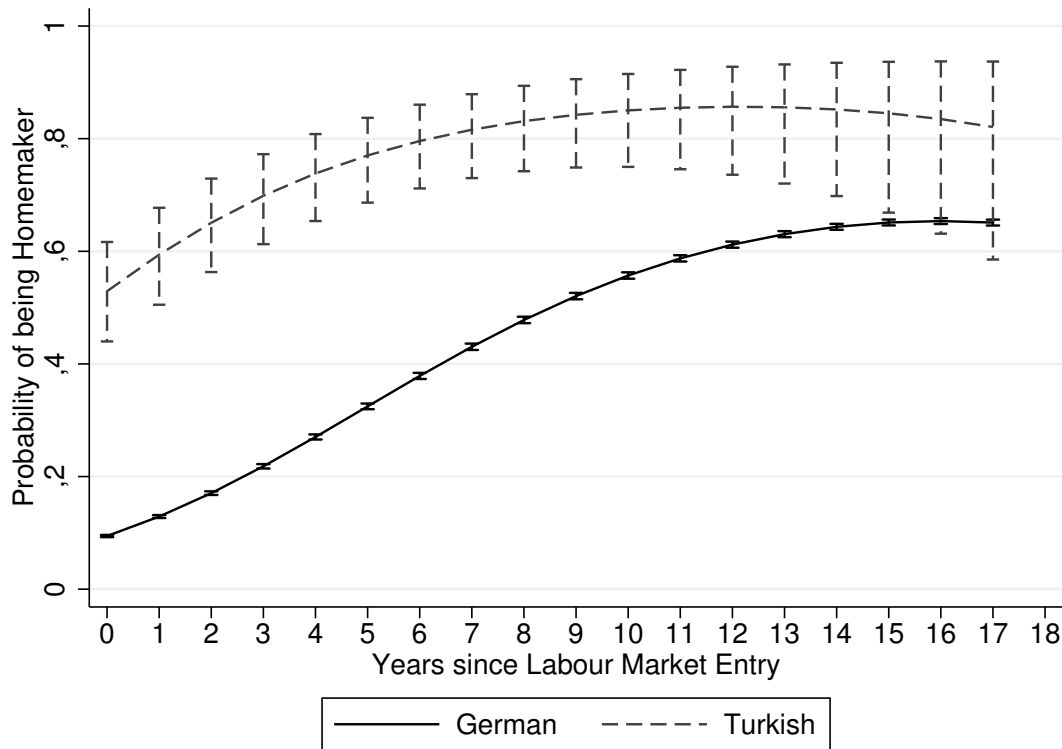


Source: SOEP (1984-2011).

over the course of a career, as specified in hypotheses 2, 3, and 4: the effects of different patterns of entry into marriage and motherhood, the effects of improving host country specific capital over time, and the effects of cumulative disadvantages. To test the effects of these variables, I construct several models in which I add additional variables to those already included in model M01.

First, I examine the effects of marriage and having children on the development of second-generation Turkish women's probabilities of employment and of becoming homemakers. According to hypothesis 2,

**Figure 7.3.** Predicted probabilities of being a homemaker for native-born German women and second-generation Turkish women, adjusted for years since labour market entry, years since labour market entry squared, and labour market entry cohort.



Source: SOEP (1984-2011).

native-born German women enter marriage and motherhood later in their careers; consequently, their probability of employment decreases more than that of second-generation Turkish women, who enter marriage and motherhood earlier and who already had lower probabilities of employment after leaving the education system. If we account for the effects of marriage and motherhood, the difference between second-generation Turkish women and native-born German women's probabilities of becoming employed rather than becoming homemakers should decrease and approach 0. In Table C.2, model M02 reports second-generation Turkish women's slope estimates



when partnership status and the number of children are taken into account; second-generation Turkish women's slope parameter for becoming employed rather than working as a homemaker moves closer to 0 and becomes insignificant (0.009). Thus, we confirm hypothesis 2: over the course of their careers, the second-generation Turkish women's probabilities of becoming employed or working as a homemaker increasingly resemble those of native-born German women because native-born German women marry and have children at later stages of their careers than second-generation Turkish women.

In the next step, I test hypothesis 3 and examine whether improving host country-specific capital, such as education, language skills or the share of native-born German friends, increases second-generation Turkish women's probabilities of employment and lowers their probabilities of becoming unemployed or homemakers over the course of their careers. The extent of second-generation Turkish women's improvements in education, language skills and social bridging capital is considerable. In Table 7.1, we observe that approximately 9% increase their education level over their careers, 42% report increases in language skills and 24% report increases in their share of native-born German friends.

Does second-generation Turkish women's increasing host country-specific capital contribute to the convergence of their probabilities of employment and becoming homemakers with those of native-born German women? The test is conducted in two steps: in model M03, I estimate second-generation Turkish women's annual change in the probability of becoming employed, unemployed or working as a homemaker relative to that of native-born German women, taking their education levels, language skills, and shares of native-born German friends each year into account as time-varying variables. In model M04, I include education level, language skills and share of native-born German friends but measure them only after the women leave the education system. Thus, the effects of improving host country-specific capital are accounted for in model M03 but not model M04. If improving host

country-specific capital is responsible for second-generation Turkish women's increasing probability of employment and decreasing probability of becoming homemakers over time compared with native-born German women, we would expect second-generation Turkish women's slope parameter to be closer to 0 in model M03 than in model M04. The results do not support hypothesis 3. Comparing the slope parameters in models M03 and M4, we find very little change, suggesting that improvements in host country specific capital do not contribute to the convergence of the two groups' probabilities of becoming employed or homemakers over their careers.

Finally, model M05 is used to test whether cumulative disadvantages impact second-generation Turkish women's assimilation over their careers. According to the arguments, the harmful effects of initial disadvantages and events, such as unemployment, increase over time. In order to separate second-generation Turkish women's slope parameter from these time-dependent effects, I control for the interaction between initial disadvantages, such as low education levels, poor language skills and lack of social capital with time since labour market entry, and previous career events, such as number of years of employment, unemployment, and working as a homemaker.<sup>2</sup> In general, if second-generation Turkish women's lower initial host country-specific capital and greater previous labour market disadvantages increase their disadvantages over time compared with native-born German women, the gap in the probabilities of becoming employed should decrease even more quickly when the cumulative effects of initial disadvantages and unfavourable events are taken into account.

The results for model M05 show that second-generation Turkish women's annual change in the probability of becoming employed compared with

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<sup>2</sup> The idea behind this approach is that if the slope parameters are affected by increasing disadvantages of initial capital and previous labour market events, one can observe how the slope parameters change if the effects are separated by controlling for previous labour market events and the interaction effect between initial disadvantages and time since labour market entry. Controlling for the interaction effect between initial disadvantages and time since labour market entry has the additional advantage of obtaining estimates about whether lower initial capital has greater detrimental effects over time than higher initial capital.

native-born German women increases slightly from 0.011 to 0.014 when being a homemaker is the reference category. Wald tests confirm that this difference is significant at the 0.05 level. However, the difference is rather small and should not be overinterpreted. Nevertheless, table C.13 in the appendix shows that inadequate initial education significantly increases unemployment chances over time, while tertiary education significantly increases employment chances over time. In addition, speaking predominantly Turkish at home also decreases employment chances and increasing the chances of becoming a homemaker. Thus, lower initial host country-specific capital indeed decreases employment chances over the course of the early careers. Given second-generation Turkish women's higher propensity to speak Turkish at home and their lower initial education, it is reasonable to assume that they are more affected by the detrimental effects of cumulative disadvantages and hypothesis 4 can be confirmed.

## 7.5 DISCUSSION AND CONCLUSION

This study aimed to examine second-generation Turkish women's labour market disadvantages in Germany over the course of their careers. In particular, I examined the extent to which their likelihood of employment, unemployment and work as homemakers differed from that of native-born German women after they left the education system, and determined how these differences develop as the women age. In addition, I tested for a wide range of socioeconomic factors, cultural factors and life-course mechanisms that might explain the disadvantages confronting Turkish women.

Using longitudinal data and logistic regression and logistic hybrid panel regression models, the key results of this study can be summarised as follows:

(H1) After leaving the education system, second-generation Turkish women are less likely to be employed and more likely to be homemakers than native-born German women.

- a) second-generation Turkish women's lower host country-specific human capital partly explains their lower likelihood of being employed and their higher likelihood of being a homemaker after leaving the education system, while the effects of their lower host country-specific social capital are less clear.
  - b) their earlier timing and likelihood of marriage contributes to their lower likelihood of employment and higher likelihood of being a homemaker after leaving the education system, while this does not hold true for their earlier timing and higher likelihood of childbirth.
  - c) second-generation Turkish women's predominantly Muslim faith contribute to their lower employment chances and higher likelihood of being homemakers instead of employed, but not to their higher likelihood of being homemakers instead of unemployed.
- (H2) During their early careers, second-generation Turkish women and native-born German women's probabilities of employment and working as homemakers converge. This convergence is the result of native-born German women's later timing of marriage and childbirth, which delay their labour market dropout and transition to homemaking
- (H3) There is no evidence that improving host country-specific capital contributes to the convergence of second-generation Turkish and native-born German women's probabilities of becoming employed or a homemaker.
- (H4) Cumulative effects of second-generation Turkish women's initial disadvantages and more unstable labour market conditions create growing disadvantages throughout their careers.

How do these results augment our understanding of second-generation Turkish women's labour market assimilation over the course of their careers? First, explanations derived from traditional labour market theory that refer to missing host country specific capital offer an empirically valid explanation

of second-generation Turkish women's chances of employment and labour market entry compared with the risks of unemployment. However, they fail to account for the higher likelihood of Turkish women becoming homemakers and for their declining employment disadvantages during their careers. Second, to account for second-generation Turkish women's higher likelihood of working as homemakers, this study demonstrates that additional factors, such as family formation and cultural differences, must be taken into account. Third, this study highlights the role of life-course mechanisms in the development of second-generation Turkish women's labour market outcomes compared with native-born German women. This is especially true for the timing of marriage and childbirth, which, in the case of Germany, strongly influences when women leave the labour market and turn to homemaking. If it were not for native-born German women's later entry into marriage and motherhood, the cumulative effects of second-generation Turkish women's initial labour market disadvantages would likely increase their labour market disadvantages during their early career.

## Part III

### SUMMARY & DISCUSSION



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## SUMMARY OF EMPIRICAL FINDINGS

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### 8.1 LABOUR MARKET OUTCOMES OVER THE COURSE OF THE EARLY CAREER

The results of the three studies paint a detailed picture of second-generation Turkish men and women's early labour market careers. According to the first study, second-generation Turkish men are less successful in pursuing stable middle-class careers as compared to their native-born German counterparts. On the contrary, they experience longer and more frequent unemployment spells than native-born German men and follow more unstable career paths. The second study supports this finding and reports that second-generation Turkish men experience higher unemployment risks and lower re-employment chances than native-born German men over their early career. However, their re-employment chances improve somewhat over the course of their early careers, whereas their higher risks of unemployment remain at the same level. In addition to second-generation Turkish men's employment and unemployment risks, the study also sheds light on their income mobility risks. The findings support the picture of second-generation Turkish men's more unstable careers as they show their higher risks of upward and downward income transitions. However, their higher chances of upward income transitions decline over the course of their early career.



The gap in pursuing a stable middle-class career is particularly large between second-generation Turkish women and native-born German women. In contrast to the latter, second-generation Turkish women enter low-wage employment more often than native-born German women. Further, their spells in middle-class employment are less frequent and shorter. They do, however, spend more time on maternity leave and in the household. The latter finding is further investigated in the third study. It supports the finding that second-generation Turkish women are more likely to become homemakers compared to native-born German women. Most importantly, the study finds that the probabilities of becoming employed and a homemaker converge between second-generation Turkish women and native-born German women over the course of their early careers.

## 8.2 CAUSES FOR INITIAL AND ONGOING LABOUR MARKET INEQUALITIES

As discussed in Chapter 3, one of the main arguments for adopting a life course perspective on migrant assimilation is that it allows us to understand the distinct temporal processes and mechanisms of ethnic assimilation in given social systems. Accordingly, each of the studies examines a variety of explanations of ethnic labour market disadvantages, including human and social capital arguments, arguments based on cultural preferences, or arguments borrowed from life course theory for explaining labour market trajectories. The following sections summarise the results for each of these arguments.

### 8.2.1 *Missing Host Country-Specific Capital*

Host country-specific capital deficits play an important role in explaining second-generation Turkish migrants lower labour market outcomes. As the results show, their lower education fully explains second-generation Turkish

men's decreased chances of pursuing a stable middle class career and partly explains the same finding for second-generation Turkish women. In addition, lower education contributes to second-generation Turkish men's higher unemployment risks and higher downward income mobility; it also fully explains second-generation Turkish women's higher unemployment risk and, to some extent, their higher likelihood of becoming a homemaker. Altogether, education proves to be the single most important factor for second-generation Turkish migrants' labour market assimilation.

Other host country-specific resources also affect second-generation Turkish migrant's labour market chances, albeit not to the same extent as education. Poorer language skills lower second-generation Turkish men's middle-class assimilation only to a very small extent; however, this has a strong negative effect on second-generation Turkish women's middle-class assimilation. A lower level of language proficiency does negatively affect second-generation Turkish men's unemployment risks but has hardly any affect on their income mobility chances. In addition, second-generation Turkish women's lower language skills partly contribute to their higher risks of becoming unemployed or a homemaker. Reduced host country-specific social capital does not significantly affect second-generation Turkish migrants' middle-class assimilation. It contributes somewhat to second-generation Turkish women's higher unemployment risks, but overall the effects are negligible.

### 8.2.2 *Family Formation Events*

Besides missing host country-specific resources, family-related factors contribute to second-generation Turkish migrants lower labour market outcomes. Most importantly, married second-generation Turkish women are less likely to pursue a stable middle class career than native-born German women, while the exact opposite holds true for second-generation Turkish men. In fact, second-generation Turkish women's higher likelihood and

earlier timing of marriage increase their distance to a stable middle-class career compared to native-born German women, while their higher likelihood and earlier timing of having children do not have such effects. For second-generation Turkish men, the findings do not confirm any positive effects of their higher likelihood of being married or having children on their employment and income-mobility disadvantages.

### 8.2.3 *Cultural Differences*

The third study attempts to assess the impact of cultural values on women's labour market participation; in the context of a lack of alternative measures, it uses religion and the frequency of attending religious services as proxy variables. While second-generation Turkish women's frequency of attending religious services does not vary much compared to that of native-born German women, the findings show that their predominantly Muslim faith increases their likelihood of becoming a homemaker rather than employed. At the same time, being Muslim reduces their likelihood of becoming unemployed.

### 8.2.4 *Cumulative Advantages*

The second and third studies address life-course processes that facilitate or hamper assimilation over the life course. One proposed argument claims that ethnic inequalities increase over the course of a career because of the cumulative effects of initial disadvantages; the two studies find some evidence that supports this argument. For second-generation Turkish men, the second study demonstrates that their initially lower host country-specific human and social capital leads to increasing unemployment risks and decreasing re-employment chances as their career proceeds. However, their income mobility risks appear not to be affected by the cumulative disadvantages. The third study supports the finding that cumulative processes play a role with

regard to labour market status. The study finds that cumulative disadvantages have a detrimental effect on the development of their probabilities of becoming employed or a homemaker.

### 8.2.5 *Increasing Host Country-Specific Capital*

A further argument claims that increasing host country-specific capital over time facilitates second-generation migrants' assimilation over the course of their careers. In fact, the second and third studies report that second-generation Turkish men and women increase their host country-specific capital over the course of their early careers. However, none of the studies find that this has a beneficial effect on their labour market outcomes.

### 8.2.6 *Timing of Events*

One argument claims that the timing of marriage and childbirth leads to different employment trajectories for native-born German women and second-generation Turkish women, and that these differences explain some of the employment disadvantages second-generation Turkish women confront. The third study supports this claim and shows that native-born German women's later childbirth decreases the employment gap between this group and second-generation Turkish women over the course of their careers. Second-generation Turkish women are more likely to become homemakers after leaving the education system. Given native-born German women tend to become homemakers after having children and to a larger extent than second-generation Turkish women, native-born German women's probabilities of becoming employed decrease to a level more similar to that of second-generation Turkish women. Further, native-born German women's probabilities of becoming a homemaker approach second-generation Turkish

women's probability of becoming a homemaker over the course of their early careers.

### 8.2.7 *Summary*

Overall, the studies show that the labour market careers of native-born Germans and second-generation Turkish men and women differ considerably. Moreover, second-generation Turkish men's difficulties of assimilating into the middle-class, their higher unemployment and their higher risks of downward income mobility are fully explained by their lower host country-specific human capital, and in particular by their lower levels of education. For second-generation Turkish women, lower host country-specific human capital also contributes to their difficulties of pursuing a stable middle-class career and to their greater likelihood of becoming a homemaker.

Further, the studies find some support for assimilation over the course of second-generation Turkish women's careers as their probabilities of becoming employed and a homemaker become increasingly similar to those of native-born German women. Given that only the early labour market career is studied, this finding may not hold true if their careers are studied for a longer period of time. For second-generation Turkish men, the studies find little evidence of assimilation over the course of their early careers. While their re-employment chances improve over time, their higher unemployment and income downward mobility risks remain at the same level.

Finally, life course processes, such as cumulative advantages and timing, do play a role in the development of second-generation Turkish men and women's labour market outcomes. According to the second and third studies, cumulative advantages somewhat increase the employment gap between second-generation Turks and the native-born population. The timing of childbirth appears to effect the development of second-generation Turkish women's labour market disadvantages over the course of their careers.

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## DISCUSSION

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### 9.1 AIMS & EMPIRICAL FINDINGS

The main goal of this dissertation was to demonstrate how a life course perspective can contribute to our understanding of assimilation processes. For this purpose, the first part criticised assimilation theories for their emphasis on intergenerational assimilation. This critique maintained that the lack of a systematic understanding and assessment of life course processes presents a conceptual weakness that obstructs important temporal processes and mechanisms of migrant assimilation.

In an attempt to amend these shortcomings, the first part presented arguments of how life course events and processes can be linked to assimilation outcomes over one's career. These arguments comprised mechanisms, such as cumulative advantages, increasing host country-specific capital and the timing, impact and frequency of life course events. I also presented arguments that directly link parents' life courses to the socioeconomic outcomes of their children, including micro-level effects - such as the impact of parents' increasing income or poverty episodes, and macro-level effects - such as how selection processes due to fertility differences affect the intergenerational mobility chances of the two groups. This part concluded that in order to attain unbiased intergenerational mobility estimates necessary to fully understanding

the temporal processes of assimilation, studies of migrant assimilation need to examine migrants' life courses and link them to their children's assimilation outcomes.

The main part of this dissertation aimed at demonstrating the potential benefits of such an approach. I conducted three studies that examine second-generation Turkish migrants' early labour market careers in Germany. The decision to focus only on career outcomes was motivated by the lack of studies on that matter, and by the fact that the second step of examining intergenerational assimilation depends on the assessment of migrants' careers. Overall, the empirical studies support the claim that adopting a life course perspective contributes to our better understanding of life course processes in a number of ways.

First, they demonstrate that second-generation Turkish migrants' labour market disadvantages vary over the course of their early labour market careers. This finding is predictable, and supports the results of studies of socioeconomic career mobility that show how labour market inequalities change between the more and less advantaged strata of society (Cheng, 2014; Fernandez-Mateo, 2009; Hillmert, 2011). It also supports related findings of changing socioeconomic inequalities over the careers of black minority members and the white majority population in the UK and the United States (Dale et al., 2006; Maume, 2004; Tomaskovic-Devey et al., 2005; Willson, 2003). Yet, studies of similar scope have not been conducted with regard to a migrant population; therefore, the studies illustrate the importance of the life course as a temporal dimension of assimilation.

Second, the studies illustrate the mechanisms through which migrants' assimilation or segmentation can take place over the course of their career. In this regard, the second study highlighted the different employment and income transition risks of second-generation Turkish men and native-born men. As transitions are the principal events through which migrants increase their labour market outcomes, any ethnic disadvantages regarding these transitions is a key cause for persisting or increasing ethnic labour market inequalities.

What is more, the studies tested the three mechanisms of labour market assimilation over the life course outlined in section 3.3. The second and third studies illustrate how initial labour market disadvantages have detrimental effects on the development of ethnic labour market disadvantages over the course of their careers, while increasing host country-specific capital does not appear to contribute to assimilation over the life course. In addition, the third study suggests that the different timing of childbirth may lead to decreasing labour market inequalities between second-generation Turkish women and native-born German women.

These life course mechanisms have rarely been studied for their impact on migrants' life courses. In a rare study on the role of cumulative advantages, Garbarski (2015) has found that they increase ethnic health inequalities. The effects of increasing host country-specific capital have been studied by Chiswick and colleagues (1978; 2005); they found that it increases first-generation migrants income and occupational position. In contrast, the results of studies two and three find no such evidence for second-generation Turkish migrants. One explanation for this finding may be that first-generation migrants already bring occupation-specific skills to the host country and are motivated to retain their pre-migration occupational position, whereas second-generation migrants may not have previously held higher occupational positions and may be less motivated and skilled to translate increasing host country-specific capital into better income or employment opportunities.

Third, the studies illustrate how life course events may be linked to migrants' assimilation outcomes. All three studies examined the effects of family formation events, such as marriage and childbirth, on second-generation Turkish migrants' labour market outcomes. One striking result is that marriage does have a greater effect on second-generation Turkish women's ability to pursue stable middle-class careers in comparison to native-born German women. While the latter finding corresponds to previous studies that find no effects of marriage on native-born German women's employment in later cohorts (Buchholz and Grunow, 2006; Grunow et al., 2006), no studies



have so far examined the role of these events for migrant assimilation. Similarly, no studies have examined the role of the timing of life course events on assimilation outcomes. Thus, by illustrating the effects of family formation events and their timing on second-generation Turkish migrants' labour market outcomes, the three conducted studies demonstrate how a life course perspective adds to our knowledge of assimilation processes.

## 9.2 THEORETICAL IMPLICATIONS

For theories of assimilation, these findings have important implications. Most importantly, they question the emphasis that assimilation theories place on intergenerational assimilation processes. Whereas assimilation theories are primarily concerned with historical time and intergenerational assimilation progress, the finding that ethnic labour market inequalities change over the course of a career draws attention to the temporal dimension of the life course. In other words, assimilation is a process that takes place over the life span as well as over generations. Thus, if theories of assimilation are to provide a comprehensive account of migrant assimilation, they need to include explanations of assimilation outcomes over the life span.

Further, assimilation theories have not systematically considered life course events but rather abstracted from the temporal processes upon which the process of assimilation is ultimately based. Yet, the findings highlight that life course events and processes are important for the development of ethnic disadvantages over the course of second-generation Turkish migrants' careers. In particular, events of family formation appear to have profound effects on second-generation Turkish women's careers and, what is more, these effects differ from those of native-born German women. Hence, the findings illustrate the importance of taking life course events into account if we are to understand migrant assimilation outcomes.

Related to this is the importance of applying domain-specific and life stage-specific explanations for migrant assimilation. All three conducted studies in this dissertation apply lower level theories that specifically aim at explaining migrants' labour market outcomes and their early career disadvantages. This is important insofar as lower level theories, such as human or social capital theory, offer more informative, explicit and applicable hypotheses than the generally broad arguments stated in assimilation theories. For instance, segmented and new assimilation theories' explanations of labour market disadvantages in part build on social capital theory, but they rarely offer explicit mechanisms and hypotheses about how social capital is linked to migrants' outcomes in domains such as the labour market or the family; nor do they examine how these effects differ at different life stages. Yet, assimilation outcomes may vary over the life course and explanations of migrant inequalities may differ between different domains of life. Thus, because a life course perspective on migrant assimilation already demands domain and life stage specific arguments, the life course perspective presents itself as a useful contribution to theories of migrant assimilation.

Finally, the findings make a compelling argument that the mechanisms of career assimilation must be taken into account if migrants' assimilation processes are to be fully understood. As shown in the second and third studies, life course mechanisms such as cumulative disadvantages play a role in migrants' assimilation outcomes. However, because they largely disregard life course processes, theories of migrant assimilation do not take these mechanisms into account. They also differ from mechanisms of intergenerational assimilation, such as the inheritance of human and cultural capital, not least because they operate over the life span instead of generations. Thus, if assimilation theories do not consider the distinct mechanisms of the life course, they miss important pieces for understanding migrant assimilation outcomes.

Altogether, these implications make a strong argument for adopting a life course approach for studies of migrant assimilation. As the foregoing

considerations show, adopting a life course perspective allows us to directly link life course events and processes to migrants' assimilation outcomes and, hence, to explicitly state and understand the temporal processes of assimilation. Moreover, by locating assimilation outcomes in certain domains and stages of the life course, as well as in specific institutional contexts, explanations of ethnic inequality can build upon well-established sociological and economic theories of social inequality in addition to ethnicity-specific explanations of assimilation theories.

### 9.3 SHORTCOMINGS

Some conceptual and methodological shortcomings in this dissertation are noteworthy. To begin with, this dissertation proposes two steps of studying migrant assimilation: migrants' life courses and their link to the next generations' socioeconomic outcomes; this approach only provides empirical analysis for the first step and does not provide original empirical research for the second step. While this decision is motivated by the lack of studies on migrants' life courses and the fact the first step is a prerequisite for the second, it leaves the overall argument of this dissertation only partly tested by empirical studies. However, Section 3.4 provides ample empirical evidence that such a link exists and supports the assumption that parents' life courses affect their children's education and labour market outcomes. Whether this holds true also for migrant groups remains to be examined by further research.

Further, all empirical studies would benefit from higher case numbers. While the data provided by the GSOEP is best suited for the purposes of the empirical studies in this dissertation, the case numbers it provides do not allow for distinguishing other migrant groups other than Turks. Moreover, higher case numbers would allow more detailed insights into the effects of second-generation Turks' labour market disadvantages. For instance, estimations of second-generation Turks employment disadvantages remain

insignificant when additional explanatory variables are included even though they are of considerable magnitude. With higher case numbers, the effects of any additional explanatory variables would be more pronounced and allow for better insights into their distinct consequences on second-generation Turks' labour market outcomes.

In addition, the empirical studies cover only the early labour market careers of second-generation Turkish migrants until the age of 35 - only a fraction of their complete life course. Thus, the empirical findings only apply to their early labour market career and cannot be generalised to their entire career. While this limitation is due to the fact that second-generation Turks have entered the labour market only in the last decade in sizeable numbers, knowledge about their later careers is clearly desirable. After all, the later labour market entry of native-born Germans with higher education may lead to even more increasing labour market disadvantages of second-generation Turks, and native-born German women's higher rates of labour market re-entries after childcare may have similar implications. Even so, investigating careers until the age of 35 already provides important and reliable insights into ethnic disadvantages over the course of their careers, not least because most women have fulfilled their wish to have children by that age.

#### 9.4 OUTLOOK

To date, no studies have examined the labour market careers of second-generation migrants in Germany. As this dissertation has highlighted, such an endeavour seems highly promising from both a theoretical and empirical perspective. Not only does such an undertaking contribute empirical insights into the distinct difficulties migrants face over the course of their careers, it also enhances our understanding of the temporal processes of migrant assimilation.

Yet, the empirical studies in this dissertation only cover a small portion of migrants' labour market careers; consequently, important questions remain unanswered. Besides the obvious questions of how second-generation Turkish migrants' labour market careers compare to those of other migrant groups in Germany and other countries, it seems of particular importance to examine how their careers develop over a longer period of time, and how they impact the socioeconomic outcomes of their children. In addition, developments in other domains of life, such as family or friendship networks, are important subjects for future research as they present other important aspects of migrant assimilation. As the studies conducted in this dissertation illustrate, adopting a life course perspective offers a more precise understanding of the mechanism of migrant assimilation than traditional approaches.

In light of recent migration flows into Europe, it is imperative to obtain a more accurate and comprehensive understanding of the life courses of migrants and the implications this has on their children's assimilation. In order for policy makers to adequately respond to the challenges of migration, scholars need to begin to understand the temporal processes of assimilation both over migrants' life course and across generations.

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# A

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## TABLES FOR STUDY 1

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**Table A.1. Men, regression of distance to continuous middle-class employment, 2/3 medium income threshold.**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
(Intercept)	4.16 **	4.06 **	4.30 **	4.21 **	4.27 **	4.41 **	4.47 **	4.29 **	4.27 **
<i>Ethnic group</i>									
2nd Turkish	0.06 **	0.14 **	0.00	0.01	0.04	0.07 *	0.18 **	0.05 *	0.03
2nd Else	0.00	0.04 **	-0.04 **	-0.03 *	-0.02	-0.02	-0.02	-0.03 *	0.00
<i>Cohorts</i>									
Cohort 1990s		-0.20 **	-0.18 **	-0.18 **	-0.18 **	-0.18 **	-0.18 **	-0.19 **	-0.18 **
Cohort 1995s		-0.07 **	-0.02 *	-0.02 **	-0.02 *	-0.01 **	-0.01 **	0.00	0.00
Cohort 2000s		0.26 **	0.26 **	0.26 **	0.26 **	0.25 **	0.25 **	0.24 **	0.25 **
Cohort 2005s		0.31 **	0.26 **	0.26 **	0.26 **	0.25 **	0.25 **	0.25 **	0.24 **
<i>Education</i>									
Missing			0.10 **	0.10 **	0.10 **	0.10 **	0.10 **	0.09 **	0.10 **
Lower Secondary			0.11 **	0.11 **	0.11 **	0.10 **	0.10 **	0.11 **	0.11 **
Middle School			0.25 **	0.25 **	0.24 *	0.24 **	0.24 **	0.23 **	0.22 *
Maturity			-0.65 **	-0.65 **	-0.65 **	-0.65 **	-0.65 **	-0.60 **	-0.61 **
Tertiary			-0.17 **	-0.17 **	-0.17 **	-0.18 **	-0.18 **	-0.16 **	-0.16 **
Vocational training			-0.50 **	-0.50 **	-0.50 **	-0.49 **	-0.49 **	-0.47 **	-0.46 **
Language skills				0.02	-0.02	-0.03	-0.04	-0.01	-0.01
German friends					0.03	0.03 *	0.03 *	0.03 *	0.02
Children						-0.10 **	-0.08 **		
Children x Turkish						-0.16 **	-0.16 **		
Children x Else							-0.02		
Marriage								-0.24 **	-0.19 **
Marriage x Turkish									0.01
Marriage x Else									-0.80 **
N	2257	2257	2257	2257	2257	2257	2257	2257	2257

Source: SOEP (1984-2011).

Significance levels of the two-tailed t-tests: \* &lt; .05; \*\* &lt; .01.

**Table A.2. Women, regression of distance to continuous middle-class employment, 2/3 medium income threshold.**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
(Intercept)	4.36 **	4.41 **	4.61 **	5.10 **	5.11 **	4.89 **	4.85 **	5.08 **	5.08 **
<i>Ethnic group</i>									
2nd Turkish	0.17 **	0.18 **	0.07 **	-0.01	-0.04	-0.05	-0.13 **	-0.02	-0.06 **
2nd Else	0.05 **	0.06 **	0.00	-0.03 *	-0.05 **	-0.04 *	-0.03	-0.04 *	-0.03
<i>Cohorts</i>									
Cohort 1990s		-0.15 **	-0.13 **	-0.13 **	-0.13 **	-0.14 **	-0.15 **	-0.13 **	-0.14 **
Cohort 1995s		-0.09 **	-0.06 **	-0.06 **	-0.06 **	-0.08 **	-0.08 **	-0.06 **	-0.07 **
Cohort 2000s		-0.03 **	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Cohort 2005s		-0.03 **	-0.03 **	-0.03 **	-0.03 *	-0.03 *	-0.03 *	-0.02 *	-0.02 *
<i>Education</i>									
Missing			0.01	-0.01	-0.01	-0.01	-0.01	0.01	0.01
Lower Secondary			-0.04 **	-0.04 **	-0.04 **	-0.01	-0.01	-0.03 **	-0.03 *
Middle School			0.15 **	0.15 **	0.15 **	0.16 **	0.16 **	0.15 **	0.15 **
Maturity			-0.44 **	-0.45 **	-0.45 **	-0.42 **	-0.42 **	-0.45 **	0.45 **
Tertiary			-0.11 **	-0.12 **	-0.12 **	-0.09 **	-0.09 **	-0.11 **	-0.11 **
Vocational training			-0.36 **	-0.36 **	-0.36 **	-0.36 **	-0.36 **	-0.37 **	-0.37 **
Language skills				-0.10 **	-0.09 **	-0.06 **	-0.06 **	-0.10 **	-0.09 **
German friends					-0.01 *	-0.01 *	0.02 *	-0.01 *	-0.01 *
Children						0.17 **	0.17 **		
Children x Turkish						0.13 *	0.13 *		
Children x Else						-0.04	-0.04		
Marriage								0.10 **	0.11 **
Marriage x Turkish									0.12 **
Marriage x Else									-0.09 **
N	2361	2361	2361	2361	2361	2361	2361	2361	2361

Source: SOEP (1984-2011).

Significance levels of the two-tailed t-tests: \* < .05; \*\* < .01.



# B

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## TABLES FOR STUDY 2

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**Table B.1.** Competing risks Cox regressions for unemployment risks

	M1	M2	M3	M4	M5	M6	All
2nd Turkish	0.741 **	0.405 *	0.278	0.232	0.410 *	0.404 *	0.227
Time since LM Entry	-0.010	0.000	0.000	0.000	-0.001	0.000	-0.001
Turkish × Time since LM Entry	0.018	0.005	0.002	-0.005	0.006	0.005	-0.004
Age at LM Entry	0.001	-0.001	-0.001	-0.001	0.000	-0.001	0.000
<i>LM Entry Cohorts (ref: &gt;2005)</i>							
1984	0.365 **	0.401 **	0.402 **	0.407 **	0.401 **	0.401 **	0.406 **
1990	0.155	0.323 *	0.322 *	0.328 *	0.323 *	0.322 *	0.327 *
1995	0.582 **	0.718 **	0.718 **	0.724 **	0.715 **	0.717 **	0.720 **
2000	0.983 **	1.164 **	1.164 **	1.170 **	1.162 **	1.163 **	1.167 **
<i>Education (ref: Intermediate)</i>							
Basic		0.406	0.404	0.404	0.417	0.405	0.415
General		0.520	0.520 **	0.519 **	0.522 **	0.520 **	0.521 **
Maturity		-0.582	-0.583 **	-0.583 **	-0.582 **	-0.582 **	-0.582 **
<i>Occupational Education (ref: None)</i>							
Vocational Training		-0.302 **	-0.301 **	-0.293 **	-0.298 **	-0.302 **	-0.290 **
Tertiary Education		-0.454 *	-0.454 *	-0.444 *	-0.453 *	-0.454 *	-0.443 *
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			0.119	0.040			0.053
Mostly Turkish			0.316	0.268			0.283
Mostly Both			0.120	0.038			0.042
<i>% of native-born German friends</i>							
Married				-0.082			-0.083
First Child (ref: no)					-0.054		-0.053
Second Child (ref: no)					0.050		0.054
Third Child (ref: no)					0.054		0.056
Public Sector					-0.146	-0.010	-0.148
N	26.269	26.269	26.269	26.269	26.269	26.269	26.269

Notes: significance levels: \* &lt; .05; \*\* &lt; .01. Source: GSOEP 1984–2011.

**Table B.2.** Competing risks Cox regressions for re-employment chances.

	M1	M2	M3	M4	M5	M6	All
2nd Turkish	-0.422 *	-0.427 *	0.031	0.055	-0.473	-0.432 *	0.020
Time since LM Entry	0.015	0.013	0.014	0.013	0.012	0.013	0.011
Turkish x Time since LM Entry	0.071 *	0.087 *	0.078 *	0.079 *	0.096 *	0.089 *	0.090 **
Age at LM Entry	-0.010 **	-0.011 **	-0.011 **	-0.011 **	-0.013 **	-0.011 **	-0.013 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>							
1984	-0.339 **	-0.329 **	-0.333 **	-0.333 **	-0.328 **	-0.325 **	-0.320
1990	-0.440 **	-0.429 **	-0.434 **	-0.436 **	-0.425 **	-0.423 **	-0.428 **
1995	-0.317 **	-0.290 *	-0.297 *	-0.300 *	-0.267 *	-0.286 *	-0.272 *
2000	-0.304 **	-0.279 **	-0.284 **	-0.284 **	-0.255 **	-0.278 **	-0.259 **
<i>Education (ref: Intermediate)</i>							
Basic		0.011	0.026	0.025	0.067	0.013	0.076
General		0.162	0.165	0.166	0.155	0.164	0.160
Maturity		0.007	0.011	0.013	0.024	0.010	0.032
<i>Occupational Education (ref: None)</i>							
Vocational Training		0.195 *	0.198 *	0.198 *	0.206 *	0.198 *	0.212 *
Tertiary Education		0.205	0.207	0.202	0.195	0.206	0.193
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.252	-0.213			-0.273
Mostly Turkish			-0.543	-0.498			-0.431
Mostly Both			-0.783	-0.719			-0.724
<i>% of native-born German friends</i>							
Married				0.038			0.037
First Child (ref: no)					0.134		0.128
Second Child (ref: no)					0.006		0.016
Third Child (ref: no)					-0.122		-0.136
					-0.182		-0.164
N	26.269	26.269	26.269	26.269	26.269	26.269	26.269

Notes: significance levels: \* < .05; \*\* < .01. Source: GSOEP 1984-2011.



**Table B.3.** Competing risks Cox regression for downward income-mobility risks, 10 percent level.

	M1	M2	M3	M4	M5	M6	All
2nd Turkish	0.473 *	0.246	0.243	0.268	0.227	0.235	0.288
Time since LM Entry	0.018	0.021	0.021	0.021	0.021	0.020	0.020
Turkish × Time since LM Entry	0.054	0.055	0.057	0.057	0.057	0.055	0.061
Age at LM Entry	0.018 **	0.018 **	0.018 **	0.018 **	0.016 **	0.018 **	0.016 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>							
1984	0.490 **	0.470 **	0.469 **	0.469 **	0.476 **	0.457 **	0.465 **
1990	0.573 **	0.610 **	0.608 **	0.609 **	0.605 **	0.585 **	0.588 **
1995	0.994 **	1.020 **	1.023 **	1.024 **	1.020 **	0.999 **	1.003 **
2000	1.195 **	1.180 **	1.185 **	1.186 **	1.195 **	1.164 **	1.183 **
Income	0.000 **	0.000 *	0.000 *	0.000 *	0.000 *	0.000 *	0.000 *
<i>Education (ref: Intermediate)</i>							
Basic		-0.164	-0.163	-0.164	-0.168	-0.171	-0.174
General		0.158 *	0.157 *	0.157 *	0.155 *	0.158 *	0.154 *
Maturity		0.082	0.081	0.081	0.083	0.089	0.089
<i>Occupational Education (ref: None)</i>							
Vocational Training		-0.362 **	-0.361 **	-0.360 **	-0.366 **	-0.358 **	-0.359 **
Tertiary Education		-0.618 **	-0.617 **	-0.616 **	-0.620 **	-0.608 **	-0.608 **
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.193	-0.198			-0.268
Mostly Turkish			0.991	0.982			0.946
Mostly Both			-0.104	-0.111			-0.159
<i>% of native-born German friends</i>							
Married				-0.007	0.119		-0.009
First Child (ref: no)					-0.046		0.118
Second Child (ref: no)					-0.020		-0.052
Third Child (ref: no)					-0.056		-0.021
Public Sector						-0.299 **	-0.052
N	17.016	17.016	17.016	17.016	17.016	17.016	17.016

Notes: significance levels: \* &lt; .05; \*\* &lt; .01. Source: GSOEP 1984–2011.

**Table B.4.** Competing risks Cox regression for downward income-mobility risks, 20 percent level.

	M1	M2	M3	M4	M5	M6	All
2nd Turkish	0.549 **	0.314	0.307 **	0.302 **	0.303	0.307	0.540 **
Time since LM Entry	0.021	0.024	0.024	0.024	0.024	0.023	0.024
Turkish x Time since LM Entry	0.049	0.050	0.055	0.054	0.052	0.050	0.057
Age at LM Entry	0.022 **	0.023 **	0.023 **	0.023 **	0.022 **	0.023 **	0.022 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>							
1984	0.462 **	0.443 **	0.443 **	0.447 **	0.450 **	0.434 **	0.445 **
1990	0.563 **	0.591 **	0.594 **	0.599 **	0.593 **	0.574 **	0.584 **
1995	0.952 **	0.972 **	0.976 **	0.981 **	0.976 **	0.955 **	0.969 **
2000	1.272 **	1.247 **	1.253 **	1.258 **	1.261 **	1.234 **	1.258 **
Income	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<i>Education (ref: Intermediate)</i>							
Basic		-0.288	-0.289	-0.292	-0.289	-0.293	-0.298
General		0.066	0.065	0.064	0.065	0.066	0.062
Maturity		0.066	0.065	0.063	0.067	0.071	0.068
<i>Occupational Education (ref: None)</i>							
Vocational Training	-0.474 **		-0.473 **	-0.472 **	-0.476 **	-0.471 **	-0.469 **
Tertiary Education	-0.709 **		-0.708 **	-0.705 **	-0.707 **	-0.701 **	-0.696 **
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.498	-0.529			-0.585
Mostly Turkish			1.088	1.033			1.013
Mostly Both			-0.453	-0.496			-0.526
<i>% of native-born German friends</i>							
Married				-0.045	0.090		-0.046
First Child (ref: no)					-0.042		0.091
Second Child (ref: no)					-0.043		-0.045
Third Child (ref: no)					-0.054		-0.045
Public Sector						-0.218 *	-0.051 *
N	17.016	17.016	17.016	17.016	17.016	17.016	17.016

Notes: significance levels: \* < .05; \*\* < .01. Source: GSOEP 1984-2011.

**Table B.5.** Competing risks Cox regressions for upward income-mobility risks, 10 percent level.

	M1	M2	M3	M4	M5	M6	All
2nd Turkish	0.448 **	0.158	0.141	0.155	0.104	0.157	0.165
Time since LM Entry	0.030 **	0.046 **	0.046 **	0.046 **	0.035 **	0.046 **	0.035 **
Turkish x Time since LM Entry	-0.094 *	-0.056	-0.057	-0.057	-0.061	-0.056	-0.059
Age at LM Entry	-0.013 **	-0.018 **	-0.018 **	-0.018 **	-0.021 **	-0.018 **	-0.021 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>							
1984	0.534 **	0.290 **	0.290 **	0.289 **	0.291 **	0.290 **	0.290 **
1990	0.459 **	0.175 *	0.175 *	0.174 *	0.156 *	0.175 *	0.154 *
1995	0.566 **	0.100	0.100	0.098	0.075	0.100	0.072
2000	0.776 *	0.022	0.022	0.020	0.025	0.022	0.021
Income	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **
<i>Education (ref: Intermediate)</i>							
Basic		-0.383 *	-0.381 *	-0.380 *	-0.392 *	-0.383 *	-0.387 *
General		-0.020	-0.020	-0.019 *	-0.028	-0.020	-0.027
Maturity		0.273 **	0.273 **	0.273 **	0.285 **	0.273 **	0.286 **
<i>Occupational Education (ref: None)</i>							
Vocational Training		-0.013	-0.013	-0.013	-0.032	-0.013	-0.032
Tertiary Education		0.522 **	0.522 **	0.521 **	0.497 **	0.522 **	0.496 **
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			0.088	0.106			0.066
Mostly Turkish			-0.054	-0.033			-0.237
Mostly Both			-0.043	-0.021			-0.121
<i>% of native-born German friends</i>							
Married				0.022			0.020
First Child (ref: no)					0.161 **		0.161 **
Second Child (ref: no)					0.112		0.112
Third Child (ref: no)					0.015		0.015
Public Sector					0.280 *	-0.010	0.283 *
N	17.016	17.016	17.016	17.016	17.016	17.016	17.016

Notes: significance levels: \* &lt; .05; \*\* &lt; .01. Source: GSOEP 1984-2011.

**Table B.6.** Competing risks Cox regressions for income upward-mobility risks, 20 percent level.

	M1	M2	M3	M4	M5	M6	All
2nd Turkish	0.478 **	0.152	0.165	0.172	0.099	0.152	0.080
Time since LM Entry	0.018 *	0.040 **	0.040 **	0.040 **	0.030 **	0.040 **	0.030 **
Turkish x Time since LM Entry	-0.116 *	-0.075	-0.080	-0.080	-0.080	-0.075	-0.083
Age at LM Entry	-0.017 **	-0.022 **	-0.022 **	-0.022 **	-0.025 **	-0.022 **	-0.025 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>							
1984	0.508 **	0.253 **	0.253 **	0.253 **	0.253 **	0.253 **	0.253 **
1990	0.418 **	0.124	0.124	0.123	0.107	0.124	0.106
1995	0.601 **	0.097	0.096	0.095	0.073	0.097	0.071
2000	0.826 **	-0.004	-0.006	-0.007	-0.002	-0.005	-0.005
Income	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **
<i>Education (ref: Intermediate)</i>							
Basic		-0.398 *	-0.395 *	-0.395 *	-0.404 *	-0.398 *	-0.399 *
General		-0.010	-0.009	-0.008	-0.017	-0.010	-0.015
Maturity		0.280 **	0.280 **	0.280 **	0.291 **	0.280 **	0.292 **
<i>Occupational Education (ref: None)</i>							
Vocational Training		-0.073 **	-0.073 **	-0.073 **	-0.089 **	-0.073 **	-0.089 **
Tertiary Education		0.532 **	0.533 **	0.532 **	0.511 **	0.533 **	0.510 **
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			0.226	0.235			0.201
Mostly Turkish			0.082	0.092			-0.072
Mostly Both			-0.035	-0.024			-0.125
<i>% of native-born German friends</i>							
Married				0.010			0.009
First Child (ref: no)					0.126 *		0.126 *
Second Child (ref: no)					0.145		0.146
Third Child (ref: no)					-0.014		-0.014
Public Sector					0.243	-0.001	0.245
N	17.016	17.016	17.016	17.016	17.016	17.016	17.016

Notes: significance levels: \* < .05; \*\* < .01. Source: GSOEP 1984-2011.

**Table B.7.** Variable estimates for Table 6.2, model M7. Competing risks Cox regression.

	Unemployment	Re-Employment	Income Up 10%	Income Up 20%	Income Down 10&	Income Down 20%
2nd Turkish	-0.081	0.203	0.091	0.035	0.127	0.451
Time since LM Entry	-0.151 **	-0.063 **	0.017	0.009	0.008	0.015
Turkish x Time since LM Entry	-0.105 *	0.117 *	-0.054	-0.091	0.037	0.015
Age at LM Entry	-0.016 **	-0.005	-0.017 **	-0.022 **	0.011 **	0.013 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>						
1984	0.400 **	-0.327 **	0.304 **	0.283 **	0.552 **	0.513 **
1990	0.397 **	-0.310 **	0.237 **	0.196 *	0.733 **	0.716 **
1995	0.503 **	-0.166	0.175 *	0.184 *	1.009 **	0.923 **
2000	0.723 **	-0.103	0.036	0.030	1.098 **	1.121 **
<i>Income</i>			-0.001 **	-0.001 **	0.000	0.000
<i>Prev. Unemp. Dur</i>	-0.020 **	-0.024 **	-0.017 **	-0.013 *	-0.006	-0.004
<i>Prev. No. of Unemp. Episodes</i>	0.477 **	0.192 **	0.185 **	0.145 **	0.174 **	0.160 **
<i>Prev. Work Experience</i>	-0.011 **	0.011 **	0.003 **	0.003 **	-0.009 **	-0.011 **
<i>Prev. No. of Job Changes</i>	0.144 **	0.055	0.059 *	0.063 *	0.057	0.077 *
<i>Education (ref: Intermediate)</i>						
Basic	0.248	-0.115	-0.350 *	-0.561 *	0.128	0.030
General	0.293 **	0.141	-0.031	-0.024	0.105	0.026
Maturity	-0.501 **	0.086	0.675 **	0.713 **	-0.087	-0.086
<i>Occupational Education (ref: None)</i>						
Vocational Training	0.083	0.096	-0.065	-0.158 *	-0.149	-0.188
Tertiary Education	0.108	-0.158	0.435 **	0.447 **	-0.408 **	-0.405 **
<i>Commonly Spoken Language (ref: Native Speaker)</i>						
Mostly German	0.446	-0.138	0.128	0.236	-0.105	-0.486
Mostly Turkish	0.080	-0.819	0.685	0.749	-0.179	-0.182
Mostly Both	0.392	-0.330	-0.110	-0.191	0.144	-0.376
<i>% of native-born German friends</i>	-0.050	0.081	0.006	-0.002	-0.047	-0.077
N	26.269	1.659	17.016	17.016	17.016	17.016

Notes: significance levels: \* &lt; .05; \*\* &lt; .01. Source: GSOEP 1984-2011.

**Table B.8.** Variable estimates for Table 6.2, model M8. Competing risks Cox regression

	Unemployment	Re-Employment	Income Up 10%	Income Up 20%	Income Down 10&	Income Down 20%
2nd Turkish	0.720 **	-0.350	-0.011	-0.045	0.301	0.347
Time since LM Entry	-0.008	0.014	0.050 **	0.045 **	0.021	0.026 *
Turkish x Time since LM Entry	0.021	0.073 *	-0.075	-0.094	0.060	0.061
Age at LM Entry	0.001	-0.010 **	-0.015 **	-0.019 **	0.017 **	0.022 **
<i>LM Entry Cohorts (ref: &gt;2005)</i>						
1984	0.365 **	-0.340 **	0.331 **	0.302 **	0.444 **	0.419 **
1990	0.136	-0.465 **	0.282 **	0.234 **	0.537 **	0.529 **
1995	0.587 **	-0.308 **	0.229 **	0.233 **	0.942 **	0.914 **
2000	0.997 **	-0.299 **	0.152 *	0.124 **	1.104 **	1.197 **
Income			-0.001 **	-0.001 **	0.000 **	0.000 *
<i>Education (ref: Intermediate)</i>						
Δ Basic	3.045 **	1.387 *	0.904	1.321 *	1.607	1.194
Δ General	3.069 **	-0.001	0.818 *	1.143 **	1.859 **	1.802 *
Δ Maturity	1.312 **	0.672	-0.667 *	-0.410	0.409	0.241
<i>Occupational Education (ref: None)</i>						
Δ Vocational Training	-0.279	-0.197	-0.308	-0.339	-0.886 *	-1.451 **
Δ Tertiary Education	-1.027 **	0.204	-0.535	-0.805	-0.811	-1.531
<i>Commonly Spoken Language (ref: Native Speaker)</i>						
Δ Mostly German	1.326 *	1.164	0.793	1.145 *	-6.208 **	-6.777 **
Δ Mostly Turkish	-2.043	-0.720	-1.823 **	-2.551 **	2.786	3.470 *
Δ Mostly Both	0.633	-0.317	-2.093 **	-2.184 **	0.253	0.613
Δ % of native-born German friends	-0.078	0.080	0.181 *	0.121	0.157	0.032
N	26.269	1.659	17.016	17.016	17.016	17.016

Notes: significance levels: \* &lt; .05; \*\* &lt; .01. Source: GSOEP 1984–2011.



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 TABLES FOR STUDY 3
 

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**Table C.1.** *Estimates of being a second-generation Turkish women compared with being a native-born German women at labour market entry, based on logistic regression models (the full models are in the appendix in Tables C.6 to C.8).*

<b>Model and Expl. Variables</b>	<b>Emp vs. Unemp</b>	<b>Emp vs. HH</b>	<b>HH vs. Unemp</b>
M01: Origin + Age + Age <sup>2</sup> + Coh.	-0.412 *	-1.208 **	0.792 *
M02: M01 + Education	-0.297	-0.940 **	0.709 *
M03: M02 + Language	-0.199	-0.892 **	0.622 *
M04: M03 + % Friends	-0.092	-0.928 **	0.778 *
M05: M04 + Partnership Status	-0.113	-0.648	0.541
M06: M05 + Children	-0.155	-0.757 *	0.621
M07: M06 + Religion	0.387	-0.620	1.046 *

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.



**Table C.2.** *Estimates of the interaction between being a second-generation Turkish woman and time since labour market entry compared with the estimates of the interaction between belonging to the group of native-born German women and time since labour market entry, based on logistic hybrid random-effects panel regression models (the full models are provided in Tables C.14 to C.18 in the appendix).*

Model and Explanatory Variables		Empl. vs. Unempl.		HH vs. HH		HH vs. Unempl	
		Slope	Level	Slope	Level	Slope	Level
<b>Development Over The Course of the Career</b>							
Mo1: Origin + Time + Time2 + Cohort		-0.091	-0.775 *	0.153 **	-1.992 **	-0.135 *	0.815 *
<b>(H2) Differences in the Family-Formation-Pattern Hypothesis</b>							
Mo2: Mo1 + Partnership + Number of children <sup>1</sup>		-0.095	-0.900 *	0.073	-1.127 **	-0.143 *	0.034
<b>(H3) Improving Host Country-Specific Capital Hypothesis</b>							
Mo3: Mo1 + Education + Language + Social capital <sup>2</sup>		-0.088	0.223	0.144 **	-1.317 **	-0.130 *	1.101 *
Mo4: Mo1 + Education + Language + Social capital (constant) <sup>3</sup>		-0.092	-0.008	0.152 **	-1.505 **	-0.132 *	0.902 *
<b>(H4) Cumulative Disadvantages Hypothesis</b>							
Mo5: Cumulative Disadvantages <sup>4</sup>		-0.029	0.331	0.182 **	0.044	0.039	0.331

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

<sup>1</sup>In addition to the independent variables included in Model Mo1, partnership status and the number of children below age 3 and 6 were used. The full table is reported in the appendix in Table C.15.

<sup>2</sup>In addition to the independent variables included in model Mo1, the independent variables were educational level, commonly spoken language at home, and the share of native-born German friends. The full table is reported in the appendix in Table C.16.

<sup>3</sup>In addition to the independent variables included in Model Mo1, educational level, the commonly spoken language at home, and the share of native-born German friends were included. All of the variables were fixed at this value after the respondent left the education system. The full table is reported in the appendix in Table C.17.

<sup>4</sup>In addition to the independent variables included in Model Mo1 educational level after leaving the educational system, we evaluated the effects of language skills after leaving the educational system, share of native-born German friends after leaving the education system, the interactions of these variables with time since entering the labour market and the previous number of years of employment, unemployment, and work as a homemaker. The full table is reported in the appendix in Table C.18.

**Table C.3.** Average marginal effects on being employed versus unemployed, based on logistic regression models.

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6	Mo7
Turkish	-0.031 *	-0.022	-0.015	-0.007	-0.008	-0.011	0.027
Age	0.005 **	0.003 *	0.002 *	0.002	0.002	0.003	0.003 *
Age Squared	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **	-0.001 **
<i>LM Entry Cohorts (ref: 1981-1985)</i>							
1986-1990	0.000	-0.011	-0.011	-0.011	-0.009	-0.016	-0.016
1991-1995	0.032	0.022	0.022	0.023	0.027	0.016	0.019
1996-2000	-0.041 *	-0.055 **	-0.054 **	-0.054 **	-0.048 **	-0.057 **	-0.054 **
2001-2005	-0.007	-0.024	-0.024	-0.024	-0.020	-0.025	-0.018
2006-2010	-0.035 *	-0.052 **	-0.053 **	-0.052 **	-0.047 **	-0.047 **	-0.043 *
>2010	-0.012	-0.026	-0.025	-0.025	-0.019	-0.017	-0.043
<i>Education (ref: Intermediate)</i>							
No Certificate		-0.020	-0.018	-0.016	-0.017	-0.017	-0.014
General		-0.039 **	-0.038 **	-0.038 **	-0.038 **	-0.033 **	-0.032 **
Advanced		0.057 **	0.057 **	0.058 **	0.059 **	0.052 **	0.050 **
<i>Vocational Education (ref: Tertiary)</i>							
None		0.002	0.002	0.002	0.002	-0.002	0.003
Vocational Training		0.022	0.022	0.022	0.022	0.016	0.017
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.006	0.005	0.004	0.000	0.002
Mostly Turkish			-0.043	-0.029	-0.030	-0.028	-0.026

Both	-0.004	0.009	0.008	0.007	0.005
<i>% of native-born German friends</i>					
<i>Partnership Status (ref: No Partner)</i>					
Married		0.039	0.040	0.037	0.034
Partnership			0.004	0.030	0.027
			-0.010	-0.006	-0.003
<i>Number of Children</i>					
<3 Years				-0.083 **	-0.076 **
3-6 Years				-0.011	-0.018
<i>Frequency of Attending Religious Services (ref: Weekly )</i>					
Monthly					0.027
Less Than Monthly					0.059 *
Never					0.051 **
<i>Religious Denomination (ref: None)</i>					
Christian					0.009
Muslim					-0.040 *
Other					-0.016
N	3.546	3.546	3.546	3.546	3.546

Notes: significance levels: \* < .05; \*\* < .01.

Source: GSOEP 1984-2011.

**Table C.4.** Average marginal effects of being employed versus working as a homemaker, based on logistic regression models.

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6	Mo7
2nd Turkish	-0.161 **	-0.121 **	-0.115 **	-0.119 **	-0.061	-0.069 **	-0.056
Age	-0.012 **	-0.016 **	-0.016 **	-0.016 **	-0.005 **	-0.003 *	-0.003 *
Age Squared	-0.001	0.000	0.000	0.000	0.000	0.00 **	-0.001 **
<i>LM Entry Cohorts (ref: 1981-1985)</i>							
1986-1990	0.102 **	0.081 **	0.081 **	0.081 **	0.063 **	0.020	0.020
1991-1995	0.137 **	0.113 **	0.112 **	0.112 **	0.062 **	0.002	0.003
1996-2000	0.175 **	0.139 **	0.138 **	0.138 **	0.061 *	0.025	0.025
2001-2005	0.125 **	0.089 **	0.088 **	0.088 **	0.032 *	0.025	0.022
2006-2010	0.256 **	0.207 **	0.205 **	0.205 **	0.117 **	0.074 **	0.071 **
>2010	0.256 **	0.233 **	0.233 **	0.234 **	0.117	0.085	0.081
<i>Education (ref: Intermediate)</i>							
No Certificate		-0.102 **	-0.097 **	-0.098 **	-0.098 **	-0.075 **	-0.074 **
General		-0.074 **	-0.074 **	-0.074 **	-0.061 **	-0.057 **	-0.057 **
Advanced		0.010	0.010	0.010	-0.011	-0.016	-0.016
<i>Vocational Education (ref: Tertiary)</i>							
None		-0.140 **	-0.140 **	-0.140 **	-0.135 **	-0.120 **	-0.121 **
Vocational Training		-0.071 *	-0.072 *	-0.072 *	-0.065 *	-0.059 *	-0.059 *
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			0.027	0.023	0.032	0.011	0.010
Mostly Turkish			-0.062	-0.069	-0.043	-0.028	-0.028

Both	-0.010	-0.015	-0.009	-0.011	-0.010
<i>% of native-born German friends</i>					
<i>Partnership Status (ref: No Partner)</i>					
Married		-0.018	-0.032	-0.012	-0.011
Partnership			-0.228 **	-0.102 **	-0.102 **
			-0.014	-0.002	-0.004
<i>Number of Children</i>					
<3 Years			-0.101 **	-0.103 **	
3-6 Years			-0.094 **	-0.092 **	
<i>Frequency of Attending Religious Services (ref: Weekly )</i>					
Monthly					-0.019
Less Than Monthly					-0.006
Never					0.026
<i>Religious Denomination (ref: None)</i>					
Christian					-0.025
Muslim					-0.035 *
Other					0.040 *
N	3.955	3.955	3.955	3.955	3.955

Notes: significance levels: \* < .05; \*\* < .01.

Source: GSOEP 1984-2011.

**Table C.5.** Average marginal effects of being a homemaker versus being unemployed, based on logistic regression models.

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6	Mo7
2nd Turkish	0.133 *	0.117 *	0.102 *	0.128 *	0.076	0.080	0.133 *
Age	0.022 **	0.026 **	0.026 **	0.026 **	0.015 **	0.013 **	0.013 **
Age Squared	-0.001	-0.001 *	-0.001 *	-0.001 *	0.000	0.000	0.000
<i>LM Entry Cohorts (ref: 1981-1985)</i>							
1986-1990	-0.129 **	-0.127 **	-0.125 **	-0.125 **	-0.065	-0.049	-0.054
1991-1995	-0.073	-0.071	-0.069	-0.061	0.020	0.033	0.033
1996-2000	-0.278 **	-0.281 **	-0.283 **	-0.279 **	-0.101 *	-0.090	-0.089
2001-2005	-0.157 **	-0.155 **	-0.154 **	-0.153 **	-0.039	-0.050	-0.037
2006-2010	-0.343 **	-0.338 **	-0.338 **	-0.333 **	-0.165 **	-0.179 **	-0.163 **
>2010	-0.290 *	-0.307 *	-0.300 *	-0.299 *	-0.117	-0.116	-0.148
<i>Education (ref: Intermediate)</i>							
No Certificate		0.082	0.078	0.082	0.084	0.081	0.089
General		0.024	0.025	0.026	0.022	0.018	0.014
Advanced		0.092	0.091	0.090	0.055	0.081	0.080
<i>Vocational Education (ref: Tertiary)</i>							
None		0.199 **	0.197 **	0.195 **	0.175 *	0.173 *	0.171 *
Vocational Training		0.133	0.133	0.133	0.093	0.093	0.086
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.051	-0.030	-0.056	-0.023	-0.015
Mostly Turkish			0.052	0.074	0.048	0.063	0.062

Both	0.052	0.072	0.063	0.083	0.094
<i>% of native-born German friends</i>					
<i>Partnership Status (ref: No Partner)</i>					
Married	0.300 **	0.222 **	0.064	0.059	0.052
Partnership	0.019	0.020			0.024
<i>Number of Children</i>					
<3 Years		0.035			0.037
3-6 Years		0.123 **			0.118 **
<i>Frequency of Attending Religious Services (ref: Weekly )</i>					
Monthly					0.040
Less Than Monthly					0.076
Never					0.065 *
<i>Religious Denomination (ref: None)</i>					
Christian					0.041
Muslim					-0.053 *
Other					-0.033
N	1.005	1.005	1.005	1.005	1.005

Notes: significance levels: \* < .05; \*\* < .01.

Source: GSOEP 1984–2011.

**Table C.6.** Estimates of being employed versus unemployed, based on logistic regression models.

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6	Mo7
2nd Turkish	-0.412 *	-0.297	-0.199	-0.092	-0.113	-0.155	0.387
Age	0.064 **	0.034 *	0.033 *	0.031	0.028	0.039	0.042 *
Age Squared	-0.017 **	-0.010 **	-0.010 **	-0.010 **	-0.010 **	-0.012 **	-0.013 **
<i>LM Entry Cohorts (ref: 1981-1985)</i>							
1986-1990	-0.004	-0.154	-0.146	-0.148	-0.121	-0.225	-0.231
1991-1995	0.433	0.295	0.295	0.307	0.370	0.220	0.266
1996-2000	-0.551 *	-0.741 **	-0.738 **	-0.731 **	-0.656 **	-0.799 **	-0.765 **
2001-2005	-0.097	-0.320	-0.331	-0.329	-0.271	-0.349	-0.250
2006-2010	-0.472 *	-0.707 **	-0.722 **	-0.710 **	-0.634 **	-0.660 **	-0.607 *
>2010	-0.154	-0.355	-0.341	-0.338	-0.255	-0.233	-0.617
<i>Education (ref: Intermediate)</i>							
No Certificate		-0.266	-0.247	-0.220	-0.226	-0.237	-0.198
General		-0.522 **	-0.518 **	-0.509 **	-0.511 **	-0.468 **	-0.463 **
Advanced		0.776 **	0.778 **	0.782 **	0.797 **	0.735 **	0.719 **
<i>Vocational Education (ref: Tertiary)</i>							
None		0.025	0.025	0.031	0.021	-0.023	0.036
Vocational Training		0.294	0.292	0.300	0.302	0.222	0.248
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.078	0.065	0.059	0.004	0.029
Mostly Turkish			-0.583	-0.390	-0.401	-0.396	-0.378



Mostly Both	-0.059	0.125	0.105	0.098	0.072
<i>% of native-born German friends</i>					
<i>Partnership Status (ref: No Partner)</i>					
Married		0.527	0.540	0.517	0.492
Partnership			0.057	0.420	0.384
			-0.140	-0.081	-0.049
<i>Number of Children</i>					
<3 Years				-1.167 **	-1.087 **
3-6 Years				-0.157	-0.253
<i>Frequency of Attending Religious Services (ref: Weekly )</i>					
Monthly					0.386
Less Than Monthly					0.841 *
Never					0.731 **
<i>Religious Denomination (ref: None)</i>					
Christian					0.134
Muslim					-0.568 *
Other					-0.223
N	3.546	3.546	3.546	3.546	3.546

Notes: significance levels: \* < .05; \*\* < .01.

Source: GSOEP 1984-2011.

**Table C.7.** Estimates of being employed versus working as a homemaker, based on logistic regression models.

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6	Mo7
2nd Turkish	-1.208 **	-0.940 **	-0.892 **	-0.928 **	-0.648	-0.757 *	-0.620
Age	-0.089 **	-0.126 **	-0.126 **	-0.126 **	-0.043 **	-0.036 *	-0.038 *
Age Squared	-0.004	0.002	0.002	0.002	-0.003	-0.011 **	-0.011 **
<i>LM Entry Cohorts (ref: 1981-1985)</i>							
1986-1990	0.768 **	0.629 **	0.631 **	0.632 **	0.539 **	0.222	0.222
1991-1995	1.030 **	0.875 **	0.875 **	0.873 **	0.528 **	0.019	0.030
1996-2000	1.308 **	1.083 **	1.075 **	1.074 **	0.521 *	0.276	0.274
2001-2005	0.937 **	0.692 **	0.686 **	0.685 **	0.275 *	0.270	0.248
2006-2010	1.917 **	1.607 **	1.596 **	1.598 **	0.998 **	0.812 **	0.790 **
>2010	1.920 **	1.813 **	1.816 **	1.820 **	1.000	0.931	0.900
<i>Education (ref: Intermediate)</i>							
No Certificate	-0.791 **	-0.791 **	-0.753 **	-0.760 **	-0.841 **	-0.822 **	-0.820 **
General	-0.574 **	-0.574 **	-0.573 **	-0.574 **	-0.518 **	-0.622 **	-0.628 **
Advanced	0.079	0.079	0.079	0.079	-0.094	-0.181	-0.179
<i>Vocational Education (ref: Tertiary)</i>							
None	-1.090 **	-1.090 **	-1.093 **	-1.092 **	-1.153 **	-1.315 **	-1.340 **
Vocational Training	-0.556 *	-0.556 *	-0.560 *	-0.558 *	-0.552 *	-0.653 *	-0.657 *
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			0.208	0.179	0.272	0.124	0.114
Mostly Turkish			-0.486	-0.536	-0.366	-0.307	-0.314

Mostly Both	-0.082	-0.118	-0.077	-0.116	-0.114
% of native-born German friends					
Partnership Status (ref: No Partner)					
Married		-0.137	-0.271	-0.129	-0.121
Partnership			-1.950 **	-1.124 **	-1.125 **
			-0.119	-0.024	-0.045
Number of Children					
<3 Years			-1.115 **	-1.139 **	-1.139 **
3-6 Years			-1.035 **	-1.023 **	-1.023 **
Frequency of Attending Religious Services (ref: Weekly )					
Monthly					-0.214
Less Than Monthly					-0.065
Never					0.290
Religious Denomination (ref: None)					
Christian					-0.281
Muslim					-0.384 *
Other					0.443 *
N	3.955	3.955	3.955	3.955	3.955

Notes: significance levels: \* < .05; \*\* < .01.

Source: GSOEP 1984-2011.

**Table C.8.** Estimates of being a homemaker versus being unemployed, based on logistic regression models.

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6	Mo7
2nd Turkish	0.792 *	0.709 *	0.622 *	0.778 *	0.541	0.621	1.046 *
Age	0.133 **	0.156 **	0.157 **	0.156 **	0.103 **	0.097 **	0.098 **
Age Squared	-0.006	-0.008 *	-0.008 *	-0.008	-0.003	0.003	0.002
<i>LM Entry Cohorts (ref: 1981-1985)</i>							
1986-1990	-0.769 **	-0.769 **	-0.763 **	-0.762 **	-0.466	-0.379	-0.425
1991-1995	-0.436	-0.430	-0.420	-0.370	0.145	0.257	0.255
1996-2000	-1.660 **	-1.703 **	-1.719 **	-1.699 **	-0.721 *	-0.690	-0.701
2001-2005	-0.936 **	-0.937 **	-0.934 **	-0.932 **	-0.277	-0.384	-0.293
2006-2010	-2.045 **	-2.050 **	-2.057 **	-2.027 **	-1.171 **	-1.377 **	-1.281 **
>2010	-1.732 *	-1.863 *	-1.821 *	-1.822 *	-0.834	-0.892	-1.162
<i>Education (ref: Intermediate)</i>							
No Certificate		0.495	0.474	0.501	0.598	0.628	0.699
General		0.148	0.151	0.159	0.154	0.139	0.109
Advanced		0.558	0.555	0.547	0.396	0.630	0.625
<i>Vocational Education (ref: Tertiary)</i>							
None		1.206 **	1.200 **	1.188 **	1.243 *	1.337 *	1.341 *
Vocational Training		0.804	0.807	0.811	0.659	0.714	0.672
<i>Commonly Spoken Language (ref: Native Speaker)</i>							
Mostly German			-0.313	-0.181	-0.398	-0.173	-0.119
Mostly Turkish			0.316	0.450	0.342	0.487	0.484

Mostly Both	0.319	0.441	0.452	0.641	0.734
% of native-born German friends		0.491	0.461	0.455	0.409
Partnership Status (ref: No Partner)					
Married			2.136 **	1.716 **	1.656 **
Partnership			0.133	0.153	0.190
Number of Children					
<3 Years			0.272		0.293
3-6 Years			0.949 *		0.922
Frequency of Attending Religious Services (ref: Weekly )					
Monthly					0.315
Less Than Monthly					0.590
Never					0.510 *
Religious Denomination (ref: None)					
Christian					0.318
Muslim					-0.417 *
Other					-0.256
N	4.592	4.592	4.592	4.592	4.592

Notes: significance levels: \* < .05; \*\* < .01.

Source: GSOEP 1984-2011.

**Table C.9.** Average Marginal Effects for Model Mo1 in Table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and being a homemaker for women in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
<b>Turkish</b>			
Turkish x Time since leaving the education system	-0.005 *	-0.139 **	0.030 *
Time since leaving the education system	-0.001	0.011 **	-0.005 *
Time squared since leaving the education system	0.000	-0.015 **	0.006 **
Labour market entry cohort (ref: <1984)	-0.000 **	0.001 **	-0.001 **
1985-1989	-0.002	0.075 **	-0.033 *
1990-1994	-0.002	0.069 **	-0.032 *
1995-1999	-0.008 **	0.129 **	-0.066 **
2000-2004	-0.008 **	0.148 **	-0.079 **
2004-2010	-0.006 *	0.267 **	-0.156 **
>2010	0.000	0.251 **	-
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	-0.000	-0.003	-0.003
Time since leaving the educational system	0.001 **	0.003	0.008 **
Time squared since leaving the educational system	-0.000 **	-0.002 **	-0.000
<b>Person-Years</b>	16.786	21.930	4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.10.** Average Marginal Effects for Model Mo2 in Table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and being a homemaker for women in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
<b>Turkish</b>	-0.008 *	-0.072 **	0.002
Turkish x Time since leaving the education system	-0.001	0.009	-0.007 *
Time since leaving the education system	0.000	-0.00 **	0.007 **
Time squared since leaving the education system	-0.000 **	0.000	0.000
<b>Labour market entry cohort (ref: &lt;1984)</b>			
1985-1989	-0.003	0.056 **	-0.033 *
1990-1994	-0.003	0.034 *	-0.013
1995-1999	-0.009 **	0.054 **	-0.023
2000-2004	-0.008 **	0.083 **	-0.050 **
2004-2010	-0.005	0.154 **	-0.112 **
>2010	0.002	0.061	-
<b>Partnership Status</b>			
Married	-0.000	-0.068 **	0.050 **
Partnered	0.000	0.005	0.010
<b>Number of Children</b>			
<3 Years	-0.005 *	-0.103 **	0.040 **
3-6 Years	-0.002	-0.068 **	0.036 **
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.000	-0.006	0.002
Time since leaving the educational system	0.002 **	0.016 **	-0.001
Time squared since leaving the educational system	-0.000 **	-0.003 **	0.000
Partnership Status Married	0.018 **	-0.100 **	0.130 **
Partnership Status Partnered	0.004	-0.032	0.008
Children <3 Years	0.009	0.087 **	-0.061
Children 3-6 Years	-0.020 **	-0.160 **	0.036
<b>Person-Years</b>	16.786	21.930	4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.11.** Average Marginal Effects for Model Mo3 in Table 3 based on logistic hybrid random-effects panel regression models of employment, unemployment, and working as a homemaker (for women) in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
Turkish	0.002	-0.101 **	0.043 *
Turkish x Time since leaving the education system	-0.001	0.011 **	-0.004 *
Time since leaving the education system	0.000	-0.017 **	0.007 **
Time squared since leaving the education system	-0.000	0.002 **	-0.001 **
Labour market entry cohort (ref: <1984)			
1985-1989	-0.005	0.059 **	-0.039 *
1990-1994	-0.007 *	0.042 *	-0.041 *
1995-1999	-0.017 **	0.093 **	-0.078 **
2000-2004	-0.018 **	0.113 **	-0.094 **
2004-2010	-0.017 **	0.218 **	-0.187 **
>2010	-0.006	0.230 **	-
Education After Leaving the Educational System (ref: Intermediate)			
Inadequate	0.007	-0.087 **	0.009
General	0.002	-0.032 *	-0.009
Advanced	0.010	-0.018	0.026
Vocational Education			
Vocational Training	0.013	-0.039	0.003
Tertiary Education	0.014	-0.009	0.059
Language Skills After Leaving the Sducational System (ref: Native)			
Mostly Germany	-0.000	0.019	-0.009
Mostly Turkish	-0.010	-0.042	0.015



Both	-0.005	0.007	-0.018
<b>Share of Native Friends After Leaving the Ed. System</b>	-0.000	0.027	0.001
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.000	0.002	-0.003
Time since leaving the educational system	0.001	-0.006	0.007**
Time squared since leaving the educational system	-0.000	-0.001	-0.000
Education Inadequate	-0.019*	-0.035	-0.044
Education General	-0.011*	-0.047	0.011
Education Advanced	0.008	0.035	0.069
Vocational Education: Vocational Training	-0.018*	-0.154**	0.047
Vocational Education: Tertiary Education	-0.007	-0.094*	-0.024
Language: Mostly German	0.006	0.055	0.043
Language: Mostly Turkish	0.002	-0.028	-0.043
Language: Both	0.007	0.006	-0.020
<b>Share of Native Friends</b>	0.010	-0.018	-0.005
<b>Person-Years</b>	16.786	21.930	4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.12.** Average Marginal Effects for Model Mo4 in table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and being a homemaker for women in Germany

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
Turkish	-0.000	-0.115 **	0.036 *
Turkish x Time since leaving the education system	-0.001	0.012 **	-0.005 *
Time since leaving the education system	0.000	-0.016 **	0.007 **
Time squared since leaving the education system	-0.000	0.001 **	-0.001 **
Labour market entry cohort (ref: <1984)			
1985-1989	-0.003	0.071 **	-0.039 *
1990-1994	-0.004	0.061 **	-0.038 *
1995-1999	-0.012 **	0.117 **	-0.078 **
2000-2004	-0.014 **	0.128 **	-0.091 **
2004-2010	-0.013 **	0.235 **	-0.180 **
>2010	-0.006	0.222 *	-
Education After Leaving the Educational System (ref: Intermediate)			
Inadequate	-0.011 **	-0.121 **	-0.023
General	-0.007 **	-0.076 **	0.008
Advanced	0.014 **	0.018	0.093 **
Vocational Education			
Vocational Training	0.002	-0.136 **	0.069
Tertiary Education	0.007	-0.096 **	0.050
Language Skills After Leaving the Sducational System (ref: Native)			
Mostly Germany	0.001	0.043	0.013
Mostly Turkish	-0.003	-0.088	-0.015

Both	0.002	0.062	-0.024
<b>Share of Native Friends After Leaving the Ed. System</b>	0.006	-0.019	0.006
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.000	0.001	-0.002
Time since leaving the educational system	0.001	-0.004	0.007
Time squared since leaving the educational system	-0.000	-0.002	**
<b>Person-Years</b>	16.786	21.930	4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.13.** Average Marginal Effects for Model Mo5 in table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and being a homemaker for women in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
Turkish	0.005	0.004	0.012
Turkish x Time since leaving the education system	0.000	0.014 **	0.001
Time since leaving the education system	-0.051 **	-0.086 **	-0.084 **
Time squared since leaving the education system	-0.000	0.002 **	-0.001 **
Labour market entry cohort (ref: <1984)			
1985-1989	-0.007	0.007	-0.009
1990-1994	-0.001	0.005	-0.021
1995-1999	-0.012 **	0.020 *	-0.008
2000-2004	-0.006	0.029 **	-0.015
2004-2010	-0.003	0.073 **	-0.043 *
>2010	0.004	0.086	-
Education After Leaving the Educational System (ref: Intermediate)			
Inadequate	-0.013 *	0.002	-0.039 *
General	-0.008 *	-0.002	-0.006
Advanced	0.015 **	0.031 *	0.001
Vocational Education			
Vocational Training	0.009	-0.027	-0.027
Tertiary Education	0.011	-0.019	-0.039
Time x Education at Labour Market Entry (ref: Intermediate)			
Time x Inadequate	-0.003 *	0.016 **	-0.009 *
Time x General	0.000	0.007 **	-0.006 *

Time x Maturity	0.003	-0.004	0.015
Time x Tertiary Education	0.007 *	0.019 **	0.004
Time x Vocational Training	0.003	0.012 *	0.007
<b>Language Skills After Leaving the Sducational System (ref: Native)</b>			
Mostly Germany	-0.007	0.013	-0.007
Mostly Turkish	-0.008	-0.041	-0.018
Both	-0.004	-0.050 *	0.007
<b>Time x Initial Language Skills</b>			
Time x Mostly Germany	0.002	-0.003	0.004
Time x Mostly Turkish	-0.001	-0.010 *	0.003
Time x Both	-0.002	-0.006	0.003
<b>Share of Native Friends After Leaving the Ed. System</b>			
Time x Share of Native Friends	0.007	-0.003	-0.013
<b>Previous Labour Market Career</b>			
Unemployment Experience in Years	0.053 **	0.080 **	0.080 **
Employment Experience in Years	0.047 **	0.017 *	0.090 **
Homemaker Experience in Years	0.048 **	0.032 **	0.104 **
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.003	-0.009	-0.006
Time since leaving the educational system	0.047 **	0.084 **	0.070 **
Time squared since leaving the educational system	0.000	-0.001 **	0.001
Time x Education: Inadequate	0.003	-0.009 *	0.004
Time x Education: General	0.001	-0.006 **	0.008 *
Time x Education: Maturity	-0.003	-0.002	-0.002
Time x Vocational Education: Tertiary	-0.006	-0.019 **	0.011

Time x Vocational Education: Training	-0.003	-0.015	*	0.009
Time x Language: Mostly Germany	-0.001	0.001		-0.004
Time x Language: Mostly Turkish	0.005	0.015		0.012
Time x Language: Both	0.000	0.005		-0.006
Time x Share of Native Friends	0.004	0.001		0.001
Time x Unemployment Experience	-0.038	-0.047	**	-0.067
Time x Employment Experience	-0.068	-0.017	*	-0.127
Time x Homemaker Experience	-0.047	-0.106	**	-0.058
<b>Person-Years</b>	16.786	21.930		4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.14.** Estimates for Model Mo1 in Table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and working as a homemaker for women in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
<b>Turkish</b>			
Turkish x Time since leaving the education system	-0.775 *	-1.992 **	0.815 *
Time since leaving the education system	-0.091	0.153 **	-0.135 *
Time squared since leaving the education system	0.024	-0.210 **	0.171 **
Labour market entry cohort (ref: <1984)	-0.010 **	0.019 **	-0.015 **
1985-1989	-0.292	1.074 **	-0.885 *
1990-1994	-0.317	0.998 **	-0.874 *
1995-1999	-1.083 **	1.858 **	-1.792 **
2000-2004	-1.137 **	2.123 **	-2.136 **
2004-2010	-0.894 **	3.842 **	-4.227 **
>2010	0.001	3.611 **	-
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	-0.053	-0.046	-0.086
Time since leaving the educational system	0.207 **	0.048	0.206 **
Time squared since leaving the educational system	-0.020 **	-0.033 **	-0.007
<b>Person-Years</b>	16.786	21.930	4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.15.** Estimates for Model Mo2 in Table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and working as a homemaker (for women) in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl
<b>Turkish</b>			
Turkish x Time since leaving the education system	-0.900 *	-1.127 **	0.034
Time since leaving the education system	-0.095	0.073	-0.143 *
Time squared since leaving the education system	0.038	-0.102 **	0.133 **
Labour market entry cohort (ref: <1984)	-0.011 **	0.004	0.003
1985-1989	-0.272	0.879 **	-0.686 *
1990-1994	-0.324	0.542 *	-0.272
1995-1999	-0.931 **	0.857 **	-0.474
2000-2004	-0.822 **	1.311 **	-1.021 **
2004-2010	-0.582	2.418 **	-2.285 **
>2010	0.262	0.965	-
<b>Partnership Status</b>			
Married	-0.005	-1.076 **	1.022 **
Partnered	0.018	0.072	0.209
<b>Number of Children</b>			
<3 Years	-0.536 **	-1.624 **	0.827 **
3-6 Years	-0.209	-1.072 **	0.732 **
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.017	-0.101	0.041
Time since leaving the educational system	0.167 **	0.245 **	-0.014
Time squared since leaving the educational system	-0.019	-0.044 **	0.008
Partnership Status Married	1.984 **	-1.572 **	2.657 **
Partnership Status Partnered	0.424	-0.504	0.168
Children <3 Years	0.969	1.364 **	-1.253
Children 3-6 Years	-2.125 **	-2.516 **	0.742
<b>Person-Years</b>	16,786	21,930	4,592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.



**Table C.16.** Estimates for Model M03 in Table 3 based on logistic hybrid random-effects panel regression models of employment, unemployment, and working as a homemaker (for women) in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl.
Turkish	0.223	-1.317 **	1.101 *
Turkish x Time since leaving the education system	-0.088	0.144 **	-0.130 *
Time since leaving the education system	0.021	-0.219 **	0.166 **
Time squared since leaving the education system	-0.009 **	0.020 **	-0.014 **
Labour market entry cohort (ref: <1984)			
1985-1989	-0.538	0.774 **	-0.995 **
1990-1994	-0.655 *	0.548 *	-1.030 *
1995-1999	-1.642 **	1.221 **	-1.974 **
2000-2004	-1.774 **	1.476 **	-2.378 **
2004-2010	-1.655 **	2.858 **	-4.746 **
>2010	-0.638	3.015 **	-
Education After Leaving the Educational System (ref: Intermediate)			
Inadequate	0.675	-1.136 **	0.221
General	0.168	-0.424 *	-0.228
Advanced	1.020	-0.231	0.674
Vocational Education			
Vocational Training	1.249	-0.515	0.082
Tertiary Education	1.410 **	-0.115	1.520
Language Skills After Leaving the Sducational System (ref: Native)			
Mostly Germany	-0.001	0.254	-0.247
Mostly Turkish	-0.940	-0.545	0.385

Both	-0.448	0.097	-0.475
<b>Share of Native Friends After Leaving the Ed. System</b>	-0.005	0.349	0.027
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.033	0.029	-0.064
Time since leaving the educational system	0.062	-0.082 *	0.173
Time squared since leaving the educational system	-0.003	-0.017 *	-0.003
Education Inadequate	-1.880 **	-0.459	-1.113
Education General	-1.098 **	-0.615 *	0.276
Education Advanced	0.784	0.456	1.755
Vocational Education: Vocational Training	-1.800 *	-2.018 **	1.176
Vocational Education: Tertiary Education	-0.731	-1.225 **	-0.624
Language: Mostly German	0.605	0.725	1.115
Language: Mostly Turkish	0.241	-0.361	-1.077
Language: Both	0.739	0.076	-0.501
<b>Share of Native Friends</b>	0.958	-0.232	-0.143
<b>Person-Years</b>	16.786	21.930	4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.17.** Estimates for Model Mo4 in table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and being a homemaker for women in Germany

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl.
Turkish	-0.008	-1.505 **	0.902 *
Turkish x Time since leaving the education system	-0.092	0.152 **	-0.132 *
Time since leaving the education system	0.022	-0.209 **	0.171 **
Time squared since leaving the education system	-0.009 **	0.019 **	-0.015 **
Labour market entry cohort (ref: <1984)			
1985-1989	-0.397	0.930 **	-0.979 **
1990-1994	-0.431	0.797 **	-0.953 *
1995-1999	-1.349 **	1.533 **	-1.962 **
2000-2004	-1.591 **	1.677 **	-2.283 **
2004-2010	-1.469 **	3.084 **	-4.521 **
> 2010	-0.700	2.909 *	-
Education After Leaving the Educational System (ref: Intermediate)			
Inadequate	-1.301 **	-1.581 **	-0.578
General	-0.846 **	-0.992 **	0.208
Advanced	1.574 **	0.234	2.352 **
Vocational Education			
Vocational Training	0.267	-1.781 **	1.725
Tertiary Education	0.748	-1.258 **	1.247
Language Skills After Leaving the Sducational System (ref: Native)			
Mostly Germany	0.061	0.557	0.334
Mostly Turkish	-0.358	-1.149	-0.368

Both					
<b>Share of Native Friends After Leaving the Ed. System</b>					
<b>Person-Specific Means</b>					
Turkish x Time since leaving the educational system	0.233	-0.815	-0.600		
Time since leaving the educational system	0.689	-0.251	0.163		
Time squared since leaving the educational system	0.015	0.018	-0.060		
<b>Person-Years</b>	0.105 **	-0.057	0.181 **		
	-0.010	-0.023 **	-0.004		
	16.786	21.930	4.592		

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

**Table C.18.** Estimates for Model M05 in table 3 from logistic hybrid random-effects panel regression models of employment, unemployment, and being a homemaker for women in Germany.

Model and Explanatory Variables	Empl. vs. Unempl.	Empl. vs. HH	HH vs. Unempl.
Turkish	0.331	0.044	0.331
Turkish x Time since leaving the education system	-0.029	0.182 **	0.039
Time since leaving the education system	-3.087 **	-1.354 **	-2.245 **
Time squared since leaving the education system	-0.007	0.026 **	-0.019 **
Labour market entry cohort (ref: <1984)			
1985-1989	-0.417	0.114	-0.251
1990-1994	-0.079	0.086	-0.573
1995-1999	-0.738 **	0.316 *	-0.202
2000-2004	-0.380	0.462 **	-0.399
2004-2010	-0.180	1.148 **	-1.161 *
>2010	0.249	1.357	-
<b>Education After Leaving the Educational System (ref: Intermediate)</b>			
Inadequate	-0.783 *	0.255 **	-0.253 *
General	0.006	0.116 **	-0.155 *
Advanced	0.889 **	0.489 *	0.038
<b>Vocational Education</b>			
Vocational Training	0.553	-0.425	-0.719
Tertiary Education	0.686	-0.298	-1.039
<b>Time x Education at Labour Market Entry (ref: Intermediate)</b>			
Time x Inadequate	-0.175 *	0.255 **	-0.253 *
Time x General	0.006	0.116 **	-0.155 *

Time x Maturity	0.155	-0.070	0.391
Time x Tertiary Education	0.401 *	0.293 **	0.105
Time x Vocational Training	0.199	0.187 *	0.195
<b>Language Skills After Leaving the Sducational System (ref: Native)</b>			
Mostly Germany	-0.439	0.200	-0.174
Mostly Turkish	-0.463	-0.650	-0.481
Both	-0.252	-0.788 *	0.184
<b>Time x Initial Language Skills</b>			
Time x Mostly Germany	0.107	-0.046	0.108
Time x Mostly Turkish	-0.039	-0.154 *	0.086
Time x Both	-0.097	-0.094	0.069
<b>Share of Native Friends After Leaving the Ed. System</b>			
Time x Share of Native Friends	0.400	-0.044	-0.356
Time x Share of Native Friends	0.009	-0.037	0.125
<b>Previous Labour Market Career</b>			
Unemployment Experience in Years	2.847 **	0.271 *	2.407 **
Employment Experience in Years	3.222 **	1.267 **	2.133 **
Homemaker Experience in Years	2.941 **	0.497 **	2.803 **
<b>Person-Specific Means</b>			
Turkish x Time since leaving the educational system	0.196	-0.140	-0.170
Time since leaving the educational system	2.887 **	1.329 **	1.878 **
Time squared since leaving the educational system	0.009	-0.023 **	0.019
Time x Education: Inadequate	0.199	-0.139 *	0.117
Time x Education: General	0.089	-0.101 **	0.213 *
Time x Education: Maturity	-0.163	-0.033	-0.063
Time x Vocational Education: Tertiary	-0.391 **	-0.297 **	0.301

Time x Vocational Education: Training	-0.162	-0.231	*	0.249
Time x Language: Mostly Germany	-0.047	0.013		-0.107
Time x Language: Mostly Turkish	0.278	0.243		0.333
Time x Language: Both	0.008	0.072		-0.153
Time x Share of Native Friends	0.257	0.011		0.032
Time x Unemployment Experience	-4.147	-0.276	*	-3.399
Time x Employment Experience	-2.325	-0.733	**	-1.791
Time x Homemaker Experience	-2.844	-1.667	**	-1.562
<b>Person-Years</b>	16.786	21.930		4.592

Source: SOEP (1984-2011).

Significance levels: \* < .05; \*\* < .01.

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