

*Routledge Studies in Labour Economics*

# **THE DYNAMICS OF MARGINALIZED YOUTH**

**NOT IN EDUCATION, EMPLOYMENT, OR  
TRAINING AROUND THE WORLD**

Edited by Mark Levels, Christian Brzinsky-Fay,  
Craig Holmes, Janine Jongbloed, and Hirofumi Taki



# The Dynamics of Marginalized Youth

This book studies young people who are Not in Education, Employment, or Training (NEET); a prime concern among policymakers. Moving past common interpretations of NEETs as a homogeneous group, it asks why some youth become NEET, whereas others do not. The authors analyse diverse school-to-work patterns of young NEETs in five typical countries and investigate the role of individual characteristics, countries' institutions and policies, and their complex interplay.

Readers will come to understand youth marginalization as a process that may occur during the transition from school, vocational college, or university to work. By studying longitudinal analyses of processes and transitions, readers will gain the crucial insight that NEETs are not equally vulnerable, and that most NEETs will find their way back to the labour market. However, they will also see that in all countries, a group of long-term NEETs exists. These exceptionally vulnerable young people are sidelined from society and the labour market. The country cases and cross-national studies illustrate that policies intended to help long-term NEETs to find their way in society are very limited.

The book provides useful theoretical and empirical insights for scholars interested in the school-to-work transition and marginalized youth. It also provides helpful insights in vulnerability to policymakers who aim to combat youth marginalization.

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# Preface

Many Western countries have large numbers of young people Not in Education, Employment, or Training (NEETs). In economic downturns, their numbers grow considerably. NEETs are less likely to return to the labour market after recessions end. Costs are high and policymakers repeatedly voice urgent concerns. Yet we do not know much about this group. Young people who are NEET are often believed to be a homogeneously vulnerable group, at risk of detrimental long-term socioeconomic marginalization. There are good theoretical reasons to believe that this is wrong. However, in empirical analyses and policy discussions, youth who are inactive for different reasons are not seldom lumped together as NEET, and then analysed.

NEET research has important limitations, as it ignores important heterogeneity in the patterns, causes, and consequences of being NEET. This book is our attempt to improve on this research. It is the result of a five-year collaboration between a multidisciplinary team of researchers from the Universities of Maastricht, Oxford, Burgundy, Bath, and Tokyo, Daito Bunka University, Doshisha University, Hosei University, Kanazawa University, The Japan Institute for Labour Policy and Training, and the Berlin Social Science Centre. The objective of that research project was to empirically research the pressing social issue of NEET, in a way that would provide actionable insights for both researchers and policymakers interested in youth unemployment, economic inactivity, and vulnerable youth. To that effect, the teams worked alongside each other to research NEETs in France, Germany, Japan, the Netherlands, and the United Kingdom. In this book, we perform comparable analyses of NEETs in these country cases and then compare the countries to better understand the role of policies and institutions in explaining cross-country differences.

This book contributes to research traditions on youth marginalization and the transitions from school, vocational college, or university to work. The book describes the diverse school-to-work patterns of young NEETs in European countries and Japan. It probes why some people become NEET, whereas others do not. It specifically investigates the extent to which individual characteristics, countries' institutions and policies, and their complex interplay can explain the why some young people between 15 and 29 years

make problematic school-to-work transitions with long or frequent NEET periods. And it studies some of the long-term consequences of being NEET.

To arrive at a better understanding of NEETs, we rely on theories from sociology and labour economics to explain relations between individual and institutional characteristics and NEET. To test these theories, the first five chapters of this book explore the country cases in-depth. In these chapters, we analyse longitudinal country data to study individual and institutional effects on trajectories in and out of NEET. Quantitative methods (sequence analyses, various regression analyses) are employed to understand NEET patterns, to assess effect heterogeneity between individuals and reveal underlying mechanisms of NEET risks. We finish with several cross-national analyses to assess the generalizability of conclusion from comparing the country chapters.

While all strengths and weaknesses in this book are fully our own responsibility, we could not have written it without the help of others. First, the research for this book was funded by the Open Research Area (ORA grant number 464-15-186), funded by the Netherlands Organization for Scientific Research (NWO), the Deutsche Forschungsgemeinschaft (DFG), the French Agence Nationale de la Recherche (ANR), and the UK Economic and Social Research Council (ESRC). In 2015, the Japan Society for the Promotion of Science (JSPS) also funded Japanese research associated with ORA (JSPS KAKENHI Grant Number JP17H02601). The datasets of Longitudinal Survey of Adults in the 21st Century that are used in the Japanese chapter were provided under Article 33 of Japan's Statistics Act. The chapter contains the outcome of secondary data analysis workshop Basic Analysis of the Structure of Social Stratification Using Administrative Data held by Institute of Social Science of the University of Tokyo, in 2016. The chapter thankfully utilized syntax published at the website of the Panel Data Research Centre at Keio University for managing the data.

We like to thank the helpful feedback from participants in various meetings of Research Committee 28 of the International Sociological Association and the European Consortium of Sociological Research for providing very helpful comments on the work presented in this book. We also thank participants of the 27th Annual Workshop of Transitions in Youth (TIY) held in Maastricht, the Netherlands from 2 to 5 October 2019. We would also like to thank the other Japanese team members of this collaborative project: Dr Shin Arita (The University of Tokyo), Dr Daisuke Kobayashi (Kanazawa University), Dr Kikuko Nagayoshi (The University of Tokyo), and Dr Takashi Yoshida (Shizuoka University) for their huge help and valuable comments.

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# 1 Not in Employment, Education, or Training around the World

*Mark Levels, Christian Brzinsky-Fay,  
Craig Holmes, Janine Jongbloed, and  
Hirofumi Taki*

## 1.1 Understanding NEET

During the economic crises in the years following 2008, policymakers of various governments regularly hit the alarm bells about the dire situation of marginalized youth in various European countries. Indeed, young people seemed particularly vulnerable during the Great Recession. In 2012, no less than 15% of young people aged 15–29 in OECD countries were *Not in Education, Employment, or Training* (so-called NEETs). These NEETs were regularly portrayed as an essential challenge for many Western countries ([European Commission, 2010a, 2010b, 2011](#); [Eurofound, 2012](#)). Not without reason: NEETs are, in many ways, the most vulnerable of all youth. Early-career inactivity turns NEETs into the most likely candidates for long-term socioeconomic marginalization, criminal careers, and grave mental and physical health problems (Bynner and Parsons, 2002; [Coles et al., 2002](#); [OECD, 2010](#); [Chen, 2011](#)). Escaping a life as NEET is hard. NEETs are also economically costly, both because of costs of policies associated with NEET, but also because of lost outputs and unfulfilled potential. Total yearly costs associated with European NEETs surpassed €153 billion in 2011 ([Eurofound, 2012](#)).

But, as [Figure 1.1](#) demonstrates, there are large differences between countries. In Turkey, almost 30% of all young people were NEETs. Even in the Netherlands – the country with the lowest rate – the NEET rate is 7%. This has prompted the expectation that the extent to which young people are prone to become NEETs at least partly depends on countries' institutional configurations and policies. However, whether this is actually the case remains an open question. Despite the apparent societal urgency, scientific attention to NEETs has remained rather modest. Consequently, our theoretical understanding of NEETs is still limited. We know too little about NEETs, whether being NEET is a transitory or long-lasting period, about differences in the timing of becoming NEET, or about the heterogeneity of the NEET population. Most studies use cross-sectional NEET rates, but it is very likely that more young people are affected by NEET periods between 15 and 29 than appears from cross-sectional studies, and

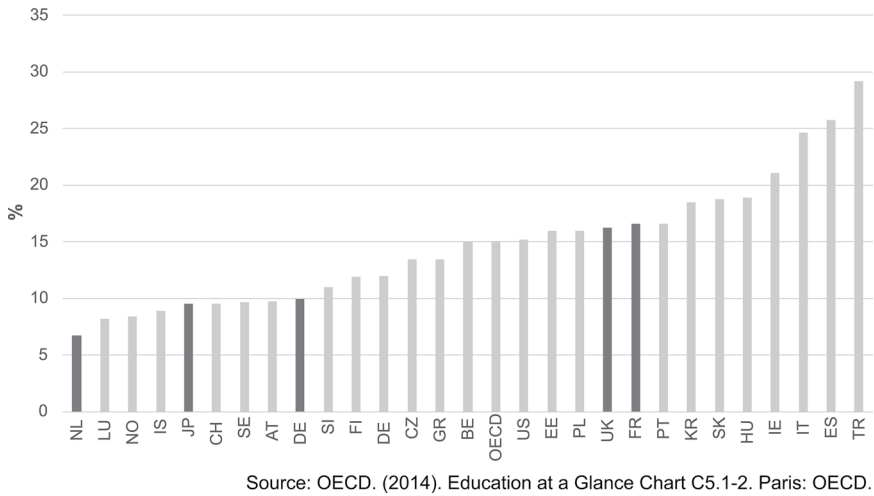


Figure 1.1 Percentage NEETs in population (15–29 years) in Europe and Japan (2012).

that relatively few remain NEET for long (Furlong, 2006; Quintini and Martin, 2006; Quintini et al., 2007; Chen, 2011). Longitudinal studies would shed light on this. However, few such studies exist, and none examine age-specific NEET patterns (Furlong et al., 2003; Cusworth et al., 2009; Chen, 2011).

Although they are thought paramount in improving youth participation in education and the labour market, the role of institutional contexts and policies is poorly understood. Like youth unemployment, NEET risks plausibly arise from interactions between individual (life-course) characteristics and countries' education and labour market institutions and policies (Hodkinson, 1996; Müller, 2005). The effectiveness of institutions and policies thus differs for different types of NEET. Completely disillusioned and disengaged youth probably react very differently to institutional incentives than, for instance, young mothers. These interactions are seldom studied.

This book aims to fill these gaps. We investigate the patterns, determinants, and consequences of being NEET to reveal and understand country similarities and differences. The goal is to provide new theoretical and empirical insights on the temporal patterns of NEETs, the impact of individual and institutional characteristics, and the interplay between institutions and individual characteristics on young people's transitions into and out of NEET. The book addresses three main research questions:

- 1 *What are typical school-to-work trajectories that NEETs experience in different countries?* Answering this question will also help us to understand to what extent NEET is a long-lasting or just a transitory stage in school-to-work

transitions and paint a realistic picture of the extent to which NEETs are vulnerable. It also allows us to focus our explanatory work on the most vulnerable NEETs.

- 2 We also want to explain how cross-national differences in typical NEET trajectories between countries can be explained and study the role of institutions and policies. Are they relevant? Do they work differently for different people? We ask specifically: *To what extent can (a) individual characteristics, (b) countries' institutions and policies, and (c) their interactions explain why young people are more likely to become NEET in certain countries, and less in others?*
- 3 We know that early-career joblessness or inactivity can have cumulative negative effects in the medium and longer terms. In this book, we focus on the most vulnerable NEETs and ask: *What are the consequences of being vulnerable NEET in different countries?*

To answer these questions, we use various research methods and modes of inference. The core of the book is formed by five in-depth longitudinal analyses of five relevant country cases – Germany, France, Japan, the Netherlands, and the United Kingdom. These quantitative country case studies rely on sequence analyses (Abbott, 1995) and various type of regression techniques to explain sequences. This enables us to study the situation of NEETs in these countries in-depth and get a good grip on the extent to which typical labour market conditions, educational institutions, and policies generate different trajectories into and out of NEET. The country case studies also help us to understand the relevance of individual and family backgrounds for these trajectories in different institutional contexts, and the consequences of experiencing NEET status in various countries. But the chapters cannot be formally compared, and conclusions we may draw from comparing findings from these case studies are limited to the countries that are studied. Additional cross-national analyses of 24 advanced economies serve to examine the relevance of institutions and policies and draw conclusions about the interaction between individual circumstances and institutional contexts. While the data we use do not allow for strict causal analyses, multilevel analyses will provide insights into generally observable patterns of interactions between institutional and individual characteristics.

The book contributes to research on youth marginalization and school-to-work transitions. It aims to:

- 1 Increase our understanding of NEETs by building on common theoretical explanations for youth unemployment and long-term economic inactivity,
- 2 Use data that allow for distinguishing different NEET categories and age groups and conduct analyses on assumptions behind the NEET concept,

- 3 Analyse individuals becoming NEET as a dynamic process and not a single event, using longitudinal studies and sequence analyses,
- 4 Study the interplay of individual and institutional factors, which might affect the incidence and the age-specific risks of NEET periods, as well as the probabilities of short- and long-term durations of NEET-status.

## 1.2 NEET: Policy definition or social group?

One of the main challenges with studying NEETs lies in the heterogeneity of the category. NEET is a negative definition; whether someone is characterized as NEET follows from a list of things they are *not*. As such, the term does not delineate a sociologically meaningful social group. However, they are commonly regarded in research literature and policy white papers as a social category. And one that is fundamentally different from the “normally” unemployed youth. NEETs are commonly painted as much more vulnerable, much more persistently inactive, and much less responsive to policy initiatives (Eurofound, 2012; Holte, 2018). The label “NEET” suggests problematic youth that has to be taken care of or, as Holte mentioned, “the concept conjured images of teenage boys who were engaged in petty crime, youth gangs or drug usage, or considered at risk of becoming religiously or politically extreme” (Holte, 2018: p. 11). This image is almost certainly incorrect. The NEET concept certainly lumps together many different forms of youth inactivity and explanations (and thus solutions) for NEETs vary widely. There are also cross-national differences. Japanese NEET who have completely retreated from society, are from different social backgrounds and face different circumstances from German immigrant children who have trouble finding a job, who in turn differ from Dutch low-ability adolescents who fail to graduate from vocational education. Patterns in and out of NEET might also vary distinctly between groups. Also, not all those classified as NEETs might actually be or become disadvantaged.

Research that treats NEETs as a homogenous category ignores these within-group differences and may thus very well obscure important explanations for youth inactivity. Which begs the question: why are researchers using this category in the first place? The NEET definition was initially coined by policymakers to capture the group of young people under the age of 18 who were out of work and education or training but ineligible for unemployment benefits. It has subsequently been expanded in terms of ages covered and fills an important role for policymakers and researchers who are interested in youth inactivity beyond on youth unemployment (Ryan, 2001; Breen, 2005). In particular, youth employment systems and their ability to integrate school leavers in labour market are traditionally described and measured by the youth unemployment rate, which is the ratio of those young people who actively search for but don’t find a job to the economically active population in the respective age group. Thus, youth unemployment rates cover the

share of young people who are part of the labour market but currently out of work (i.e. the share of those searching for jobs). Inactive youths are excluded by definition. However, because school-to-work transitions are often not straightforward and characterized by detours or erroneous periods or interim solutions of varying duration, the status of inactivity has a higher relevance for young people compared to adult persons. The concept of youth unemployment is not able to capture the situation of young people who are inactive and, therefore, incompletely represents the activity dynamics of school leavers (Dietrich, 2013).

Since the 1990s, various alternative concepts emerged in labour market research as well as among policymakers. One of these concepts is NEET, which was first used in the UK (Rees et al., 1996; Furlong, 2006; Yates and Payne, 2006) and is closely connected to the theoretical concept of social exclusion. NEET is conceptually related to youth unemployment but also differs fundamentally. The NEET definition is broader; it includes the share of all young people who are disengaged from both the labour market and education, whether they search for jobs or not. The NEET rate thereby overcomes two critical aspects of the youth unemployment rate: the NEET definition better captures different types of youth “joblessness” and does not depend on administrative or subjective reports of “unemployment” (OECD, 2010). The NEET rate has therefore become an essential indicator for political actors who aim to combat youth inactivity (European Commission, 2010a, 2010b, 2011; OECD, 2010; Eurofound, 2012). In this context, it is used in an increasing number of reports on cross-sectional youth labour market assessment (Eurofound, 2012, 2015; OECD, 2016) and enjoys the increasing interest of policymakers. The NEET concept (Raffé, 2003) has become a key term in cross-nationally comparative reports that international organizations regularly publish about youth labour markets. The NEET rate is interpreted as an aggregated indicator for “disengagement from the labour market and perhaps from society in general” (Eurofound, 2012: p. 1).

However, the NEET concept covers many groups, including the unemployed, sick or disabled, but also inactive young people, who do home or care work or who are engaged in constructive activities that do not cause later disadvantages regarding labour market integration. It is observed that young people from higher social origin not only have fewer and shorter interruptions of education and employment but also do not have too problematic NEET periods (Raffé et al., 2001). It is therefore important to analyse socio-economic differences in the causes of NEET in connection with the outcomes of NEET periods. There is hardly any research that in a detailed way describes the longitudinal patterns of youth who experience NEET periods. To further illustrate why this is important, Figure 1.2 illustrates that overall NEET rates (the explanandum of many studies) hide important differences between age groups. Age-specific NEET rates indicate differences in the patterns, causes, and consequences of NEET within and between countries. Hence, research should distinguish teenage-NEETs (15–19), who might face scarring effects



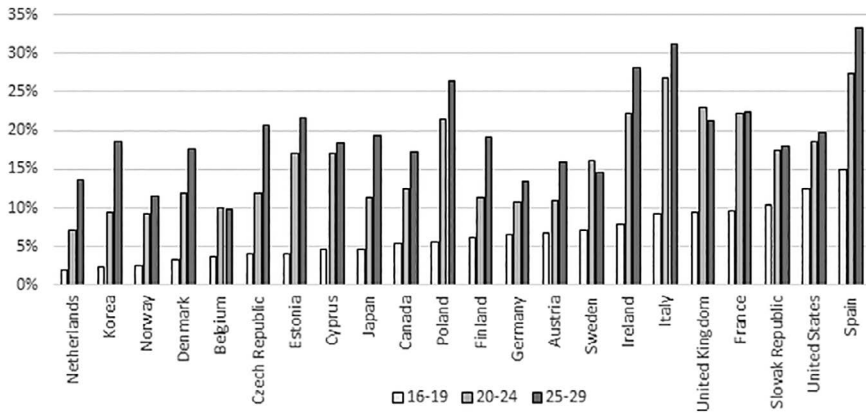


Figure 1.2 Age-specific NEET rates in selected countries.

(Hodkinson and Sparkes, 1997) or persistent (long-term) marginalization, from NEET groups after age 20. Very few studies do.

### 1.3 Different theoretical explanations for NEETs

NEETs are a group that has been defined by analysts following from policy decisions, rather than being a sociologically definable intermediate group. That makes theorizing about why some youth become NEET something of a challenge. It is apparent that a single theoretical explanation cannot suffice. Rather, a myriad of micro-level explanations is required to predict why some young people do not have jobs and are also not in education or training. To provide theoretical explanations of the impact of and mechanisms through which individual and institutional characteristics generate and penalize NEET periods in youth and young adulthood, we must consider key theoretical insights from various theories from labour economics and sociology.

A short description of various theoretical explanations will illustrate the point. For example, *human capital theory* (Becker, 1964, 1965), in its strictest form, has difficulties explaining NEETs. The theory would predict that periods spent outside employment, education, or training are either temporary phenomena driven by labour market inefficiencies or an extreme and implausible form of leisure. In the thick version of human capital theory, productivity is solely driven by one's skills that are rewarded on the labour market with a certain wage. Workers who are not productive in one job can either improve their skills through work experience, education, or training, or move to a job that is more in line with their actual skill level. Some frictional unemployment is possible, but if labour markets function efficiently, only temporary. Another potential explanation for NEETs that is consistent with human capital theory would be the choice to spend some time on leisure. The general idea is that

people derive utility from consuming products, but also from spending time on leisure. If people earn enough, they may decide to dedicate a portion of their time to leisure. However, the human capital model would not predict they would dedicate all their time to leisure, since their income would effectively be nought if they do not spend time on labour.

Alternatively, *matching theories* (Thurow, 1975; Kalleberg and Sorensen, 1979; Logan, 1996; Müller, 2005) consider labour market allocation as matching processes between people and jobs. They presuppose that job-seekers and employers strive for optimal matches, given their preferences, opportunities, and constraints. Employers match jobseekers to jobs based on observable characteristics that signal the extent to which candidates possess the required skills for the given job and favourable characteristics (indicating high or higher work motivation, reliability, etc.) in terms of productivity. Youth with the lowest skills and diplomas are therefore usually less likely to gain access to jobs and also are more likely to lose the jobs, if employed. This implies NEET is a logical possibility: those whose skills are not in demand are more likely to become NEETs.

Socioeconomic stratification in employment further derives from interpersonal differences that affect job-search behaviour and success, such as social capital (e.g. information and recruitment network recourses), cultural capital (e.g. non-cognitive competencies, internalized position in educational hierarchy), and, specifically, gendered time constraints. Motherhood is in many countries a precursor to reduced labour participation, much more so than fatherhood is.

Another labour market theory that does help to understand NEETs are *segmentation theories*. These theories assume that labour markets are not homogeneous with respect to job quality, wages, job security, employment mobility, or training opportunities. These differences are not gradually distributed across the labour force but cumulate in more or less separated segments. While Doeringer and Piore (1971) identified only two labour market segments, i.e. internal labour markets with good jobs vs. external labour markets with bad jobs that follow distinct logics (market vs. hierarchy), other authors focus on an additional occupational segment as a result of a structured vocational training system (Lutz and Sengenberger, 1974; Edwards et al., 1975). With respect to NEET youth, segmentation theories may explain country differences as well as differences between school leavers with or without a vocational degree. The occupational segment has positive individual employment consequences in countries with well-developed vocational training or apprenticeship systems. Therefore, in countries where these systems play an important role, the (aggregate) NEET rates and (individual) NEET occurrences and durations might be lower. In countries with established occupational segments, such as Germany or to some extent the Netherlands, NEET risks should be clearly lower for those with occupational degrees, because vocational training in these countries provides industry-specific, transferable skills and therefore increases the chances of young

people to stay in the firm as well as to use their qualifications for getting a job in another firm. In those countries without such a skill formation system, vocational qualifications are gained within the firm emphasizing firm-specific skills. It is only the internal labour market segment that prevents young people from becoming NEET. Typical management practices of large companies in Japan are prime examples of such labour markets. The Japanese management system consists of lifetime commitment, seniority-based earnings, and company unions coupled with periodic recruiting of new graduates, which concentrates the opportunity of young people at the entrance point of the internal labour market (Abbeglen, 1958; Aoki, 1988; Marsden 1999).

*Insider-outsider-theories* aim at explaining the existence of (involuntary) unemployment or NEET by the power differential between incumbent workers (insiders) and the non-employed (outsiders). Basically, insiders have a better bargaining position with employers, because firms have already invested in their employees and dismissal would lead to transaction costs, whereas outsiders usually do not have agents in this process (Lindbeck and Snower, 1989, 2001). Insiders skim transaction costs in terms of wage increase above the equilibrium, which may cause involuntary unemployment. The higher bargaining power of insiders can be observed when looking at trade union or social-democratic policies (cf. Rueda, 2005). The source of differences between insiders and outsiders are skills and qualifications or work experience. School leavers and labour market entrants are therefore seen as outsiders by definition. Skill formation systems relying on firm-specific qualifications or internal labour markets make it more difficult for school leavers to escape NEET periods at the beginning of their employment career. Skill formation systems relying on industry-specific qualifications shift the boundary between insiders and outsiders: insiders are here those with vocational degrees and outsiders those without vocational degrees.

*Signalling theory* explains employment chances by employers' risk calculations within a situation of asymmetric information (Spence, 1973). Their main interest is to ensure productivity of new employees, which they estimate using available information or "signals" (certificates, CVs, job references etc.). Proponents of this theory claim that credentials communicate information about the expected productivity of school leavers. High productivity is assumed for higher school leaving certificates or vocational degrees, whereas those with lower degrees or without any degree are assumed to be less productive. In this view, the education system is designed for uncovering students' productivity for future employers. Signalling theory can explain higher individual risks of becoming NEET for those who are leaving school without a degree or with only lower degrees. In countries with extensive vocational training, labour market entrants without vocational degrees should be more at risk of becoming NEET.

Finally, the *sociology of education* demonstrates that participation in education and training is strongly stratified by socioeconomic family background,

school biographies, immigration history, and health status as well as institutional setups of education systems (like tracking or residential segregation). Theoretical explanations for this social stratification of educational participation and attainment vary from theories on different cultural (Bourdieu and Passeron, 1990) and social capital (Coleman, 1988; Portes, 1998) to theories on differential educational decision-making (Breen and Goldthorpe, 1997).

If the overview of theoretical explanations above can tell us anything, it is that there are many arguably competing explanations for why youth become NEETs. To understand how we deal with this theoretical complexity throughout this book, three arguments are important. First, we maintain that these theories should not be regarded as competing explanations for why youth become NEETs. Consistent with the heterogeneous nature of the NEET concept, we see these theories as largely supplementary, and expect that they all explain a piece of the puzzle. We need all of them to understand why educational attainment, gender, bad health, immigration status, growing up with parents of low socioeconomic status (SES), or living in poor housing are among the main causes of NEET risks (Meadows, 2001; Coles et al., 2002; Strelitz and Darton, 2003; Cassen and Kingdon, 2007; Eurofound, 2012). We will use these theories pragmatically to explain why certain groups have a more problematic school-to-work transition or are more likely long-term NEETs than others.

Second, the theories described above are often used to explain how young people's circumstances are related to their (un)employment and educational participation risks. However, they all expect that NEETs at some point will land jobs or reengage in education and cannot explain why some young people (lower skilled, or former NEETs) resist work or education, even if opportunities are open to them (Furlong, 2006). Thick versions of human capital theory and signalling theory do deal well with non-frictional unemployment, let alone inactivity. Insider-outsider theories also predict that outsiders upgrade their skills until they can enter the labour market. So, these theories generally predict that NEET is a temporary and transitional stage, and that after some period of time, NEETs will either find jobs or drop back into education. However, the theories described above do a poor job explaining why some NEETs do not find their way back to the labour market or education. To understand such differences, we consider the development and pathways of NEETs' careers as part of the normal school-to-work transition. To do so, we take a life-course perspective. Earlier life experiences crucially shape later life-outcomes in two ways: the incidence and patterns of NEET are being shaped by earlier life experiences, and NEET experiences themselves are "earlier" life experiences. The life-course perspective thus enables us to properly identify differences in NEET probabilities and the impact of early life experiences on the stability and dynamics of NEET processes and thus helps us understand why some NEETs remain vulnerable, whereas others find their way to society again. If necessary and helpful, we turn to theoretical arguments that help to understand life-course differences. We may,

for example, use strain theory to explain why some youth become long-term NEETs (Merton, 1938). This theory predicts that disadvantaged youths learn to harbour low expectations of socioeconomic success. NEETs indeed are more likely to have low self-esteem and low expectations (Strelitz and Darton, 2003; Social Exclusion Task Force, 2008). When these low expectations are met (e.g. because of low educational performance), youths might develop retreatist attitudes, rejecting both societal norms of socioeconomic success and the prescribed means through which these norms must be met, i.e. through academic and occupational prowess. Based on this reasoning, we would expect that some young people will become long-term NEET, particularly if they are disadvantaged. Important factors for such cooling-out or disengagement processes might be the age at which young people are affected by NEET (early or later in school-to-work transition) and/or the duration of the inactive period (making NEET a self-fulfilling prophecy).

From the theoretical models so far, we may deduce the following **hypotheses**:

- Hyp. 1.** In all countries, most youth who are NEET are NEET for only a short period of time and will either return to education or find jobs after a short period of time.
- Hyp. 2.** In all countries, there exist a group of NEETs that experiences very long NEET spells (H2a). We expect these to be the most vulnerable (H2b).
- Hyp. 3.** Youth from backgrounds that are disadvantageous on the labour market, such as (H3a) those with relatively low credentials, (H3b) those with skills that are not in high demand (H3c) those from lower socioeconomic backgrounds, or (H3d) immigrants are more likely to experience NEET spells, and when they do, are more likely long-term NEET.
- Hyp. 4.** Women with children are more likely NEET, and more likely long-term NEET.

But, and this brings us at the third argument, the extent to which these micro-level explanations are important may strongly differ cross-nationally. We expect that these micro-level theories only explain cross-national differences to a certain extent, and that we need additional theories about contextual effects to help explain why youth with a given background and given characteristics are more likely to become NEET, or even long-term NEET, in one country than in another. Youth lives are crucially shaped by a wider societal context. The life-course perspective therefore also helps to understand how institutional contexts and their interrelationships with individual characteristics shape NEET risks, patterns, and consequences (Sampson and Laub, 2005; Mayer, 2009). As an institutional theory framework, it argues that life-courses and decisions are influenced by prevailing institutional configurations. Research into youth transitions has clearly shown that national

institutional differences structure differences in labour market entry patterns among youth. This is particularly important, as youth are in “a delicate phase of their working life, the first entry into the labour force,” which is often determinate of later outcomes (Caroleo et al., 2018: p. 16). For example, the institutional features of employment protection legislation and the vocational specificity of the education system have been shown to “shape to a large extent the opportunity structure for school-leavers in Europe” (Wolbers, 2007, p. 208), together with macroeconomic labour market conditions. Thus, the NEET concept provides an opportunity to look beyond individual factors into “how structural forces such as the political economy shape young people’s lives” and how social forces “shape young people’s lives in different contexts” (Holte et al., 2019: p. 256).

#### **1.4 Explaining cross-national variation in NEET rates: Institutions and policies**

Various “institutional arrangements that shape young people’s education–work transitions” are theoretically relevant for explaining life–course–dependent NEET risks (Raffe, 2008). First comes the education system. The extent to which the education system succeeds in allocating school-leavers to the labour market depends on its characteristics. Four dimensions are particularly important: stratification, standardization, vocational orientation, and institutional linkages (cf. Van der Werfhorst and Mijs, 2010; Bol and Van der Werfhorst, 2013). *Stratification* refers to the level of tracking within an education system. In stratified education systems, students are placed in hierarchical tracks ranging from lower tracks to higher (Allmendinger, 1989). Tracking can occur at different ages, most of the time it takes place in secondary education; however, some countries track in post-secondary education as well (Shavit et al., 2007). For instance in the UK, the level of tracking is low until the age of 16 when the more academically able students remain in sixth form college and study academic qualifications while the less academically able may go to further education colleges and study vocational subjects at a lower level, while in Germany students around age 10 have to make a decision between “Hauptschule” (lowest level), “Realschule” (intermediate level), and “Gymnasium” (highest level), mainly based on their abilities. In more stratified systems, the school-to-work transition can be smoother, for three reasons (Levels et al., 2014). First, more highly stratified education systems enable a more fine-grained distinction of school-leavers’ true abilities and employers are better informed about the ability levels of job applicants (Müller, 2005; Andersen and Van der Werfhorst, 2010; Van der Velden, 2011). Second, in more stratified systems, the average skills level of workers can be more precisely defined; as a result, employers can better model job tasks to workers’ skills (Marsden, 1999). Third, required skills levels can be much more precisely determined in more stratified systems, which improves the information about skills requirements and improves matching quality (e.g.

Dörfler and Van der Werfhorst, 2009). As a result of higher quality matching, we would expect that:

**Hyp. 5.** The allocation of school-leavers to jobs is generally more efficient in highly stratified countries, and the number of (long-term) NEETs is relatively low.

However, we would also expect that those who follow the lowest tracks will have the most difficulties finding jobs in more strongly stratified systems, since credentials from lower tracks will be regarded stronger signals of low academic achievement. As such, we would expect that

**Hyp. 5a.** Youth from lower educational tracks are more likely long-term NEETs in these systems.

The *level of standardization* reflects the way in which the education system is standardized nationwide. This could be based on the use of central exams, uniform curricula, same training for teachers, or standardized budgets. For instance, in the Netherlands, a national commission has control over all the exams for the secondary and vocational educated students. The grades of the exams count for 50% of the final grade in the examinations, the other 50% is based on school-exams. Diplomas serve as a signal of the type and level of skills that job-seekers have gained at school (Van der Velden, 2011), and can also be seen as observable signals of unobserved expected productivity or training costs (Arrow, 1973; Spence, 1973). If we regard diplomas as signals of acquired skills, it becomes clear that the more informative these signals are about the actual skills of job-seekers, the better informed employers are, and the more effective recruitment and selection for jobs will be (Breen, 2005; Andersen and Van der Werfhorst, 2010). In more standardized systems, the information level of diploma is higher (Allmendinger, 1989), which would imply that

**Hyp. 6.** In more standardized systems, a more successful allocation of school-leavers to the labour market ensures a relatively low number of NEETs, and also that those who experience a time as NEETs will be long-term NEETs.

Network theories further suggest that information generated by educational institutions (such as grade point averages or credentials) can be more effectively transformed into labour market signals if institutionalised ties exist between schools and workplaces (Rosenbaum and Kariya, 1989; Rosenbaum et al. 1990). Another important aspect of the education system involves the *level of vocational orientation*. Education can supply students with general and specific skills. The level of vocational orientation is mostly associated with the existence of vocational programs within a country in which students

learn occupationally specific skills. The Netherlands and Germany are mostly seen as countries with high levels of vocational orientation, while in Japan, France, and the United Kingdom, vocational education is much less prominent or is considered to be lower status. We distinguish four major types of upper secondary education systems: apprenticeship systems, school-based vocational systems, mixed systems, and general education systems (Müller, 1994; OECD, 2000). The more vocationally oriented the upper secondary education systems, the higher the participation after the end of compulsory education and, thus, the lower the NEET risks between ages 15 and 19. Moreover, the closer the linkages with the labour market, the more appropriate the (occupationally specific) skills, the lower the social stigma associated with lower academic ability of VET-trained youth (Solga, 2008; Gesthuizen et al., 2011), and hence the higher the employment chances of labour market entrants. This may result in the following prediction:

**Hyp. 7.** In more vocationally oriented systems, a more successful allocation of school-leavers to the labour market ensures a relatively low number of NEETs, and a lower the likelihood that those who experience NEET spells become long-term NEETs.

The *level of institutional linkages* is associated with the extent to which there exist strong linkages between education and actors on the labour market. This can play out in different ways. For example, vocational education can take place at school but can also be offered in an apprenticeship that combines school and work (Ryan, 2001). In such systems, links between schools and the labour market have been strongly institutionalized. Students in such a dual system not only learn occupationally specific skills, but also firm-specific skills (Hanushek et al., 2017). Moreover, in education systems with a high level of institutional linkages, employers can help to determine the curriculum of vocational education (Andersen and Van der Werfhorst, 2010) and might also influence the size of the output (Culpepper and Finegold, 1999; Thelen, 2004). Thus, the linkages between education and employers are tighter than in school based vocational oriented systems. This would lead us to believe that:

**Hyp. 8.** In vocationally oriented systems, the stronger the institutional linkages, the less likely it is that vocationally educated school-leavers become NEET and the less likely it is that vocationally educated NEETs are long-term NEET.

Next to education systems, labour market arrangements that shape labour market flexibility and employment protection might influence NEET risks and consequences (Van der Velden and Wolbers, 2003; Breen, 2005). *High employment protection* (e.g. the Netherlands) may create labour market



insiders (and outsiders) and thereby hamper youth's labour market integration. However, in theory, employment protection might also provide more protection – or stability in labour market integration – for those young people who have jobs. The empirical evidence is mixed. In general, youth unemployment is higher in countries with stronger employment protection (Esping-Andersen, 2000; Breen, 2005). However, deregulating the use of temporary contracts between 1992 and 2012 did not reduce unemployment risks and for low-educated young men, even increased them (Gebel and Giesecke, 2016). Decreasing the protection of permanent jobs also did not affect the risks of labour market exclusion for youths (*ibid.*). Moreover, high employment protection combined with strong employer linkages of the upper secondary education system (e.g. Germany) might also lead to higher youth's labour market integration and lower NEET risks (Gangl et al., 2003; Breen, 2005). Labour market flexibility might therefore cut both ways. On the one hand, flexible labour markets might support young people's labour market entry, as employers' hiring risks are relatively low. On the other hand, high employment protection might increase youth's employment stability after labour market entry (Brzinsky-Fay, 2007; Solga, 2008). Given the mixed theoretical expectations and empirical evidence, we may formulate competing hypotheses:

**Hyp. 9a.** In countries with higher employment protection, youth generally have more trouble making the school-to-work transition, which implies a higher number of NEETs, and a higher the likelihood that those who experience NEET spells become long-term NEET.

**Hyp. 9b.** In countries with higher employment protection, youth who do find jobs are more likely to keep those jobs, which implies a relatively lower number of NEETs, and a higher likelihood that those who experience NEET spells become long-term NEETs.

Active labour market policies (ALMPs) should also affect NEET rates. ALMPs do not necessarily reduce the chance that youth become NEET but are specifically designed to help NEETs find jobs or education or training programs and, if effective, should therefore shorten the period that youth are NEET. We may expect that in countries that spend more on such ALMPs, these policies are better organized. We may therefore expect that:

**Hyp. 10a.** In countries with higher levels of ALMPs, young NEETs are less likely long-term NEET.

However, ALMPs can broadly be divided in two different types of approaches (Dingeldey, 2007; Knotz, 2012). Some policies focus more on interventions aimed at enabling youth to find jobs. These enabling ALMPs focus on helping youth to find jobs that match their skill levels, for example by (re-)training job seekers. By contrast, enforcing ALMPs aim to force young NEETs into

work, for example by lowering the level and duration of financial benefits (Knotz, 2012). Even though the underlying policies are different, they both aim to lower the chances for young people to become NEET. Therefore, we hypothesize that:

**Hyp. 10b.** In countries with higher levels of enabling ALMPs, young people who become NEET are less likely long-term NEET.

**Hyp. 10c.** In countries with higher levels of enforcing ALMPs, young people who become NEET are less likely long-term NEET.

Also, the structure of *labour market transition systems* remains a useful concept for understanding differences in school-to-work transitions (Raffe, 2008). Following the classic classification by Maurice et al. (1986), researchers generally distinguish between occupational labour markets (OLMs) and ILMs, and some countries that do not fit into the dichotomy (cf. Gangl, 2003). In OLMs (e.g. Germany and the Netherlands), matching processes are driven by highly standardized, vocationally specific qualifications. Such systems boast smooth school-to-work transitions, but those without such qualifications or qualifications with low demand risk long-term economic marginalization (Solga, 2008; Gesthuizen et al., 2011). Entry into ILMs (e.g. United Kingdom, Japan) is based on general educational attainment levels and work experience rather than occupationally specific qualifications (Gangl, 2001). ILMs generally have weaker linkages between educational programs and occupations (DiPrete et al., 2017). The school-to-work transition in ILMs is generally less smooth than in OLMs (Müller, 2005). Young people stay longer in general education programs (Shavit and Müller, 1998). In times of crisis, young people in countries with OLMs are more likely to remain in school than become job seekers, and they are better off for it in the long run (Witteveen, 2020). This might lower the risk that school-leavers become long-term NEET. Based on these reasonings, we may expect:

**Hyp. 11.** Compared to predominantly ILM countries, school leavers in OLM countries are less likely to become NEETs (11a), and NEETs are less likely long-term NEETs. School-leavers in OLM countries with lower qualifications are more likely to become NEETs than those with higher qualifications (11b).

From an institutional standpoint, NEET rates may also be influenced by *family policies*, including “public child-care provision, maternity and parental leave benefits, wage inequality, strictness of employment protection, and the tax penalty on second earners” (Estévez-Abe and Hethey-Maier, 2013). Both leave benefits and childcare have been highlighted as particularly important in the literature (Estévez-Abe, 2005). The availability of such family policies differs extensively between countries (Thévenon, 2011;

Thévenon and Luci, 2012). Empirical evidence suggests that the generosity of paid maternity and parental leave benefits is most beneficial in augmenting women's relative economic position (as compared to their husbands or cohabiting partners), while public childcare provision does not play a significant role (Estévez-Abe and Hethey-Maier, 2013). Women may also experience more barriers to further education and training (FET) over the life-course, which is linked to economic outcomes. For example, women are less likely to participate in FET in all European countries except Belgium and the Nordic states (Massing and Gauly, 2017). The length of paid parental leave also is important. There is a curvilinear relationship between the length of paid leave and young mothers' labour market participation (Del Boca et al., 2008; Akgunduz and Plantenga, 2012; Thévenon and Solaz, 2014; Nieuwenhuis et al., 2017). Young mothers who have no leave or only very short leave are more likely to become NEETs (OECD, 2011; Nieuwenhuis et al., 2012). However, if parental leave is too long, the resulting human capital depreciation and foregone work experience also create an impediment for women who seek to return to work (Pettit and Hook, 2005; Boeckmann et al., 2014; Nieuwenhuis et al., 2017). So, we may expect that:

**Hyp. 12.** In countries with longer leave schemes (e.g. maternity, paternity, parental), young people are less likely to become long-term NEET (13a), and this is particularly the case for women (13b).

**Hyp. 13.** In countries where childcare is more affordable, young people are less likely to become long-term NEET (14a), and this is particularly the case for women (14b).

In theory, *welfare regimes* may also affect the probability that youth become NEETs. Theorizations of the welfare state have a rich tradition in political science, sociology, and political economy. Since the early 1990s, international comparative studies in the social sciences have been greatly influenced by Gøsta Esping-Andersen's (1990a, 1990b) theory of the "Three Worlds of Welfare Capitalism," which originally focused on stratification and decommodification in pension provisions but has also been applied to sick leave, employment and unemployment benefits, health care provisions, family allowances, overall welfare state expenditures, and other welfare state benefits (Bambra, 2007). Esping-Andersen defines the welfare state as more than publicly provided social services and income transfers: rather, it constitutes qualitatively different forms of social protection that serve to order social relations, including varying levels and types of decommodification and social stratification. Decommodification describes the extent to which people can "uphold a socially acceptable standard of living" without relying on the market (Esping-Andersen, 1990b: p. 37). Stratification defines the structuring of social relations that result in part from the functioning of the welfare state institutions themselves, which creates groups or classes through the definition of policies distributing social benefits. A welfare

regime's approach can also be applied to youth policies. Pohl and Walther (2007) describe five types of youth transition regimes: universalistic, liberal, employment-centred, sub-protective, and post-communist. These groupings are based on information about educational and training policies, employment regulation and protection legislation, types of activation schemes, and cultural norms regarding interpretations of youth "disadvantage" and unemployment (Hadjivassiliou et al., 2016: p. 3). In universalistic regimes, personal development in the form of supportive activation policies is the focus of transition policies, supported by a strong sense of collective social responsibility, and is typified by the Nordic countries. In liberal regimes, individual rights and responsibilities are predominant, such as the workfare activation models seen in the United Kingdom. In employment-centred regimes, schooling is strongly stratified and plays a key role in "allocating the younger generation towards occupational careers and social positions in different segments" (Pohl and Walther, 2007: p. 547). Countries such as Austria and Germany exemplify this regime. In sub-protective regimes, high rates of unemployment have created a kind of "dualistic" welfare regime that depends largely on the family and informal work to supplement social provisions in early adulthood characteristic. Examples include the Mediterranean countries of Italy and Spain. Finally, the post-communist regimes are in the unique position of having a school-to-work transition that has changed from stable and secure but with very little choice, to high "de-standardization, uncertainty and risk" since the early 1990s (Pohl and Walther, 2007: p. 548).<sup>1</sup>

## **1.5 About this book**

### ***1.5.1 Objectives and challenges***

The main objective of this book is to empirically explore the plausibility of the hypotheses formulated before. It follows from the empirical and theoretical considerations in the previous chapters that:

- 1 Not all NEETs are equally vulnerable. Most NEETs experience friction unemployment, and while background characteristics and circumstances may explain why some stay NEET longer, most NEETs are expected to (re-)enter the labour market of education at some point.
- 2 Only a proportion of NEETs are expected to remain long-term NEET. A longitudinal perspective is needed to distinguish vulnerable from less vulnerable NEETs, and NEET spells are best understood as part of the normal school-to-work transition.
- 3 NEET must be considered as an emergent process, reducible neither to individual characteristics nor to institutional environments. To understand and empirically study NEET, the interplay between the two is crucial.

These suppositions pose some daunting challenges for empirical research. First and foremost, research faces data issues. To study patterns of school-to-work transitions, we must rely on high quality longitudinal data on the school-to-work transition of a representative and large sample of potential school-leavers. These data would ideally offer longitudinal information about the education and labour market status of youths for a large period, as well as contain enough information about their family background, their skills, their abilities, their economic and social circumstances, and so forth. To study institutional effects, we would ideally compare a large number of countries and model the relationships between institutional configuration and the various NEET-related school-to-work transitions, or even identify their causal effects. Such analyses would ideally require a cross-nationally comparative longitudinal data sets with all the relevant variables. Unfortunately, such data sets do not exist, which makes studying NEETs quite the challenge.

### ***1.5.2 Research strategy and methods of analyses***

To solve the issues hampering our understanding of NEETs, this book takes a different strategy. Rather than relying on a single method or data type, we combine various types of research. We conduct in-depth analyses of different types and patterns of NEET in various countries (research question 1), explanatory analyses of how different NEET patterns are related to age, education, and gender differences in various countries (research question 2), and supplement this with cross-national analyses of how determinants of NEET risks depend on individual characteristics and their interaction with institutional configurations of education systems and labour market institutions (research question 3).

The objectives of our empirical analyses are thus to describe and understand the school-to-work transitions of NEETs in different countries and to explore what the relevance of institutions and policies is for explaining these differences. We move passed interpreting NEET status as an indication of universal vulnerability and distinguish those for whom NEET is just a temporary stage in a more or less successful school-to-work transition from those for whom it is a true ticket to inactivity. To do so, we start by analysing different school-to-work transitions in the Netherlands, Germany, France, England, and Japan. We formulate hypotheses on explanations for expected patterns in these countries, given specific institutional and policy contexts in these countries.

To establish different trajectories of the school-to-work transition that youth at risk make in these countries, we use sequence analyses techniques. In each country, we select youth who experience at least one month of NEET during their school-to-work transition. Since we focus on the longitudinal perspective of NEET, i.e. activity statuses across time, this means that we have a huge variation of possible individual trajectories of school leavers. Imagine a ten-year-period (=120 months) after leaving school, where every individual may have one out of six activity statuses each month. The

theoretically possible number of individual sequences can then be calculated as  $6^{120} = 2.39 \times 10^{93}$ . Even if we will end up with a much lower number of realized sequences, the still huge variation of “real types” requires a classificatory method, which systematically reduces complexity as well as it allows for comprehensive analysis. Social sequence analysis does exactly this by comparing each individual sequence with each other using an algorithm that produces a quantitative measure of inequality. This inequality measure is used with cluster analysis (cp. [Everitt et al., 2011](#); [Hennig et al., 2016](#)) in order to create groups (“ideal types”) of similar sequences. We end up with a country-specific typology, where the similarity within groups is maximized and the similarity between groups is minimized. We describe these ideal-types and interpret them against the background of the specific institutional configuration of the various countries.

The ideal-typological trajectories are then used as either independent or dependent variables in two types of regression models. First, we use available data on relevant background characteristics in the national data sets to explain cluster membership and test country-specific hypotheses, using multinomial logit models. This gives us an indication of explanations for the more problematic trajectories in different countries. Second, we exploit the longitudinal character of the data and use the ideal-types as categorical independent variables in regression analyses on various outcomes later in life. This allows us to investigate some of the consequences of trajectories later in life.

After these longitudinal analyses, we perform cross-national analyses to establish the relevance of institutions and policies. In three subsequent chapters, we perform multilevel regression analyses on large-scale cross-national data and explore the relevance of education systems, labour markets, and family policies more formally.

### 1.5.3 *Caveats*

By combining methods and data sources, we aim to better understand the school-to-work transition of young NEETs in different institutional contexts. However, when evaluating our analyses and the inferences we may draw from them, it is important to consider a number of caveats. First, as said, it is our objective to learn something about NEETs and their school-to-work transition by analysing longitudinal data from different interesting cases in a comparable way. One important issue regards the comparability of the data sets that we analyse. A formal comparison of results from different countries would require identical data sets for each of the countries, but of course, such comparable longitudinal data do not exist. As a result, the data sets we analyse differ in important ways. For example, different data sets have different sets of potentially interesting mediating and moderating variables, which means that the model can be specified rather differently in different countries. Also, measurements of independent variables differ slightly cross-nationally. For example, income and education level are measured differently in different

countries. These issues also pertain to the way in which NEETs are measured in different data sets. In the Netherlands, the register data only allow for distinguishing whether people work or are in formal education; no information about non-formal training is available. In Germany, France, Japan, and the United Kingdom, the use of survey data makes it possible to arrive at much more granular definitions, but here too, possibilities vary because of differences in survey questions about education, work, and training.

In general, we aimed to make the analyses as comparable as possible. That could mean we would use measurements that were as comparable as possible, for dependent and independent variables, and for time. We would also specify models as similarly as possible. However, because data are fundamentally different, we do caution against formally comparing the results from the country chapters.

Another important caveat regards causality. We assess the generalizability of the hypotheses that we derive from the country chapters using cross-national data from the [OECD \(2013a\)](#). These data are one of the most comprehensive cross-nationally and cross-culturally comparative data sets on education, skills, and work, and they offer the advantage of analysing long-term NEETs using comparable data from a very large number of countries. We analyse these data using the multilevel regression techniques that are best suited for analysing crossnational data. But this comes at a cost. The cross-sectional data and the analyses do not allow to formally identify causal effects of institutions and policies on long-term NEET risks. They do not allow controlling for unobserved heterogeneity. As such, one should be careful to interpret correlations that we present causally. The estimated associations can however help to understand whether institutions should be expected to causally impact the school-to-work-transition at all, and the analyses can also aid in understanding potential mechanisms underlying such institutional effects.

### ***1.5.4 Overview of the organization of the chapters***

To adopt a comparative perspective without losing too much in the analyses of trajectories, the book is set up as follows. First, five chapters focus on exploring common, but also specific aspects of NEET within typical countries. For country case selection, we adopted a diverse-case selection strategy ([Seawright and Gerring, 2008](#)) in order to achieve maximum variance along relevant institutional dimensions. Building on the work of the CATEWE project (Smyth et al., 2003: p. 13), we selected countries that form ideal-typical examples of distinct combinations of the education and labour market characteristics described above:

- Germany is a prime example of a country with a high degree of educational standardization, stratification and vocational orientation, and a strong institutional linkage between the education system and employers, with substantial sharing and cooperation between providers and employers in delivery of education and training (e.g. in apprenticeships) and a high occupationalization of the labour market.

- The Netherlands exemplifies countries with a high degree of standardization, a moderate degree of stratification and vocational orientation, tight couplings between the education system and employers, with collinear institutional linkages that are characterized by high levels of in-school provision of education and training specific to particular occupations that is agreed with employers. The labour market is strongly occupationalized.
- France and the United Kingdom are examples of highly standardized education systems that combine a moderate (United Kingdom) and lower (France) level of stratification and vocational orientation with a transition system that is loosely coupled or decoupled, but with strong market signals. These countries are best characterized by the low degree employer sharing of education and training provision, a low occupationalization of labour markets, and a limited school involvement in employment decisions.
- Japan is rather unique in that it has a highly standardized system with very weak stratification and vocational education, but has a highly idiosyncratic transition system of institutional ties between schools and workplaces, which produces strong labour market signals through grade point averages and school prestige.

With the exception of the level of standardization, these countries also vary substantially across the other potentially relevant institutional variables. [Table 1.1](#) provides an overview of cross-national differences of policies and institutions in the countries we study.

*Table 1.1* Institutions and policies in a comparative perspective

	<i>The Netherlands</i>	<i>Japan</i>	<i>Germany</i>	<i>UK</i>	<i>France</i>
Stratification	4 tracks	2 tracks	4 tracks	2 tracks	2 tracks
Age of tracking	12	15	10	16	15
Standardization	1	1	0.44	1	1
Vocational orientation	1.260	−0.729	0.887	0.467	0.393
Institutional linkages	20.0%	0.0%	45.0%	0.0%	11.3%
Labour market type	OLM	ILM	OLM	Mixed	Mixed
ALMP spending	2.74	0.39	1.65	2.93	n/a
Employment protection	++	0	+	−	+
Welfare regime	Employment	Weak	Employment	Liberal	n/a
Paid maternity leave in weeks	16	14	14	52	16
Childcare costs	19	19	11	25	9

Sources: Bol and Van der Werfhorst (2012), Leave Network (2018), OECD (2019a, 2020a), Pohl and Walther (2007).

Notes: Although the unique long-term organizational relationship between schools and workplaces in Japan has been called “institutional linkage” in the sociological literature (Rosenbaum and Kariya, 1989; Rosenbaum et al., 1990; Okano, 1993; Ishida, 1998), we call it “institutional ties” in this book to distinguish the system from “institutional linkages” that typically refer to the dual system in Germany in European context to avoid confusion. The institutional ties between school and workplaces are discussed in the Japanese chapter.



The country chapters serve two purposes. As a first common aspect, all chapters contribute to an in-depth understanding of inequalities in NEET patterns and risks of young people of different age groups (15–19, 20–24, 25–29) in different countries. Each chapter also focuses on distinct subgroups (i.e. teenage mothers, low SES youth) whose vulnerability may be increased by that country’s specific institutions. Second, the chapters assess effect heterogeneity between subgroups. For example, while less-educated youth, immigrants, and children from low SES families are generally more at risk of becoming NEETs, their chances might depend on countries’ institutional configurations. The country chapters use longitudinal data to gauge how individual and family circumstances predict transitions into and out of NEET, given the specific combination of education systems, labour market institutions and policies particular to the country under study. We explore Hypotheses 1–4 (see [Section 1.3](#)), as well as other country specific hypotheses.

[Chapter 2](#) analyses NEETs in *The Netherlands*. The Dutch boast the lowest NEET-rate among the OECD countries, which might partly be attributable to the Dutch VET system ([Levels and Verhagen, 2013](#)). The system has both strong school-based VET tracks and strong firm-based tracks ([Wolbers, 2007](#); [Levels and Verhagen, 2013](#)). Furthermore, labour market protection is relatively strong, and the educational system is highly stratified. We use high-quality register data to analyse patterns into and out of NEET in this setting.

[Chapter 3](#) is about *Germany* and provides important insights for our research questions. First, Germany’s VET system includes both fully qualifying VET programs and a large sector of prevocational measures. In 2013, 27% of new VET enrolments entered such prevocational measures ([Autorengruppe Bildungsberichterstattung, 2014](#)). Second, the apprenticeship system is highly stratified by school attainment and entails enormous differences in career prospects of trained occupations. Third, the VET system is highly gendered. Women are underrepresented in prevocational programs and overrepresented in school-based (white-collar) VET programs ([Solga and Konietzka, 1999](#)). The German National Education Panel Study (NEPS) provides excellent life-course data and information on individual (non/cognitive) skills and qualifications – enabling us to account for selection processes into (different) VET sectors and programs as well as NEET patterns (persistent, short-term, perforated/or zig-zag). The NEPS subsamples support in-depth group comparisons and the application of matching techniques for counterfactual analyses on unbiased “treatment” effects (selection bias control).

[Chapter 4](#) focusses on *France*. Given the importance of formal qualifications or diplomas in the access to the labour market in France, youths with low or no qualifications have a higher risk of becoming NEET. Youths without qualifications and VET dropouts are more often unemployed and have little opportunity to return to studies. In general, VET is a lesser valued track on the French labour market. Moreover, vocational education revolves around

school-based education rather than firm-based apprenticeships. Research shows the effectiveness of apprenticeship training on the short-term employment of secondary school youths (Bonnal et al., 2002). This said, the various policies aimed at boosting apprenticeships have had a limited success amongst low-qualified youth and have failed to reduce social inequalities (Kergoat, 2010). France also stands out by the rigidity of its labour market arrangements, which is often thought to cause a relatively high YUP rate (Blanchard and Tirole, 2003). Youths with low skills or experience have great difficulties accessing the labour market, which confines them to precarious careers with lots of fixed-term contracts (Cahuc et al., 2013). We explore how female and male youth fare in this system.

Chapter 5 focuses on the **United Kingdom**, which was among the first countries to recognize the NEET problem (Social Exclusion Unit, 1999), particular for those under the age of 22. The problem has persisted at a similar level despite major institutional changes, most notably the expansion of education through greater participation in post compulsory secondary and higher education and numerous attempts to redesign the vocational system. In recent years, there has been a fall in the proportion of UK NEETs under the age of 18, but a corresponding rise in the proportion of older NEETs. This suggests policy efficacy might differ for age groups. Like France, the United Kingdom does not have a highly valued vocational system, and despite various reforms it is not clear that it provides a route into the labour market.

Chapter 6 then analyses young NEETs in *Japan*, where the government made major changes to the original concept of NEET to deal with youth employment issues. The Japanese version of the NEET concept, referred to as “Niito,” became a unique concept targeting unmarried individuals aged 15–34 who are were not seeking jobs, expressing no desire to work, were not engaged in any kind of education or training, and were not mainly engaged in housework. This conceptualization limited in scope to the most inactive jobless youth and is biased to males. We illustrate the patterns of NEETs in a non-European institutional context and contribute by providing an example of a society with highly expanded education, strong ILMs, a strong male breadwinner model, and relatively weak vocational education with specific institutional ties between school and the workplace.

In Chapter 7, we discuss various **policy initiatives** that have been initiated in the five countries we study to either prevent that young people become NEETs, or to help young NEETs back to school or onto the labour market. We describe some best practices but also show why some initiatives do not work. And we describe how sometimes a governance structure can form an impediment for successful intervention policies. This set allows us to fully understand the complexity of explanations for potential cross-national differences.

In Chapters 8–10, we perform several cross-national analyses to infer conclusions about the interaction between individual circumstances, policies, and institutional contexts. We focus on education systems (Chapter 8), labour

market characteristics ([Chapter 9](#)), and family policies ([Chapter 10](#)). We draw preliminary conclusions from the country case studies and test these conclusions with **comparative analyses** of cross-sectional data of over **20 OECD countries**. We also further explore whether institutions and policies have different consequences for different groups. These analyses provide insights about generally observable patterns of interactions between institutional and individual characteristics.

In [Chapter 11](#), we draw **conclusions** and **discuss strengths and weaknesses** of our approach and research designs. We also discuss consequences of our analyses for policy and practice.

## Note

1. We do not test hypotheses about welfare regimes in this book.

## 2 NEET during the School-to-Work Transition in the Netherlands

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### 2.1 Introduction to NEET in the Netherlands

In this chapter, we investigate how individual characteristics can explain school-to-work transitions that are associated with NEET status after leaving secondary school in the Netherlands. The Netherlands is a particularly interesting case to study youth who are Not in Employment, Education, or Training. In 2016, the Netherlands had the lowest NEET rate in the European Union (Eurofound, 2016). This may be attributable to the education system. In the Dutch education system, VET students generally make the school-to-work transition successfully (e.g. [Bernardi et al., 2004](#); [Cedefop, 2020](#)). Compared with their counterparts in other European countries, Dutch VET graduates are relatively successful in making the school-to-work transition ([Cedefop, 2020](#)). The vocational education system generally succeeds well in teaching students relevant occupationally specific skills, and a vocational degree in the Netherlands is not perceived by employers as a signal of low academic performance ([Muja et al., 2019](#)). All of this ensures a relatively smooth labour market allocation for vocationally educated children.

However, the downside to this well-functioning allocation system may well be that those school-leavers who do not succeed in making a successful school-to-work transition are perceived by employers as fundamentally unfit for the labour market. Indeed, early inactivity can act as a trap for Dutch school-leavers ([Steijn et al., 2006](#); [Wolbers, 2007](#)) especially when outflow is low, and spells are long ([Ryan, 2001](#); [Luijkx and Wolbers, 2009](#)). Also, crowding out is an important issue ([Gesthuizen and Wolbers, 2010](#)). Government policies are often criticised for failing to meet the real needs of youth and instead focus policies “on the school-age group, leaving young people who struggle to make successful first steps into the labour market, relatively unattended” ([Bekker and Klosse, 2016](#): p. 249). When asked why they are NEET, youth often highlight “external (no suitable job or course, no decent jobs or courses available) rather than internal causes (not decided what job or course to do, need more qualifications)” ([Reeskens and van Oorschot, 2012](#): p. 380).

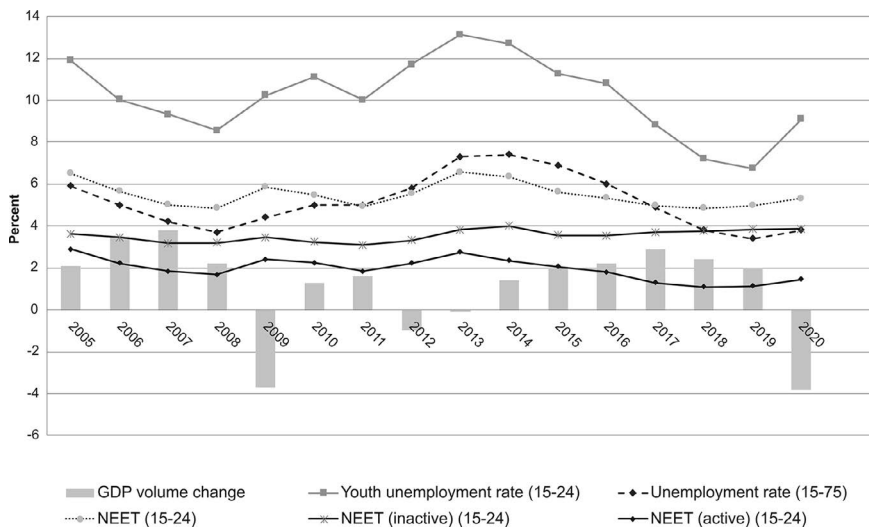


Figure 2.1 Trends in unemployment and NEETs in the Netherlands.

As a consequence, in the Netherlands NEETs are more often inactive than in most other EU countries (Eurofound, 2016). Recent policy changes did not succeed in reducing the number of NEETs (Cammeraat et al., 2017). This leads to the assumption that those who do become NEET in The Netherlands are a particularly negatively selected group, who are relatively immune to policy interventions. This is illustrated further by Figure 2.1, which shows that youth unemployment in the Netherlands is somewhat higher than the unemployment rate of general population. The general unemployment rate, the youth unemployment rate, and the active NEET rate closely follow the trend in vacancy rates. The rate of inactive youth, however, does not.

One main practical advantage of studying NEET in the Netherlands is the high quality of the available data. In particular, we use register data from the Social Statistical Database (SSD) of Statistics Netherlands (CBS) (Bakker et al., 2014). This allows us to follow people throughout their school-to-work transition.

## 2.2 Institutions and policies in the Netherlands

Many Dutch institutions and policies were a deliberate attempt to counter rapidly rising youth unemployment in the 1980s, when very high rates of youth unemployment, especially among the less educated, paired with and low outflow and educational crowding out were of great concern (Salverda, 1992). Eventually, different institutional changes were made, and specific

policies were introduced, which helped to create the “Dutch miracle” and unemployment plummeted.

### **2.2.1 The Dutch education system**

First and foremost, the Dutch education system is commonly thought to contribute to good labour market allocation of school-leavers and the low number of NEET. The Dutch education system aims to sort pupils according to their ability, provide them with skills relevant to them, and provide them with a qualification that is meaningful and valuable in the labour market. For that, a number of devices are put in place. First, as [Figure 2.2](#) illustrates, the system is highly tracked. Tracking starts relatively early, at age 12. After primary education, children generally can go to one of four secondary vocational tracks, or to one of two general academic tracks. The four secondary vocational tracks (VMBO) in principle prepare for vocational training at the upper secondary level (MBO, also four tracks). All upper secondary tracks have school-based and a workplace-based curriculum. The academic tracks in secondary education (HAVO, VWO) prepare for tertiary vocational education (HBO, equivalent to bachelor's degree) and university, respectively. A diploma at MBO level 4 is also an entry ticket to the HBO. Special education and practical education tracks are designed for schooling children with special needs or learning disabilities, respectively. In principle, the tracks are a form of ability-based vertical stratification that allows for differentiating. To allow for repairing for initial misplacement, mobility between adjacent tracks is possible, after gaining the necessary entry qualification requirements. Around 5% of pupils are downwardly mobile while another 7% are upwardly mobile with mobility rates also increasing in the last decades ([Tieben and Wolbers, 2010](#)). While in theory intra-secondary track mobility is available to everybody, in reality it is more often used by pupils from higher socioeconomic backgrounds, thus exacerbating existing inequalities ([Jacob and Tieben, 2009](#)).

The sorting system is highly standardised. Sorting over the educational strata happens based on test results. Track placement in secondary education is determined by the pupils' score on a series of standardised performance tests on a number of indicators (e.g. reading and math literacy, logic, or world orientation) and a teacher evaluation, right at the end of elementary education. Admission to post-secondary and tertiary education programmes is conditional on obtaining credentials from relevant secondary education programmes. To obtain such diplomas, pupils' abilities are tested with centralised exit exams and school exams. This standardisation of output is meant to ensure that Dutch school-leavers at least have gained the minimum requirements to succeed in post-secondary or tertiary education.

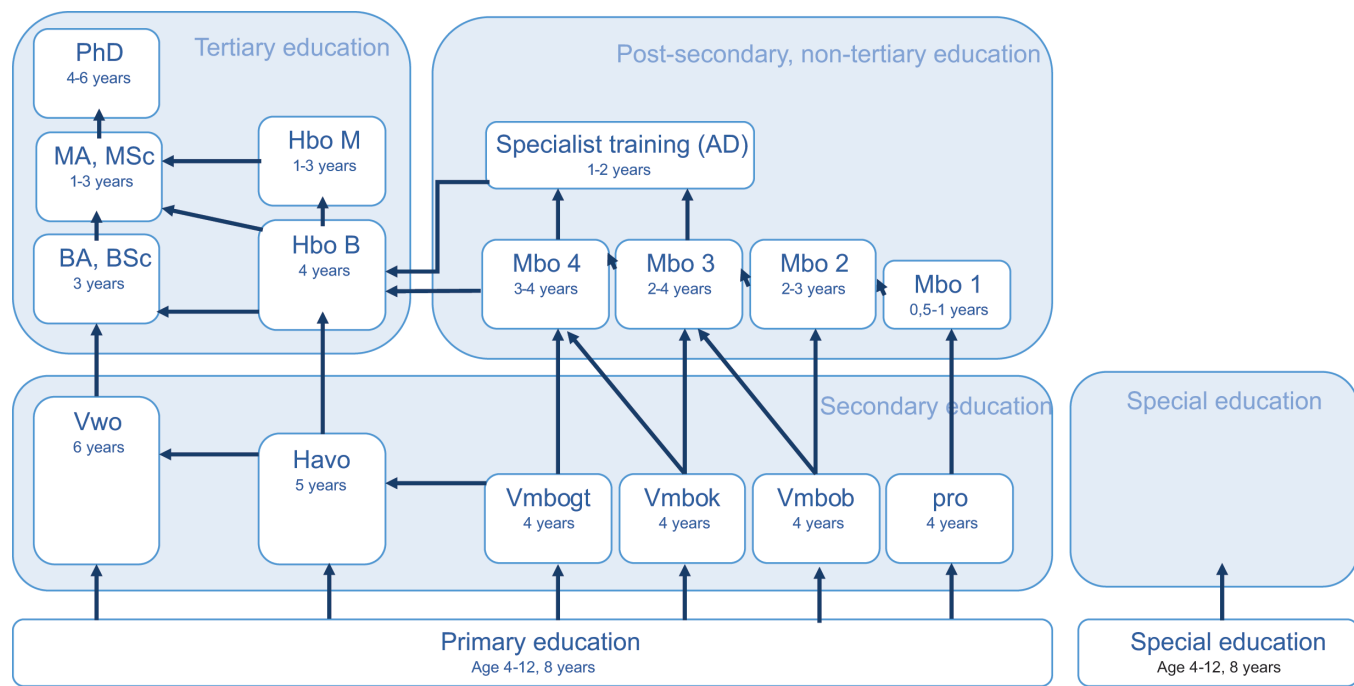


Figure 2.2 Schematic overview of the Dutch education system.

The Dutch education system is thought to limit the NEET rate in various ways. First, education is mandatory in the Netherlands until the age of 16. In addition, Dutch pupils between 16 and 18 are obligated by law to obtain a qualifying diploma, which is minimally at the level of MBO level 2, HAVO, or VWO. Pupils who leave the education system before the age of 18 and without a diploma are considered early school-leavers. After the age of 18, the legal pupils between 18 and 23 who do not have a qualifying diploma receive government support from a regional coordinator. This system keeps students in school until they have a qualifying diploma. Second, the costs of education are low. It should be noted here that Dutch youth in education receive ample financial support to help them to engage in studies. Dutch nationals can receive government support (in some cases: a low-interest loan) for education. In general, people who are registered for full-time or dual programmes at a school for VMBO, HAVO, VWO, MAVO, LWO, Praktijkonderwijs, VSO, or VAVO (secondary education), school-based programmes in the MBO, or programmes at tertiary education are eligible for financial support, if the education programme is accredited and takes longer than one year.

Youth in secondary education and MBO have to be 18 years old to be eligible; for youth in tertiary education, there is no minimum age requirement. Eligibility ends at the age of 30. The general support takes the form of a monthly payment and free travel in public transportation. The amount of the monthly payment depends on the income of parents. Children from low-income families receive higher support. The general support is intended to pay for general study costs and living conditions, to pay for college fees, and additional government loans can be applied for.

### **2.2.2 Vocational education in the Netherlands**

Although the number of students in vocational education has been steadily declining for years, the vocational track is actually still the most common form of education in the Netherlands; over half of all students in secondary education follow VMBO (VET at ISCED 2) ([Inspectorate of Education, 2020](#)), and about 40% of all working Dutch adults have been educated in MBO (continued VET or CVET at ISCED 3 or 4) ([Karsten, 2016](#)).

As can be seen in [Figure 2.2](#), the vocational tracks in the Netherlands are quite intricate. In secondary education, VET has four tracks. Next to a practical education track for children with low IQs or cognitive challenges, the track generally considered lowest is VMBO-B (“basisberoepsgerichte leerweg”), which teaches students the basic skills of a craft without further specialisation. It is the least academically challenging track in secondary education and has a light central exam and offers general courses (e.g. Dutch, English, math, arts, and culture) at a basic level. The second track is the VMBO-K (or: “kaderberoepsgerichte leerweg”), in which students



also learn by doing, and in which they prepare for a track in the MBO that prepares for a middle management function in a given sector. The VMBO-G (“gemengde leerweg”) track not only offers general courses at a higher level, but also offers a modest amount of practical education. It is often combined with the highest track in VET, VMBO-T (“theoretische leerweg”), which offers school-based VET, with theoretical courses in four areas: i.e. technique, care and well-being, economics, and agriculture. This track is an entry ticket into the highest MBO track (4) and the HAVO track. Note that the arrows show routes that students can take through the system, but that other routes are also possible.

In higher secondary and post-secondary, non-tertiary education, CVET also is organised in four tracks. The lowest track (MBO level 1) is an entry-level programme accessible for students who do not have a diploma from secondary education. Its diploma is not considered a starting qualification for the labour market, but a steppingstone for education programmes at level 2 (basic vocational education). However, MBO level 1 students who cannot finish a level 2 programme can enter the labour market as assistants. MBO level 3 programmes are professional training programmes that prepare for independent craftsmanship in professions in various sectors. The highest track (MBO level 4) prepares for middle management functions or functions as specialists but is also an entry ticket to the HBO. The HBO (“hoger beroepsonderwijs”) is in essence a form of tertiary vocational education at ISCED level 5.

All programmes in the MBO are offered in two different learning pathways. The BOL pathway is mostly school-based but offers practical training between 20% and 60% of the time. The BBL pathway is a dual-track that offers at least 60% of practical education. To ensure that programmes in the Dutch VET teach relevant occupationally specific skills, there are close institutional linkages with employers. Schools and employers work together in an organisation that is founded for this specific reason (the so-called Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven or SBB). One task of this organisation is to ensure that schools and employers collaborate to determine which skills are needed for the various MBO credentials. All CVET programmes base their curricula on so-called competency-based qualification dossiers. These dossiers are national frameworks that describe for each CVET programme which skills, knowledge, and competences students in that programme should learn, and at which level (Van der Meijden and Petit, 2014). This nation-wide policy shift started in 2004 and, after initial resistance and scepticism, was completed in 2012 (Van der Meijden et al., 2013).

### ***2.2.3 The Dutch transition system***

Another way in which the Dutch education system is thought to limit NEET rates is by ensuring that the skills taught in education are demanded on the labour market. The Netherlands is a prime example of an occupational

labour market or OLM (Gangl, 2003). As said, Dutch vocational education is characterised by strong institutional linkages, and in many cases, employer organisations affect curricula through the SBB. This implies that skills taught in Dutch vocational education have a high vocational specificity. This is also true for the vocational tracks in tertiary education (HBO). The Netherlands has a strong OLM, and allocation and matching are in principle based on an open market.

#### 2.2.4 Labour market arrangements

The Dutch labour market is highly institutionalised. The government actively works with unions and employer organisations to co-design labour market arrangements. About 75% of all labour contracts are the result of collective bargaining agreements that are mostly negotiated at the industry level (Hartog and Salverda, 2018). Such agreements include seniority-wage scales for occupational groups. Also resulting from this strong collective outlook on employee-employer relations is the fact that the Dutch labour market traditionally has relatively strong employee protection (OECD, 2020c). Permanent contracts can be undone, but only after permission by a court of law or the executive labour organisation (UWV). This strong position for insiders is commonly thought to worsen the position of newcomers on the labour market, and particularly be to the detriment of young people (Muffels, 2013). Indeed, as Figure 2.1 shows, the youth unemployment rate is much higher than the general unemployment rate.

However, a main feature of the Dutch labour market is the rapid flexibilisation in the past two decades. Flexible jobs include jobs with a temporary contract, such as work for a temp agency, zero-hour contracts, and probationary periods of jobs that will eventually become permanent. Just like in other countries, the number of such flexible jobs has increased steadily from 16% in 2001 to 26% in 2016 (Muffels, 2013; Hartog and Salverda, 2018). Temp agency work has been subject to policy since 1996 and turned into (so-called flexicurity) legislation in 1999, increased about 30% between 2001 and 2016 (Hartog and Salverda, 2018). Young people are most likely to have these flexible jobs.

They are also most likely to hold part-time jobs. Between 2001 and 2016, the number of part-time flexible work arrangements has risen significantly, and about half of all employment is currently part-time (meaning less than 35 hours per week (*ibid.*). Among youth aged 15–24, the number of people in jobs of less than 12 hours a week rose from 36% in 2001 to 44% in 2016; an increasing number of the young people with small jobs are also in education (*ibid.*).

Wages are regularly renegotiated by the social partners to adjust for inflation and productivity differences. Outside these collective wage negotiations, Dutch workers usually do not negotiate about their wages. The collective bargaining thus forms the prime source of income increase for

Dutch workers (Hartog and Salverda, 2018). These wages have not changed much between 2001 and 2016 (Hartog and Salverda, 2018). Also relevant is the minimum wage policy: all employees in the Netherlands over 21 are entitled to the legal minimum wage. On July 1, 2019, the minimum wage was determined by law to be €1,635.60, before taxes. Young employees are entitled to the so-called youth minimum wage, which is a percentage of the minimum wage. This depends on one's age: a 16-year old is entitled to a wage of 34.5% of the minimum wage, a 20-year old to 80% (in 2019).

### **2.2.5 Welfare state arrangements**

Part of the Dutch NEETs are unemployed and, as such, may be eligible for unemployment benefits. Young people who become unemployed may be eligible for unemployment benefits. Employees who become fully or partly unemployed are eligible for receiving unemployment benefits ("WW-uitkering") subject to conditions: one must (a) be employed, not on full-time unpaid leave, and not yet retired, (b) not be in the Netherlands illegally, (c) lose at least 5 hours of employment each week and no longer receive income over these hours, (d) be directly available for work, (e) have worked for at least 26 weeks for an employer in the 36 weeks before unemployment, and (f) not become unemployed due to one's own doing. The scheme is designed to stimulate reintegration. Eligible workers who become unemployed are entitled to at least three months of benefits, but the actual length of the period one is eligible for receiving unemployment benefits depends on one's work experience. Generally, the more working years one has gained, the longer one is entitled to receiving benefits. The maximum period for receiving benefits is two years. In collective bargaining agreements, additional periods (up to 38 months) may be agreed to. The actual height of the benefits depends on one's income. In the first two months of unemployment, benefits are set at 75% of the average daily wage earned in the year before unemployment. For the remaining period, benefits are 70% of the average daily wage. This is for those who become fully unemployed. To stimulate reintegration, the WW-programme also supplements income for those who accept a job at a substantially lower wage than the WW-wage (87.5%). People who do not have work after their unemployment benefits end may apply for general welfare.

In general, people over 18 are entitled to general welfare ("Algemene Bijstand") if they do not have sufficient income or capital to pay for basic living standards and are not entitled to other benefits (such as unemployment benefits). Further conditions are that one is a legal resident of the Netherlands and is not institutionalised or in prison. To stimulate reintegration into the labour market, several additional conditions must be met. Welfare recipients must actively work on their reintegration. They (a) must accept and keep any job offered to them, (b) register with an employment

agency, (c) be willing to travel to and from work for 3 hours a day, (d) willing to move to a location where one can find a job, (e) do anything in one's ability to acquire relevant skills and knowledge, (f) cooperate with any government support in finding employment, and (g) dress, behave, and groom oneself in a way that does not hamper one's ability to get a job. The government can withhold payment of benefits for up to three months for non-compliers. These conditions are not applicable to single parents with one or more children under five, or for those who are permanently incapable of working. Further conditions may also apply. For example, the government may demand that welfare recipients perform services, or invest in language skills. All welfare recipients must comply with all government requests for cooperation, information, and identification and behave decently vis-à-vis government officials. The amount of benefits depends on one's age and living situation. People of 21 years old who are married or living together are entitled to 100% of the minimum wage. Singles over 21 receive 70% of the minimum wage; single parents receive an additional payment for children. For youth under the age of 21, the welfare is capped at a lower amount. Youth under the age of 27 are not entitled to general welfare if they can follow education programmes that would entitle them to government study financing programmes.

Besides a large share of active NEETs, another large group of NEETs in the Netherlands seems to be long-term inactive. Many of these may be disabled (Eurofound, 2016). They could be entitled to benefits under the Disablement Assistance Act for Handicapped Young Persons (Wajong) and the Participation Act of 2015. Young people can get disability benefits if – before the age of 18 – they contracted an illness or disability that is so serious that they cannot work. Youth between 18 and 30 can be eligible for these benefits if they become seriously ill or disabled during education. In all cases, additional conditions are that these young people have not gained any work experience and cannot work, are living in the Netherlands, are older than 18 (but not retired), have not been in prison for longer than a month, and follow a number of rules. Evaluation of the ability to work is done regularly by a central executive agency (UWV). Young people with a disability or illness that permits them to work will be helped to find a job in two programmes. First, the job creation programme (“banenafspraak”) is a collaboration between the government and employers, to create jobs for partly disabled youth. Young people who can work, but who cannot make the minimum wage, are eligible for this programme. Government subsidies make hiring these youth attractive to employers. Second, youth who need extra support to work can be placed at so-called sheltered jobs (“beschut werk”), for example at social workplaces specifically designed to employ people with disabilities. Youth who became ill or became disabled at a young age but have possibilities to work are not eligible for Wajong benefits but may be eligible for general welfare.

### 2.2.6 *Family policies*

First, maternity, paternity, and parental leaves are important for understanding cross-national differences in labour market participation. Paid leave enables parents to temporarily disengage from the labour market and take care of their children without fear of losing their jobs or reducing their incomes. Countries differ widely in the availability of paternity, maternity, and parental leaves, in the length of the period covered, and in the amount. Dutch pregnant workers who take maternity leave are entitled their full salary costs; employers are compensated 100% by the government. Pregnant workers are eligible to receive four- to six-week pregnancy leave before childbirth and at least ten-week maternity leave after childbirth. If a pregnant woman takes less than six-week pregnancy leave before childbirth, the remaining amount can be added to her maternity leave after giving birth. Maternity leave always begins after the actual birth, and the total may therefore be longer than 16 weeks ([Ministry of Social Affairs and Employment, 2001](#)). The Netherlands also has paternity leave, but it is much narrower in scope. [Van Belle \(2016\)](#) cross-nationally compared parental leave policies and shows that the Netherlands had a relatively short paternity leave of two days, which also were not compensated, but that the uptake is relatively common. Since 2019, young fathers are entitled to 5 days of paternity leave ([Rijksoverheid, 2016](#)). Parental leave can be taken at any point in time for anyone with children under the age of 8. Parental leave is generally unpaid.

Second, public childcare is an important explanation for cross-national differences in the labour market effects of children ([Uunk et al., 2005](#)). However, Dutch parents are traditionally disinclined to make use of full-time formal childcare options ([Portegijs et al., 2006](#)), possibly because formal childcare has long been looked upon as of low quality ([Leitner, 2003](#)). Dutch parents rely on informal care relatively often; mostly, such care is provided by grandparents ([Knijn and Liefbroer, 2006](#); [Mills et al., 2014](#)). Those who do use childcare do so in part-time: attendance is much higher for shorter stays than it is for longer stays ([Mills et al., 2014](#)). Poor people are also much less likely to use childcare than rich people ([Mills et al., 2014](#)). The Childcare Act of 2005 intended to increase the labour participation rate of young parents ([CPB, 2011](#)). It did so by increasing child subsidies for low-income households and increasing subsidies for formal childcare for lower-income families. The 2005 law ensures that parents can receive government compensation for the costs of formal childcare. The size of the compensation is partly based on household income, with parents with higher incomes receiving lower subsidies. Furthermore, the allowance also depends on the total costs of childcare, and on the number of children one has. There is a minimum allowance. There is also a maximum allowance, based on a maximum number of hours of childcare per child per month and a maximum rate. Parents are entitled to childcare support if (a) they are

eligible and (b) make use of childcare in a registered childcare facility or registered host parent. Eligible are only working couples or single working parents. Parents who do not work are eligible if they are in a reintegration track and actively try to return to the labour market, migrants in an integration course, teen parents who are in education, and students. Note that under this law, childcare is not subsidised if neither parent is working or in education. A large-scale evaluation study found that the 2005 reform indeed increased labour market participation of young mothers. However, lower educated young mothers were not affected (CPB, 2011). Subsidies were cut again in 2012, mostly in response to the Great Recession.

### 2.3 Hypotheses

Following theoretical assumptions described in Section 1.3, we expect that in the Netherlands, most NEETs remain so only for a short period of time (Hypothesis 1), but also that there exists a group with Long NEET spells (Hypothesis H2a). The school-to-work transition in the Netherlands on average is rather smooth, and most school-leavers succeed in finding jobs (see, for example, ROA, 2016). However, there is a downside to that: those who do fall out of the labour market during the school-to-work transition are negatively selected and may experience problems (re-)entering. This is probably aggravated by the strong employment protection legislation, which favours the position of insiders. We thus expect that those who do experience long-term NEET status are more likely to experience long-term scarring effects (H2b).

The Dutch institutional context leads to very specific expectations about the size, composition, and gravity of NEET in the Netherlands. Given the strong stratification and differentiation of Dutch education, job queuing and sorting by employers are based on credentials, which should result in higher long-term NEET rates for early school-leavers who lack diplomas (H3a). Also, the quality of vocational education, its good reputation, the relevance of the occupationally specific skills taught, and the close links between schools and employers all imply that the school-to-work transition of VET-trained youth is relatively smooth and that, in comparison to their generally educated peers, they are less often NEET and less often problematic NEET (H3b).

Socioeconomic background is not expected to play a huge role in explaining NEETs in the Netherlands. In the highly stratified Dutch system, tracking happens relatively early, which is associated with stronger social background effects. However, track placement takes place after high-stakes cognitive testing, which partly mitigates this effect (Korthals and Dronkers, 2016). There is a relationship between SES and being in vocational education. However, given the relatively good reputation of vocational education and the strong emphasis on skills, we expect that those with a relatively low SES background are relatively successful in making the school-to-work transition, and not more likely NEET (H3c).

Immigrants are expected to be vulnerable. In a selective labour market, youth from immigrant backgrounds also face many disadvantages, even if their conditions of access to the labour market vary depending on their social and educational characteristics. On average, immigrant children achieve lower levels of education, are more often early school-leavers (ROA, 2016), and are less likely to find relevant internships, while at VET which hampers their integration into the labour market (Inspectorate of Education, 2017). Furthermore, ethnic discrimination can be observed in the Dutch labour market (Thijssen, 2020). This would lead us to believe that immigrant youths will be more likely to become NEETs, and also more likely to become NEET for longer periods of time (H3d).

Generally, the number of NEETs and long-term NEETs is expected to be relatively low in the Netherlands, if compared to other countries. There are a few exceptions. First are young women with children. This is perhaps rather surprising, since the extent to which child-rearing affects women's decisions to disengage from the labour market at a young age is reduced by at least two cultural idiosyncrasies. First, the Dutch have a very liberal contraceptive culture. About half of young women aged 16–30 use birth control pills (Statistics Netherlands, 2017). Abortion laws are very liberal, but abortion is very rare: family planning and accessible contraception reduce the need for abortion (Levels et al., 2012). Second, and perhaps related, Dutch women on average transition to motherhood relatively late. The mean age at first birth in the Netherlands was 29 in 2018, which is relatively high (Human Fertility Database, 2018). However, the traditional male breadwinner model has long been dominant in the Netherlands (Clerkx and Van IJzendoorn, 1992). While this culture has changed partly, childcare is still regarded by many as the responsibility of women (Mills et al., 2014); combining child-rearing with a full-time job is less accepted by women (Van Peer and Moors, 1996). As such, the Netherlands is still generally regarded as an example of a conservative model of work–family reconciliation (Gornick and Meyers, 2003). In addition, welfare may be a trap into NEET status for some young women. Welfare benefits are generally not granted to Dutch youth, so welfare does not play a big role in explaining Dutch NEETs in general. However, single parents are exempt from certain activating measures. Thus, we expect that young women (H4a) with children (H4b) are probably more likely long-term NEET.

## 2.4 Data and measurements

### 2.4.1 Data

We select from the registers those individuals who have left secondary education and follow their activities in the registers for ten years. We take a 25% random sample of the 1987 birth cohort. We chose 1987 because it allows us to observe these youth from the age of 16 onwards and observe their outcome at age 30. We draw a random sample because of computational issues



regarding the optimal matching algorithm. Furthermore, we only select those for whom we have at least nine out of ten years of full sequence information and who spent at least one month as NEET during the observation window. After the listwise deletion of missing values on our core variables of interest, our final analytical sample consists of  $N = 23,342$ . The analysis of the NEET patterns is done with sequence and cluster analysis on data from the SSD of CBS (Bakker et al., 2014). In these data, we have monthly information about the employment and education activities of the entire Dutch population. We obtain the monthly activity after merging two datasets from the SSD. One includes spell data on the main economic activity based on the main source of income. We recode the original variable into (a) Working (including employee, shareholder, self-employed, other activities), (b) NEET (including recipients of unemployment insurance, recipient of welfare, recipient of other social benefits, recipient of illness and disability benefits, recipient of pension), (c) VET education (including [not yet] pupil/student with income, [not yet] pupil/student without income, other without income), and (d) Higher Education. The second dataset includes spell data on registrations in publicly funded education. We merge the two variables, whereas education always overwrites other states. We distinguish between “Secondary Education and below” (including primary education, practical education, secondary education) and “Further education” (including MBO, HBO, WO). We start our observation in 2001 and end in 2017. From every year, we exclude the month of August. We do this because, in the register data, school leaving seems to be an artefact because of school registers ending in July and starting in September. Based on this data, we would underestimate the timing of school leaving for many. We then align sequences on the first month spent out of secondary education.

#### 2.4.2 Measurements

A person’s *gender* was obtained from public registers. We distinguish women (1) from men (0). From the same data, we also know youth’s *immigration background* and distinguish between native-born with two native-born parents (coded as 0), born abroad with at least one foreign-born parent (coded as 1), and pupils born abroad with two foreign-born parents (coded as 2). The *country of birth* of the pupils and the parents was obtained from Dutch administrative records, as was information about the *provinces* in which youths lived when they were leaving school. The *educational level* distinguishes between those with no diploma at school leaving (0), those with a diploma at VMBO or MBO level 1 (1), or those with a diploma at MBO level 2, HAVO, or VWO (2). Socioeconomic status is measured in various ways. First, we measure the *employment status of the father* as the modal state of employment during the year our population of interest was 16 years old. We distinguish working (and education) (0) from unemployment/welfare (1), sickness/pension (2), and not matched in registers (3). We



measure *homeownership*, distinguishing youth who live in a home that is owned (0) from rentals with (1) and without subsidies (2). We also measure the average monthly *household income* in the year they were 16.

## 2.5 Analyses and results

Like in the other chapters, we analyse the data in four steps. First, we perform sequence analyses.<sup>1</sup> This ensures that sequences that are most alike are clustered, and that the clusters are as distinct as possible. This produces a number of patterns that can be seen as typical and representative to typical patterns that can be discerned in the data.<sup>2</sup> For this, we use TraMineR (Gabadinho et al., 2011). Second, we explain which trajectory is followed by way of multinomial logistic regressions. We take the patterns as dependent variables and socioeconomic characteristics as independent variables, to assess the extent to which various patterns can be explained by characteristics of individuals and their families. Third, we analyse the number of NEET months after school leaving. Fourth, we use the patterns from the sequence analysis as independent variables to investigate the extent to which the different STW-patterns can explain the income at the age of 30.

### 2.5.1 Descriptive analyses of Dutch NEETs

In Figure 2.3, we present school-to-work transition sequences of our full sample in a state distribution plot. The graph depicts how often each status occurs in each month and thus illustrates how the relative frequencies of statuses evolve over time. After leaving school, most Dutch youths remain in education and continue into post-secondary or tertiary education. These statuses are coloured dark blue. Others move into employment, and their proportion increases over time; these statuses are green. Months spent as NEET are coloured orange.

We see that those with NEET status are a minority, but also that they are non-negligible. We also see a slight increase in NEET rates over time. Given the institutional configuration of the Netherlands, we expected that VET-trained youth would be less often NEET and less often long-term NEET and that early school-leavers, immigrants, and women with children would be more likely long-term NEET. Table 2.1 presents the comparison of our analytic sample with youth who never become NEET during the STW on standard demographic variables. These descriptions already provide some first clues about our hypotheses. First, in general, our sample with those who experience at least one month of NEET status differs on some interesting points from the overall sample. The percentage of people without a diploma after first-time school leaving is indeed larger in the NEET sample (17%–13.4% in the general population). Also, first-generation (5.4%) and second-generation (16.8%) migrants are somewhat more represented in the analytic sample than in the overall sample (where the percentages are 4.3% and 13.9%, respectively). However, other than we expected, graduates from VET are not more likely NEETs.

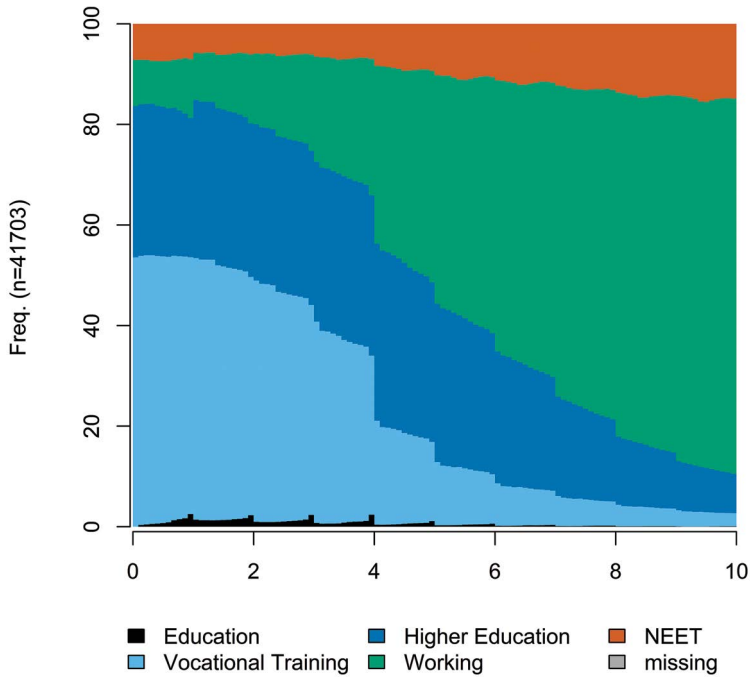


Figure 2.3 Transversal state distribution plot for the sample as a whole.

Next, we test parametrically whether these descriptive differences are statistically interesting and perform logistic regression analysis on the occurrence of at least one month of NEET. We analyse a multivariate model with all variables we included in the descriptive analyses, including school-leaving diploma, gender, immigration background, province, father's and mother's employment at age 16, house ownership, and household income. Figure 2.4 presents the results of the logistic regression. We present average marginal effects. These analyses largely confirm the descriptive conclusions. Those without a diploma are much more likely to be NEET, compared to those who have a credential from HAVO or VWO; however, those from the lower vocational tracks are not more likely to have experienced one month of NEET.

Both first- and second-generation immigrants are more likely to experience one month of NEET than Dutch natives. Young women more probably experience one month of NEET, but the differences are not huge. Also interesting is that among those who have experienced at least one month of NEET, the father is less likely to be employed and more often not matched at all. Also, NEETs were more likely to grow up in rented housing, and in households with lower incomes.

Table 2.1 Summary statistics by sample

	<i>Never NEET</i>		<i>NEET <math>\geq 1</math> month</i>		<i>Total</i>	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
<i>Gender</i>						
Male	9,522	51.8	11,751	50.3	21,273	51.0
Female	8,843	48.2	11,591	49.7	20,434	49.0
<i>School-leaving diploma</i>						
No diploma	1,613	8.8	3,976	17.0	5,589	13.4
HAVO/VWO	7,017	38.2	7,591	32.5	14,608	35.0
VMBO	9,735	53.0	11,774	50.4	21,509	51.6
<i>Immigration background</i>						
Native	15,978	87.0	18,149	77.8	34,127	81.8
First generation	506	2.8	1,270	5.4	1,776	4.3
Second generation (one parent)	1,881	10.2	3,923	16.8	5,804	13.9
<i>Father's employment status (age 16)</i>						
Working (or education)	16,149	87.9	18,381	78.7	34,530	82.8
Unemployment/Welfare benefits	513	2.8	1,237	5.3	1,750	4.2
Sickness/Other benefits/ Pension/No income	1,021	5.6	2,013	8.6	3,034	7.3
Not in registers	682	3.7	1,711	7.3	2,393	5.7
<i>Mother's employment status (age 16)</i>						
Working (or education)	12,646	68.9	14,348	61.5	26,994	64.7
Unemployment/Welfare benefits	723	3.9	2,183	9.4	2,906	7.0
Sickness/Other benefits/ Pension/No income	4,737	25.8	6,388	27.4	11,125	26.7
Not in registers	259	1.4	423	1.8	682	1.6
<i>Household homeownership (age 16)</i>						
Owned	13,914	75.8	14,614	62.6	28,528	68.4
Rented w/Subsidies	1,459	7.9	3,962	17.0	5,421	13.0
Rented	2,992	16.3	4,765	20.4	7,757	18.6
<i>Province</i>						
Drenthe	570	3.1	796	3.4	1,366	3.3
Flevoland	455	2.5	666	2.9	1,121	2.7
Friesland	769	4.2	985	4.2	1,754	4.2
Gelderland	2,504	13.6	2,710	11.6	5,214	12.5
Groningen	546	3.0	840	3.6	1,386	3.3
Limburg	1,217	6.6	1,596	6.8	2,813	6.7
Noord-Brabant	2,863	15.6	3,401	14.6	6,264	15.0
Noord-Holland	2,408	13.1	3,631	15.6	6,039	14.5
Overijssel	1,464	8.0	1,607	6.9	3,071	7.4
Utrecht	1,310	7.1	1,672	7.2	2,982	7.1
Zeeland	490	2.7	504	2.2	994	2.4
Zuid-Holland	3,769	20.5	4,934	21.1	8,703	20.9
<i>Household income (age 16), mean</i>	41,879 (20,775)		38,753 (22,127)		40,130 (21,598)	
Total	18,365		23,342		41,707	

Source: Statistics Netherlands, own calculations.

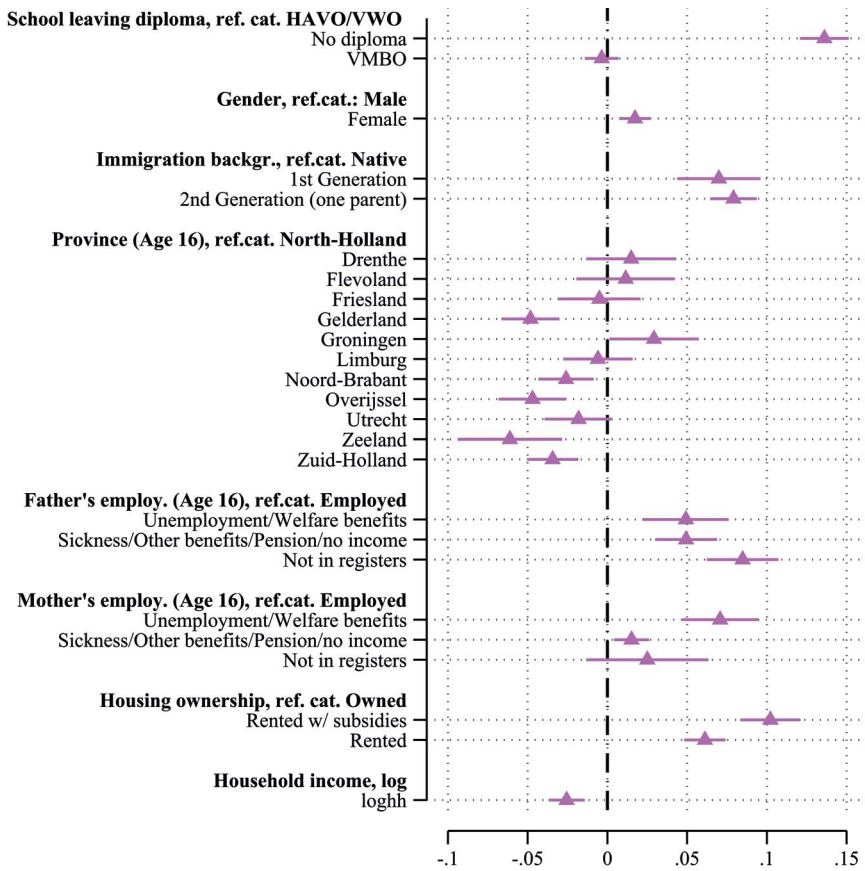


Figure 2.4 Logistic regression of NEET sample selection (never-NEET vs NEET for at least one month), average marginal effects.

### 2.5.2 Sequence analyses: The patterns of NEET in the Netherlands

The goal of the sequence analyses is to explore whether we can observe meaningful regularities in patterns related to NEET status during the STW-transition. We analyse young people who experience at least one month of NEET in the ten years after leaving education for the first time. Our method produces six meaningful distinctions, as can be seen in Figure 2.5. The accompanying status proportion plots (or state distribution plots) are depicted in Figure 2.6.

The first cluster (HE,  $N = 6,897$ ) represents individual trajectories of school-leavers who follow a typical higher education trajectory after leaving secondary education. As can be seen in Figure 2.6, the sequences in this trajectory are characterised by very short and infrequent NEET episodes

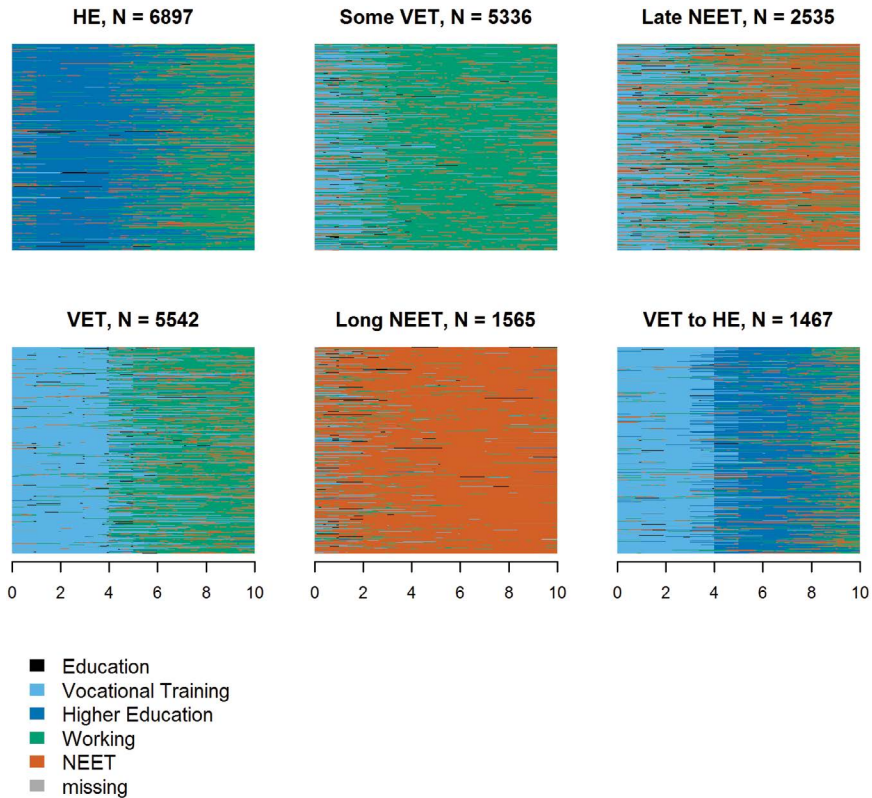


Figure 2.5 Index plots of NEET patterns in the Netherlands.

during the STW-transition; people in this cluster usually leave NEET-hood quite rapidly. Most people in this cluster eventually end up employed. The remaining clusters mostly describe different STW-pattern through VET. In turn, this also means that NEET after higher education is very rare and that, as expected, one of the most important factors in explaining NEET is education.

The first of these clusters (some VET, N = 5,336) represents a trajectory of finding employment relatively soon after secondary education and some vocational training or short stints in higher education. Another relatively straightforward trajectory is represented by VET (N = 5,542). This represents the classical vocational training trajectory. Many people follow this trajectory successfully into employment. Another VET-related cluster groups are people who first follow VET, then transition to higher education, and then to the labour market (VET to HE, N = 1,467).

This underlines our expectation that those with a VET education are less likely problematic NEET. We find two distinct patterns of people who

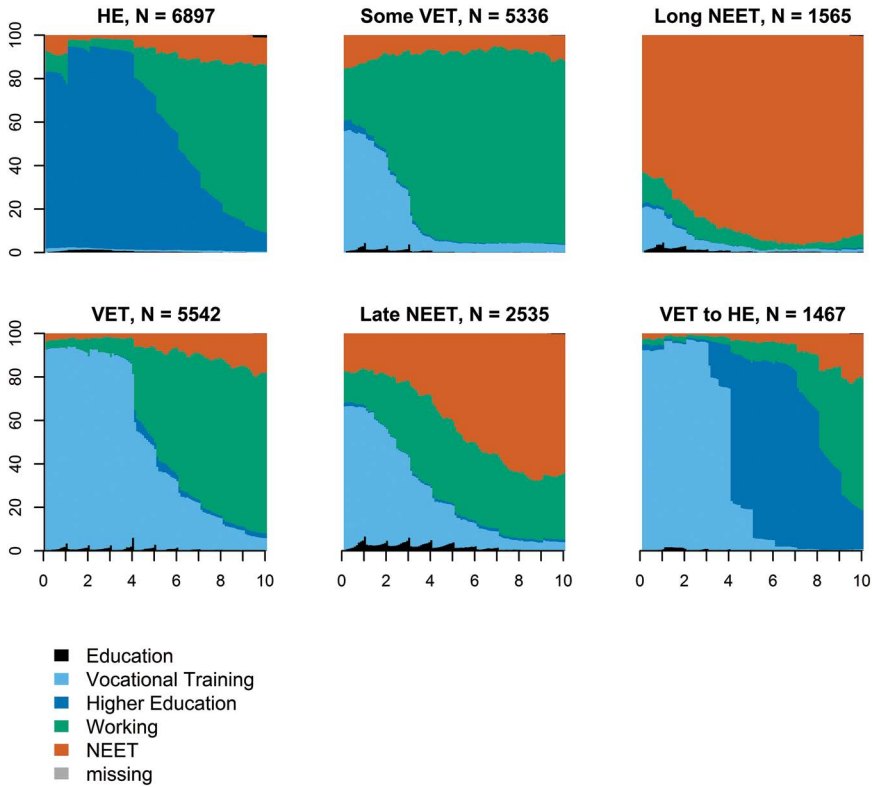


Figure 2.6 Status proportion plots of NEET patterns in the Netherlands.

largely become NEET. First is Long NEET ( $N = 1,565$ ). More than half of these youth become NEET right after second education and they do not integrate into the labour market. Some first go through some short VET or experience short employment episodes, but the vast majority of youth in this cluster stay in NEET for the rest of the ten-year observation period. Second is Late NEET ( $N = 2,535$ ) who largely first goes through VET, then goes through some short spells of employment, and then generally (about 60%) ends up as NEETs.

In Table 2.2, we describe the clusters. The higher education cluster has the highest share of women (55.8%); it should also be noted that the two problematic NEET clusters have an about equal gender distribution. Unsurprisingly, those who leave education without a starting qualification are overrepresented in the Long NEET and Late NEET clusters, with Late NEET are most likely those that leave education with a VMBO diploma, and those who leave school without a diploma are overrepresented in the Long NEET cluster. Migration background also correlates with being in a Long

Table 2.2 Distribution of covariates across clusters

	<i>Late NEET</i>		<i>Long NEET</i>		<i>Some VET</i>		<i>VET</i>		<i>VET to HE</i>		<i>HE</i>		<i>Total</i>	
	2.535		1.565		5.336		5.542		1.467		6.897		23.342	
<i>Total N</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
<i>Gender</i>														
Male	1.262	49.8	773	49.4	3.060	57.3	2.910	52.5	700	47.7	3.046	44.2	11.751	50.3
Female	1.273	50.2	792	50.6	2.276	42.7	2.632	47.5	767	52.3	3.851	55.8	11.591	49.7
<i>School-leaving diploma</i>														
No diploma	669	26.4	1.015	64.9	1.276	23.9	722	13.0	246	16.8	48	0.7	3.976	17.0
HAVO/VWO	62	2.4	64	4.1	617	11.6	160	2.9	91	6.2	6.597	95.7	7.591	32.5
VMBO	1.804	71.2	486	31.1	3.443	64.5	4.660	84.1	1.129	77.0	252	3.7	11.774	50.4
<i>Immigration background</i>														
Native	1.541	60.8	1.097	70.1	4.447	83.3	4.240	76.5	1.109	75.6	5.715	82.9	18.149	77.8
First generation	315	12.4	119	7.6	200	3.7	330	6.0	76	5.2	230	3.3	1.270	5.4
Second generation (one parent)	679	26.8	349	22.3	689	12.9	972	17.5	282	19.2	952	13.8	3.923	16.8
<i>Father's employment status (age 16)</i>														
Working (or Education)	1.603	63.2	926	59.2	4.236	79.4	4.369	78.8	1.187	80.9	6.060	87.9	18.381	78.7
Unemployment/Welfare benefits	259	10.2	177	11.3	281	5.3	254	4.6	70	4.8	196	2.8	1.237	5.3
Sickness/Other benefits/Pension/No income	334	13.2	244	15.6	446	8.4	516	9.3	117	8.0	356	5.2	2.013	8.6
Not in registers	339	13.4	218	13.9	373	7.0	403	7.3	93	6.3	285	4.1	1.711	7.3
<i>Mother's employment status (age 16)</i>														
Working (or Education)	1.219	48.1	645	41.2	3.220	60.3	3.376	60.9	948	64.6	4.940	71.6	14.348	61.5
Unemployment/Welfare benefits	487	19.2	341	21.8	486	9.1	523	9.4	103	7.0	243	3.5	2.183	9.4

(Continued)

Table 2.2 Distribution of covariates across clusters (Continued)

	<i>Late NEET</i>		<i>Long NEET</i>		<i>Some VET</i>		<i>VET</i>		<i>VET to HE</i>		<i>HE</i>		<i>Total</i>	
	<i>2.535</i>		<i>1.565</i>		<i>5.336</i>		<i>5.542</i>		<i>1.467</i>		<i>6.897</i>		<i>23.342</i>	
<i>Total N</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
Sickness/Other benefits/ Pension/No income	773	30.5	524	33.5	1,533	28.7	1,545	27.9	390	26.6	1,623	23.5	6,388	27.4
Not in registers	56	2.2	55	3.5	97	1.8	98	1.8	26	1.8	91	1.3	423	1.8
<i>Household homeownership</i> <i>(age 16)</i>														
Owned	1,042	41.1	592	37.8	3,038	56.9	3,338	60.2	1,017	69.3	5,587	81.0	14,614	62.6
Rented w/Subsidies	846	33.4	574	36.7	897	16.8	982	17.7	200	13.6	463	6.7	3,962	17.0
Rented	647	25.5	399	25.5	1,401	26.3	1,221	22.0	250	17.0	847	12.3	4,765	20.4
<i>Province</i>														
Drenthe	95	3.7	51	3.3	150	2.8	214	3.9	50	3.4	236	3.4	796	3.4
Flevoland	100	3.9	41	2.6	182	3.4	160	2.9	38	2.6	145	2.1	666	2.9
Friesland	118	4.7	52	3.3	202	3.8	262	4.7	82	5.6	269	3.9	985	4.2
Gelderland	275	10.8	185	11.8	607	11.4	658	11.9	170	11.6	815	11.8	2,710	11.6
Groningen	92	3.6	94	6.0	119	2.2	241	4.3	65	4.4	229	3.3	840	3.6
Limburg	181	7.1	111	7.1	354	6.6	363	6.5	94	6.4	493	7.1	1,596	6.8
Noord-Brabant	327	12.9	211	13.5	903	16.9	753	13.6	209	14.2	998	14.5	3,401	14.6
Noord-Holland	397	15.7	217	13.9	833	15.6	819	14.8	226	15.4	1,139	16.5	3,631	15.6
Overijssel	143	5.6	119	7.6	322	6.0	435	7.8	109	7.4	479	6.9	1,607	6.9
Utrecht	170	6.7	100	6.4	378	7.1	376	6.8	93	6.3	555	8.0	1,672	7.2
Zeeland	52	2.1	30	1.9	121	2.3	126	2.3	31	2.1	144	2.1	504	2.2
Zuid-Holland	585	23.1	354	22.6	1,165	21.8	1,135	20.5	300	20.4	1,395	20.2	4,934	21.1
<i>Household income (age 16), mean (SD)</i>	31,234	15,622	29,667	14,399	35,851	18,294	36,028	17,539	39,823	19,006	47,786	28,350	38,753	21,598

Source: Statistics Netherlands.



or Late NEET cluster. In both clusters, natives are by far the largest group, the share of first- and second-generation migrants is quite sizable, although in the case of Long NEET not higher than should be expected based on population distribution. Interestingly, second-generation immigrants are much more likely to be in problematic NEET clusters than first-generation immigrants. Socioeconomic background also matters: compared to the other clusters, youth in the Late and Long NEET clusters are much more likely from homes with parents who do not work, live in a rental house, and have lower incomes.

**2.5.3 Multinomial regressions: Explanations of Dutch NEET patterns**

The sequence analyses have revealed a classification of six meaningfully distinct patterns of labour market entry trajectories with at least one month of NEET spells. A second step is to analyse whether certain trajectories are associated with characteristics of the individuals. To answer this question, we estimate a multinomial logistic regression model in which cluster

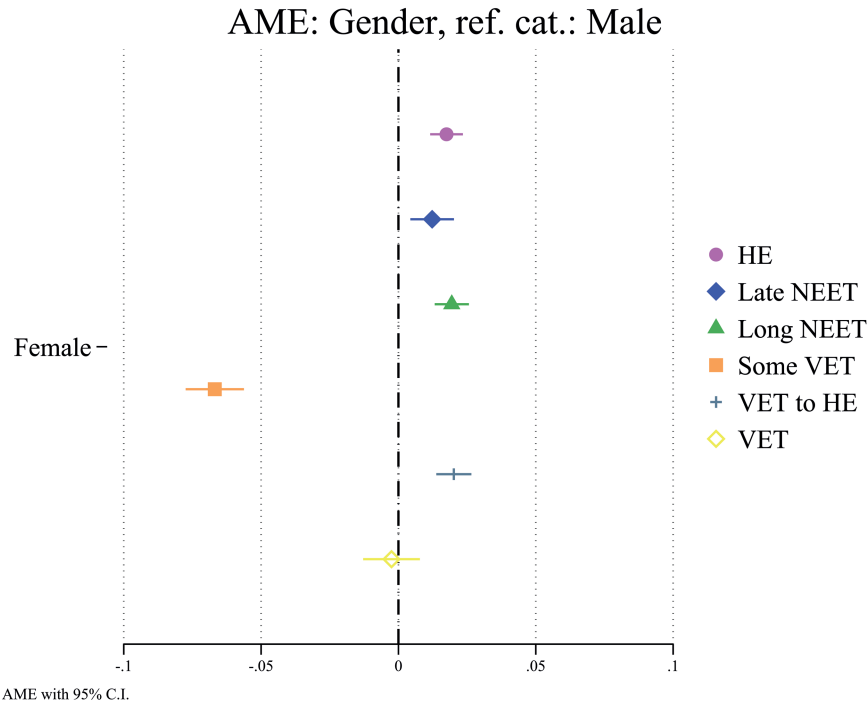


Figure 2.7 Average marginal effects of gender on STW-transitions.

memberships are dependent variables and demographic and socioeconomic characteristics of school-leavers are independent variables. In these analyses, the reference category is a group of individuals who never experienced an episode of NEET that lasts over one month during the ten years after leaving school. In the following, we present the average marginal effects for each of the relevant variables.<sup>3</sup> We focus on describing the membership of the most problematic clusters, i.e. Long NEET and Late NEET.

Figure 2.7 shows that there are some distinct gendered patterns in the school-to-work transitions of school-leavers who experience at least one month of NEET. Women are more likely to follow a trajectory through higher education than men and are also more likely to follow a trajectory through VET and HE. They are considerably less likely to go straight to employment (after finishing some VET) than men. Most of our interest, and in line with our expectations, women are (slightly) more likely than men to experience long-term NEET and later NEET spells than men.

In Figures 2.8 and 2.9, we show that this is indeed partly due to the association between having a child during the STW-transition and the various trajectories. We find that having a child is associated with a higher likelihood of being in some VET/early employment trajectories. Only after interacting

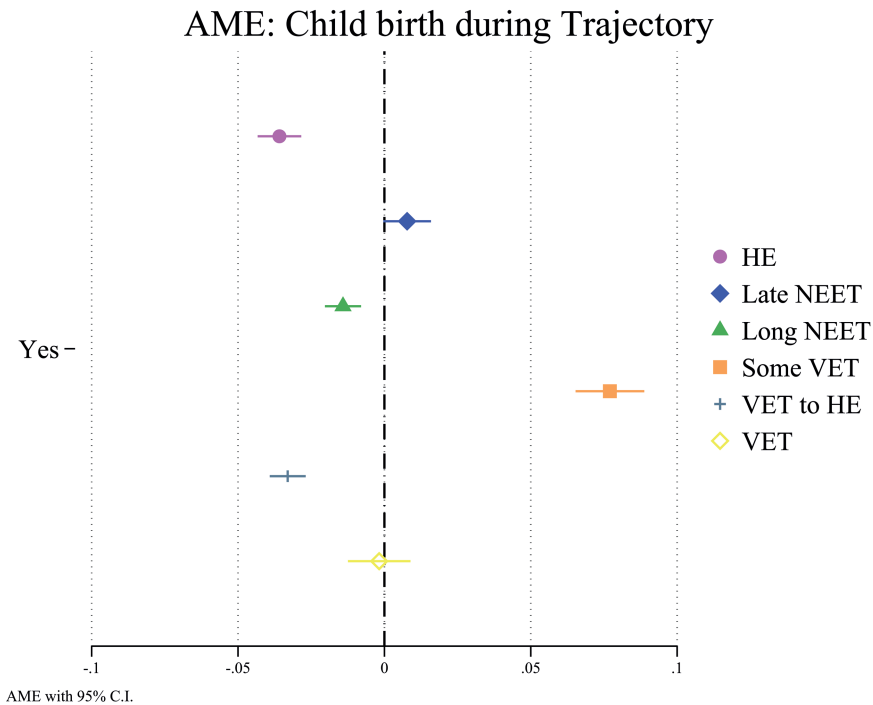


Figure 2.8 Average marginal effects of childbirth on STW-transitions.

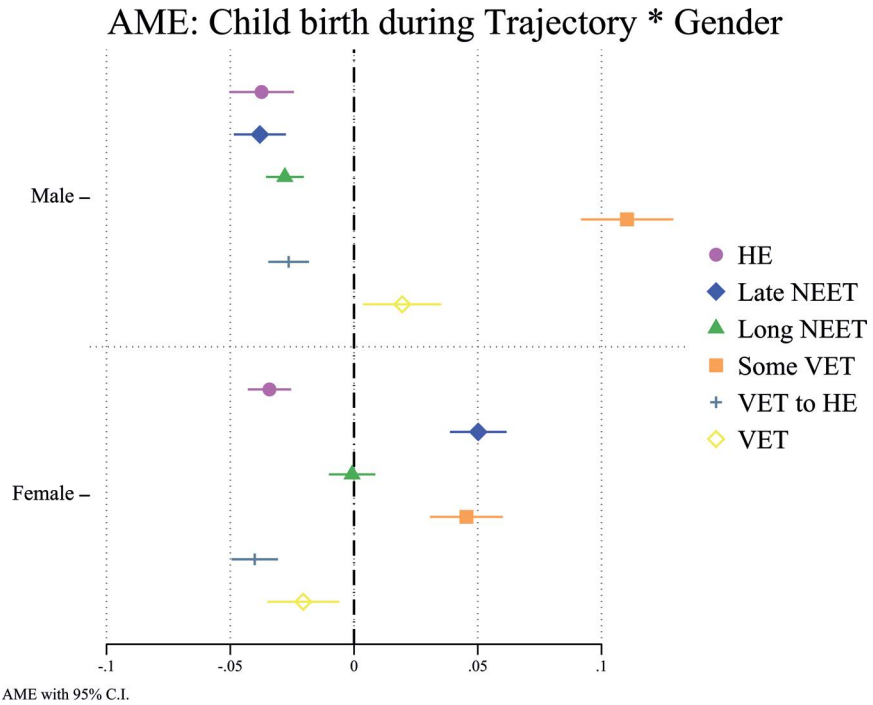


Figure 2.9 Average marginal effects of childbirth\*gender on STW-transitions.

child with gender, we find more pronounced associations. In Figure 2.9, we see that women with children are not more likely long-term NEET but are more likely to become Late NEET. Interestingly, and also in line with our expectations, men with children, on the other hand, are also less likely to become long-term NEET.

In Figure 2.10, the relationship between immigration background and the STW-trajectories is presented. Compared to natives, both first- and second-generation migrants are more likely to end up in Late NEET-trajectories. This is in line with what we expected. Contrary to what we expected, however, immigrants are not more likely to be long-term NEETs, though.

Figure 2.11 explores the role of early school leaving in the school-to-work transition. Here, the reference is those with a qualifying diploma (i.e. those with a HAVO, VWO, or MBO level 2 diploma). Perhaps unsurprisingly, those with these diplomas are more likely to follow paths through higher education. As we expected, those with no diploma are more likely to follow NEET-trajectories that are problematic: Long NEET and Late NEET. Those who followed VET but did not achieve a qualifying diploma are somewhat more likely to be Late NEET than those who have followed general education. Differences are rather small, however.

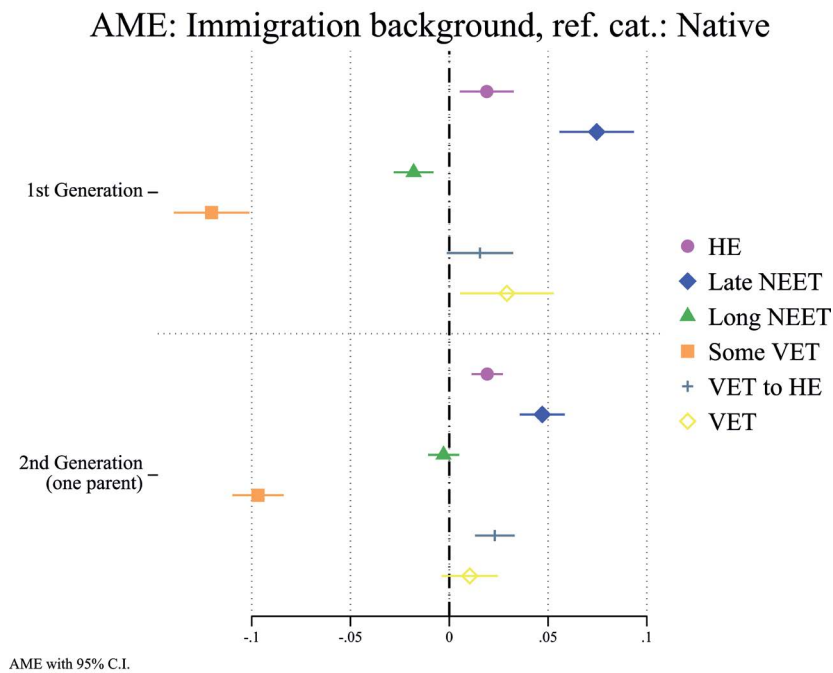


Figure 2.10 Average marginal effects of immigration background on STW-transitions.

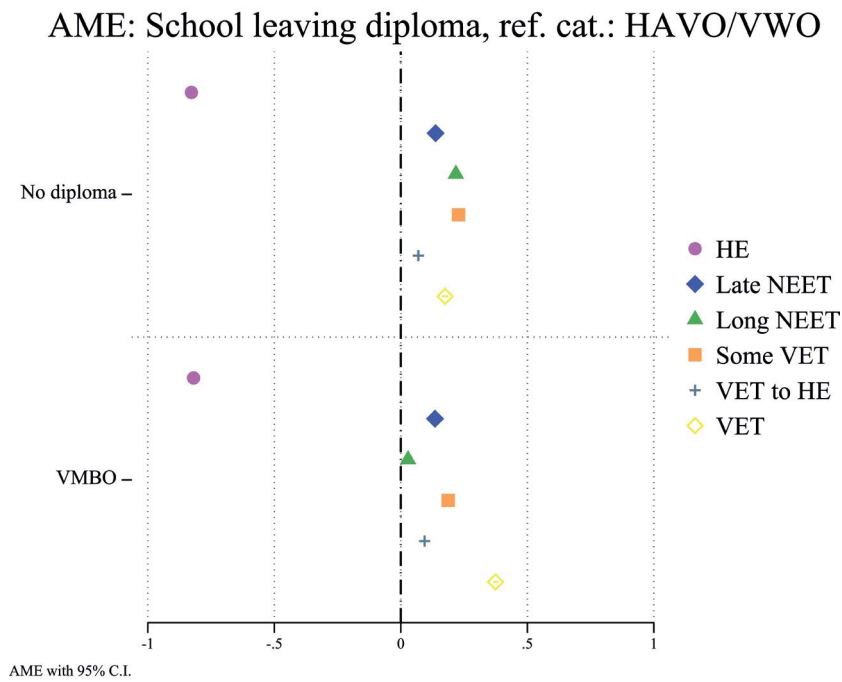


Figure 2.11 Average marginal effects of early school leaving on STW-transitions.

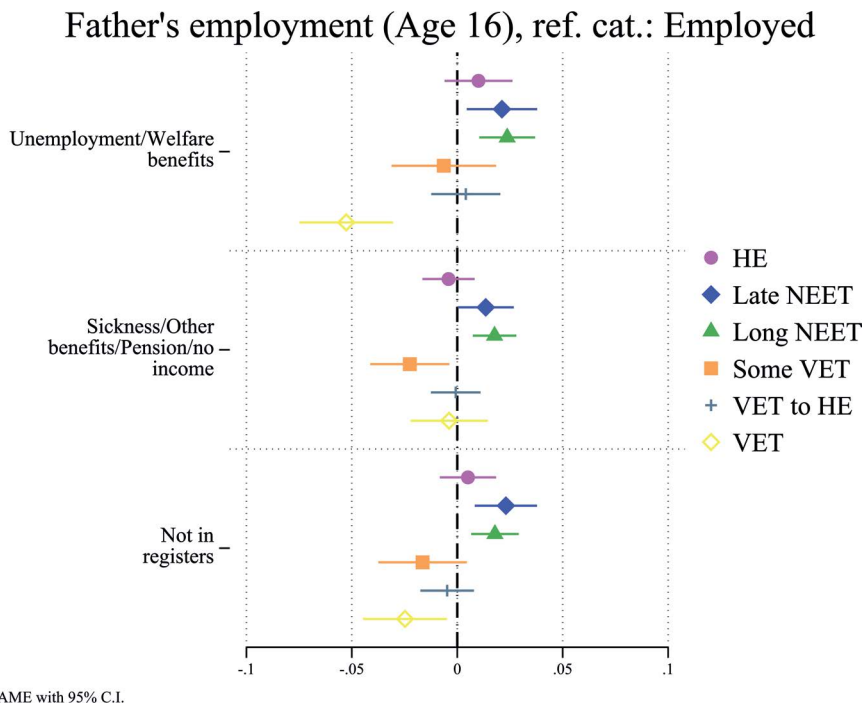


Figure 2.12 Average marginal effects of father's employment on STW-transitions.

Our analyses do suggest that – contrary to our expectations – intergenerational factors play a strong role in explaining problematic school-to-work transitions in the Netherlands. Figure 2.12 presents the role of the father's employment status in the school-to-work transitions of young school-leavers who experience at least one month of NEET. Working fathers form the reference category. Compared to having a working father, all other categories are associated with a higher risk to become Late NEET and Long NEET. In Figures 2.13 and 2.14, the relationships between NEET-trajectories and homeownership as well as household income are shown. The patterns are not as we expected. As compared to those whose parents own a house, those who live in a rented house are more likely to experience the problematic STW-patterns Late NEET and Long NEET. Regarding household income, unsurprisingly, those whose parents have had higher incomes during their youth are less likely to be in the Late NEET and Long NEET clusters. So, what predicts the length of the NEET period in the Netherlands? Figure 2.15 shows the same variables just discussed used to explain a related but different outcome variable, namely the total number of months spent in NEET during the ten-year observation window. From this analysis, we can see that especially early school leaving and graduating from non-qualifying VET are important correlates of long-term NEET-trajectories. Immigrants are slightly more

## AME: Homeownership household (Age 16), ref. cat.: Owned

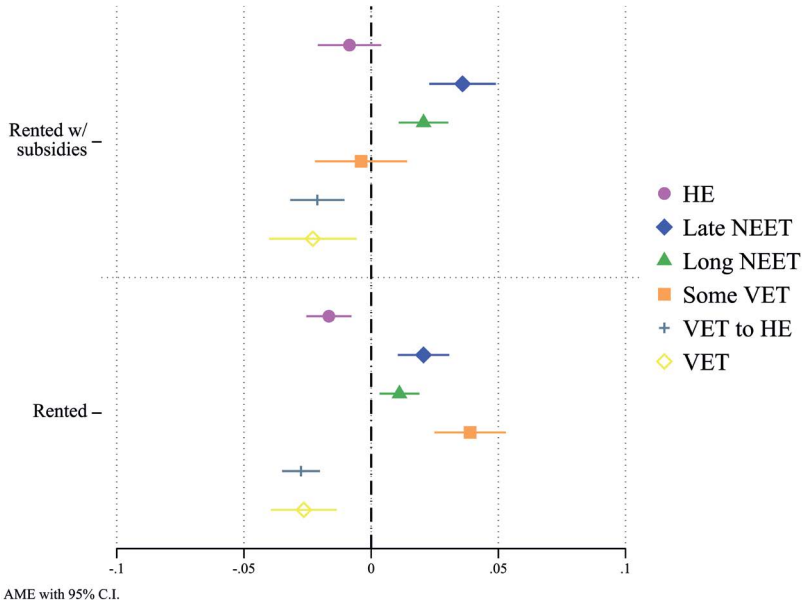


Figure 2.13 Average marginal effects of household homeownership on STW-transitions.

## AME: Household income, log (Age 16)

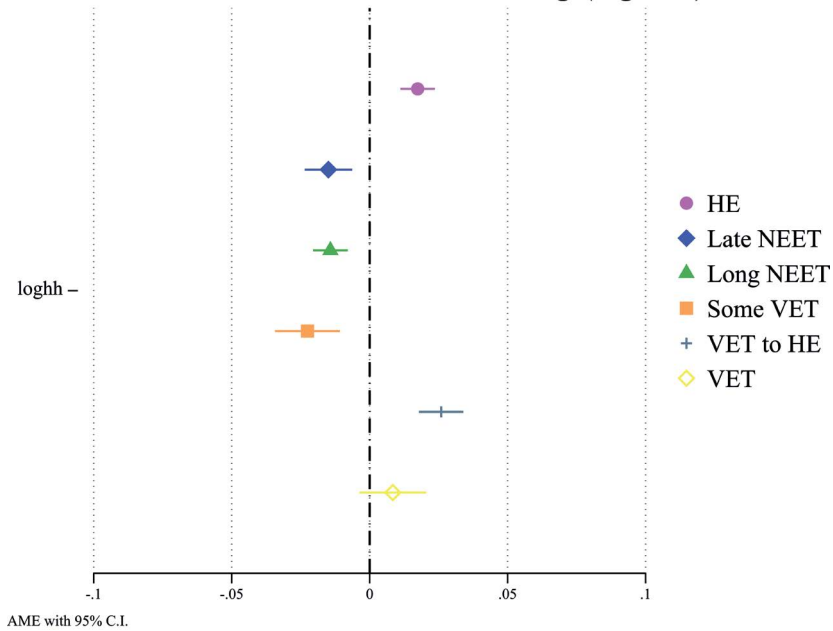


Figure 2.14 Average marginal effects of household income on STW-transitions.

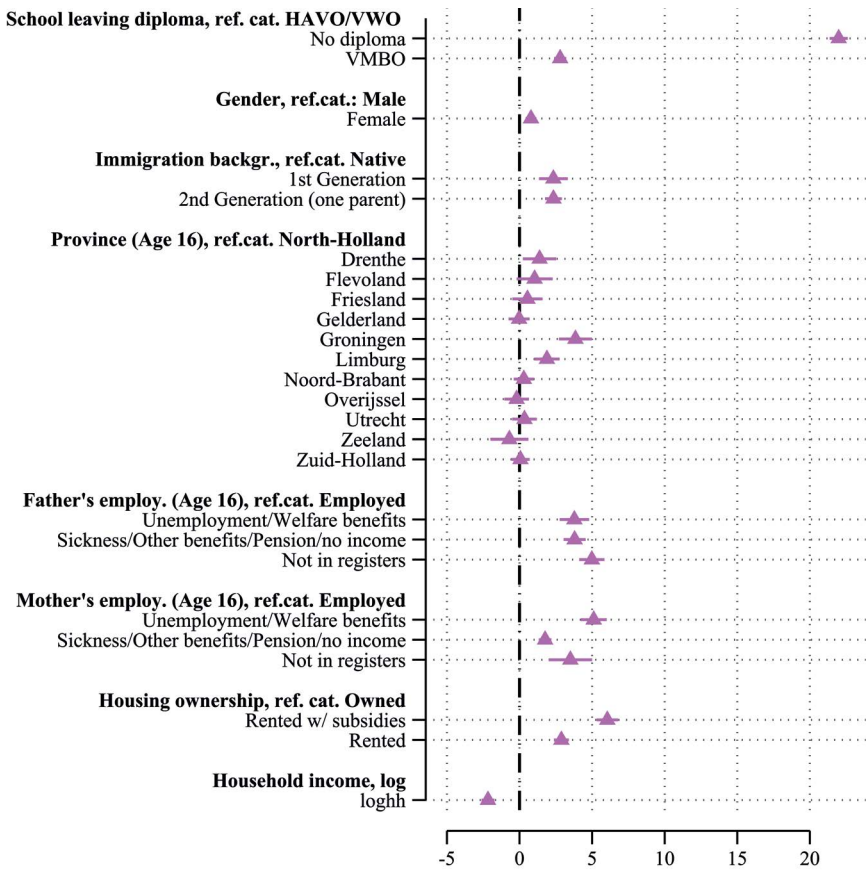


Figure 2.15 Linear regression of NEET months during ten years after leaving school.

likely to be NEET longer as well as those from a background of parents who are unemployed and live in rental housing.

### 2.5.4 Predictive analyses: Long-term consequences of NEET patterns

Finally, we want to study longer-term consequences of being NEET during the school-to-work transition. More specifically, we study whether cluster membership during the school-to-work transition predicts wage differences later in life. Figure 2.16 shows that at age 30 those young people who were either long-term NEET or Late NEET during the school-to-work transition have a considerably lower monthly salary than those who

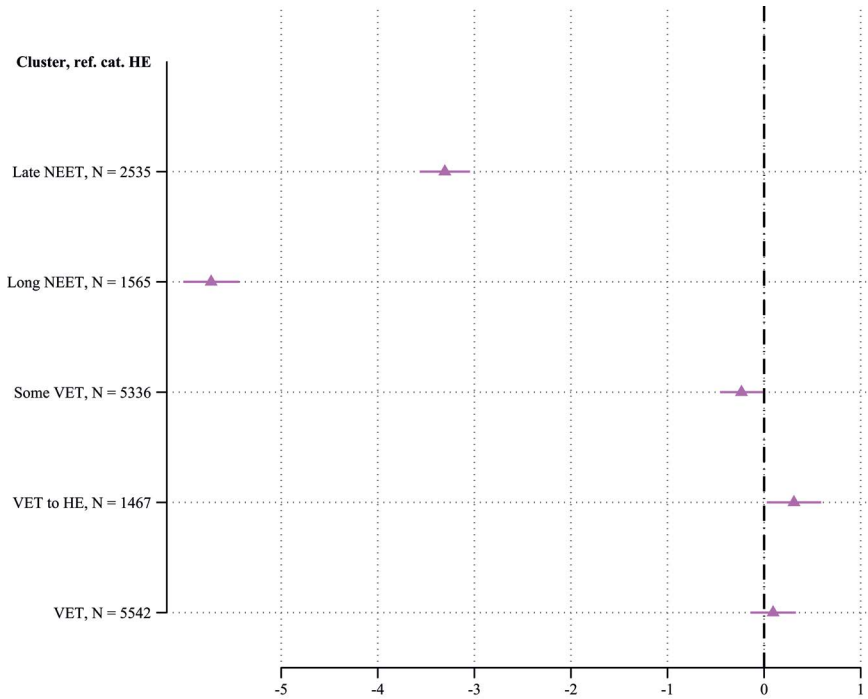


Figure 2.16 Linear regression of income at age 30 on NEET-trajectories.

follow more standard trajectories. For the other clusters, we do not see such scarring effects.

## 2.6 Conclusions and discussion

In this chapter, we studied NEET patterns of young people in the Netherlands using longitudinal data and following youth during their entire school-to-work transition. We should interpret the findings in this chapter against the backdrop of the Dutch institutional context. The Netherlands have a highly stratified, educational system, that tracks relatively early into a myriad of tracks. It is also rather vocationally oriented with, with fully developed educational VET tracks at different levels. Selection is mainly done based on standardised high-stakes tests. The Dutch labour market is an OLM, with a high level of employment protection. Welfare is generally not available for school-leavers, and family policies may contribute to gender-specific patterns in the school-to-work transition.

We first estimated logistic regression models to see which personal characteristics explain experiencing at least one month of NEET during the



school-to-work transition. These analyses suggested that early school-leavers are much more likely to be NEET for at least a month, but also that having a vocational education does not necessarily protect against being NEET during the school-to-work transition. We did find that first- and second-generation immigrants are more likely to experience one month of NEET than Dutch natives. Young women are only slightly more likely than men to experience one month of NEET. We also found indications for the relevance of social backgrounds: those with unemployed fathers and those living in rental houses are more likely to experience NEET.

We then focused on youth who experienced at least one month of NEET status and used sequence analysis to identify clusters of typical trajectories. We found six clusters. By far most youth who experienced one month of NEET status actually have a fairly normal school-to-work transition. Only 6.7% of all youth who experience NEET status can be considered long-term NEET. Another 10.9% is potentially problematic, as they become NEET later in the school-to-work transition. Since our data are right-censored, they may actually be long-term NEET that experiences problems later on. Taken together, less than 18% of all Dutch youth who experience NEET are to be considered potentially problematic. We expected the Netherlands would have a relatively low number of problematic NEETs compared to the other countries. As a comparison with similar analyses that other chapters will show, the Netherlands ranks a bit higher than France (about 13% of NEET are long term), Germany (about 12%), and England (16.9%). Only in Japan, more school-leavers are late (15%) or long-term (17%) NEETs.

We found that women are more likely than men to experience long-term NEET and later NEET spells than men. As we expected, this seems indeed partly a motherhood penalty. Interestingly, women with children are not more likely long-term NEET but are more likely Late NEET, which is in line with the expectation that Dutch women on average make the transition into motherhood relatively late and suggests that motherhood is not the gateway into long-term disengagement. Interestingly, and also in line with our expectations, men with children are less likely to become long-term NEET. This corresponds with the dominance of the male breadwinner model. We also found that migrants are more likely to experience Late NEET-trajectories but not more likely to be long-term NEETs. As we hypothesised, early school-leavers (those without diplomas or with non-qualifying credentials) are much more likely to follow NEET-trajectories that are problematic: Long NEET and Late NEET. Early school leaving is actually the strongest predictor of problematic transitions. Finally, the multinomial analyses confirm the importance of family background and suggest that intergenerational factors strongly contribute to problematic school-to-work transitions in the Netherlands. In fact, parental unemployment seems intergenerationally transmissible to children. Finally, our analyses also suggest that being long-term NEET or Late NEET during the school-to-work transition has considerable scarring effects: youth in these groups earn a much lower salary at age 30.

## Notes

1. We use Ward's algorithm for clustering. Costs are set to 1.2. We have no substantial reasons, theoretical or otherwise, to assume a different cost structure (cf. [Brzinsky-Fay, 2007](#); [Brzinsky-Fay and Solga, 2016](#)).
2. However, the data-driven nature of our analysis should not be over-stated. As researchers, we chose the number of clusters. Although based on data-driven indicators, we also make theoretical decisions for which number of clusters makes the most sense. We can then describe typical patterns of sequences based on our understanding of the patterns in the data.
3. The full multinomial regression table is provided in the online supplement.

# 3 NEET in Germany

## Labour Market Entry Patterns and Gender Differences

*Christian Brzinsky-Fay*

### 3.1 Introduction to NEET in Germany

This chapter aims at assessing the NEET youth (Not in Employment, Education or Training) in Germany, where one finds a strong institutionalized apprenticeship system, a relatively high stratification of the educational system and a gendered vocational education and training (VET) system. For this purpose, I focus on three main questions: (1) Which kind of NEET patterns exists during the period of labour market entry? (2) Do certain socio-economic groups (with a special focus on gender) show particular NEET patterns?, and (3) Do labour market entrants having particular NEET patterns during this period differ on their occupational status afterwards? These three questions are answered using retrospective longitudinal data from the German National Education Panel Study (NEPS), which allows examining monthly activity status changes for 10 years after leaving school. For the explorative analysis of the NEET patterns, only those young people are selected, who experienced at least 1 month of NEET status during this period, because this provides a more detailed picture of how NEET episodes are distributed. I apply sequence analysis (optimal matching) and cluster analysis (Ward's method) to the categorical time series, the statuses of which are school, VET, university, employment, NEET, and other. The explorative analysis reveals eight distinct NEET patterns which are examined descriptively and serve as a dependent variable for the further analysis. The question, which individual characteristics might have higher or lower risks of becoming NEET, is answered in two ways: first, by estimating a multinomial logistic regression model of NEET patterns on socio-economic variables and their interactions and second, by estimating a linear ordinary least-squares (OLS) regression model of the cumulative NEET length on socio-economic variables and their interactions. Here, I use only NEET youth (within group comparison) as well as the whole sample of school leavers (between group comparison) in order to contrast the effects. The third question, whether there are differences in labour market outcome, is also answered by using a within-group and between-group comparison. The dependent variable is the occupational status at the age of 30 measured by the International

Socio-Economic Index of Occupational Status (ISEI). The independent variables are the socio-economic background information and the NEET patterns or respectively the cumulative NEET length. All analyses include information on the birth cohort, which allows for the assessment of effects across time.

The results indicate that the NEET risk is particularly high for women with children, which reflects the male breadwinner model typical for Germany. Women with children have a much higher probability of entering the labour market via a pattern with long NEET periods. People who are born abroad also show clearly higher risks of entering the labour market via patterns which involve long NEET periods. Younger cohorts have a higher risk of experiencing longer NEET periods and have also a higher probability to enter the labour market via those patterns that involve longer NEET periods. I also observe a decrease of the probability by entering the labour market via VET across time. The patterns that include university do gain increasing importance across cohorts and reflect the educational expansion. The occupational status at the age of 30 is only partly affected by the NEET pattern itself, but more by the length in combination with the educational level: individuals with higher education (university) are not really harmed by NEET periods in their labour market entry period.

Germany constitutes an interesting case when looking at the longitudinal patterns of youths who experience NEET periods, for several reasons. First, it has an extensive vocational training and apprenticeship system. This integrates school leavers with intermediate degrees quite well, provides standardized occupational skills, and, therefore, leads to a relatively smooth integration of young people into the labour market. At the same time, the German public employment system does provide a large body of active labour market policies and educational programmes that help problematic school leavers to overcome their competitive disadvantages. Third, and in contrast to Scandinavian countries and many liberal countries, the German labour is quite gendered regarding both female labour market participation and occupational segregation. These characteristics of the German transition system put the focus on gender disparities regarding longitudinal NEET experiences of school leavers.

### **3.2 Institutions and policies in Germany**

In international comparison, the connection between education system and the labour market in Germany is quite structured. Therefore, Germany is often described as a 'coordinated market economy' (cp. Hall and Soskice, 2001), where educational institutions and labour markets are tightly connected and pathways of labour market entry are more or less stratified (Maurice et al., 1986). The tight coupling of the German (vocational) education and employment system (cp. Weick, 1976) is reflected in a high proportion of this kind of smooth school-to-work transitions. At the same time, a

large body of active labour market policies exists, which aims at integrating young people into employment. These are institutional reasons, why NEET rates in Germany are comparatively low (Eurofound, 2012).

### **3.2.1 Education system**

The German system of general education shows a high degree of stratification and a high degree of diversity between the German regions (Bundesländer), which is not only the result of the German unification and diverging school systems of former East and West Germany but also the consequence of Germany's federalist structure that is most prevalent in education policy (cp. Hüfner and Hüfner, 2010). On the national level, this leads to a low degree of standardization of the general education system. Pupils in Germany are tracked early – that is at the age of 10 or 12 – into schools that lead to intermediate secondary and upper secondary degrees. Traditionally, school leavers with an intermediate degree (lower secondary education) enter the dual system of VET, whereas those with an upper secondary degree are entitled to continue with tertiary education. General education in Germany is compulsory until the age of 15 or 16 (depending on the Bundesland) and is followed by a compulsory vocational education (at least part-time vocational schooling) until the age of 18. This means that NEET cannot legally occur by definition before this age. Within the last two decades, there is an increase in the number of those with upper secondary degree who anyhow enter the dual system of apprenticeship. Nevertheless, the social selectivity of the school system is still prevalent. The high degree of stratification of the German education system leads to disadvantages for youth with migration background even in the second generation (Baysu et al., 2018). However, there are a lot of educational reforms after the so-called PISA shock in the year 2000, which showed that German 15-year-old pupils have only average cognitive skills. These reforms are manifold and hardly coordinated between the regions, but in many cases, they refer to the integration of different school types and degrees in order to allow for more mobility between school tracks and therefore lowering the social background effect on school success.

### **3.2.2 Vocational education and training**

The dual system of apprenticeship is the most distinguishing characteristic of the German VET system. It combines school and work-place training and its training regulations are nationally coordinated by including federal and regional governments, trade unions, and employers' organizations. This leads to a high degree of standardization providing clear signals to firms regarding apprentices' qualifications. Apprenticeships are available for school leavers with lower secondary degrees and usually last for 2–3 years. There are more than 300 occupations in all economic sectors available.

Additionally, some occupations are trained in full-time vocational schools, such as nurses or childcare workers. The high degree of coordination is the foundation of the German corporatist structure of the education-labour nexus and the ‘high-skill equilibrium’ (Culpepper, 1999), because it provides high-quality occupational skills and increases the job-qualification match. The chance of finding employment is increased by both the screening effect of work-place training and the provision of industry-specific (i.e. transferable) skills. Across the recent decades, the share of apprentices staying with their firm is decreasing, but this is offset by the positive signal of standardized, industry-specific skills (cp. Brzinsky-Fay et al., 2016). The clear advantages of the dual system also involve some drawbacks, namely a high gender-specificity, a problematic integration of marginalized groups such as migrants (Tjaden, 2017; Bergseng et al., 2020) and low-achieving youth (Solga and Kohlrausch, 2013), and a segmentation between vocational and higher education (cp. Baethge and Wolter, 2015). Gender segregation is related to occupations themselves as well as structured by the distinction between firm- and school-based vocational training (Estévez-Abe, 2012). The latter form of training comprises mostly ‘female’ occupations such as nurses and childcare workers. The German VET system in the past was able to integrate school leavers of lower classes into the labour market, but recently it seems no longer able to fulfil this function (cp. Baethge and Wolter, 2015). This is particularly true for school leavers with migration background. As a consequence, the transition system has been continuously growing during the recent decades.

### ***3.2.3 The German transition system***

The transition system includes the sum of measures and programmes of active labour market policy that help school leavers to gain access to employment (Kohlrausch, 2012).<sup>1</sup> In the German case, there are two thresholds for lower secondary degree holders, which these policies address: the transition from school to apprenticeship and the transition from apprenticeship to employment. Both transitions have been creating distinct markets. The vast majority of these programmes and measures are directed to the first threshold (apprenticeship market) and include prevocational training courses, which do not provide vocational degrees, but prepare young people for starting an apprenticeship. Within the last two decades, the transition system expanded and between 30% and 40% of school leavers go through it each year (Baethge and Wolter, 2015), most of them are low achievers. The transition system as it is defined here constitutes the third pillar of the VET system. All programmes and measures are related to education, i.e. they provide school certificates or vocational orientation or preparation, so that their participants are not counted as unemployed or economically inactive and, therefore, not NEET. This considerably well-developed system contributes to a low proportion of unemployed or NEET youth.

### **3.2.4 Regulation of the German labour market**

Traditionally, the level of regulation in Germany is relatively high, e.g. employment protection for regular employees, although trade union density, i.e. the share of trade union members, is only on a low or medium level (OECD, 2019a). However, the proportion of non-standard employment relationships increases, not only since the labour market reforms in the 2000s (cp. Blossfeld et al., 2011a). These employment forms are not as protected and therefore, flexibilization policies have led to a higher number of exits from employment as well as the entries into employment. At the same time, the number of fixed-term employment contracts for young people increased. The consequence of increasing turnover rates is a higher probability of NEET occurrences within employment trajectories. Despite this development, Germany remains a country with a moderate level of deregulation if compared to other countries. However, employment protection is unequally distributed and young people – among other groups – belong to the disadvantaged ones (Buchholz and Kolb, 2011). Unemployment benefits in Germany are quite generous and are based on the insurance principle, where the size of the allowance depends on the length and the level of previous employment. The contribution period after which one is eligible for unemployment benefits is 12 months (OECD, 2019a). For everybody, basic social assistance is provided after 1 year of receiving unemployment benefits. Since labour market entrants by definition do not have long employment durations or high salaries, they are also disadvantaged regarding the provision of unemployment benefits.

### **3.2.5 Family and welfare policies**

Regarding the family and welfare policies, Germany is usually defined as a conservative gendered welfare state (Orloff, 1996; Esping-Andersen, 1999; Sainsbury, 1999; Korpi, 2000), which supports the male-breadwinner model with respect to household labour division. In Germany, the most important characteristics are single earner supporting taxation system and the lack of early childcare institutions. Within the last decade, childcare provision was increased sustainably, including a legal claim for childcare of 1–3-year-old children. However, compared to other countries, the gender division in terms of employment remains quite large, also because traditional role models continue to be widespread. The traditional German welfare system is based on the insurance principle and relatively generous long-lasting unemployment benefits. Decreasing labour demand and high wages were supported by excluding certain groups from the labour market, such as women (due to family care), older people (by early retirement programmes), or even young people (by long education periods and obligatory social/military service). The labour market reforms of the 2000s ('Hartz-Reform') introduced a couple of activation and flexibilization policies while limiting the maximum reception

time for unemployment benefits (60% of former income) to 12 months. After this period, unemployed ones receive only basic social assistance. These and other reforms on the one hand have led to a flexibilization of the labour market, which contributed to the recovering of the German labour market. On the other hand, they created a ‘dualization of employment’ (Eichhorst, 2015), i.e. it increased the segmentation of the German labour market.

### 3.3 Hypotheses

The institutional and policy characteristics described above lead to particular assumptions regarding the occurrence and duration of NEET among young people in Germany. On the aggregate level and in the longitudinal perspective, we expect to find a lower amount of NEET in Germany, regarding both incidence and duration. Regarding the development over time, there were many reform activities in different policy fields. The most important reform is the labour market flexibilization, which may lead to increasing occurrence of NEET in school-to-work transitions. However, the highly coordinated or tightly coupled systems of education and the labour market reduce insecurity during the job search process by providing information. Therefore, it can be assumed that most NEETs are NEET only temporarily (H1). However, following theoretical assumptions described in [Section 1.3](#), we expect that a group of NEETs is long-term NEET (H2). Furthermore, the stratification of the general and vocational education system implies that early educational attainment determines the school leaving certificate and together with occupational degree determines individual labour market chances. Disadvantaged groups such as low-qualified (H3a) and migrant (H3d) youth will therefore show clearly more NEET periods and longer NEET durations. The German welfare state and its traditional orientation towards the male-breadwinner model lead to a higher engagement of women in family care and, therefore, a higher share of women with children in NEET (H4).

### 3.4 Data and measurements

#### 3.4.1 Data

The explorative analysis of the NEET patterns is done by applying sequence and cluster analysis to the employment histories of the adult cohort (starting cohort 6) of the German NEPS (Blossfeld et al., 2011b, 2011c). In this dataset, individuals born between 1944 and 1986 were interviewed and asked to retrospectively provide monthly information about their education and employment career. I use individuals who have left school and follow their activity history for 10 years. From this group, only those were taken who have reported at least 1 month of NEET status in order to search different NEET patterns and assess their individual causes and consequences. Thus, this analysis is a within-group comparison that helps distinguishing NEET



patterns and their relative differences. The sample for this analysis contains 4563 individuals with complete information for the period of 10 years (balanced panel).<sup>2</sup> The monthly activity statuses are school (for those who went back to school after having left it once), VET, university (including technical college), employment (including military service and self-employment), NEET, and other (which is mostly the status ‘unknown’). Each individual has a 10-year-activity-status-sequence, which is 120 months. This gives a huge variation of possible individual sequences<sup>3</sup>, and the sequence concentration is quite low, that is 91% of all sequences in the sample of NEET youth are unique. Sequence analysis provides an algorithm that is able to compare all these different sequences and creates a similarity measure matrix that can be used as an input for classification methods such as cluster analysis in order to group sequences in a way that the within cluster similarity is maximized, whereas the between-cluster similarity is minimized. The result is an empirically derived, manageable number of ideal sequence types (or patterns), which reflect in our application ideal types of NEET patterns containing at least 1 month of NEET status.

After the exploration of the NEET patterns, I estimate a multinomial logistic regression model, where the patterns are taken as dependent variables and socio-economic characteristics and the cohort serve as independent variables.<sup>4</sup> This allows identifying the different probabilities of certain individual characteristics for experiencing a particular type of NEET pattern in contrast to those who don’t experience NEET. A special focus is on gender differences, and hence, interaction effects with gender are included here. Individuals in our sample are born in the years between 1961 and 1990. After the analysis of which individual characteristics increase or diminish the probability of experiencing a particular NEET pattern, I examine whether and how these factors also influence the cumulative length and the number of NEET episodes. Since all these dependent variables are on a metric scale level, straightforward OLS regression models are estimated here. This is done in order to find out whether there are different mechanisms in which socio-economic characteristics influence NEET patterns or the cumulative duration of NEET (length) or the number of NEET episodes.

The patterns that were distilled from the exploratory sequence analysis are then taken as independent variables in addition to the individual characteristics in order to investigate their impact on later labour market outcomes, namely occupational status and net income at the age of 30. For this purpose, OLS regression models are estimated. Here, we again check whether there are differences between the effects of NEET patterns or NEET length or NEET episodes on occupational status at the age of 30.

### **3.4.2 Measurements**

The start cohort 6 data of the NEPS provide a wide range of variables. We use time constant variables for gender, migration background, region, children, education, parental background, and birth cohort. Migration background

is measured by the fact whether someone is born in Germany or abroad. The region variable indicates whether an individual lives in East or West Germany. Because having children is a time-varying property, the variable is coded as a dummy indicating whether at least one child is born during the period of observation. Accordingly, educational level refers to the highest educational level within the observation period measured in three categories (low, intermediate, and high). The same categories are used when measuring parental (education) background. In order to assess changes across time, they are divided in six birth cohorts 1961–1965, 1966–1970, 1971–1975, 1976–1980, 1981–1985, and 1986–1990. The last cohort is only small, as individuals born after 1986 cannot be included in the sample, because the last available survey year is 2016. Because also age is time-varying, the age at start of the observation period is added to the regression models as control variable. The model applied for the assessment of NEET outcomes uses occupational status as dependent variable, which is operationalized by using the ISEI (cp. [Ganzeboom et al., 1992](#)), which classifies occupations based on income and education and ranges from 16 (unskilled farm worker) to 90 (judges).

### 3.5 Analyses and results

The results are presented as follows: first, a descriptive picture of the sample is drawn in order to see how the individuals who experienced NEET differ from those who did not. In addition, I estimate a logistic regression model of the probability of experiencing NEET on the independent variables in [Section 3.5.1](#). Second, the explorative analysis that uses sequence and cluster analysis in order to extract ideal typical transition types of those individuals who experience at least 1 month of NEET will be presented in [Section 3.5.2](#). Third, the results of the multinomial regression models are presented in [Section 3.5.3](#). Some further explorations, namely the analysis of predictors for NEET length and NEET episodes, are conducted in [Section 3.5.4](#) and finally, the results of the models for the consequences of NEET are shown in [Section 3.5.5](#).

#### 3.5.1 Description of NEET in Germany

The first description of the school-to-work transition sequences is provided for all individuals (those with and without NEET experience). [Table 3.1](#) shows the distribution of the three groups by dependent variables. The composition of the whole sample (last column) regarding standard demographic variables does not show remarkable deviations from the general population: there are slightly more women than men, the share of respondents who were born in a foreign country is 10.6%, which is around the same as in the German population. The same is true for people from the Eastern part of Germany. The variable child born is a dummy variable indicating whether during the 10-year observation period a child is born. This has been the

Table 3.1 Sample descriptives

	<i>NEET &gt;= 1 month</i>		<i>Never NEET</i>		<i>All individuals</i>	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
N	4563		4665		9228	
Age at start (years)	17.2		17.2		17.2	
Gender (females)	2619	57.4	2122	45.5	4741	51.4
Origin (foreign born)	599	13.1	376	8.1	975	10.6
Region (East)	881	19.3	863	18.5	1744	18.9
Child born	1694	37.1	1144	24.5	2838	30.8
Upper secondary degree (Abitur) at start	1463	32.1	1630	34.9	3093	33.5
Upper secondary degree (Abitur) at end	1848	40.5	2025	43.4	3873	42.0
Education: low	945	20.7	734	15.7	1679	18.2
Education: intermediate	1554	34.1	1646	35.3	3200	34.7
Education: high	2057	45.1	2276	48.8	4333	47.0
Education: missing	7	0.2	9	0.2	16	0.2
Father's education: low	588	12.9	480	10.3	1068	11.6
Father's education: intermediate	2944	64.5	3095	66.3	6039	65.4
Father's education: high	775	17.0	863	18.5	1638	17.8
Father's education: missing	256	5.6	227	4.9	483	5.2
Mother's education: low	1252	27.4	1189	25.5	2441	26.5
Mother's education: intermediate	2743	60.1	2912	62.4	5655	61.3
Mother's education: high	400	8.8	415	8.9	815	8.8
Mother's education: missing	168	3.7	149	3.2	317	3.4
Birth cohort 1961–1965	1180	25.9	1647	35.3	2827	30.6
Birth cohort 1966–1970	1055	23.1	1274	27.3	2329	25.2
Birth cohort 1971–1975	749	16.4	702	15.0	1451	15.7
Birth cohort 1976–1980	773	16.9	513	11.0	1286	13.9
Birth cohort 1981–1985	689	15.1	446	9.6	1135	12.3
Birth cohort 1986–1990	117	2.6	83	1.8	200	2.2

Source: NEPS Starting Cohort Adults, doi:[10.5157/NPS:SC6:3.0.1](https://doi.org/10.5157/NPS:SC6:3.0.1); own calculation.

case for 30.8% of all individuals in the sample. The variable upper secondary degree (Abitur) indicates whether individuals have had an upper secondary school degree (higher education entrance qualification) at the beginning of the 10-year period. When looking at the distribution of the characteristics in the other two groups ('NEET  $\geq 1$  month' and 'never NEET'), we find remarkable difference with respect to three variables: *gender*, *origin*, and *child born*. In the group of those who experienced NEET, we find clearly more women (57.4% compared to 45.5%), more people born abroad (13.1% compared to 8.1%), and more people with children (37.1% compared to 24.5%) as in the group who never experienced NEET. It can be assumed that people with these properties are found to be overrepresented in the NEET group also in the multivariate model.

Whereas *gender*, *origin*, and *region* are time-constant variables by nature, *childbirth*, and *school degree* are time-varying in principle.<sup>5</sup> Because sequence analysis treats longitudinal processes holistically, it was necessary to fix these variables. In the case of childbirth, this leads to some degree of endogeneity when calculating the probability of belonging to a NEET cluster for socio-economic characteristics, but so far there is no satisfying way to avoid this. However, it must be kept in mind when it comes to the interpretation of the results.

The numbers in Table 3.1 are representing only bivariate relationships, that is relationships which are not 'controlled' by relationships of the other variables. In order to assess the net effect of single variables, I estimated a logistic regression model of the probability for experiencing at least 1 month of NEET on the independent variables. The results of this model are presented in Figure 3.1 and the online supplement.

The graph shows the odds ratios (OR) as well as the average marginal effects (AMEs) of the model. There are three two-way-interaction effects among gender, child born, and origin included, which can only be shown in the OR, because AMEs cannot be calculated for interaction effects. The multivariate model mainly corroborates the findings from the bivariate descriptives. When looking at the AMEs first (hollow circles), we find strong and significant effects for gender, origin, and child born, i.e. women as well as people born abroad and people with children have a higher probability of experiencing NEET. On the other hand, holding an upper secondary degree (Abitur/FH) decreases the probability of experiencing NEET. The same is true for parental background (only father's education). Quite strong and significant effects in terms of increasing the probability of NEET we do find for younger cohorts. This effect seems to be large, but it has to be kept in mind that we have retrospective data here, which means that there might be memory bias included, i.e. that the further episodes are back in the past, the worse they are remembered (Dex, 1995, Manzoni et al., 2010).

The ORs (orange triangles) report the model with the interaction effects included. We see that most of the coefficients have the same direction as in

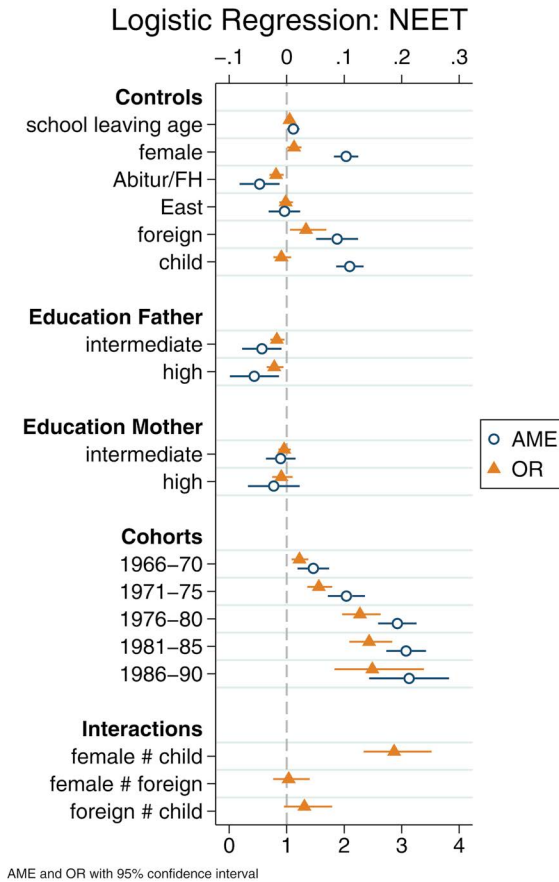


Figure 3.1 Logistic regression of the probability of experiencing at least 1 month of NEET.

the first model, but the strength and the significance are smaller: the pure gender (representing women without children) and the pure child effect (representing men with children) disappear, whereas the interaction of the two becomes outstandingly strong. The other two interaction effects (*gender\*origin* and *origin\*child*) are insignificant. The pure effect of origin as well as the effects of education and cohort remain significant.

Regarding the probability of experiencing NEET, we can summarize that first, women with children have a very high (i.e. three times higher) probability of experiencing NEET, whereas men with children don't show higher probabilities. This corroborates hypothesis (H4). Second, I find that people born abroad have a higher probability of NEET (H3d), which is only weakly related to the fact of having children. Better education – measured by holding an upper secondary degree – has a negative effect on

the probability of experiencing NEET (H3a). Both findings confirm my expectations. And third, younger cohorts clearly show a higher probability of NEET, but we need to be cautious here because of the memory bias effect.

Because I estimated the probability of experiencing at least 1 month of NEET in the logistic regression model, we know about the effects on the *occurrence* of any NEET, but we don't know whether the duration (how long?) or the pattern of NEET (how often, how long, and where in the trajectory) is affected by socio-economic properties.

### 3.5.2 Sequence analysis: Exploring patterns of NEET in Germany

The objective of the exploratory analysis of NEET types is to detect possible structures in NEET incidence during the labour market entry process. The optimal matching algorithm and cluster analysis are able to generate a classification of ideal types of sequences. Using those individuals who experience at least 1 month of NEET during the 10-year-observation period produces quite distinct trajectory types as shown in [Figures 3.2 and 3.3](#). The first type (*discontinuity*) represents individual trajectories of school leavers who spend a quite long time in vocational education or training (or vocational preparation), but this training is prolonged, postponed, or interrupted by NEET or employment or even school periods. Seven hundred and eighty-five individuals, i.e. 17.2%, of our sample follow trajectories of

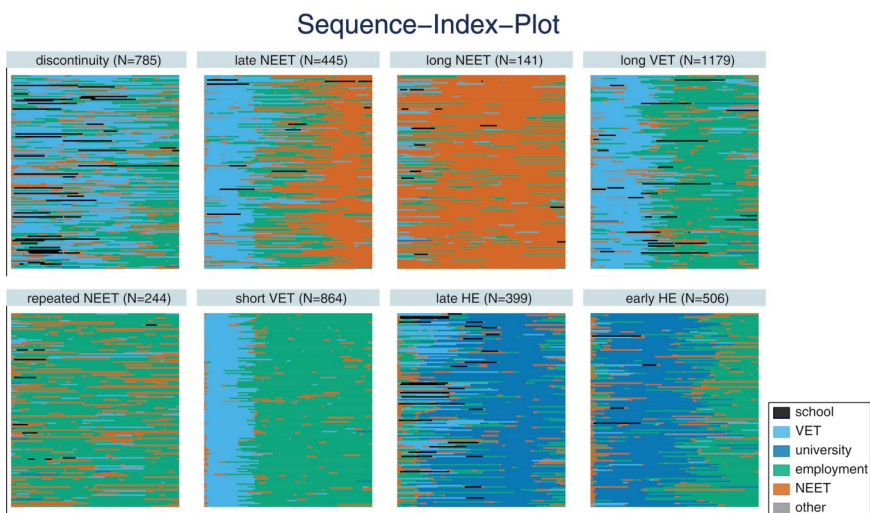


Figure 3.2 Sequence-index-plot of the clusters (trajectory types).

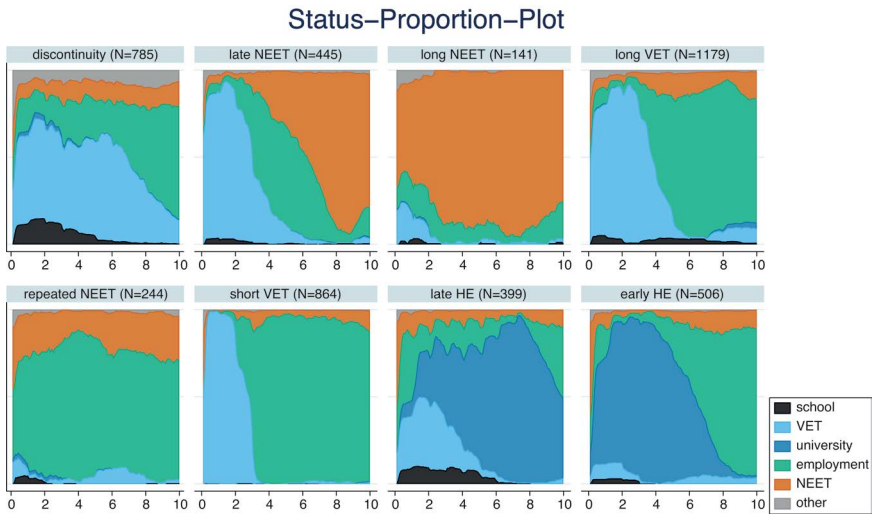


Figure 3.3 Status proportion plot of the clusters (trajectory types).

this type (Table 3.2). Months in VET constitute 45.2% of all statuses, 29.6% are in employment. At the end of the 10-year-period, 65.6% of the individuals are in employment, but the overall number of months spent in NEET is not high (10.6%). The trajectories of this cluster are somewhat slowed down or cumbersome, because the VET duration is much longer than usual in the German apprenticeship system.

The second cluster (*late NEET*) is composed of individuals who start with VET for 2–3 years, have a short employment episode, which is followed by a rather long NEET period that in most of the cases last until the end of the observation period. Around 10% of the sample have such kind of trajectories, and 40% of the time is spent in NEET, 30% in VET and 27.3% in employment. Ten years after leaving school, 75.7% of the individuals are still in NEET and only 17.8% are integrated into employment. This type is a problematic labour market trajectory, because it represents an exit from employment and education.

Cluster 3 (*long NEET*) shows the longest NEET periods: here, most individuals spend more or less the whole observation period in NEET; 81% of all statuses are NEET statuses, only 12.2% are employment statuses. One can assume that these trajectories will turn out to have the most negative effects on later employment careers. However, this cluster is the smallest accounting for only 141 individuals or 3.1% of the sample population. At the end of the observation period, 22% of individuals are integrated into employment, whereas 75.2% remain in the NEET status. It has a low volatility and the lowest value for the integration indicator (Table 3.2). This cluster undoubtedly shows a problematic trajectory.

Table 3.2 Distribution of covariates across clusters

Cluster	Discontinuity		Late NEET		Long NEET		Long VET		Repeated NEET		Short VET		Late HE		Early HE	
N	785	17.2%	445	9.8%	141	3.1%	1,179	25.8%	244	5.3%	864	18.9%	399	8.7%	506	11.1%
Age at start (years)	17		17		17		17		17		17		18		19	
Gender (females)	424	54.0%	364	81.8%	112	79.4%	615	52.2%	140	57.4%	504	58.3%	154	38.6%	306	60.5%
Origin (foreign born)	116	14.8%	52	11.7%	68	48.2%	87	7.4%	106	43.4%	51	5.9%	39	9.8%	80	15.8%
Region (East)	153	19.5%	104	23.4%	12	8.5%	216	18.3%	32	13.1%	199	23.0%	79	19.8%	86	17.0%
Child born	234	29.8%	333	74.8%	104	73.8%	402	34.1%	135	55.3%	304	35.2%	50	12.5%	132	26.1%
Upper sec. degree (Abitur) at start	270	34.4%	67	15.1%	17	12.1%	205	17.4%	53	21.7%	131	15.2%	268	67.2%	452	89.3%
Father's education: low	94	12.0%	60	13.5%	53	37.6%	139	11.8%	66	27.0%	113	13.1%	25	6.3%	38	7.5%
Father's education: intermediate	499	63.6%	299	67.2%	63	44.7%	852	72.3%	137	56.1%	644	74.5%	210	52.6%	240	47.4%
Father's education: high	153	19.5%	43	9.7%	6	4.3%	131	11.1%	19	7.8%	54	6.3%	152	38.1%	217	42.9%
Father's education: missing	39	5.0%	43	9.7%	19	13.5%	57	4.8%	22	9.0%	53	6.1%	12	3.0%	11	2.2%
Mother's education: low	185	23.6%	137	30.8%	83	58.9%	313	26.5%	127	52.0%	258	29.9%	70	17.5%	79	15.6%
Mother's education: intermediate	489	62.3%	265	59.6%	42	29.8%	764	64.8%	94	38.5%	548	63.4%	236	59.1%	305	60.3%
Mother's education: high	84	10.7%	13	2.9%	1	0.7%	61	5.2%	11	4.5%	29	3.4%	88	22.1%	113	22.3%
Mother's education: missing	27	3.4%	30	6.7%	15	10.6%	41	3.5%	12	4.9%	29	3.4%	5	1.3%	9	1.8%
Birth cohort 1961–1965	186	23.7%	100	22.5%	26	18.4%	313	26.5%	75	30.7%	315	36.5%	64	16.0%	101	20.0%
Birth cohort 1966–1970	180	22.9%	110	24.7%	23	16.3%	257	21.8%	70	28.7%	238	27.5%	85	21.3%	92	18.2%
Birth cohort 1971–1975	131	16.7%	88	19.8%	31	22.0%	213	18.1%	34	13.9%	119	13.8%	47	11.8%	86	17.0%
Birth cohort 1976–1980	138	17.6%	94	21.1%	32	22.7%	198	16.8%	38	15.6%	110	12.7%	79	19.8%	84	16.6%
Birth cohort 1981–1985	127	16.2%	48	10.8%	28	19.9%	170	14.4%	26	10.7%	78	9.0%	102	25.6%	110	21.7%
Birth cohort 1986–1990	23	2.9%	5	1.1%	1	0.7%	28	2.4%	1	0.4%	4	0.5%	22	5.5%	33	6.5%
Volatility indicator	0.29		0.24		0.13		0.27		0.18		0.23		0.30		0.25	
Integration indicator	0.34		0.28		0.11		0.61		0.72		0.80		0.16		0.43	
NEET length (months)	12.77		47.93		97.16		10.95		25.88		5.84		9.38		9.58	
NEET episodes	1.65		1.79		1.71		1.60		1.62		1.36		1.69		1.59	



Cluster 4 is the largest (1179 individuals or 25.8% of the sample) and represents one of the ‘classical’ labour market entry patterns for Germany: after apprenticeship of 3–4 years, these school leavers are quite well integrated in employment (nearly 71.2% at the end compared to 16% in NEET). The overall amount of NEET is quite low (9.1%) and does not show a tendency across time for these trajectories. Since the apprenticeship period is a bit longer than normal, this cluster is labelled *long VET*.

The fifth cluster (*repeated NEET*) is mostly composed of employment and NEET (92.3%), but the episodes are often interrupted and there is no core area, where NEET appears. The cluster belongs to the smaller ones (5.3% of the sample) and at the end of the observation period, 67.6% of the individuals are employed, whereas 25.8% are in NEET. This cluster has a large amount of NEET interruptions, but a quite high integration potential. It is regarded as a NEET cluster, but problematic only with some reservations. It is assessed later whether this type of trajectory has negative effects on income or occupational status.

Cluster 6 (*short VET*) is quite similar to cluster 4, with a difference of the duration of VET episodes which are shorter here. There is a lower amount of NEET (4.9%) and a higher share of employment (69%). The integration indicator has its highest value for this cluster (Table 3.2), and therefore, 85.5% of individuals in this cluster are employed at the end of the observation period. Together with this similar cluster 4, individuals with VET and subsequent employment account for 44.8% of the sample.

Clusters 7 (*late HE*) and 8 (*early HE*) contain those trajectories, including university periods. Individuals in cluster 7 in most cases start with a VET period for around 3 years before switching to university, whereas those in cluster 8 immediately start with university. Both clusters account for 19.8% of the sample, only around 10.3% of the individuals are in NEET at the end of the 10-years-period, while 41.1% (cluster 7) and 84.2% (cluster 8) are in employment. Additionally, in cluster 7 there are 45.6% still in university, which is due to the fact that members of this cluster started their university period later. Both clusters contain NEET periods, which are mostly found at transition points, i.e. between VET and employment or university and employment.

The classification of trajectory types is based only on the monthly activity statuses, i.e. other socio-economic variables were not considered for this process. Therefore, if there are relationships between trajectory types and socio-economic variables, we can conclude that structuring processes are at work, which lead to over- or underrepresentation of particular groups in certain clusters. Table 3.2 provides a descriptive overview about potential relationships that are tested in a multivariate model in the following section. The highest share of women we find in cluster 2 (*late NEET*) and 3 (*long NEET*), both of which show the highest share of NEET months. In cluster 7 (*late HE*), there is the lowest share of women. Individuals with migrant background are overrepresented in cluster 3 (*long NEET*) and cluster 5 (*repeated*

NEET). In the VET, clusters 4 (*long VET*) and 6 (*short VET*) people born outside Germany are underrepresented. Regional differences are quite low, maybe with the exception of cluster 3 (*long NEET*), where we find a very low number of individuals from East Germany. For the variable *child born*, we find overrepresentation in all three NEET clusters – very similar to *gender* – that is clusters 2 (*late NEET*), 3 (*long NEET*), and 5 (*repeated NEET*).

A very high share of school leavers with an upper secondary degree (Abitur) we unsurprisingly find in the two university clusters 7 (*late HE*) and 8 (*early HE*), because the Abitur is the necessary degree for university entrance. In the VET clusters and in cluster 3 (*long NEET*), upper secondary graduates are underrepresented. Regarding the parental background, individuals with lower educated parents are slightly overrepresented in the NEET clusters 3 (*long NEET*) and 5 (*repeated NEET*). School leavers of the older cohorts are more frequently found in the VET clusters 4 and 6 and in cluster 5 (*repeated NEET*). Younger cohorts are overrepresented in the HE clusters 7 and 8. In the next section, I will check whether these relations remain stable in a multivariate approach.

### 3.5.3 Multinomial regression: Explaining German NEET patterns

The optimal matching algorithm together with the Ward's clustering procedure created a classification of distinct patterns of labour market entry trajectories. This classification is only based on the trajectories themselves, so that as a second step it is relevant to analyse whether particular socio-economic characteristics are overrepresented in these cluster. I will answer this question by estimating a multinomial logistic regression model, in which the (time-constant) socio-economic characteristics of school leavers are the independent variables and the membership probabilities in the clusters are the dependent variables. As reference category for the NEET clusters a group (*no NEET*) is created that contains all school leavers without any NEET month during the 10-year observation period.<sup>6</sup> For each independent variable, the AMEs are presented. Because the multinomial regression table is quite large, it is provided in the online supplement. The independent variables are gender, higher education entrance certificate (Abitur), birth cohort, region (East/West), origin (native/foreign born), social origin (mother's/father's educational level), and childbirth. In the descriptive part, the impression emerged that women with children are particularly affected by becoming NEET. Therefore, I included an interaction effect between gender and childbirth. Additionally, interaction effects of gender and origin and origin and childbirth are tested.

Figure 3.4 displays the marginal effects of gender on the probability of following a specific labour market entry pattern. Women more probably enter the labour market via the *discontinuity* trajectory, but this effect is marginally significant. For two of the clusters involving remarkable NEET periods (*late NEET*, *long NEET*), the marginal effects for females are positive and

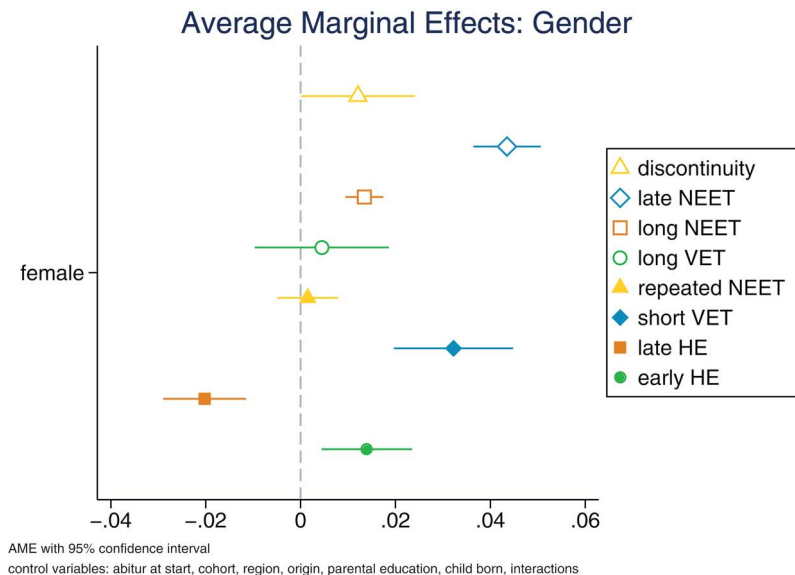


Figure 3.4 Average marginal effects for gender.

significant. For the cluster *repeated NEET*, we do not find a significant effect. The *short VET* is more probable for females and so is the *early HE*, but the *late HE* that combines VET with HE is less probable entry pattern for women. These effects are observable although the interaction effect between gender and childbirth is controlled for.

The finding of the descriptive analysis that it is particularly the group of young mothers which is more frequently in NEET clusters, which include long NEET-periods, is confirmed by looking at the predictive margins of the interaction effect (Figure 3.5): for women without children, there are positive effects for the *short VET* as well as for the *early HE* pathway. The *late HE* trajectory shows a lower probability for women without children. Women with children have a higher probability for the *late NEET* pathway and also – to a lower extent – for the *long NEET* pathway. Also, *long VET*, *short VET*, and *repeated NEET* are more frequently the trajectory for young mothers. The gender effect is in fact a mother effect.

The assessment of the education effect is somewhat difficult in this regression model, because education is both time-varying and an integral part of the trajectories themselves. Because of the holistic notion of sequence analysis, the inclusion of (time-varying) information from parallel developments leads to endogeneity. However, in order to measure the effect of education anyway, I included a dummy variable indicating whether an individual has got an upper secondary school certificate (Abitur) already at the beginning of the trajectory. This certificate is the higher education entrance qualification and requirement. Hence, this variable does not

### Predictive Margins (MER): Interaction Females\*Child Birth

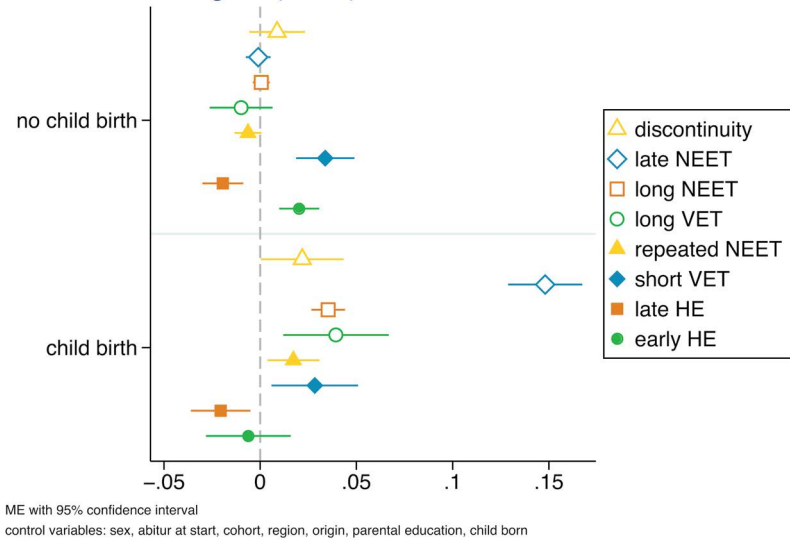


Figure 3.5 Marginal effects of sex at representative values (MER) for child born<sup>7</sup>

measure educational progress within the trajectory, i.e. those young individuals who decide to go back to school in order to get the upper secondary certificate are not covered here. The effect of upper secondary certificates (Figure 3.6) does not provide surprising insights: the strongest effects are a lower probability for the classical labour market entrances (*long VET* and *short VET*) and a higher probability for the university patterns (*late HE* and *early HE*). This fits well to the traditional logic of the German education system, where university education and apprenticeships are perceived as hierarchical order. For the problematic trajectories involving long NEET periods (*late NEET* and *long NEET*), school leavers with upper secondary education certificate show significant lower probabilities.

The richness of the NEPS starting cohort 6 data allows comparing developments over time by including different birth cohorts (Figure 3.7).<sup>8</sup> The most striking effect can be found when looking at the probabilities for the *no-NEET*-group: older cohorts have a higher probability not to experience any NEET at all during the 10-year period after leaving school.<sup>9</sup> This means that across time, school leavers increasingly are involved in NEET. For the two university clusters (*late HE* and *early HE*), the probabilities increase for the younger cohorts reflecting educational expansion. Younger cohorts are not more frequently in the three problematic NEET clusters, namely *late NEET*, *long NEET*, or *repeated NEET*. In a nutshell, we find increasing incidence of NEET for school leavers of younger cohorts, but no increasing incidence of explicitly problematic NEET trajectories. The regional effect – measured with an East/West-dummy variable – on the probabilities for

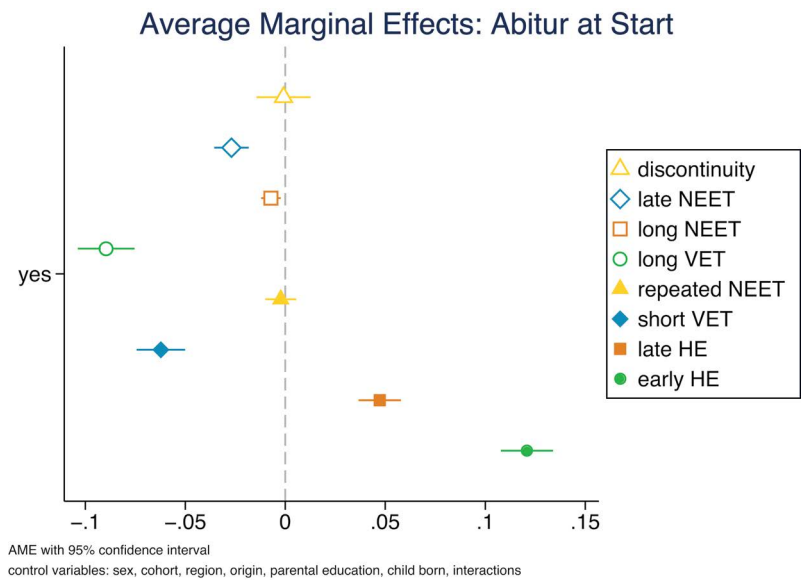


Figure 3.6 Average marginal effects for upper secondary degree (Abitur) at start.

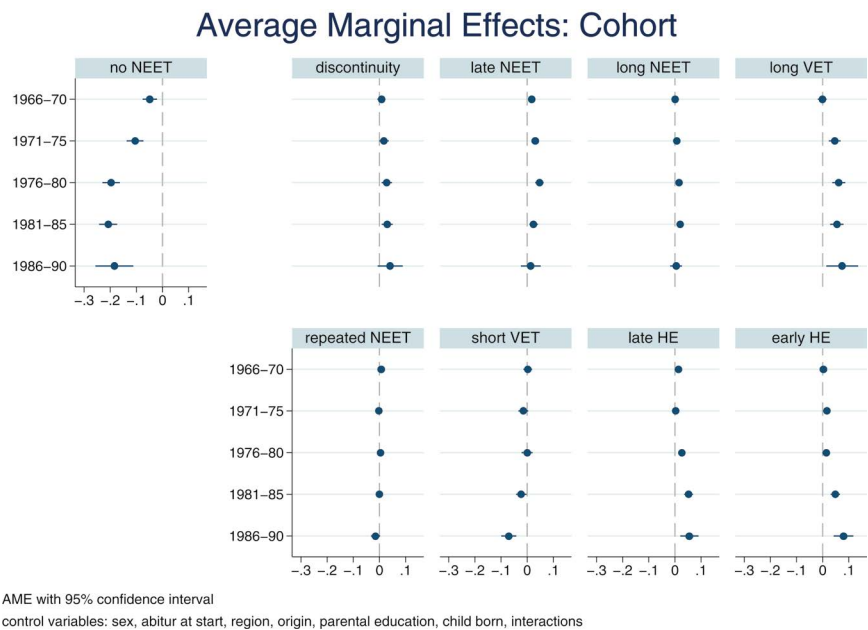


Figure 3.7 Average marginal effects for birth cohort.

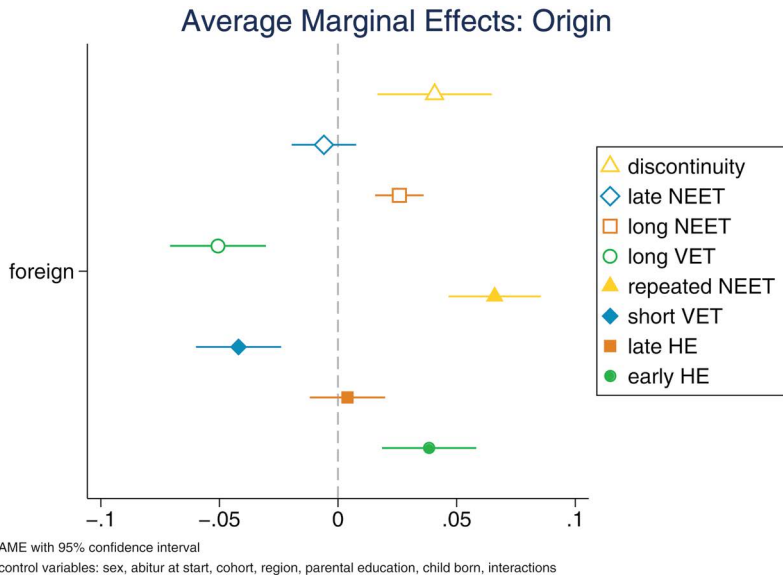


Figure 3.8 Average marginal effects for origin (born abroad).

a certain trajectory is not observable. The effect sizes are very tiny and in the full models slightly significant. The origin effect – measured as place of birth (Germany vs. abroad) with a dummy variable – shows some clear effects (Figure 3.8): first, their probability is higher for being in the *discontinuity* trajectory, which represents instable, but not necessarily unsuccessful trajectories. Second, the probability of foreign-born school leavers for doing the classical trajectories (*long VET*, *short VET*) is significantly lower than for natives. Third, school leavers born abroad have a higher probability to have a problematic NEET trajectory pattern (*long NEET*, *repeated NEET*). Foreign-born school leavers are therefore disadvantaged ones in a double sense, because they are more frequently in problematic situations (*long NEET*) and if they are successful in the end, they've reached their labour market integration via a quite unstable trajectory (*discontinuity* or *repeated NEET*) and not by classical institutionalized pathways (*long VET*, *short VET*). Finally, they have a higher chance for the university pathway (*early HE*), but this is most probably a selective group of students who come to Germany in order to study.

The social origin of the school leavers is measured by educational level of both parents. The coefficients of mother's education and father's education are pretty similar with regard to effect direction and do not show surprising results for the different clusters: school leavers with higher educated parents have a lower probability for having a NEET pathway (*long NEET*, *repeated NEET*); they also have a significantly lower probability

for the classical cluster (*short VET*). Higher parental education influences positively the probability for the two university clusters (*late HE*, *early HE*). As mentioned above, I introduced three interaction effects into the regression model, namely the interaction between gender and childbirth, the interaction between sex and origin, and the interaction between origin and childbirth. This was in order to test if either foreign-born males or females or foreign-born fathers or mothers drive the effects of gender and childbirth, respectively. Whereas the interaction between gender and childbirth shows very strong and significant positive effects for the clusters involving longer NEET periods, the other two interactions remain weak and/or insignificant in most of the cases.

To summarize, I find strong support for a gender effect on the pattern of the trajectory between school and the labour market, but this effect is moderated by childbirth. Young mothers show a much higher probability to have longer NEET periods in their trajectories. In the gendered German welfare system, the NEET problem is a problem of young mothers because of family formation. Additionally, the NEET situation for those women is characterized by one single labour market exit and a long-term NEET period as in the *late NEET* and *long NEET* pathway. Hypothesis H4 is therefore clearly confirmed. Apart from that, education and social origin show effects as expected from theory: school leavers with upper secondary degree (higher education entrance certificate) and school leavers with higher educated parents have a lower probability for the trajectories with long and frequent NEET periods, but a higher probability for the two university types. Migrants (born abroad) also have a higher probability to end up in the problematic NEET pathways (*long NEET*, *repeated NEET*) and a lower probability for VET pathways (*long VET*, *short VET*). Both findings confirm the hypotheses H3a, H3c, and H3d, i.e. that stratification of the German education system disadvantaged marginalized groups. We also find changes across time, namely an increase in all trajectories containing NEET over time. The traditional entry pattern (*short VET*) becomes less important, whereas educational expansion increases university pathways.

### **3.5.4 Further explorations of socio-economic context of NEET characteristics**

The explorative analysis of NEET patterns during the school-to-work transition period created a typology of patterns, which is qualitative in nature. The value added of this approach has to be proven against quantifying indicators, which provide simplified and aggregated information and can be used as independent variables as well, such as cumulative number of NEET months (NEET length) or the number of NEET episodes within the 10-year observation period. These indicators provide aggregated information about the duration and the occurrence of NEET within this period while disregarding information about the concrete pattern.

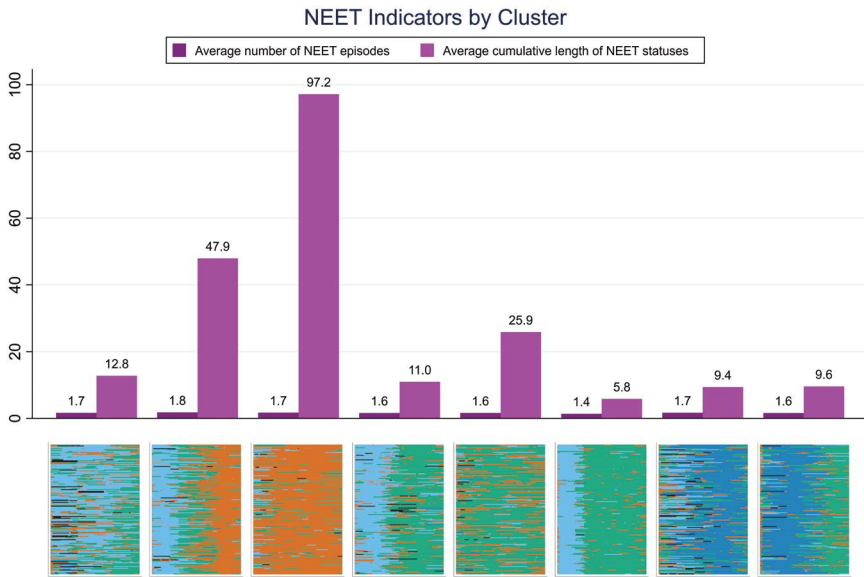


Figure 3.9 NEET length and NEET episodes for clusters.

Figure 3.9 shows two NEET indicators for the eight NEET trajectories we've extracted from the data. The small and dark bars show the average number of NEET episodes of all individuals with a certain trajectory type. Many episodes of NEET can be considered a very negative signal that deteriorates later employment chances. The overall distribution of NEET episodes reveals that 95% of the persons with at least 1 month of NEET have up to three NEET episodes during the 10-year-observation period. Therefore, the variation of this indicator is quite small: it ranges from 1.4 episodes (cluster 6, *short VET*) to 1.8 (cluster 2, *late NEET*). It seems that this indicator doesn't differentiate the clusters sufficiently enough, because it ignores the overall duration of the NEET status.

The second indicator is the cumulative number of months spent in NEET (NEET length). This indicator differentiates the clusters much better, because it shows high values for those trajectories, which have long NEET periods (cluster 2 and 3, *late NEET* and *long NEET*). However, this indicator is not able to detect differences in NEET patterns, because clusters 7 and 8 (*late HE* and *early HE*) have the same value but show a different location of the NEET episodes within the 10-year-period. It might be the case that the outcomes of both patterns differ from each other. The inclusion of NEET length as independent variable in a regression model that measures the effect of NEET on later outcomes will most probably have less statistical power. The same is true for the first indicator (NEET episodes), because we find similar values here for different clusters. Both indicators also have a different theoretical



meaning: while the incidence of NEET reflected by episodes fits better to the signalling theory, because a negative signal is induced by becoming NEET, the NEET duration can be captured by human capital approaches, because they usually refer to the devaluation of educational investments by long periods of unemployment or inactivity.

From this descriptive look on the quantitative indicators, we may test whether in regression models we will find results somewhat different from those in the multinomial models, where we had the patterns as dependent variables. Since the indicators have a metric scale level, I will use OLS regression models here.

Figure 3.10 presents the coefficients of the full model with NEET length as dependent variable.<sup>10</sup> All independent socio-economic variables explain 20% of NEET length's variation. In addition to the independent variables from the multinomial regression model of NEET patterns I include interaction effects of gender and cohort in this model in order to find out if cohort moderates the gender effect. Since the interaction between origin and gender as well as those between origin and childbirth were not significant at all, they are not regarded here anymore. The strongest influence on the cumulative NEET length can be found for origin and for the interaction between gender and childbirth: people who are born abroad have on average 8.6 months more NEET during the 10-year-period after leaving school than people born in Germany. Women with children have even 15.8 months more NEET in that period. Again, it is remarkable that the effect of the gender variable and of the childbirth variable disappear completely as soon as the interaction between them is included in the model (see online supplement). This is again a strong indication that the exit from the labour market (or from further education spells) due to reproduction is mainly a women's subject in Germany. An upper secondary degree when leaving school leads to less NEET months in the 10-year-period. The region (East or West Germany) does not have a significant effect on the length of NEET after leaving school.

The social origin of school leavers is measured by the educational level of the father and the mother. Both are very similar with respect to effect direction and size, that is school leavers with higher educated parents have less NEET in the observation period after leaving school than those with lower educated parents: on average, school leavers with high educated parents have 3–4 months in NEET less during the 10 years after leaving school. This is not very much of a difference, but the effect is highly significant across all model specifications. When looking at the development over time (cohort variables), we find a quite clear trend: school leavers from younger birth cohorts have more NEET periods than those from older cohorts.<sup>11</sup> I assume that this effect is a composition of both increasing flexibilization of labour markets and the transition system as well as recall bias, which means that short unemployment episodes are less frequently remembered the larger the temporal distance is. Those individuals, who

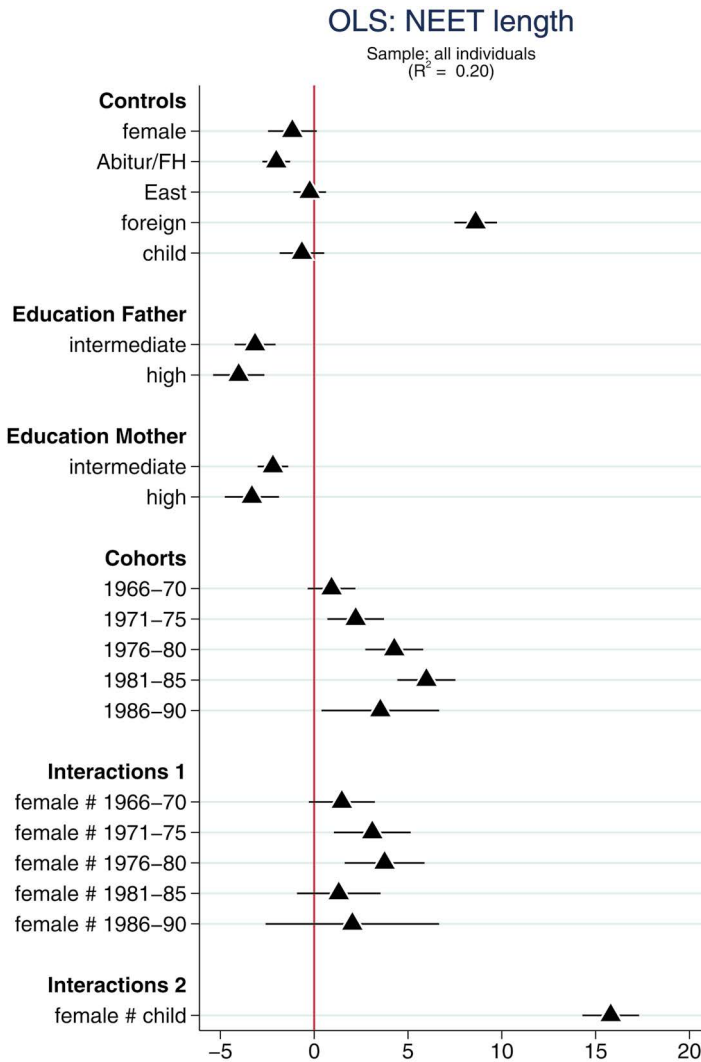


Figure 3.10 OLS model for cumulative NEET length.

were interviewed later in their lives (older cohorts), will underreport their early unemployment episodes, which partly explains the differences in the cohort coefficients. I introduced the interactions between gender and cohort in order to check whether labour market entry trajectories of women have changed across time. They show a somewhat unclear picture: until the fourth birth cohort (born between 1976 and 1980) the NEET length increases by 3.8 months compared to the oldest cohort. However, the two youngest cohorts show neither significant nor similar effects. However, the point estimates are

positive in comparison to the oldest cohort and might reflect the increasing integration of women in the labour market, but, on the other hand, one may argue that inactive family-caring women of the older cohorts are also covered by the NEET concept.

The OLS model results for NEET length comply well with those from the multinomial logit model: In the latter model, also origin and the interaction between gender and childbirth have got a strong effect on those clusters which involve long NEET periods (*late NEET*, *long NEET*, *repeated NEET*). In addition, we found a higher probability to have these trajectories for school leavers in the younger cohorts. In both models, higher social origin (measured as parents' educational level) leads to less NEET in the period or a lower probability for long-NEET-clusters respectively. Though the multinomial model with transition patterns as dependent variables provides a more detailed picture by considering the concrete pattern of the trajectory.

In addition to the duration of NEET, we also have a look on the incidence, which is measured by the number of NEET episodes here. [Figure 3.11](#) shows the results of the OLS model regressing number of NEET episodes on the same set of independent variables as in the model before. First, the explanatory power of the model is quite weak: only 7% of the dependent variable's variation can be explained by the variation in the independent variables. The confidence intervals are also larger than in the model before.

Among the control variables, only upper secondary certificate and origin are significant: While those holding an Abitur have on average 0.1 NEET episodes less than those without, school leavers born abroad have 0.1 episodes more. The point estimates of the parents' educational level are weaker but having the same effect direction than for the NEET length. However, they are hardly significant. The cohort variable shows the same pattern as for NEET length, whereas the interactions between gender and cohort are not significant. The interaction between gender and childbirth also shows a strong and significant effect, i.e. women with children have on average 0.4 more NEET episodes than men or women without children. Comparing the results to those from the multinomial model and the first OLS model, one sees more or less the same effects, but the explanatory power of the model examining the number of NEET episodes is lower and the confidence intervals are larger. These results suggest that the trajectory patterns and the cumulative number of months in NEET (NEET length) are most suitable for the analysis of conditions for becoming NEET. The pattern examination by sequence analysis reveals a qualitative dimension of the trajectories and considers the location of NEET episodes as well as the distribution across the observation period. The quantitative dimension is easier to measure and to model, but less informative. All models revealed two major socio-economic groups which are affected by long NEET episodes and therefore, risky school-to-work transitions: migrants and young mothers. Policies in Germany, which aim at reducing the risk becoming NEET should mainly target these two groups. So far, we automatically assumed that becoming

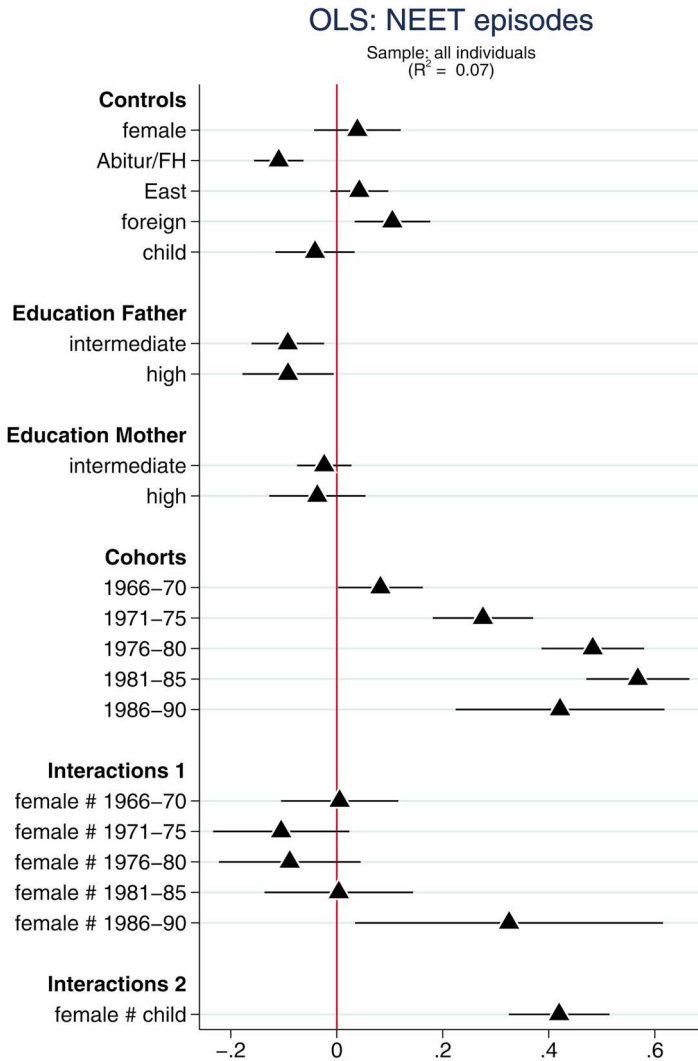


Figure 3.11 OLS model for NEET episodes.

NEET has negative consequences for the later employment career or labour market integration. However, in the next section, I will examine whether and if yes how different NEET patterns affect later outcomes.

### 3.5.5 Predictive analysis: Individual consequences of NEET

Being in NEET during the school-to-work transition interrupts career paths by a period where individuals neither gain work experience nor increase their educational level. Thus, it can be assumed that in their later employment

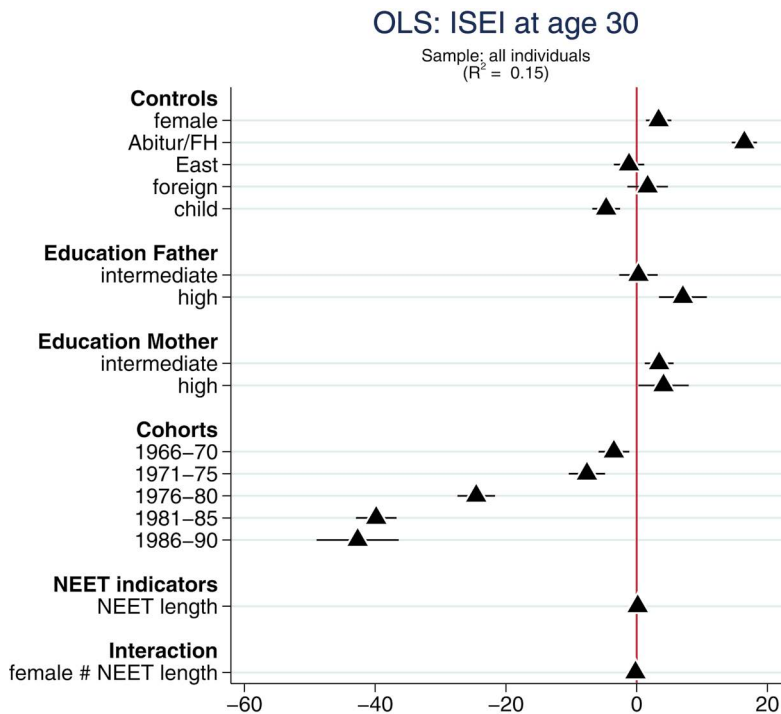


Figure 3.12 OLS regression model of ISEI at the age of 30 on NEET length.

career, those young people who have had a longer NEET period after school will face disadvantages with respect to their occupational status. In this section, I will present the results of a regression model of occupational status at the age of 30 on the socio-economic variables from the previous models. I use the cluster membership from the classificatory analysis and – as an alternative – NEET length as additional independent variables in order to find out whether and how particular trajectory patterns or NEET duration influence this outcome. In order to specify the gender effect, I interact the trajectory types with gender.

Figure 3.12 shows the results of the model for the occupational status at the age of 30 using the NEET length as predictor variables. All variables included in the model explain 15% of the variance of the dependent variable. We find that women surprisingly have a lightly higher occupational status (3.3 points) than men. As I also controlled for childbirth and the interaction of the trajectory type with gender, this coefficient reflects only women without longer NEET episodes. People with an upper secondary degree (Abitur/FH) have 16 points more on the ISEI scale, which is a quite remarkable difference, but also not too surprising, because the Abitur entitles for studying at university. Having a child leads for women and men

to a reduction of 4.7 points on the ISEI scale of occupational status. Better educated parents contribute to a higher occupational status of their children, but only to a small amount. Strong effects can be observed for the birth cohort: under control of all the other variables remarkable effect sizes can be observed here.

The youngest two cohorts have an occupational status of 40 scale points less than the oldest birth cohort. These effects have a couple of reasons, e.g. the educational expansion. Because educational careers become more prolonged, gaining higher occupational statuses takes more time beyond the age of 30 (cp Brzinsky-Fay and Solga, 2016). Younger cohorts may not have reached the same status as older have done. Additionally, the higher number of graduates from higher educational tracks may lead to more competition, and if the number of higher status jobs is not increasing in the same way, processes of overeducation may be induced. However, the fact that despite equal investment in education young people receive lower returns seems to be evident. The NEET length only has a small influence on the occupational status at the age of 30. Interestingly, the pure effect of NEET length (representing NEET length for males) is positive, where the effect of NEET length for women (the interaction) is negative. That means that women suffer from NEET, whereas men benefit from it.

Figure 3.13 shows the same OLS model but using the cluster variables from the sequence analysis instead NEET length. The coefficients of the socio-economic background variables are nearly the same regarding both strength and significance. Including the patterns of NEET provides a more differentiated picture. Since the interactions reflect women in the respective clusters, the preceding effects of the cluster variables refer only to males. Individuals who enter the labour market via the university clusters have a higher occupational status at the age of 30. Given that in these pathway types (*late HE* and *early HE*), NEET periods are also included and that we control for educational degree leads to the interpretation that higher educated people do not suffer from NEET periods. Interestingly, individuals who have gone through the *discontinuity* pathway also have a higher occupational status at the age of 30. The reason here might be that they were able to adjust their qualifications more often than people who continuously stay with the same job. The positive effect on occupational status could therefore be explained by search processes, which lead to a better matching in the long term. However, this effect is significant only on the 5%-level, and so is the negative effect of *long VET* pathway. From the interaction effects between gender and pathway, only one is significant also on the 5%-level: women with a *late NEET* pathway have 14.4 point lower occupational status. This clearly shows that exiting from the labour market in Germany is a quite high risk regarding later employment outcomes.

Comparing these two models, it is obvious that the integration of the pathways indeed provides a more differentiated picture than only considering the cumulative NEET length. The explained variance is not increased,

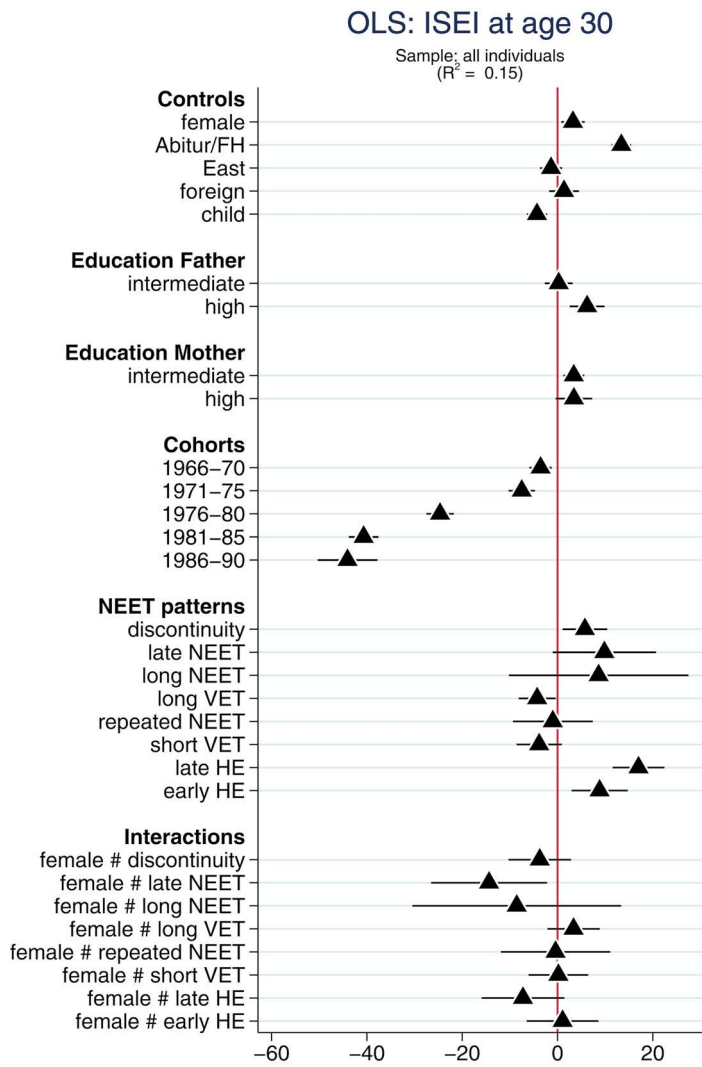


Figure 3.13 OLS regression model of ISEI at the age of 30 on trajectory types.

but the amount of information about the trajectories' effects is larger. Apart from that, I suppose that the effect of the NEET length is not linear.

### 3.6 Conclusion

In this chapter, I tried to explore the *occurrence*, the *duration*, and the *pattern* of NEET among school leavers in the school-to-work transition period in Germany and assess the consequences of NEET on the later employment career. Regarding the *occurrence* of NEET, I found that approximately 50%

of the individuals of the sample population have at least 1 month of NEET within 10 years after leaving school, which is relatively small proportion compared to other countries. Women with children have very high probability or risk to experience NEET within the first 10 years after leaving school. This is due to the traditional male-breadwinner model that is still part of the German welfare regime. In addition, we find significant effects for migrants and low-educated ones, who also had higher risks for experiencing NEET in this period. This confirmed the hypothesis that imposed that the stratification of the German general and vocation education system has negative consequences for disadvantaged groups. Additionally, younger cohorts also show a higher probability for experiencing NEET. The institutions of the education system, the labour market, and the transition system shape the NEET among youths as strongly as expected.

The analysis of the *patterns* of NEET in the period under observation reveals eight distinct NEET patterns, from which three can be seen as problematic: an exit pattern (*late NEET*), where people leave VET or employment and stay for a long time in NEET; a dropout pattern (*long NEET*), where school leavers not even start a labour market integration process; and a back-and-forth pattern (*discontinuity*), which comprises many changes between different activity statuses, including NEET. The size of the different pathway types shows the strong structuration of the German education and transition system, because 'classical' trajectories (*long VET*, *short VET*) account for 50% of the NEET trajectories. The multivariate analysis of the NEET patterns confirms the findings of the NEET occurrence but presents a more differentiated picture.

The analysis of the *duration* of NEET estimated the influence of socio-economic variables on the NEET length in comparison with the number of NEET episodes. The results from the analysis of the occurrence and the patterns could be confirmed here. It could be shown that the indicator 'number of NEET episodes' is not as appropriate as the patterns and the NEET length. The analysis of the consequences of NEET even showed that the consideration of NEET patterns allows a more differentiated analysis than only using the cumulative NEET length. With respect to the consequences of NEET, I examined the effect of NEET on the occupational status at the age of 30. Here, I found a very strong cohort effect indicating an increasing negative effect on occupational status across time. Younger generations are not only more affected by NEET but also have to invest more in education in order to gain the same occupational status than young people in the past.

NEET in Germany is female and strongly connected to family formation. While policy recommendations in international assessments of NEET are often oriented towards problematic groups such as school dropouts or young people with multiple social or psychological problems, the main target group for policy interventions in Germany is young mothers. The same is true for young people born abroad, which face difficulties regarding the integration



into the VET system. While the latter group clearly is in the focus of policymakers, the first group (young mothers) is not. Given the analyses above, it should be clear that young mothers should be in the centre of policy interventions that aim to reduce NEET in Germany.

## Acknowledgement

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## Notes

1. Besides this tight definition used here, there is a wide definition of a transition system that includes the institutional framework, i.e. the education and employment system (cp. Raffe 2008, 2014).
2. For the first description, also individuals without any NEET experience were included, so that the number of cases is 9228 here. I excluded those without NEET experience from the sequence analysis in order to avoid that all persons with NEET experience of any kind are grouped in the same cluster. In this case, differences among different patterns of NEET would be blurred.
3. The complexity of these sequences can be illustrated by the theoretically possible number of sequences, which is given by the number of possible statuses to the power of the number of time points, that is in this example  $6^{120} \approx 2.4 \times 10^{93}$ .
4. Those individuals who do not have any NEET month within their 10-year observation period are now included. They constitute a new non-NEET cluster, which is taken as a reference category for the independent categorical cluster variable.
5. A comparison between school degree and childbirth at the beginning and at the end of the 10-year period is shown in the online supplement.
6. For the reason of sensitivity testing, this part of the analysis was conducted with both samples: first, only with those individuals who experienced at least 1 month of NEET and second, with all individuals in the sample. The results were very similar with respect to direction as well as to magnitude. Here are only the effects for the whole sample presented.
7. Since interaction effects cannot be calculated as average marginal effects, I use marginal effects at representative values (MER) here (cp. Williams 2012).
8. The diagram is switched by 90 degrees, because the cohort variable has more values and can easier be read vertically than the diagrams for the dummy variables.
9. The confidence interval for the youngest cohort is for all clusters larger, because this group is only very small.
10. The hierarchically constructed OLS model can be found in the online supplement.
11. The insignificant and deviating effect of the youngest cohort is most probable, because of its small size and should not be interpreted here.

## 4 Patterns in NEET statuses during the school-to-work transition in France

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### 4.1 Introduction to NEET in France

This chapter examines patterns in NEET statuses during the school-to-work transition in France. Young French people's experiences of NEET statuses are situated in a strongly standardized and academically oriented education system that is internally stratified based on types of *baccalauréat*, or school-leaving certificates, and in a national labour force context framed by a largely 'insider' market, characterized by market segmentation that disadvantages young people and the least qualified. This chapter explores different patterns of entry into the labour market, focusing on those who experience at least one month of NEET status during this transition. We identify those youth who experience recurrent and long-term NEET statuses throughout their school-to-work transition, and examine whether socio-demographic characteristics, such as gender, schooling history, and parental socio-economic factors, are linked to specific NEET patterns. Finally, we test whether these qualitatively different types of transitions are associated with varying financial and personal outcomes, seven years after leaving the educational system.

These topics are studied using longitudinal data from one of Céreq's *Génération* surveys, which are nationally representative French surveys that collect information about young people's entry into working life during the first seven years after they leave school. Thus, the focus is on the pathways of young people in the transition between the education system and the labour market in France, during which they potentially spend periods of time in NEET statuses. First, a description of the French labour market context is given, which provides background information essential to understanding the ways in which young people enter the labour market in France. Next, we identify the characteristics of young people who are NEET for at least one month during their school-to-work transition. We analyse the probability of experiencing at least one month of NEET status for the sample as a whole, then, in order to focus more specifically on NEET youth, only those with at least one month of NEET status are selected for analysis.

Moving beyond quantitative markers to qualitative patterns, we characterize typical transition pathways in France using monthly calendar data from

the *Génération* survey of young people who left the education system for at least one year in 2004. Limiting our analysis to the sub-sample of those who experience at least one month of NEET, we conduct descriptive analyses of the patterns in the school-to-work transition in order to explore the prevalence of short- and long-lasting periods of NEET statuses. Sequence analyses and cluster analyses are used to describe, group, and visualize the time series data of monthly statuses, which are defined as time spent in initial education, employment, a return to education or training, or in NEET. Five distinct groups of transitions are found: although all experience at least one month in NEET status, the quantity and qualitative patterns of these statuses clearly differ. These groups then serve as dependent variables in analyses predicting the impact of various characteristics on the type of transition into the labour market using multinomial regression analyses. In this section, we focus on the determinants of pathways characterized by extended periods of time spent NEET. Then, we return to our sample as a whole and use Poisson regression techniques to predict the average number of months that individuals spend in a NEET state for all individuals. Notably, we explore interactions between gender and childbirth during studies to predict prolonged NEET statuses. Finally, we examine differences in outcomes seven years after exiting the educational system, focusing more particularly on monthly average revenues from employment for those who are employed at this seven-year mark.

Our results show that while women are less likely to experience at least one month of NEET status, gender as moderated by having a child during one's studies is predictive of group membership in a long-term or recurrent NEET school-to-work trajectory in France. Furthermore, women with children tend to have more accumulated months of NEET status. The socio-economic status of one's family of origin also plays an important role. Particularly, having a mother who works appears protective against later NEET-dominated labour market entry patterns, although father's employment status is less important. Thus, female labour market participation appears to have a strong cross-generational effect for both young men and women. In terms of membership in a particular trajectory type, having at least one parent who works in a white-collar or professional occupation and participating in an apprenticeship programme also lower the risk of an entry pattern marked by prolonged periods of NEET status. Coming from a family with an immigration background or experiencing early setbacks in the form of grade repeats early in one's schooling, on the other hand, increases the risk of finding oneself in such a pattern. Unsurprisingly, recurrent and long-term NEET patterns are associated with lower human capital accumulation, lower earnings seven years after leaving school, and a more negative overall outlook on one's life.

## **4.2 Institutions and policies in France**

The French labour market is often seen as unfavourable to young people leaving the education system (Bruno and Cazes, 1998; Cahuc et al., 2013a). A comparison of NEET levels across the OECD countries underscores the

difficulties that young people face when entering the labour market. There are an estimated 1.9 million young people who are NEET in France, a figure that has risen in recent years. Unlike other OECD and European Union (EU) countries that have seen a decline in this figure since 2013, the percentage of people in France who are NEET has still not fallen and remains high (17.2% in 2016 versus 13.9% in other OECD countries).<sup>2</sup> While this four-point gap is wide, it is lower than the gap in youth unemployment rates (26.6% in France versus 13% in OECD countries overall).<sup>3</sup>

To combat high youth unemployment, successive French governments have proposed policies increasing educational provisions (Bédoué and Germe, 2004). Returning to education, especially higher education, encourages an increase in the level of qualification of the youth workforce while also taking pressure off the youth labour market. Therefore, the vocational *baccalauréat* was created in the 1980s to enable young people with vocational qualifications to continue their education. More recently, the reform of this vocational track – with the termination of the lower secondary education diploma (BEP) and the extension of the length of the vocational *baccalauréat* courses in order to be equal to other *baccalauréat* – was also designed to encourage higher educational attainments. By keeping youth in education, this policy mechanically reduced the number of inactive youths in the labour market.

These provisions did not completely stem the high dropout rate of young people from the education system, even if there has been a decrease in recent years. While the minimum school-leaving age has been 16 years for more than half a century now, it has not been extended to the age of 18. As a result, a large proportion of young people leave the education system without any qualification. The proportion of early school-leavers among the population of 18–24-year-old young adults is slightly below the EU average, but opportunities for returning to education and, more particularly, the chances of finding a job are lower in France than in many other EU countries. This explains the relatively high proportion of NEETs in France who left school after lower secondary education (Cahuc et al., 2013b).<sup>4</sup>

#### 4.2.1 The French education system

Education is compulsory in France from 3 to 16 years old,<sup>5</sup> and over 50% of youths between the ages of 18 and 21 are still in full-time education or participating in vocational training programmes. Currently, 79% of the students in a graduating class can expect to obtain the *baccalauréat* (28% from a vocational track, 20% from a technological track, and 52% from a general track), which is the standard final diploma of upper secondary education and the gateway to access to higher education.

There are two particularly important decision stages in the secondary system for both families and their children. The first occurs at the age of 15 at the end of lower secondary education (*collège*), where the choice is between academic *baccalauréat* (i.e. *baccalauréat général*) and vocational tracks. In upper secondary education, there are three tracks: the general or academic track in

the *lycée* (the most valued pathway with 1,599 thousand students enrolled in 2016), the vocational track in the *lycée professionnel* (665 thousand students), and the apprenticeship track, which is generally less valued, unless it takes place in higher education (417 thousand apprentices representing 5% of youth 16–25 years old).<sup>6</sup> The second important decision stage arises when students are 18 years old and concerns access to higher education.

Because of the emphasis on general education, the vocational education track in France is generally less valued than the academic track. The vocational secondary educational pathway, compared to the academic track, is often based on constrained choices and chosen by ‘default’ (Broccolichi and Sinthon, 2011). Following this choice, the rigidity of the system does not allow any real opportunity to change between tracks. This produces less motivated youths, with lower knowledge of basic skills and a higher dropout rate. Moreover, vocational education revolves around school-based education rather than firm-based apprenticeships. France, compared with other countries, remains a country associated with formal schooling, even in the apprenticeship track, and offers few opportunities to return to education within these tracks. The share of young people (15–29 years old) who combine education and work is lower than in other countries (7% compared to 12% for all OECD countries).<sup>7</sup>

Overall, 44% of school-leavers are graduates of higher education, 30% have a *baccalauréat*, 12% hold a certificate of professional competence (*certificat d’aptitude professionnelle*, CAP), and 14% leave initial education without a diploma. This means that nearly 110,000 young people leave school without a secondary diploma in France.<sup>8</sup> The rate of early dropouts (for 18–24-year-old youth) is nearly 9% compared to 11% overall in the EU in 2016.<sup>9</sup> In order to address the problem of early school-leavers, the Ministry of Education set up an integration mission in 1984, which is charged with preventing youth from leaving school early and helping those who do to integrate into further education or training. As part of this effort, monitoring and support platforms for dropouts have been implemented since 2011, with 400 coordinated programmes.<sup>10</sup>

Although in recent years France has seen a surge in the hiring of overqualified candidates and educational returns have stagnated, qualifications do provide increasing protection against unemployment. Three years after leaving education, young people with no qualifications are three to four times more likely to be jobless than young people with higher education qualifications (Barret et al., 2014). In addition, there is competition for access to employment that benefits the most highly qualified (Moncel, 2008), even for jobs requiring little (if any) formal qualifications. Successive eviction effects cause even highly qualified youth to be downgraded (Fondeur, 1999). Thus, young people with few or no qualifications are at the back of the queue behind better-qualified individuals when applying for unskilled jobs. The rationing of such jobs and a lack of credentials forces those without qualifications into unemployment. However, this ‘qualifications race’ is not the same across all

sectors of the economy. While it may be a strain to recruit skilled labour in industrial sectors of the labour market, this is not so in the administrative service sector where the *baccalauréat* and even a first degree in higher education are increasingly the reference standard (Couppié et al., 2004).

Young people without qualifications face the question of returning to education and training after leaving the system early. However, multiple obstacles stand in their way. First, there are fewer opportunities for resuming studies or training than there are young people who may be interested. There are sometimes competing schemes designed to propose solutions through training courses designed to re-motivate young people. EPIDE (*Etablissements pour l'insertion dans l'emploi*) or second-chance schools (*Ecoles de la deuxième chance*) offer training aimed at acquiring basic proficiency and soft skills for young people with few or no skills and incorporate work in a vocational project and the possibility of a sandwich period of practical work experience.<sup>11</sup> Even so, such schemes remain selective and tend to be aimed at more employable youth (Zaffran, 2017), neglecting those who are the furthest removed from the labour market. Second, national and international evaluations of students emphasize, especially for the weakest, a decline in literacy and numeracy skills that particularly affects students from lower social backgrounds and economically deprived areas (Le Donné & Rocher, 2010). These weaknesses compound with school dropout (Dardier et al., 2013) and reduce youths' chances of getting back into education and training. This twofold effect means that young people with low basic skills and no qualifications are being excluded from the labour market.

#### 4.2.2 Vocational education and training in France

France is distinctive in that its vocational education in secondary education has long been structured around the school curriculum. Even so, this vocational track, despite its successive changes, is a 'default' choice for many secondary school students. Poor educational achievement and social background continue to structure participation in this track (Di Paola et al., 2016). Vocational education is more or less forced upon some students as a result of career guidance and limitations in educational provision. Inapt career guidance also generates a high risk of dropout from courses that are too far removed from young people's choices (Arrighi et al., 2009). Moreover, for those who do succeed, there remains the question of finding a job or possibly continuing in education. The 2008 economic crisis seems to have made first-job entry more difficult for those from vocational tracks, and markedly more so than for those with other qualifications (Di Paola et al., *op.cit.*). This effect is particularly detrimental for administrative-related studies, which are more female-oriented fields, and so it more frequently affects young women and causes them to become economically inactive (Ilardi and Sulzer, 2015).

The vocational track appears to be becoming increasingly segmented after the 2009 reform and the creation of a three-year vocational *baccalauréat* course

to bring it in line with the other general or technological *baccalauréat* (Bernard and Troger, 2013).<sup>12</sup> The 2009 reform has bolstered the academic ambitions of some vocational *baccalauréat* holders. However, this reform risks widening the gap between youth leaving at the first level of the vocational track, the CAP, and those leaving after the vocational *baccalauréat*. This splits the vocational track, concentrating educational inequalities in the first segment (CAP) and reducing social mixing among students. The second segment (vocational *baccalauréat*), on the other hand, moves these students closer to the other *baccalauréat* holders by facilitating access to higher education.

To make it easier for young people leaving secondary education to find employment, the government has sought for several years now to put effort into the development of vocational apprenticeship courses, in particular with reference to the German dual model. The apprenticeship contract, in theory for 16–25 year-olds,<sup>13</sup> is a course completed as part of an educational qualification with a portion of the training done within a firm. In France, this may occur at different levels of educational qualifications, from lower secondary to university degrees. It most often prepares apprentices for a certified technology or vocational qualification. Some studies have reported that apprenticeships are only moderately successful in training young people, especially in secondary education (Bonnal et al., 2002; Lopez and Sulzer, 2016). Recent years have seen a fall in the number of apprentices in lower levels of secondary schooling. In 2015/2016, they represented 53% of apprentices registered for the CAP and 8% of those registered for vocational *baccalauréat* versus 62% and 16%, respectively, in 2000/2001.<sup>14</sup>

Two difficulties are worth mentioning. Despite substantial public financial support – indeed, in even larger amounts than in Germany – apprenticeships have mostly been developed in higher education in France in recent years (Cahuc et al., 2014) and have actually declined in secondary education. Another difficulty concerns access to apprenticeships, which is often based on educational and social selection, to the detriment of young people from disadvantaged and lower socio-economic backgrounds (Kergoat, 2010).<sup>15</sup> This phenomenon, which is most striking in higher education, also appears in secondary education. Lastly, the apprenticeship contract is often equivalent to a form of early recruitment: slightly more than one in three young people stay on with the firm after training, and this rate rises for higher education graduates. In other words, although generally considered effective for the lower qualified, the development of apprenticeships seems to provide ever less protection from NEET for those who need it most. Furthermore, it is not a guarantee against dropping out of school: almost one in three youths in France quit during their apprenticeship.

#### 4.2.3 Transition systems: Segmentation that disadvantages youth

France is generally considered to be a country with a largely insider market which leads *de facto* to marked segmentation of the labour market (Eyraud et al., 1990). Described as an *internal labour market (ILM) system* by Marsden (1999),

in contrast to countries such as Germany with *occupational labour market (OLM) systems*, France lacks a sufficiently specific education and training system providing occupational skills recognized by employers in the labour market. This creates barriers in the labour market between ‘insiders,’ who are protected within insider markets from economic vagaries, and ‘outsiders’ in outsider markets in which young people, and especially the low-skilled, have no job security, and are often engaged in temporary employment contracts and thus experience repeated episodes of unemployment. Young people, whether ‘entrants or outsiders,’ according to the terminology of Lindbeck and Snower (1989), are therefore confronted far more than other generations in the labour market with the ups and downs of the economic climate. Even so, the most highly qualified usually manage to get into the insider market, with education often being a decisive factor (Dupray, 2001).

In the secondary segment of the labour market, the question of the cost of labour is critical for unskilled jobs and especially unfavourable for young people in France as compared with other countries (Cahuc et al., 2013). Although the minimum wage is identical regardless of age, numerous policies have sought to cut employers’ contributions for unskilled employment, which had previously benefitted young people.<sup>16</sup>

Questions may also be asked about more structural changes in the labour market. Not only is the share of insecure employment in the labour market rising, but also the transition from temporary to permanent contracts has receded.<sup>17</sup> Part-time contracts, which most people typically engage in by necessity and not by choice (see Couprie and Joutard, 2015), are also more frequent among young workers. Shrinking internal markets (Gautié, 2004), the growth of unskilled labour in the services sector, and the decline in employment in the public sector explain this rise in instability that primarily affects youth. However, for the better qualified who have priority access to ILMs, the proportion of young people with permanent contracts remains similar (Couprie and Joutard, 2017). Three years after leaving education, one in three youths without qualifications who are in employment have a permanent employment contract, while one in two secondary school graduates and nearly three in four higher education graduates have a permanent contract (Gaubert et al., 2017).

#### **4.2.4 Labour market arrangements: Employment policies**

France has often promoted interventionist policies for youth employment in particular by subsidizing jobs offered to young people.<sup>18</sup> For the past 20 years, between one quarter and one-third of jobs held by those under 26 years old have benefitted from state aid (Aeberhardt et al., 2011). This is quite unique to France, as compared to other contexts. Examples of programmes focusing on the direct employment of young people, mainly in the public sector, include *contrats d’emploi solidarité*, *travaux d’utilité collective*, and *emplois d’avenir*. These programmes provided subsidized jobs with a training component to help young people between 16 and 25 years old in



precarious life situations gain work experience and allowed the employer – mainly in the public sector – to receive financial assistance in return for recruiting a young person.

While this choice can prevent large amounts of time spent outside the labour market, it has often been considered of little effect for the subsequent destinations of young people (Bonnal et al., 2006). In some instances, it may even provide a negative signal when attempting to gain access to the private sector. Indeed, only those measures aimed at the private sector seem to have had positive effects on young people's future trajectories. Certain arrangements, essentially those amounting to subsidies for employing young people in the private sector, have had positive stabilizing effects (Benoteau, 2015). Others, such as apprenticeships, which are at the crossroads between employment policy and educational policy also seem to promote access to employment, even if they increasingly depend on young people's educational level.

The effects of employment policies are therefore nuanced. While these policies keep young people out of certain segments of the labour market for a time (Elbaum and Marchand, 1994) and, in particular, reduce competition in the private sector of the economy, their effects on future employability are unclear. There are many doubts about the capacity of these policies to enable young people to acquire experience and skills that increase their productivity or enhance their social capital.

In a limited form since 2013, and generalized across the country since 2017, French employment policy has headed in a different direction: supporting young people in looking for work. In the French version of the Youth Guarantee Scheme (*Garantie Jeunes*), 16–25-year-olds with no social security, who are not in education, employment, or training (50,400 youth in 2016) are offered a *contrat d'engagement*. Based on support from *Missions locales* (part of the public employment service for young people), the aim is to enable them to gain work experience, training, or consolidate their career project.<sup>19</sup> This support is reinforced with an income of 462 euros that is meant to give young people some degree of independence. This is part of a larger approach (*parcours contractuelisé d'accompagnement vers l'emploi et l'autonomie*, PACEA) that provides support in finding training opportunities, work experience, and social and professional guidance based on individuals' own objectives but evaluated by programme staff. A 'work first' logic is still central to these programmes: access to employment remains a priority compared with all other opportunities. Initial evaluations of the scheme suggest it has positive albeit limited effects (Gautié, 2018). Although it seems on the whole to achieve its target and enable greater access to employment for beneficiaries, qualitative studies underscore that it is not very effective for those who are the furthest from employment (Loison-Leruste et al., 2016). As the scheme is demanding in terms of support, concerns also arise over its capacity to target young people who are most at risk.

#### 4.2.5 Welfare systems

[Chevalier \(2016\)](#) claims that France, which relies on a Bismarckian welfare system, has developed a ‘family-based’ social citizenship for its young people: parents are supposed to support children through family policy mechanisms, with direct provision from the state only taking over after they reach the age of 25. This familialist approach means that benefits are not paid directly to young people but to their families, either as direct cash payments or tax rebates (*quotient familial*) until children are 20 years old, or 25 years old if they are still students (even if they no longer live at home). While in the education system, grants are conditional upon parental support and parents receive tax credits.

Unlike many other countries, most youths under the age of 25 years old without prior work experience are not eligible for general social assistance in France. On leaving education, 18–24-year-olds no longer living with their parents are not entitled to benefits in the form of the *Revenu de Solidarité Active* (RSA) unless they have either already been employed for a certain number of months, or if they are young single parents. This employment history criterion handicaps them because of the difficulties they face finding work.<sup>20</sup> There is a minimum-age requirement of 16 years of age for unemployment benefits (distributed by *Pôle emploi*), and the payment of benefits again depends on work history (specifically, the length of the contribution period); for example, a youth who has worked four months since the last unemployment spell will receive four months of benefits (up to a maximum of two years).

In France, as in many other countries, the extension of the transition period from education to work raises the question of youths’ independence. Higher levels of education, with young people now leaving the French educational system on average at the age of 21, and the instability of the period of integration into the labour market make young people increasingly dependent on outside resources. The lack of direct state support combined with an elitist educational system and an employment policy that does little for promoting access to higher qualifications increases social inequalities amongst youth. More recent arrangements, which nevertheless remain selective, such as the Youth Guarantee Scheme or the *Ecoles de la deuxième chance*, propose a top-up income that is more or less the same as the out-of-work benefit (*revenu minimum d’insertion*). However, this lack of direct public aid for young people can be expected to exacerbate the negative effects of NEET statuses in the French context.

Even if other welfare benefits such as housing support supplement youth resources and favour a move out of the parental home (Thévenon, 2011), social resources for young people remain limited especially for NEETs ([Castell et al., 2016](#)). At the end of 2014, fewer than one in five young people in France who were unemployed or inactive received unemployment benefit, with just 36% of young people who were NEET receiving any welfare support.

#### 4.2.6 Family policy

In terms of family policy, France places emphasis on women's ability to be active in the labour market through 16-week maternity leaves and enhanced childcare possibilities. Family policy is overseen by a special branch of the Social Security Administration, the National Family Allowance Fund (*Caisse Nationale des Allocations Familiales*), which determines areas of intervention following decisions made by the government. Financial assistance to families is distributed by the local branches of the Family Allowance Funds, which are also responsible for the development of childcare services. Beginning in the 1970s, the number of public day-care (*crèche*) places increased exponentially and nursery school (*école maternelle*, created in the 1880s under the Third Republic) attendance rose for young children until becoming mandatory for all children three years and older in 2018. Indeed, this provision is free and universal, and canteen and out-of-school-hours care centres (for a minimal fee) allow more mothers to work full-time. These policies integrate the model of the 'working mother' (Fagnani, 2007).

In terms of cash benefits, a family allowance payment is given to all families, whether the parents are working or not, and this payment is financed from social security contributions paid by employers. Parents can also receive a Child Rearing Benefit (*Allocation parentale d'éducation*, APE) after the birth of a child if they were employed but stopped working to raise their child. However, these benefits appear to function in opposition to the 'working mother' model: they enable a large number of mothers, and most often those with few or no qualifications, to exit the workforce or reduce their working hours, perhaps permanently, after the birth of a child (Fagnani, 2007). Although this parental leave (*Congé parental d'éducation*) guarantees a return to work until the third birthday of the youngest child, it has been described as a 'poisoned chalice' that perpetrates gender inequalities in the workforce (Fagnani, 2000). Indeed, these leaves may result in a depreciation of skills and a loss of work experience that are disadvantageous to women when they return to work (Boeckmann et al., 2014).

### 4.3 Hypotheses

Persistent social inequalities, family backgrounds, and levels of education shape differences in the school-to-work transition in France, and these as well as other inequalities also continue to play a role in the labour market. Based on theoretical assumptions described in Section 1.3, we expect that in France, most NEET only remain NEET for a short period of time (Hypothesis 1), but also that there exists a group of young people with long NEET spells (Hypothesis H2a).

The characteristics of French public policy and the labour market context described above compile to create a particularly challenging environment for NEET youths. Those with low skills and few or no qualifications are

presented with extremely limited options when entering the labour market. While this is also the case in OLM countries, such as Germany, the combination of an ILM system, labour queues, and low-quality signals for vocationally specific qualifications in the French labour market may make this transition even more difficult. While relatively low educational qualifications may be taken as a signal of employability in highly stratified educational systems, this is not necessarily the case in the French context. The challenge facing youth as new entrants in this type of labour market is that employers do not know very much – or even sometimes anything – about their potential occupational skills. This puts both youth and employers in a situation of strong potential risks, which may increase reliance on socio-economic status cues and social networks. Hence, our hypothesis (H3c) is that social categories likely play a strong role in predicting NEET statuses in France.

In a selective labour market, youths from immigrant backgrounds also face many disadvantages, even if their labour market access conditions vary depending on their social and educational characteristics. For most of them, low levels of education, failed career guidance in secondary vocational education and training (VET) programmes, absence of social capital, geographic segregation, and lack of transport are compounded and make their integration in the labour market even more difficult. Furthermore, employers' discriminatory behaviour makes matters worse in some sectors (Silberman and Fournier, 1999; [Brinbaum and Guégnard, 2013](#)). Thus, we test hypothesis H3c and expect that youth from immigrant backgrounds will be more likely to experience NEET statuses.

As in other European contexts, gender inequality continues to differentiate career paths to the detriment of young women ([Brinbaum and Trancart, 2017](#)). Better-qualified young women experience unequal pay and reduced access to more qualified positions. For less qualified young women, inequality comes in the form of a lack of job security, part-time work, unemployment, or economic inactivity. While discrimination continues, especially for more qualified positions, differences relating to career guidance are also decisive – even though young girls generally perform better at school. The limited labour market opportunities for VET graduates in some highly feminized sectors, especially in the administrative service sector (secretariat, accounting, and other fields), increase young women's unemployment risks, either through discouragement or labour market exclusion. As described earlier, many of these women further disengage from the job market after the birth of their first child. Therefore, our hypothesis (H4) is that young women – most particularly young women with children – face greater risks of becoming NEET in France, and for longer periods of time.

Another characteristic of the labour market for young people is spatial disparity. Economic dynamics vary widely between regions, which affects both employment of young people and their geographical mobility during education and then when getting into work ([Caro, 2011](#)). Generally, the less economically dynamic regions are characterized by greater difficulties in

the labour market, especially for young women and those leaving education with few or no qualifications (Dupray and Gasquet, 2004).<sup>21</sup> Within regions, differences relating to the rural–urban gradient also shape inequalities. In terms of both the level of education of youth and demand for employment, two types of areas experience difficulties: deprived suburban areas and rural areas. They are usually associated with high levels of dropout from education (Boudesseul et al., 2013) and a low density of employment. Although rural areas seem to allow less qualified young people to avoid precarious work situations (Zaffran, 2017), this seems more difficult to do in some suburban areas which are classified by public policies as deprived urban areas (*Zus, Zones Urbaines Sensibles*). Despite their support for these areas, the lack of qualifications of young people, remoteness from employment, difficulties relating to geographical mobility, weak social and personal networks in these districts, and also the existence of geographical discrimination make it harder for young people to get into work (Calavrezo and Sari, 2012). Consequently, we explore whether geographic differences may both independently increase the chances of becoming NEET and exacerbate other inequalities.

## 4.4 Data and measurements

### 4.4.1 Data

In France, Céreq<sup>22</sup> carries out nationwide surveys every three years in order to observe the entry into working life of a youth cohort that left the education system in the same year. For our analysis, we used data from Céreq's *Génération* 2004 survey, covering the seven first years after entry into the labour market (2004–2011). We also analyse years spent in higher education before 2004 using retrospective self-reported educational participation data.<sup>23</sup> We use sequence analysis on ten years of monthly data following secondary school leaving (typically at 18 years old) and examine labour market outcomes in 2011 (seven years after these young people exited the educational system for at least one year). We thus examine both their education-to-work transition over time, as well as their labour market outcomes at a fixed point in time.

### 4.4.2 Measurements

The Céreq survey was conducted on a target population of young people who left their initial education (secondary schools and higher institutions) for the first time and at least one year in 2004. This survey is based on the French concept of people *leaving* initial education and training. Only young people who have interrupted their schooling for at least one year are surveyed. In other words, the scope of the French survey, contrary to those in other countries, excludes young people who are continuing their studies, unless they have exited completely from the education system for at least one year.

Panel survey data were collected by phone three times (spring 2007, spring 2009, and autumn 2011) in order to gather retrospective life-course information. Our analyses utilize data from 12,326 youth – 6,419 women and 5,907 men. Respondents reconstructed their work status month by month,<sup>24</sup> their family status, and gave their opinions on their current situation, their work experience and prospects, and other socio-demographic characteristics. We distinguish four monthly statuses – initial education, employment, a return to formal education or training (FET), and NEET – and use a common definition of NEET as the experience of at least one month without a job and without participation in education (the minimum length for statuses being one month).

## 4.5 Analyses and results

### 4.5.1 Descriptive analyses: NEET in France

The sample is representative of the corresponding population of youth who left the educational system in 2004. These young people began their entry into the labour market in unfavourable economic context, despite a slight improvement during the years 2006–2007, before the economic crisis hit at the end 2008. Most began the transition from school leaving by entering higher education, although a sizeable minority transitioned directly into work and a significant proportion spent a few months in NEET status before finding work. Over time, a larger and larger proportion of the sample were in employment, a smaller and smaller proportion were in initial education, and small but relatively consistent minorities found themselves in NEET statuses or engaged in a return to formal education or training. In terms of sample characteristics, slightly more than half of the sample is female and a slight majority completed a higher education credential. In terms of familial socio-demographic factors, more than 80% of school-leavers' fathers were employed, as well as just over 70% of their mothers. Almost a third had at least one parent employed in a professional occupation, while nearly one-fifth come from a family with an immigrant background. By 2011, over one-third had started a family (one child or more).<sup>25</sup>

Examining [Figure 4.1](#), we see the school-to-work transition sequences of the sample as a whole (for both those with and without at least one month of NEET status) in the state distribution plot of all individuals. This plot shows the proportion of each status for each point in time and allows us to see trends and changes in these statuses over time. In the first few months after leaving school, most individuals remain in initial education by entering into some form of higher education directly (dark blue)<sup>26</sup> or employment (green).

However, a substantial minority take some time to transition into employment and thus spend several months in NEET statuses (orange) or decide to return to formal education or engage in professional retraining (light blue). NEET statuses represent a small but significant proportion of the sample over

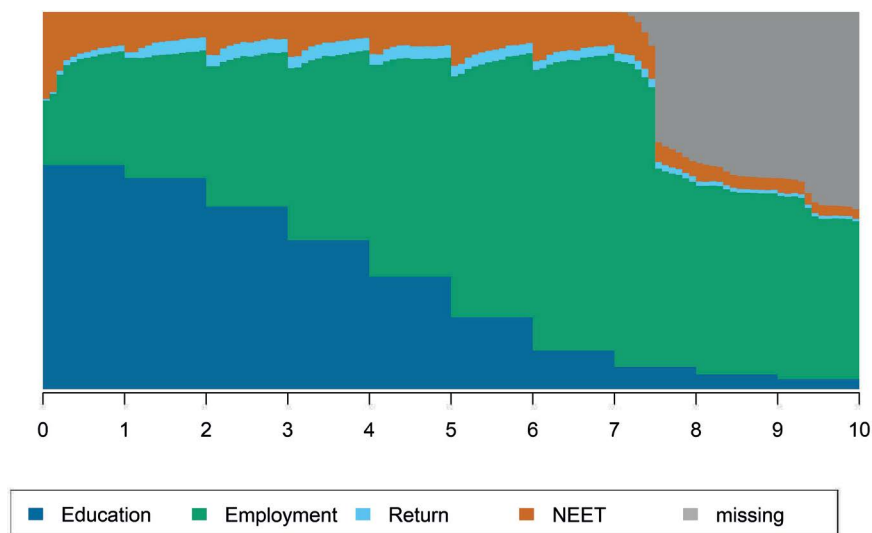


Figure 4.1 Transversal state distribution plot for the sample as a whole.

the ten-year period. At the end of the ten-year period under observation, slightly less than 10% of the sample population are NEET, while the vast majority (90%) is employed.

When describing the French context, we predicted that socio-economic and demographic characteristics would have an impact on school-to-work trajectories, and more particularly on the prevalence of NEET statuses over time. We suggested that socio-economic and immigrant backgrounds, gender, and region of residence are associated with differing probabilities of entering into and potentially remaining in prolonged periods of NEET. Table 4.1 shows the frequencies of these characteristics in the part of the sample without any months spent in NEET during the transition from school to work, in the part of the sample who spent at least one month in NEET, and in the overall sample.

We can gain some preliminary insights from these descriptive statistics of the distribution of characteristics. For those with at least one month of NEET over the observation period, we see that there are more individuals with an immigration background and grade repeats in early schooling, and fewer individuals who had a child during their studies and who did an apprenticeship. The share of women is higher in the non-NEET group than those with at least one month of NEET. Levels of education are clearly lower in the group with at least one month of NEET. Finally, we see that while the differences are not large, those with at least one month of NEET include a slightly lower percentage of fathers and mothers in employment, as well as a lower percentage of parents in a professional occupation.

Next, in order to test these descriptive differences parametrically, we conduct logistic regression analyses on a dichotomous dependent variable

Table 4.1 Covariate frequencies by NEET status

	No NEET over the period	NEET at least one month	All individuals
Women	2,064 53.95%	4,355 51.24%	6,419 52.08%
Child during studies (2004)	205 5.36%	161 1.89%	366 2.97%
Parents with immigrant background	575 15.03%	1,630 19.18%	2,205 17.89%
Was late entering middle school	375 9.80%	1,067 12.55%	1,442 11.70%
Apprenticeship (last school year)	689 18.01%	1,154 13.58%	1,843 14.95%
Father not in employment (2004)	668 17.46%	1,576 18.54%	2,244 18.21%
Mother not in employment (2004)	1,043 27.26%	2,540 29.88%	3,583 29.07%
At least one parent professional (2004)	1,178 30.79%	2,337 27.49%	3,515 28.52%
Highest education ISCED 0–2 (2011)	122 3.19%	808 9.51%	930 7.55%
Highest education ISCED 3–4 (2011)	1,148 30.01%	3,649 42.93%	4,797 38.92%
Highest education ISCED 5–6 (2011)	2,556 66.81%	4,043 47.56%	6,599 53.54%

Source: Céreq's *Génération 2004* survey.

measuring the occurrence of at least one month of NEET status in the ten-year observation period after leaving education for the first time and at least one year. The independent variables used in the analyses include the same socio-economic characteristics included in the descriptive analyses (gender, having a child during one's studies, immigration background, grade repetition in early schooling, participating in an apprenticeship, and father's and mother's employment and occupational status in 2004), as well as a variable capturing the region in France in which the individual was resident when they left the educational system and entered (or attempted to enter) the labour market. Figure 4.2 illustrates the results of the logistic model in terms of the odds ratios.

We see that men are significantly *more* likely to experience at least one month of NEET status, as are those who repeat at least one grade before entering middle school. Those who have at least one parent with a professional occupational status are less likely to report at least one month of NEET status. We also see a clearly significant effect of both apprenticeship programmes in the last year of schooling and immigration background. Those who complete an apprenticeship are less likely to spend at least one month in NEET status, while those with an immigration background (i.e. one of their parents was not born in France) are more likely. The same is true for parental



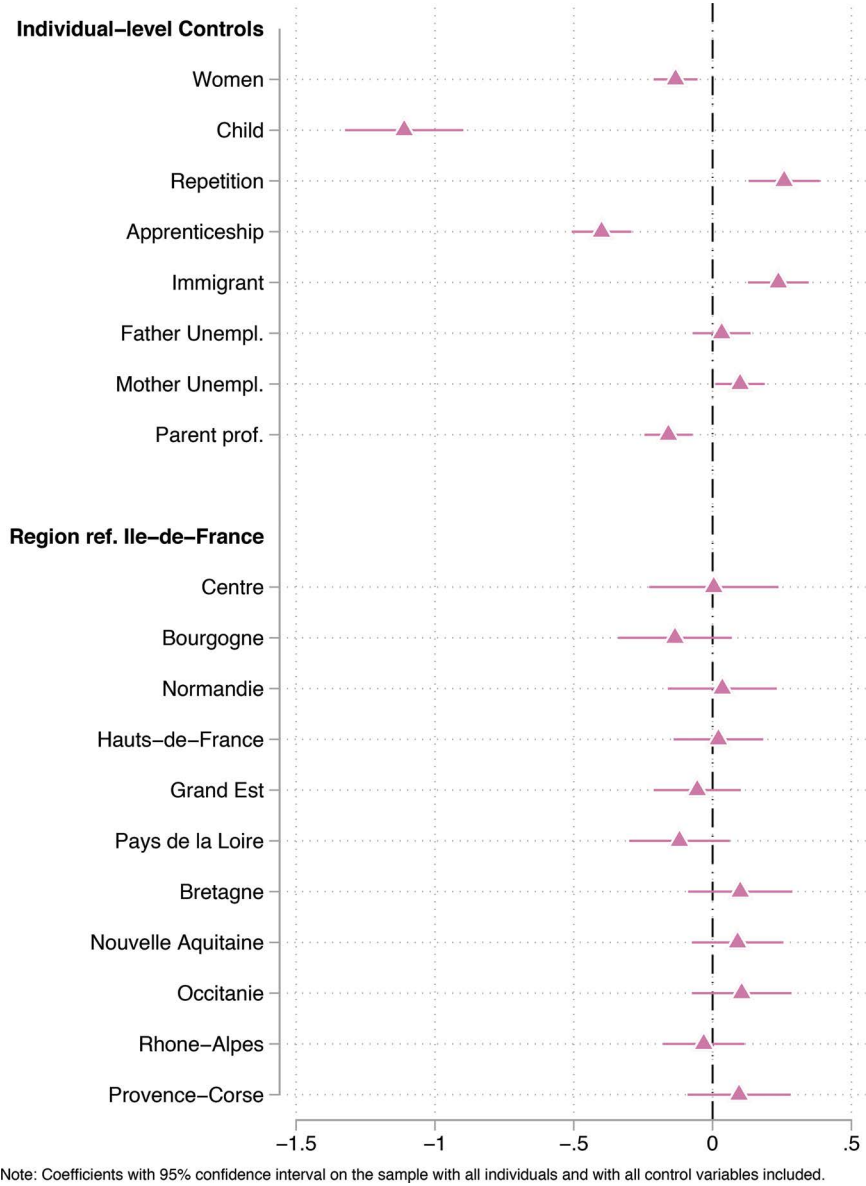


Figure 4.2 Logistic model predicting those who experienced at least one month of NEET.

employment: those with mothers who were unemployed when the individual left the educational system are more likely to report at least one month of NEET status in the ten-year period of their school-to-work transition. However, this effect is not significant for father’s employment status.

The fact that women are less likely to experience at least one month of NEET status is a surprising finding based on previous research and our hypotheses (H4). The effect of children is also different than might be expected: those who have a child during their studies are much *less* likely to report at least one month of NEET status in the years following their entry into the labour market. Furthermore, when we include an interaction term between gender and child, the interaction is not significant, while the individual direct effects of gender and child remain significant (see the online supplement). This suggests that women with children are not more likely to experience at least one month of NEET; however, later models examining NEET length will explore the possibility that women with children may be more likely to spend longer periods of time in NEET statuses once they have entered a NEET state.

#### ***4.5.2 Sequence analyses: Exploring NEET patterns in France***

The primary objective of this chapter is to conduct an exploratory analysis of NEET patterns in order to detect trends in NEET statuses during the transition from initial education into the labour market. We classified the trajectories into groups by applying sequence analysis and cluster analysis (Brzinsky-Fay and Solga, 2016), using optimal matching<sup>27</sup> and Ward algorithms, respectively. Using these methods, we were able to generate a classification of distinct ‘types’ of sequences. In these analyses, we restrict our sample to those individuals who experienced at least one month of NEET status during the ten-year period under investigation.

In order to determine the optimal number of clusters, we examined the dendrogram and cluster solutions from three to eight clusters. Based on the typological analysis, we chose to retain the five-cluster solution, which also showed the best theoretical interpretability of the group characteristics. Using these five distinct groups, we examine the trajectories of these young people as five different types of transitions into the labour market (as shown in Figures 4.3 and 4.4). The first two include those who participated in higher education for longer or shorter periods of time before transitioning relatively quickly into the labour market; the third is made up of those who embarked in a return to formal education or training (FET) after initially leaving the education system for one year; the fourth comprises those who remained in a pattern of recurrent and relatively long-term NEET statuses throughout the survey period without, for the most part, participating in higher education; and the fifth group is made up of those who transitioned directly from secondary schooling into employment. The characteristics of each of these groups of transition pathways are explored in further detail below.

The analytical process outlined above identified trajectory types that are quite distinctive both in terms of patterns of activity over time and in terms of group characteristics. Cluster 1 comprises the group of young people who experienced a fairly long, but favourable transition over the seven years

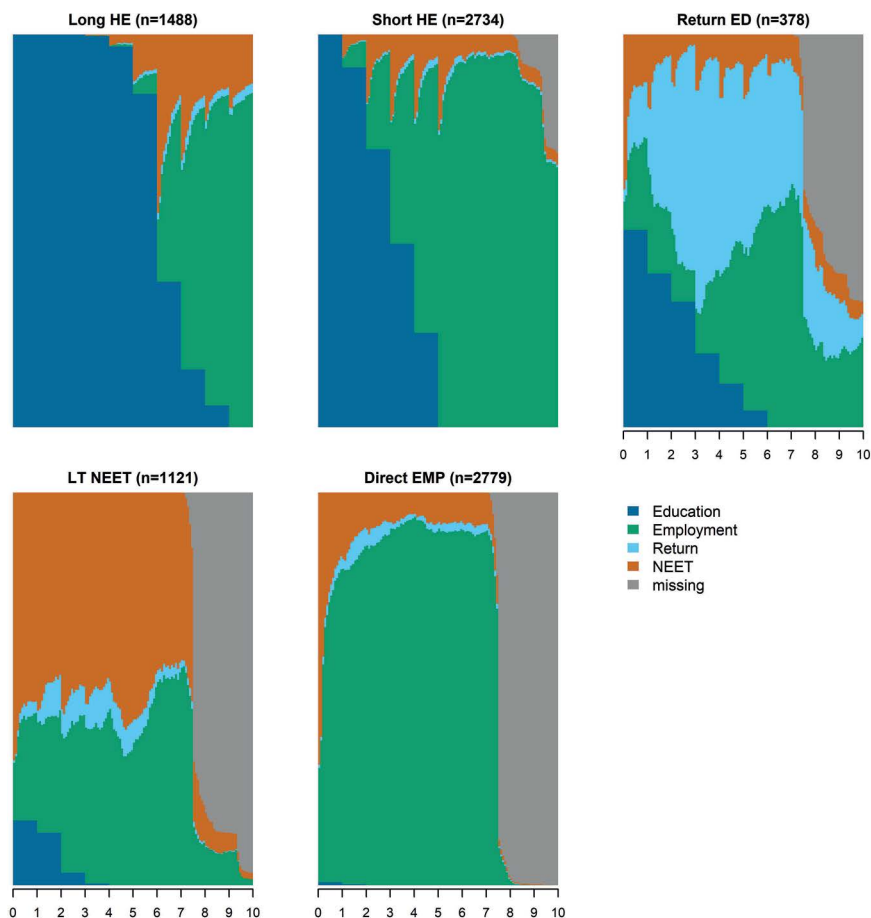


Figure 4.3 Transversal state distribution plots by cluster groups.

since finishing their initial education. This cluster is referred to as the ‘Long Higher Education’ pathway, which includes a significant number of years in higher education followed by a relatively smooth entry into the labour market. Young people in Cluster 1 represent the 18% of the sample who spent extended periods of time in education.<sup>28</sup> This group, which is almost entirely made up of higher education graduates (96%, see Table 4.2), and mostly female (56%), gained access to employment fairly quickly. On average, they spent 77 months in higher education, took 7 months to find their first job, and at the end of the ten-year period, they had totalled 31 months in employment, with only 11 months in NEET on average. In 2011, after seven years in the labour market, 90% were in work and only 9% were in NEET. This group left the education system at the oldest age (25 years on average) and is the most likely to have children. Indeed, almost half of this group had children as of 2011 (43%).

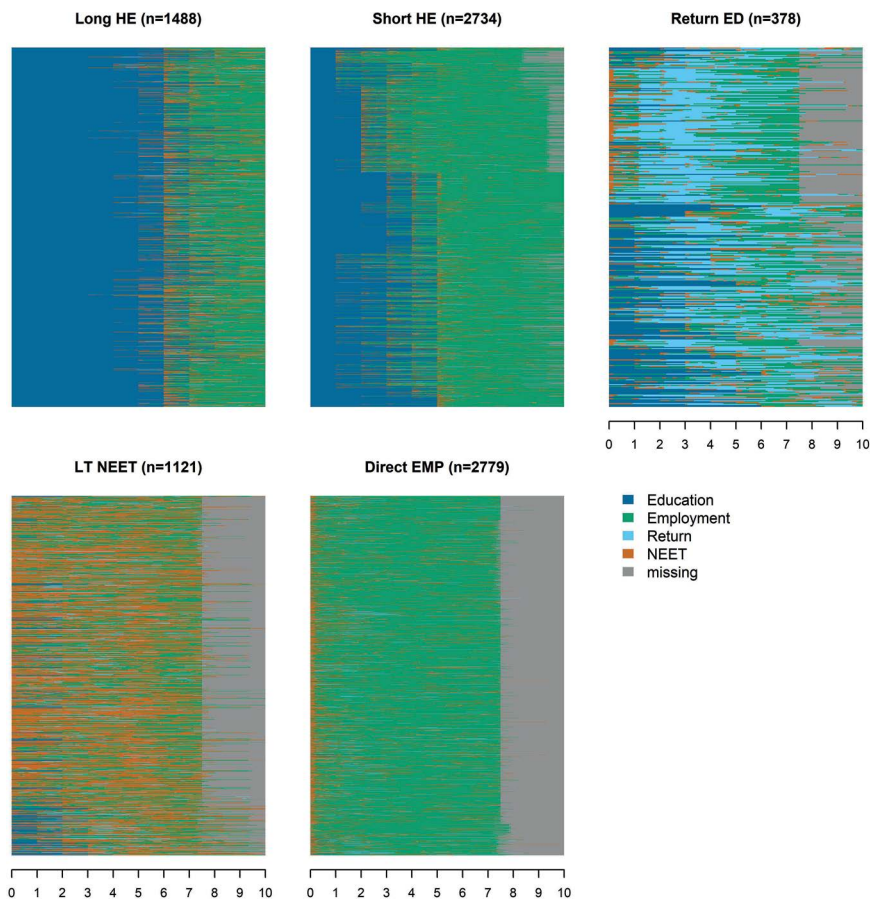


Figure 4.4 Monthly status index plots by cluster groups.

In 2011, more of them were responsible for large families (19% have two or more children versus 12% for the sample as a whole), although only a small portion became parents before they left education (3% versus 2% on average). This group has the highest monthly salaries in 2011, when we consider only those who are in employment, with an average of 1,992 euros (the overall average for the sample is 1,640 euros).

Cluster 2 brings together 2,734 young people who experienced a short and favourable transition from higher education into employment. This cluster is referred to as the ‘Short Higher Education’ pathway. This group, which is mostly made up of higher education graduates (86%, see Table 4.2), and 55% female, had the swiftest transition employment, taking only three months on average to find their first job. This rapid and organized transition into work is evident when looking at the index plots for this group (see Figure 4.4). At the end of their first seven years in the labour market, these young people had totalled 69 months in employment and only seven months in NEET on

Table 4.2 Covariate frequencies by cluster groups

	Cluster 1: Long HE ( <i>n</i> = 1,488)	Cluster 2: Short HE ( <i>n</i> = 2,734)	Cluster 3: Return FET ( <i>n</i> = 378)	Cluster 4: Long NEET ( <i>n</i> = 1,121)	Cluster 5: Direct ( <i>n</i> = 2,779)	All ( <i>n</i> = 8,500)
Women	826 55.51%	1,505 55.05%	260 68.78%	590 52.63%	1,174 42.25%	4,355 51.24%
Child during studies (2004)	48 3.23%	24 0.88%	5 1.32%	39 3.48%	45 1.62%	161 1.89%
Parents with immigrant background	332 22.31%	434 15.87%	80 21.16%	302 26.94%	482 17.34%	1,630 19.18%
Was late entering middle school	65 4.37%	128 4.68%	27 7.14%	282 25.16%	565 20.33%	1,067 12.55%
Apprenticeship (last school year)	58 3.90%	289 10.57%	17 4.50%	145 12.93%	645 23.21%	1,154 13.58%
Father not in employment (2004)	373 25.07%	458 16.75%	58 15.34%	253 22.57%	434 15.62%	1,576 18.54%
Mother not in employment (2004)	499 33.53%	701 25.64%	102 26.98%	483 43.09%	755 27.17%	2,540 29.88%
At least one parent professional (2004)	726 48.79%	889 32.52%	118 31.22%	169 15.08%	435 15.65%	2,337 27.49%
Highest education ISCED 0–2 (2011)	2 0.13%	3 0.11%	29 7.67%	344 30.69%	430 15.47%	808 9.51%
Highest education ISCED 3–4 (2011)	52 3.49%	384 14.05%	229 60.58%	673 60.04%	2,311 83.16%	3,649 42.93%
Highest education ISCED 5–6 (2011)	1,434 96.37%	2,347 85.84%	120 31.75%	104 9.28%	38 1.37%	4,043 47.56%
Average age in 2011 ( <i>sd</i> )	31.84 (1.41)	29.23 (1.33)	27.54 (2.12)	26.62 (1.89)	26.69 (1.78)	28.44 (2.51)

Source: Céreq's *Génération 2004* survey.

average. In 2011, 95% were in work and only 4% were in NEET. This group has the second highest monthly salaries in 2011, when we consider only those who are in employment, with an average of 1,750.36 euros. This group left the education system on average at the age of 22 years. Almost half of this group had children as of 2011 (41%), although less than 1% had become parents before they left education (1% versus 2% on average).

Cluster 3 is more heterogeneous in terms of the variability of individual trajectories than the first two groups (see Figure 4.4). It comprises only 5% of the overall sample and is 69% female. These individuals exited from education system only to fairly quickly re-enter and engage in some type of formal education or training (FET). Indeed, they spent an average of 40 months in education, and only an average of 33 months in employment. Their transition into the labour market was fairly difficult: on average, it took them 17 months to find their first job. However, they only spent 11 months in a NEET status on average, and, in 2011, 78% were employed, 8% were still in FET, and 14% were NEET. This group left the education system on average at the age of

21 years, and only 18% of this group had children as of 2011, showing a later engagement into traditional adult roles. This group had the monthly salaries closest to the overall sample average in 2011, when we consider only those who are in employment, with an average of 1,598.09 euros.

The fifth cluster is mostly male (58%) and brings together almost one-third of the sample. These young people transitioned quickly from secondary education into work ('Direct-to-Employment' pathway). This group contains a mix of lower educational levels: 83% of these youths have a *baccalauréat* diploma, which is the key diploma necessary to access higher education, or a VET credential at the secondary level, while only 1% have a tertiary diploma and almost 16% have less than secondary education (without a diploma). They had spent an average of 77 months in employment by 2011 and were rarely NEET (on average a total of 10 months). When examining the trajectories in this group, it is evident that this short period of NEET status was most common just after leaving compulsory schooling (see [Figure 4.4](#)). Few have experienced lasting periods of unemployment, and seven years after leaving initial education, only 10% were NEET versus 89% in employment.

Contrasting with these four trajectory groups are the young people in Cluster 4 who make up 13% of the cohort. Women are slightly overrepresented (53%). The young people in this cluster are the most vulnerable group within our sample and share a common 'Recurrent or Long-term NEET' pathway. They are characterized by very little participation in formal education from the time they initially left secondary schooling until 2011, with only four months on average of initial higher education. Some have experienced episodes in employment, but less than those in the other groups (on average only 37 months), and these young people have totalled on average 48 months of NEET status over the ten-year period. These are interspersed with a few months of education and training, which totals five months on average for this group. Their entry into the labour market was very difficult, and they took 16 months on average to find their first job. After seven years in the labour market, 42% were still NEET, 55% were in employment, and 3% had re-entered formal education or training.

Although these long-term NEETs emerge from all family backgrounds, they are more likely to have come from 'disadvantaged' families: only 15% have a parent who is in a professional (executive, manager) position (versus 28% on average), while their mothers are less likely to be employed (57% versus 70% on average). Finally, upon completing their education, only 48% of these young people have both parents in employment (versus 60% for the sample as a whole), which may influence the relationship of these young people with the labour market and the density of their family's network in the world of work. Their parents are less often French-born and this immigrant background (almost one-third versus 19% on average) may also have repercussions on their social and professional integration. In addition, more of them live in struggling economic areas with high rates of unemployment (*Zus* or economically deprived areas) upon completing their education.

These young people are also more often school-leavers without a diploma (31%). They show a combination of various difficulties in their educational paths: they are more likely to have degree levels lower than the cohort average, to have been late on entering secondary school (repeating one or more years of primary school for almost one-third versus 13% on average), and to have experienced constrained study choices in secondary school, ending up in a VET track by ‘default’ rather than choice. These observations should not mask, however, the non-negligible proportion of VET and *baccalauréat* holders (60%) among them.

The school-to-work transition for the young people who are long-term NEET involves ‘desynchronization’ of the stages of their transition to adulthood (Galland, 2000). Cohabitation, parenthood, and residential autonomy appear to occur later for these youths. The absence of employment or stable employment is a barrier to independence with a smaller percentage living with a partner or alone. It is evident that being NEET is not a comfortable position for these young people, as almost half of them (47%) report not being satisfied with their situation (versus 25% on average) and 12% of them report being in poor health (versus 8% on average) at the end of the ten-year period of study. In addition, more of them say they have suffered from discrimination in the labour market in the first seven years of their careers (22% versus 13% for the sample as a whole).<sup>29</sup>

#### **4.5.3 Multinomial analyses: Explaining problematic NEET transitions**

After examining the pathways of youth from education into the labour market, we next attempt to predict which individual characteristics and situations are likely to lead to certain types of trajectories, focusing on the recurrent NEET pathways. To predict group membership in the trajectory clusters, we use multinomial logistic regression models where individual, time-constant characteristics of school-leavers are the independent variables and membership in the cluster groups are the dependent variables. The results of these models can be described in multiple ways: the exponentiated coefficients describe the odds for each independent variable in predicting membership in one particular category of the dependent variable relative to a reference category, while the average marginal effects capture the average change in the probability of belonging to a particular pathway group for a variable of interest (see online supplement).

We report the average marginal effects of each variable of interest here, in order to maintain maximum comparability between effects by groups and variables.<sup>30</sup> Using this approach, we analyse the effect of various time-constant personal, social, and contextual characteristics on the probability of becoming a member of a particular group, and most particularly the recurrent NEET group. The independent variables are gender, having a child, having done an apprenticeship, having repeated a grade before middle school,



having an immigration background, having a mother who is unemployed, having a father who is unemployed, having at least one parent who is a professional, and the region where the individual was resident when they exited the educational system in 2004.

Our findings are largely consistent with the literature specific to France outlined in the introduction to this chapter. When predicting the cluster groupings, personal and family factors tend to explain trajectories marked by long-term NEET statuses. Examining the marginal effects of gender on the probability of belonging to a specific type of school-to-work transition pathway, we see that the marginal effects for females are positive and significant for Clusters 2 and 3, i.e. those in a ‘Long Higher Education’ and a ‘Return to Formal Education or Training’ trajectory pattern (see Figure 4.5). This is also true for belonging to the ‘Long-term NEET’ trajectory; however, this effect disappears when an interaction term is introduced between gender and having a child during one’s studies (see Figures 4.6 and 4.7). This is confirmed when looking at the relative risk ratios for these models (see the online supplement). Thus, within the restricted sub-sample of those who have at least one month of NEET status, and given equivalent characteristics, being a woman is not associated with an increase in the probability of being in a recurrent NEET transition *unless* she has a child (see Figures 4.5 and 4.7). Women are also much less likely to be in the ‘Direct-to-Employment’ group, as we saw in the descriptive analyses earlier.

Those who had a child during their studies are more likely to end up in the ‘Long Higher Education’ group and less likely to be in the ‘Short Higher

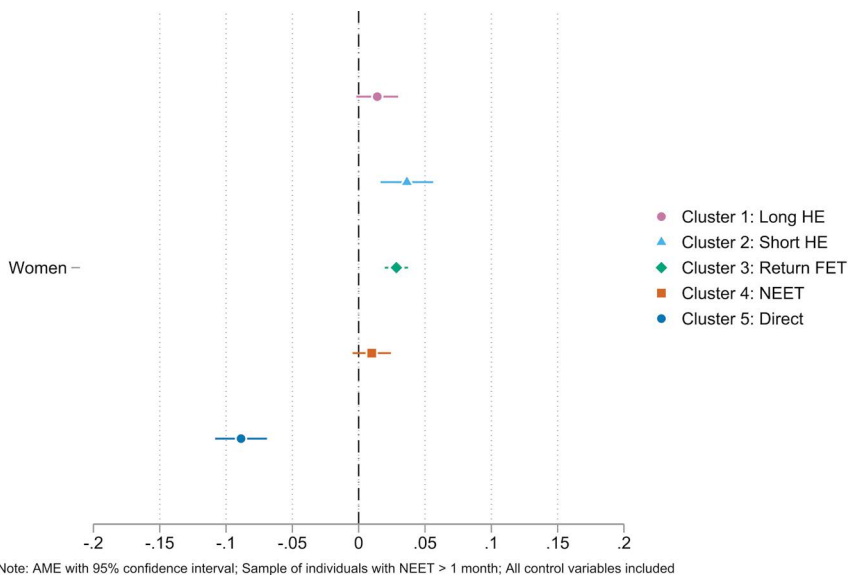
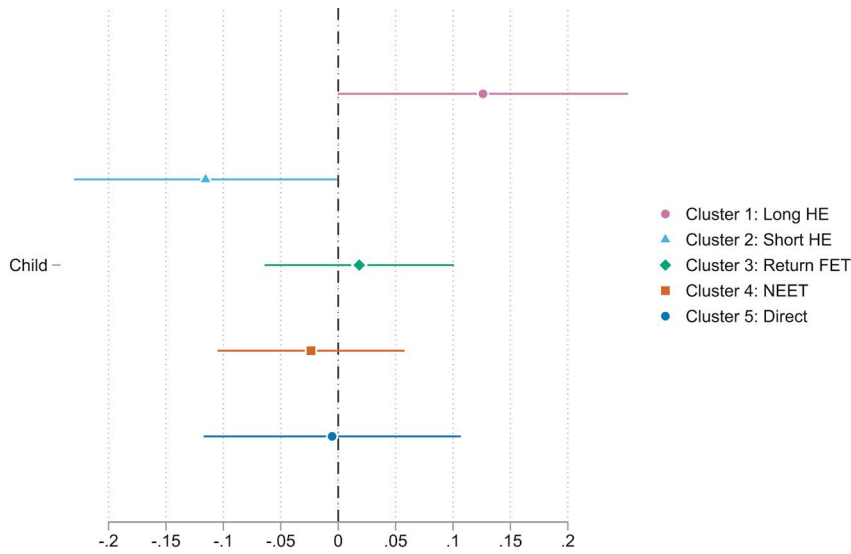


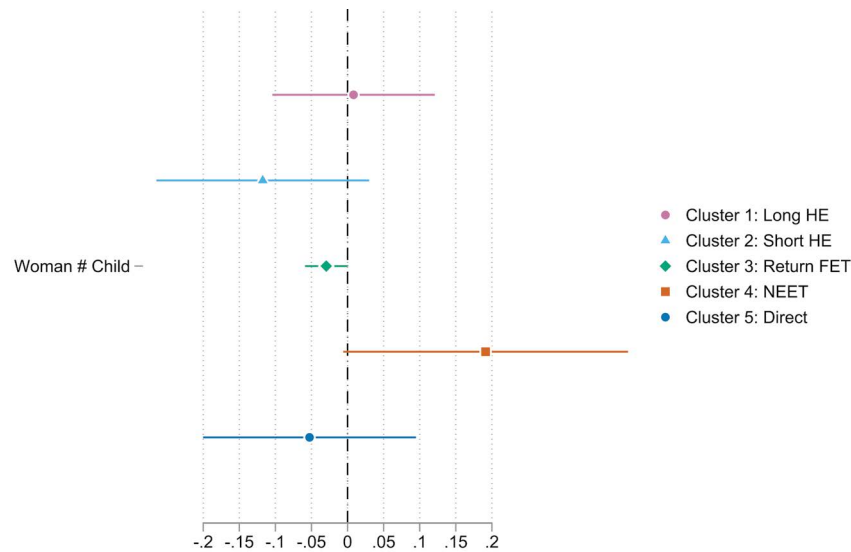
Figure 4.5 Average marginal effects (AME) of gender in predicting cluster membership.





Note: AME with 95% confidence interval; Sample of individuals with NEET > 1 month; All control variables included

Figure 4.6 AME of having a child during studies in predicting cluster membership.



Note: AME with 95% confidence interval; Sample of individuals with NEET > 1 month; All control variables included

Figure 4.7 AME of the gender and having a child interaction in predicting cluster membership.

Education' cluster (see Figure 4.6). Furthermore, these effects remain consistent when an interaction term between gender and childbirth is introduced. The independent effect of having a child during one's studies remains across model specifications. This is, however, to be expected, since those in the 'Long Higher Education' group finish their initial education at an older age than the other groups. Indeed, the comparison of interest here is between the 'Direct-to-Employment' and 'Long-term NEET' trajectory groups, as both leave school at an early age and have lower educational qualifications as well as socio-economic disadvantages. One difference is the gender make-up of these two groups (predominately male for the first versus female for the second), and another is the probability of having had a child before one completed one's schooling.

Next, we turn to characteristics of one's early schooling history, including participating in an apprenticeship during secondary school and having repeated a grade during primary school. An important differentiating characteristic between those who participate predominately in initial higher education, return to formal education or training, or become NEET versus those who enter directly into the workforce is that of having completed an apprenticeship course, which is a factor associated with a direct (and quick) transition into employment. Indeed, those who have participated in an apprenticeship are much more likely to end up in the cluster which transitions directly into employment (see Figure 4.8). However, those with a direct-to-employment transition and those with a recurrent NEET transition are both equally more likely to have had a difficult educational path with class

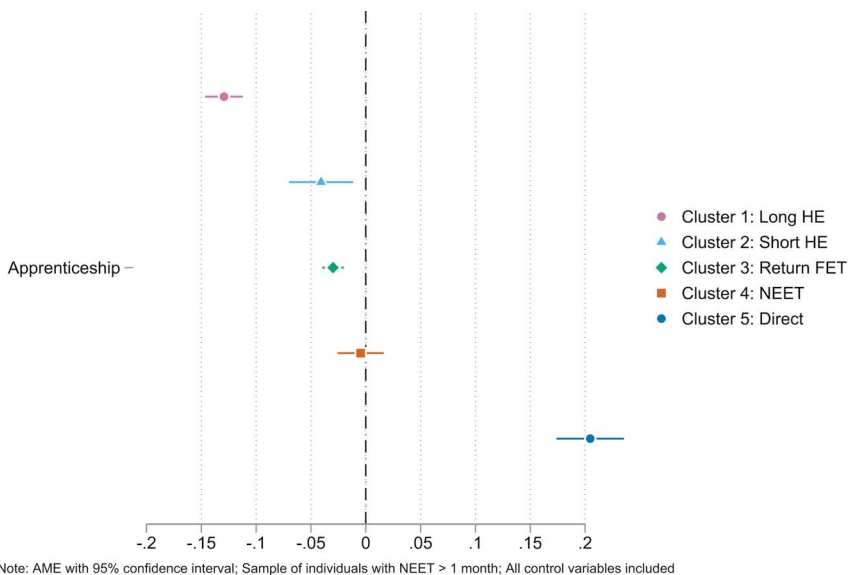


Figure 4.8 AME of apprenticeship in predicting cluster membership.

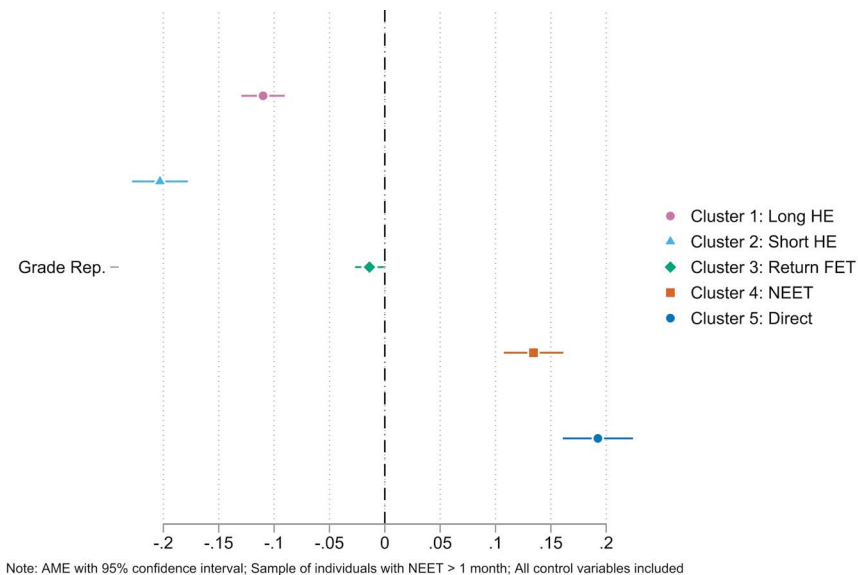


Figure 4.9 AME of grade repetition in predicting cluster membership.

repetition before middle school (see Figure 4.9). This suggests that apprenticeships are an important and potentially determinant factor for labour market integration for those who face difficulties in compulsory education. This may be particularly the case in the ‘insider’-type market characteristic of France, although it would seem that these benefits operate despite an overall lack of public investment in the apprenticeship system at the secondary level, as discussed in the description of the French context earlier in this chapter. This may be most pronounced at the beginning of young people’s careers, as apprenticeships often lead directly to a first job after their completion. However, this may also be taken as some evidence of increasing quality in the signals provided by apprenticeships to employers.

Social origin also plays a role in predicting group membership. We see that parental characteristics are important in shaping their children’s outcomes. Young people with at least one parent with an immigration background (i.e. born outside of France) are more likely to experience a long-term NEET transition to employment over the long term compared with those with two French parents (see Figure 4.10). In comparison, the group traditionally viewed as successful due to their educational attainments and quick labour market integration, the members of the ‘Short Higher Education’ cluster are significantly less likely to have an immigration background.

Parents’ employment and professional status also play a role in our models of cluster membership. Those in the ‘Direct-to-Employment’ pathway are significantly less likely to have a father who is unemployed, while those in a prolonged educational pathway are more likely (see Figure 4.11). Although

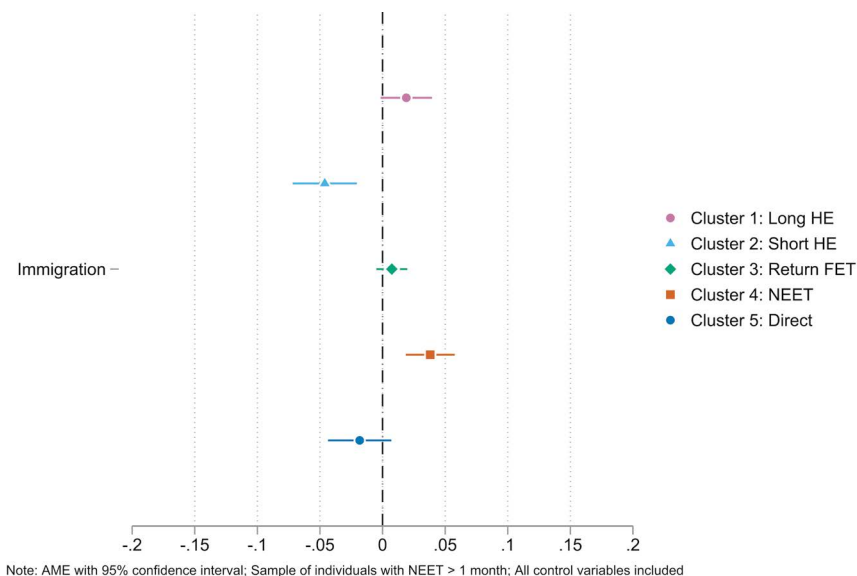


Figure 4.10 AME of immigration background in predicting cluster membership.

we do not see significant differences in predicting long-term NEET group membership with father’s employment status, we do see that having a mother who is unemployed significantly increases the chances of being in this group (see Figure 4.12). Again, this is also true for those in the ‘Long Higher

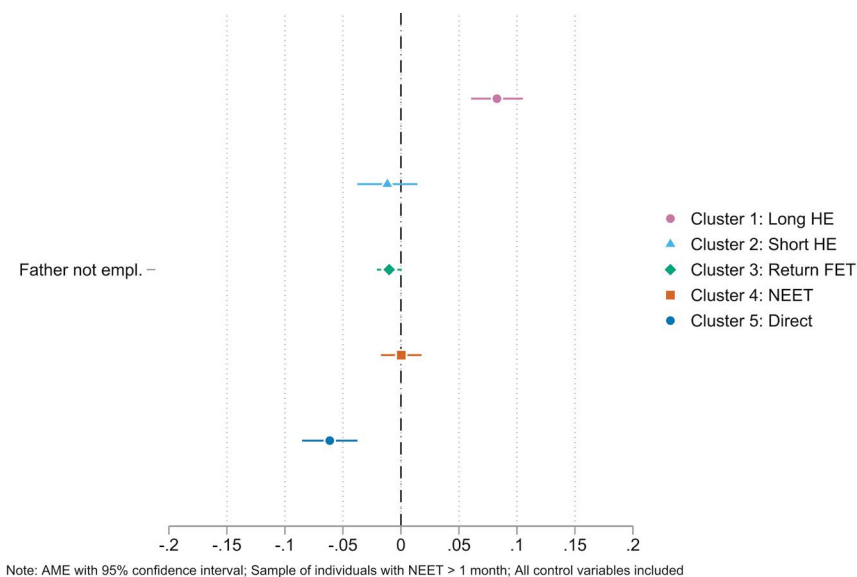


Figure 4.11 AME of father not being in employment in predicting cluster membership.

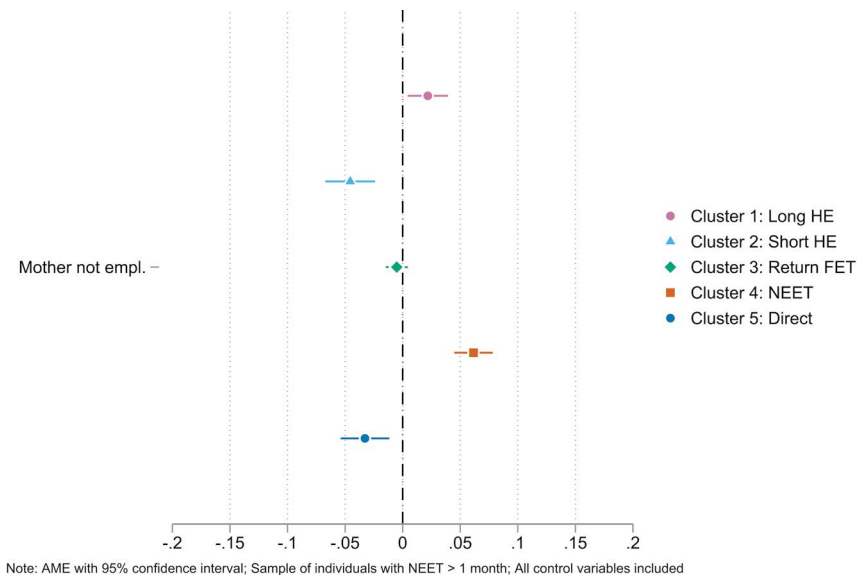


Figure 4.12 AME of mother not being in employment in predicting cluster membership.

Education’ group. In contrast, those in the ‘Short Higher Education’ and ‘Direct-to-Employment’ groups are significantly less likely to have a mother who is not in employment. Thus, the mother’s employment status seems to be particularly key in determining relatively quick and successful entries into the labour market in France.

Finally, those in the NEET group are less likely to have at least one parent who is a professional, white-collar worker, although this is also the case for those in the ‘Direct-to-Employment’ pathway (see Figure 4.13). Both groups with higher education pathways, short or long, are more likely to have at least one parent who is a professional (*cadre*) or white-collar worker rather than a lower-skilled occupational status. This effect is particularly neat and marked: we see a clear relationship reflecting the cross-generational impact of parents’ occupation on children’s educational trajectories.

When examining findings by region, we see that the geographical context at the time of completing education is of importance (see the online supplement). Certain regions are more or less dynamic in terms of employment and training opportunities. For example, the regions of *Pays de Loire* and *Bretagne* have low levels of youth unemployment, as does the comparison group of *Île-de-France*. Indeed, we find higher relative risk ratios for the ‘Long-term NEET’ cluster in the regions of the *Centre*, *Bourgogne*, *Normandie*, *Hauts-de-France*, *Grand Est*, and *Occitanie*, as compared to *Île-de-France*. These regions thus show an overall less favourable situation for youths in terms of avoiding the risk of recurrent NEET statuses during their transition into the labour market.

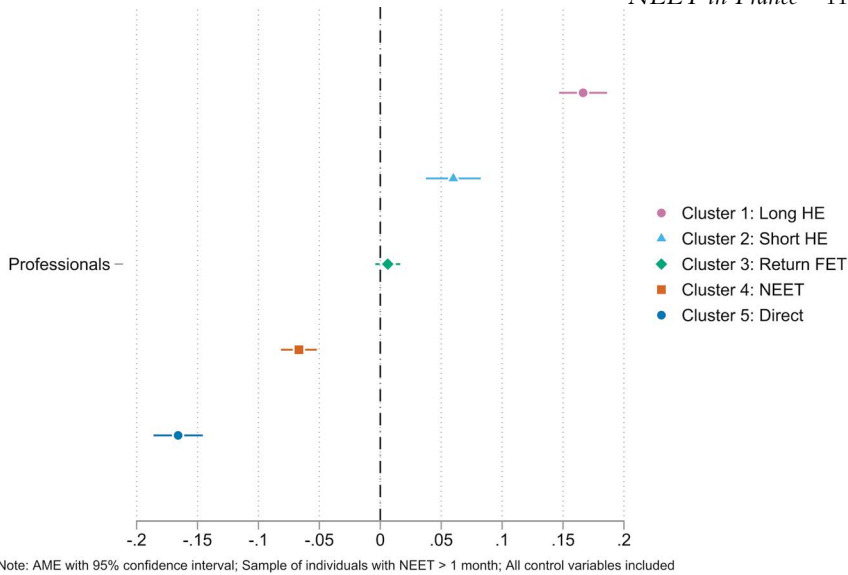


Figure 4.13 AME of professional work status in predicting cluster membership.

In summary, we find fairly strong evidence that a gender effect exists when predicting school-to-work trajectory patterns, and young people who had a child during their studies show a higher probability of having a ‘Long-term NEET’ trajectory as well. These results change, however, when we include an interaction term in the model and when we adapt these models to include all individuals, using those individuals who experience no months of NEET as the comparison group (see the online supplement). When we do so, having a child decreases the likelihood of being in a ‘Long-term NEET’ trajectory, while being a woman with a child increases this risk. Thus, we find fairly strong evidence of an interaction between gender and having a child, with men being less likely to fall into a pattern of recurrent NEET statuses when they have a child during their studies, while women are more likely. This is consistent with the literature outlined at the beginning of this chapter.

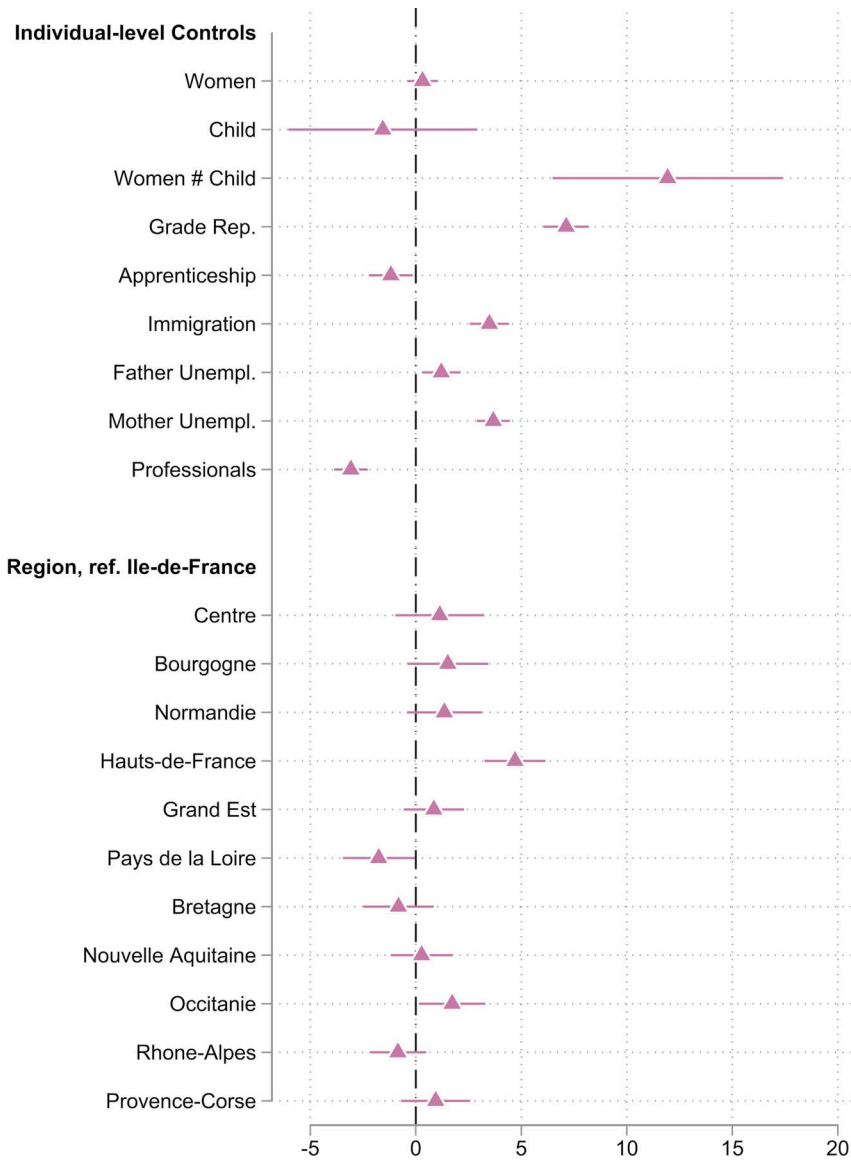
More importantly in the French context, we see a strong effect of prior schooling history and social origin: those with early academic difficulties in compulsory schooling are less likely to continue on into higher educational pathways, and more likely to either transition directly into employment or end up in a prolonged NEET pathway. An important differentiating factor is participation in an apprenticeship at the end of secondary schooling. This factor seems to distinguish the employment and NEET clusters, along with immigration background. Thus, social origin shows effects consistent with existing theory: school-leavers with immigrant parents have a higher probability of belonging to the trajectory with long and frequent NEET periods. In contrast, school-leavers with mothers who are employed, and

especially employed in a professional occupation, are less likely to belong to the trajectory with long and frequent NEET periods and more likely to belong to one of the higher education clusters. Thus, we see evidence of a cross-generational inheritance in employment trajectories that hinge on mother's labour market participation.

#### 4.5.4 Further explorations of the context of NEET statuses

Following our descriptive and explorative analyses of school-to-work transition period patterns in NEET status, through which we created a qualitative typology of patterns, we turn to a strictly quantitative indicator: cumulative NEET length. This simple aggregate measure captures the cumulative number of months spent in NEET status over the ten-year observation period, without consideration for the qualitative patterns in these statuses. Clearly, this measure differs significantly on average between the clusters (with the 'Long-term NEET' cluster showing by far the highest average). However, results may differ because education no longer directly impacts the measure. The entire sample is used in these analyses, including those who do not experience any months of NEET. We use cumulative NEET length as the dependent variable in regression models measuring the effect of our various time-constant personal, social, and contextual characteristics on individuals' total number of months spent in NEET status. Both Ordinary Least Squares (OLS) and Poisson regression models are used because the number of months of NEET is a count variable with many 'zero' responses.<sup>31</sup>

The results of the model with all controls and an interaction term between gender and having a child during one's studies are illustrated in [Figure 4.14](#). Sequential stacked models are given in the online supplement. We see that, in contrast to the earlier results, there is a large statistically significant interaction between gender and having a child. What is more, the independent direct effects of gender and children disappear once this interaction is taken into account. Thus, when looking at the total number of months spent in NEET status, women are not more likely to spend more months in NEET status than men *unless* they also have a child. Likewise, a young person with a child is only more likely to spend more months in a NEET state – 12 months more on average, *ceteris paribus* – if she is also a woman. This crucial distinction from the earlier models shows that gender is instrumental in forming NEET pathways, but that it only becomes a critical factor when compounded with having a child and becoming NEET for a preliminary period of time. The other findings from these models are consistent with the results described earlier. Those with a history of grade repetition are more likely to have additional months of NEET status (four months, on average), as are those from an immigration background (again, four months, on average). Those with a father or a mother who are unemployed are both more likely to spend more time in NEET statuses themselves. On the other hand, those



Note: Coefficients with 95% confidence interval on the sample with all individuals and with all control variables included.

Figure 4.14 OLS (and Poisson) regression predicting the number of months spent in NEET.

who complete an apprenticeship or have at least one parent who works in a professional-type occupation have fewer months spent in NEET statuses on average and holding all other factors constant (two months and four months less, respectively).

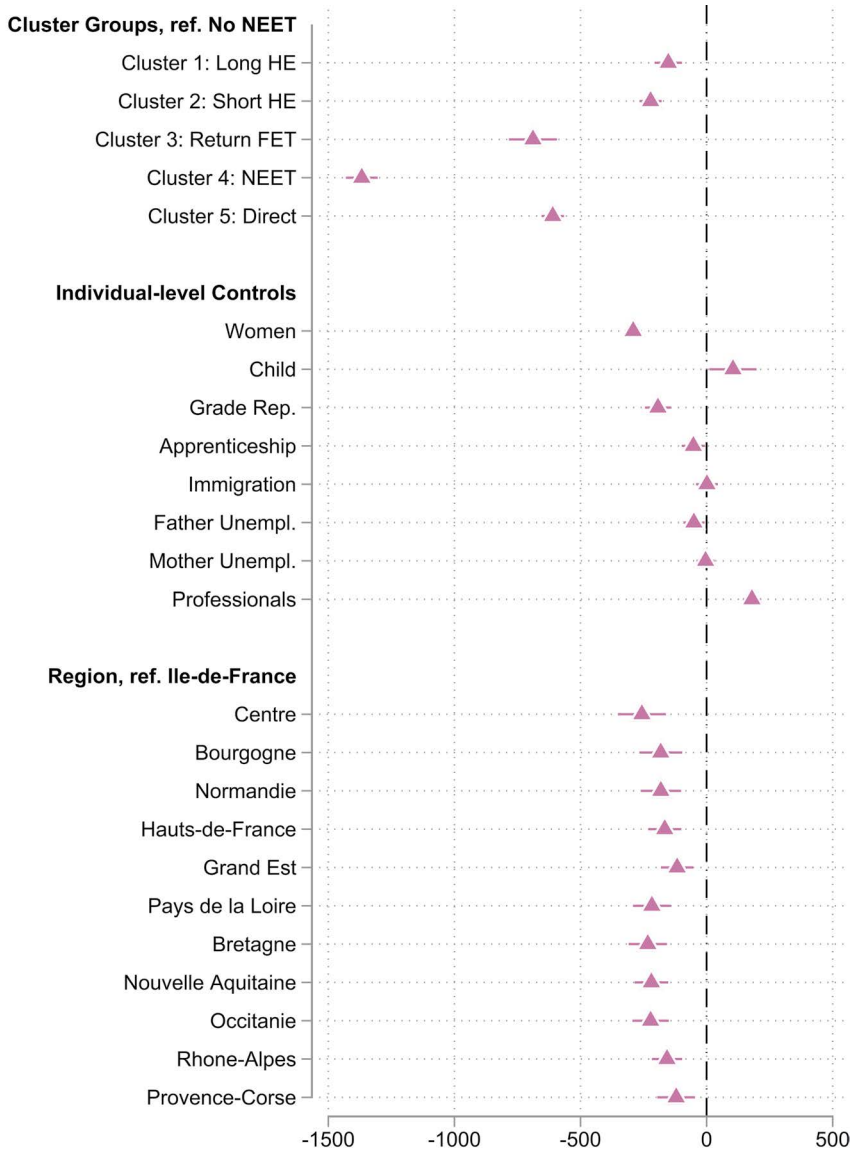


#### 4.5.5 Predictive analyses: Consequences of NEET in France

Finally, we turn to the outcomes associated with ‘Long-term NEET’ trajectory patterns in the transition from education to the labour market. Falling into NEET status during the school-to-work transition can interrupt individuals’ career trajectories, causing them to lose time in a ‘human capital void’ that is neither used to accumulate work experience, nor educational credentials. Therefore, it can be assumed (and has been shown in previous research outlined earlier in this chapter) that young people with prolonged periods in NEET status after leaving school face significant disadvantages in their later employment, in particular in terms of their occupational status and income. In this chapter, we focus on the question of the impact of NEET pathways on the monthly earnings from employment of young people in 2011, seven years after they left initial education and entered the labour market. We use the same control variables as the previous models, but this time we include the qualitative cluster groupings as independent variables. In doing so, we incorporate the findings from the classificatory analysis earlier in this chapter in order to predict later income, exploring whether or not specific trajectory patterns influence this labour market outcome.

We run Tobit regression models to account for the fact that a significant proportion of our sample has zero income (and our dependent variable is thus left-censored), and most particularly for our group of interest: those who are in NEET status in 2011. Our comparison group for the independent variables capturing the cluster patterns is the group of individuals in the sample who reported no months of NEET. Indeed, since these analyses are run on our complete sample, we have distinguished a sixth group based on a quantitative criterion – no months spent in NEET status – rather than a qualitative pattern. However, we hypothesize that the fact of having never been in a NEET state is an important marker of an individual’s transition, suggesting very quick and orderly transitions between school and work. These individuals, we see, also earn the highest average monthly incomes in 2011.

The results are displayed in [Figure 4.15](#). We find clear evidence that NEET status has a negative association with later earnings: those in the ‘Long-term NEET’ cluster earn by far the least of all groups (more than 1,000 euros less per month on average, *ceteris paribus*), and those with no experience of NEET earn even more than the highest earning and most educated group with at least one month of NEET status. We also see a strongly significant effect of cumulative NEET length on earnings with those who spend more months in a NEET state earning significantly less in monthly revenues (approximately 20 euros less for each additional month of NEET status). Furthermore, consistent with the literature, women earn significantly less than men on average, as do those who experienced a setback in early schooling. We see a slight advantage for those with children, which may also partially reflect an age effect. Unsurprisingly, due to the substantial centralization typical of France, all individuals in regions other than Île-de-France earn significantly less than those in the Paris region.



Note: Coefficients with 95% confidence interval on the sample with all individuals and with all control variables included.

Figure 4.15 Tobit regression predicting monthly salary after seven years in the LM.

## 4.6 Conclusion and discussion

This chapter uncovered novel longitudinal dimensions in NEET patterns of young people in France, both highlighting new insights and confirming previous research into the socio-economic context that leads to recurrent NEET

pathways as well as labour market outcomes in terms of salaries seven years after leaving initial education. We underscored France's specific institutional context, which is characterized by a strongly standardized and academically focused education system that is stratified by types of *baccalauréat*, and labour force entry patterns that are shaped by an 'insider' market that creates segmentation disadvantaging new entrants and low qualified workers. We also suggested that a gendered occupational structure continues to exist in France, even though family policies and childcare provisions favour women's labour market participation.

These research questions led us to investigate patterns in NEET statuses using several approaches. First, we estimated a logistic regression model predicting the probability of experiencing at least one month of NEET status and found that men, those who repeat at least one grade before entering middle school, and those with parents with an immigration background (i.e. one of their parents was not born in France) were significantly more likely to experience at least one month of NEET status. On the other hand, women, those with children, those who have at least one parent with a professional occupational status, those who complete an apprenticeship, and those with mothers who were employed when the individual left the educational system are less likely to report at least one month of NEET status in the ten-year period. These central findings generally held true across all of our further analyses, with the partial exception of gender and children.

In our next analyses, we used sequence and cluster analysis techniques to classify the trajectories of those individuals who experienced at least one month of NEET status. We classified the 8,500 school-to-work trajectories into five distinct types, which illustrated descriptively how NEET statuses are distributed in varying patterns over the transition from education to the labour market. Notably, we found a 'Long-term NEET' cluster, which resembled the 'Direct-to-Employment' cluster in many respects (socio-economic status, educational levels, etc.), but differed both in its composition of women with children and men who had not participated in an apprenticeship at the end of secondary schooling. Using these five clusters, we conducted multinomial regression models to predict the probability of experiencing a particular trajectory type using personal and familial socio-economic, as well as regional, characteristics as predictor variables. We found that women only have a higher probability of entering a NEET-dominated trajectory when they have a child during their studies (a moderated effect of gender by childbirth). However, this effect is relatively small in the French context (H4), while the effects of grade repetition before middle school, mother's employment status (H3c), and immigration background (H3d) are much stronger predictors of belonging to this group.

Next, we explored whether socio-economic characteristics influence the cumulative number of months spent in NEET status over the ten-year observation period. Here, we found a highly significant and positive effect of the interaction between gender and having a child during one's studies on NEET length. Thus, our findings suggest that the gender-childbirth nexus is more

determinate of NEET length than NEET pattern in France. However, these qualitative NEET patterns may be more important to consider since they contain more detailed and nuanced information than the brute NEET length measure. Lastly, we investigated potential associated labour market outcomes related to our school-to-work transition patterns using Tobit regression models of monthly income from employment in 2011. We predicted income using both the qualitative cluster groups and the quantitative cumulative NEET length indicator, finding that, in both cases, a recurrent NEET pathway has a strong negative impact on earnings.

The findings of this chapter emphasize the difficulty some young people in France face attempting to escaping recurrent NEET statuses. This concerns about one in ten young people in the first seven years after leaving the education system. Among the reasons that explain why some remain NEET, the level of qualifications is decisive. Young people who have no qualifications are much more likely to be NEET than higher education graduates. The characteristics of early academic careers also impact these pathways: poor scholastic achievement before entry into secondary education increase the likelihood of becoming or remaining NEET. Finally, young people's education-to-work transitions also depend on their parents' employment situation and background. Having inactive or unemployed parents, as well as those from working-class or immigrant backgrounds, elevates the risks of following a long-term or recurrent NEET trajectory. Conversely, once these various factors have been controlled for, regional characteristics seem to have a relatively weak impact.

These analyses have several limitations. One of these limitations concerns the role of gender. Career paths are highly gendered and studying the diversity of labour market histories among women and men suggests specific pathways that cannot readily be observed when the two populations are included within the same sample. In-line with this, while mother's unemployment appeared more determinant than father's unemployment in our analyses, this may interact with the gender of the young person: it is possible that these effects may operate differently for young women and men. Another limitation is the role of qualifications: it would be worth conducting an analysis focused on youth with lower qualifications, in order to understand whether the protection of apprenticeship that is observed for all graduates continues to exist for unqualified young people or those leaving education with only a first level of vocational training (CAP). Group differences between the 'Long-term NEET' cluster and the 'Direct-to-Employment' clusters suggested that apprenticeships protect best at the lowest levels of education, but this is worth testing parametrically in further analyses. Lastly, the analysis ignores the diversity of jobs held by young people and in particular subsidized jobs, which account for a large proportion of jobs taken up by those leaving education with few if any qualifications. Some subsidized jobs may prevent recurrences of NEET more than others. However, our sample size does not permit a more refined analysis of this question.

In conclusion, the term NEET covers a range of profiles: young people who are not in education, employment, or training, for a short or long period of time, with or without parental responsibilities, living with a partner or living with their parents, with at least a secondary school diploma or with no qualifications. Membership in a school-to-work transition trajectory that comprises long-term and recurrent NEET statuses may be a consequence of structural problems related to the French labour market (such as segmentation, job quality, and short-term contracts), employment and training policies, or social policies (where benefits are only available for young people who have worked for a certain amount of time or for young people with children). While membership in long-term NEET pathways includes a diversity of situations that require a number of discrete responses in terms of social action or public policy, some overall trends are evident in the French context that highlight the need for expanded public support for childcare, regional mobility, and enabling a return to formal education or training. These policy implications will be further explored in [Chapter 7](#).

## Notes

1. Authors' names are listed alphabetically. Their work was supported by a French National Research Agency grant awarded to IREDU [Grant Number ANR-15-ORAR-0005-01]. See author lists for affiliations and brief biographies of the authors.
2. Eurostat puts the NEET rate in France in 2016 at 14.4% for 15–29-year-olds versus 14.8% for the EU.
3. This is found in the NEET population structure, which, in France more frequently than elsewhere, is made up more of young people who are unemployed rather than economically inactive.
4. [Cahuc et al. \(2013a\)](#) report that about 42% of young people who are NEET have not gone further than middle school (*collège*), which is among the highest rates in the EU after the countries of southern Europe.
5. Sometimes children even start school at two years old if they are toilet-trained and there are places available.
6. L'Etat de l'Ecole, 2017: p. 11.
7. L'Etat de l'Ecole, 2017: p. 77; OECD, *Society at a glance*, 2016.
8. France stratégie, 2016, *Quelles priorités éducatives 2017–2027?*
9. *Repères et statistiques*, 2017: p. 271.
10. These support platforms include: The right to *Retour à l'école au lycée* (52,000 young people from 2014) and second-chance schools (*Ecole de la Deuxième chance* with 15,000 young people each year).
11. The gap is wide if we compare, even in rough terms, the 15,000 young people who get into *Ecole de la Deuxième Chance* and the 3,000 who get into the EPIDE with the 100,000 young people who drop out each year.
12. In particular, it abolished the four-year secondary stream in which young people had to first earn a lower secondary education certificate, the BEP, and then the vocational *baccalauréat* two years later.
13. Under certain circumstances, the age limit may be pushed back to 30 years.
14. If compared for each age cohort, in 2015, the rate of school apprenticeships is 7% at 18 years old versus 5% at 16 years old.
15. [Moreau \(2015\)](#) reports that this is particularly true for girls and for young people from immigrant families.

16. More than 8 in 10 jobs held by young people benefit from reduced levies, especially general ones with low wages (Boisson-Cohen et al., 2017).
17. A total of 50% of 15–24-year-olds were in insecure jobs in 2011, versus 17% in the early 1980s (*Insee*).
18. Since the 1980s, France has invested great effort in numerous co-existing policies focused especially on 16–25-year-olds. These take three main directions: increasing the qualification of young people in order to improve their access to employment, individual support for young people, and incentives to employers (direct subsidies, tax credits, minimum wage, etc. for firms). There are also numerous national measures to promote youth employment (support, training, and work experience), which operate in a fairly complex and fragmented system.
19. Youth can continue to find government-subsidised employment through their *mission locale* by signing a *Contrat unique d'insertion* (CUI).
20. Since September 1, 2010, the RSA has been extended to young people under 25 years (Young RSA) who have worked for at least 3,214 hours in the three years preceding the application. Otherwise, the RSA is reserved for people who are more than 25 years old without resources, unemployed, and not in training. The condition relating to being in employment is not required for young pregnant women or those who already have at least one dependent child. The RSA also provides an additional income for poor workers.
21. Young people's career paths are built in the local labour markets (Grelet, 2006; Couppié and Gasquet, 2009) and especially so when they are not highly educated, with the least qualified being the least mobile geographically.
22. Centre for Research on Education, Training and Employment, which is a public establishment under the aegis of the Ministries of Education and Labor.
23. The years of higher education were imputed based on respondents' educational credentials; therefore, sequences vary from seven to ten years.
24. At each survey date, a calendar was used to collect successive monthly statuses, including employment, unemployment, initial education, a return to formal education or training (FET), and inactivity. For the descriptive analysis, we applied sample weights correcting for sample design in terms of gender and education, and for the multivariate analysis, we used the unweighted sample.
25. While the socio-demographic variables, such as gender and immigrant origin, are time-constant variables by nature, having children and the highest level of education are time-varying within our sequence data. Highest education is highly pattern dependent and examined only as an outcome variable. Having children during one's studies, on the other hand, is substantively of interest in predicting patterns and is therefore included in models even though this leads to some degree of endogeneity when calculating probabilities.
26. The colours chosen for the status proportion plots and the sequence index plots are based on the colour-blind-friendly scheme suggested by Okabe and Ito (2002) and consistent with the other country chapters.
27. Indel costs are set to 1; substitution costs are set to 2. Missing data from the end of sequences due to unequal sequence lengths were simply deleted at zero cost.
28. Those who *return* to formal education are undoubtedly underestimated. Young people who go back into education or apprenticeship during the first year after leaving in 2004 are not considered to have left learning. They are not, by definition, within the scope of the *Génération* survey included in the sample. Generally, these surveys are based on the French concept of 'education leaver': any young person registered in an initial education and training establishment in a given year and not registered the following year in that or some other establishment is considered to have left the education system and so comes within the scope of the survey.

29. In answering the question, 'Do you consider that you have been a victim of discrimination at time of hiring at least once in your career since 2004?'
30. In doing so, we conduct our analyses using the 'margins' command in Stata. Because the marginal effects differ from individual to individual in our models, we compute this probability for each individual and then compute the overall average of these marginal effects.
31. Both OLS and Poisson regressions were conducted, but for ease of interpretation, the OLS results are reported here. The results did not differ in direction or significance between the two models.

## 5 NEETs in England

*Craig Holmes, Liam Wright, Emily Murphy,  
Ken Mayhew, Ewart Keep and Sue Maguire*

### 5.1 Introduction to NEET in England

This analysis in this chapter focuses specifically on the experience of not in education, employment, or training (NEETs) in England. The decision to focus on England specifically, rather the whole of the United Kingdom, has been driven by two factors. First, while there are clearly many areas of commonality between the four nations that make up the United Kingdom, a number of areas of policy that relate to NEETs in Wales, Scotland and Northern Ireland are devolved to their respective national governments, in particular policies around education and training. For that reason, it is analytically more straightforward to focus on one nation within the United Kingdom. Second, to produce an analysis that is comparable with the other country chapters in this book, we use data from Next Steps, which was formerly known as the Longitudinal Study of Young People in England. Other data sets that were available which covered the whole of the United Kingdom did not allow us to follow the same methodology as in other countries.

The chapter is set out as follows. In the next section, we describe the education, labour market and social policy context that affect young people in England. Drawing on this context, [Section 5.3](#) sets out our main hypotheses, which we will examine with our analysis – these relate the way the education system, labour market flexibility and social norms around care are expected to impact on the experience of being NEET. [Section 5.4](#) describes our data and the methodology used in the analysis, in particular highlighting how the key variables used to explain differences in NEET risks were derived from our data. [Section 5.5](#) gives the results – in the first part, we use sequence analysis to highlight the different trajectories for those who experience being NEET at some stage in their life, before the regression analysis explains what characteristics are associated with both ever being NEET, and then which of those characteristics are associated with each of the trajectories. In the second part of that section, we use experiences of being NEET to predict various financial and personal life outcomes at the age of 25. [Section 5.6](#) concludes with some comments on our hypotheses.



## 5.2 Institutions and policies in England

### 5.2.1 *The English education system*

Broadly speaking, the English education system has offered three main pathways into the labour market:

- 1 Entry into employment, with or without further on-the-job training, at the end of compulsory general schooling at the age of 16
- 2 Progression through further schooling to an undergraduate degree course, typically in a university, with some continuing to complete further postgraduate degrees
- 3 Progression after compulsory schooling into vocational further education (FE).

Since 2015, the first of these has been affected by the raising of the participation age, which has meant that young people need to remain in some form of education until the age of 18, which could be in school or college, through a work-based apprenticeship or be part-time if completed alongside employment or voluntary work. Each of these pathways leads towards particular qualifications. Those leaving school at 16 usually complete General Certificate of Secondary Education qualifications (GCSEs), as they also do in Wales and Northern Ireland – the equivalent in Scotland are the National 4 and 5s (which replaced the older Standards in 2014). For those progressing to university, the typical route is to complete A-Levels in school or FE college before entering what is usually a three- or four-year course that awards a bachelor's or master's degree upon completion.

As students' progress through further levels of formal schooling and higher education, they become more specialized. Students take five or more GCSEs, with compulsory courses in English, math and science, and many students are encouraged to also take either history or geography, and a foreign language completion of this combination of traditional subjects is known as an English Baccalaureate, which is a school performance measure rather than an award. At the post-16 level, students take a smaller number of subjects, typically three if they are hoping to progress to higher education, and there are no compulsory subjects (unlike qualifications at the same level such as the International Baccalaureate). The subjects on offer for GCSE and A-Levels are largely academic. Unlike many other European countries, there is currently no established vocational route prior to the end of compulsory secondary schooling. This is not to say that such options have not been experimented with in the past – for example, there were the General National Vocational Qualifications, but take-up was always low compared to the more academic route. School-based vocational education has been taken up again recently with the new T-Levels, which aim to provide a vocational path for 16-to-19-year olds in 15 sectors such as hair and beauty and construction delivered mostly

in classrooms – probably in FE colleges rather than schools – with some work experience. It is too early to make any definite judgements, but a concern is that, as so often before, this new track will be seen simply as an inferior alternative A-Levels for the academically less gifted.

University degrees are more specialized again, typically in one or two subject areas, and many are work-focused and vocational, in the sense that graduates from certain subject end up working in a small number of occupations. This includes teacher training, medicine, dentistry and other subjects allied to medicine, including nursing, midwifery, pharmacy, physiotherapy and others. It also includes, to a lesser extent, subjects like civil engineering, architecture, IT and landscape design. Other degree courses are less vocational and do not lead into a small number of specific occupations, such as biological and sport sciences, business studies, geography, history and languages (see HEFCE, 2018, for a full classification of subjects by occupational concentration).

In general, those not progressing on to a university course and entering vocational FE will either enrol in part-time or full-time study in an FE college or a school sixth form college or take up an apprenticeship, which (to be eligible for government funding) has to be linked to a full-time paid job and include some off-the-job training. However, those who are following this pathway face a far more complicated landscape of programmes and qualification, which vary in terms of quality, level, content, provider and a number of other features.

To aid with comparability, different qualifications are placed within a national qualification framework. The United Kingdom has had a number of different frameworks. The National Vocational Qualifications (NVQs) framework, first introduced in the late 1980s, was superseded in 2008 by the Qualifications and Credit Framework (QCF) in England, Northern Ireland and Wales, with a separate Scottish Credit and Qualifications Framework (SCQF) in Scotland. The QCF has recently been replaced by individual frameworks in each of the three UK countries – the Regulated Qualifications Framework in England and Northern Ireland (but with separate regulatory bodies) and the Credit and Qualifications Framework for Wales (CQFW).

Table 5.1 summarizes the current English national qualification frameworks. Qualifications in these frameworks are assigned a level, each of which has a notional equivalent in terms of school or higher education qualifications. Qualifications at level 2 are equivalent to good passes at GCSE, those at level 3 are equivalent to A-Level qualifications and those at 4 or above correspond to some form of higher education, with bachelor's degrees at level 6.

The delivery of vocational training – outside of those higher education courses linked to particular occupations – has historically been a work-based matter, including apprenticeships, traineeships and other workplace training schemes. In the 19th and early 20th centuries, the United Kingdom was unusual among industrialized and industrializing countries in leaving vocational education and training (VET) provision largely to individuals and their employers, while

Table 5.1 The RQF

<i>Level</i>	<i>Example vocational qualification</i>	<i>Equivalent academic qualification</i>	<i>European Qualifications Framework equivalent</i>
1	NVQ level 1	GCSE grades D–G	2
2	Intermediate apprenticeship, NVQ level 2	GCSE grades A*–C	3
3	Advance apprenticeship, NVQ level 3	A–Level or International Baccalaureate	4
4	Higher apprenticeship, Higher national certificate (HNC), NVQ level 4	T–Levels Certificate of higher education	5
5	Higher National Diploma (HND)	Diploma of Higher Education or foundation degree	5
6	Degree apprenticeship	Bachelor's degree	6
7	Level 7 diploma	Master's degree	7
8	Level 8 diploma	Doctorate	8

many other countries created vocational training structures with major state involvement. Although the UK state had a peripheral role, especially through the provision of vocational education in FE colleges and through government training centres, it remained only a marginal player until the early 1960s.

In terms of the type of training provided, craft apprenticeships for a small, select group of young people was the dominant form within manufacturing with little in the way of structured training for adult workers. Outside manufacturing, there were various forms of clerical training and cadetships for some young entrants but again little provision for adults. From the early 1960s, things started to change rapidly. The 1964 Industrial Training Act signalled the start of significant policy involvement in post-school VET, and though the form of this involvement changed somewhat during the Thatcher and post-Thatcher years, training and skills policy has remained a central concern of government. However, as intimated above, the success of policy interventions has been extremely limited, with many new programmes introduced and old programmes abandoned by successive governments (and sometimes by the same government).

Figure 5.1 summarizes the educational attainment levels of the English working age population between 2008 and 2015. The figure shows that the biggest change over the past decade has been the growth of those with level 4 (and above) qualifications and the fall in those with less than level 2 qualifications. The increase in the former is largely related to the expansion of higher education through the completion of an undergraduate degree or higher at university, which since a rapid growth in participation since 1989 has become the most common route for young people to enter the labour market across the United Kingdom.

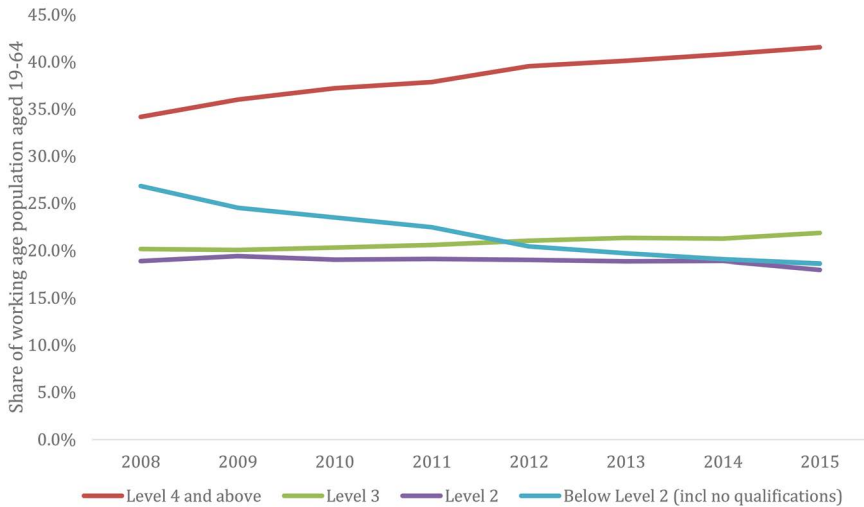


Figure 5.1 Highest qualification level, all population aged 19–64, England.

While higher education participation has continued to grow, the mode of study has changed since 2006. In particular, the number of part-time students studying for a first degree has fallen by around 40% while full-time numbers have grown by approximately that same proportion. This has been linked to reforms in the university fees structure accompanied by a lack of financial support available to part-time students as compared to their full-time counterparts (Open University, 2017).

Alongside this ongoing expansion of higher education, the number of students participating in courses at FE colleges has declined markedly since 2010. This decline has coincided with an almost 25% drop in vocational qualifications awarded at level 2 and below since 2012. Level 3 and 4 vocational qualifications have increased at the same time, but from a much lower base, and increasingly these qualifications have been completed in schools. Figure 5.2 shows that the number of students staying in school to do a level 3 qualification has increased since 2009, as well as at sixth form colleges, but with little change at FE colleges. At the same time, the number of students entered for A-Levels has dropped. This implies one of two things about the way students are progressing through the educational system. First, the students are switching from traditional A-Levels to other forms of qualifications before progressing into university. Second, it might indicate that more students are looking to follow a vocational route into work without going to university.

### 5.2.2 Vocational education in England

As mentioned in the previous section, vocational education has become increasingly an area of intervention for the UK governments (which, since

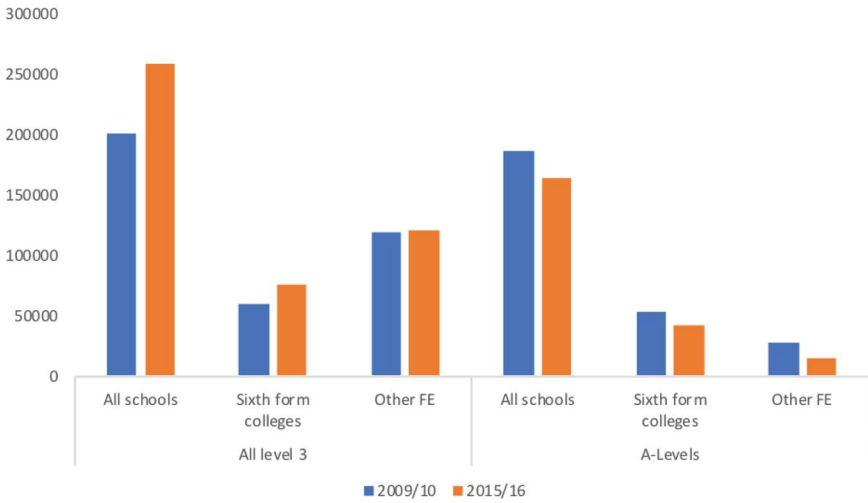


Figure 5.2 Students aged 16–18 entered for level 3 qualifications.

devolution, is now responsible for policy in England alone) over the past few decades, with many attempted reforms to deal with the perceived weakness in the route into the labour market when compared to its equivalents in continental Europe. These concerns remain present today, despite all of the policy activity. The 2011 Wolf Review found that the vocational education system, despite having some examples of excellence, was often failing young people, who ended up in courses which did not give them the best future opportunities, had low returns, struggled to gain involvement from employers and consequently continued to have a second-class status amongst students and parents as compared to academic qualifications. They are often seen as the route for less able young people who were not able to enter A-Levels or a university course. Claims of equivalence between vocational and academic qualifications at particular levels are not seen as credible. Recent government policy has emphasized the importance of apprenticeships and recent reforms have aimed to improve their uptake and quality. Figure 5.3 shows that the number of new apprentices in England at the Intermediate and Advanced level (level 2 and 3 respectively) increased enormously after 2010. Starting from a much lower base, Higher Apprenticeships (which are at level 4) have also grown at an extremely fast rate.

However, figure 5.4 shows that this growth was almost entirely for those over the age of 25, and that the number of apprentices under the age of 19 has remained constant since the early 2000s. Moreover, some have commented that this increase in over 25 apprenticeship start may not represent new training but a relabelling of existing training under now defunct schemes like Train to Gain: ‘Importantly, it is not clear that the increase in the number of apprenticeships reflects an increase in training. The increase between 2009–10

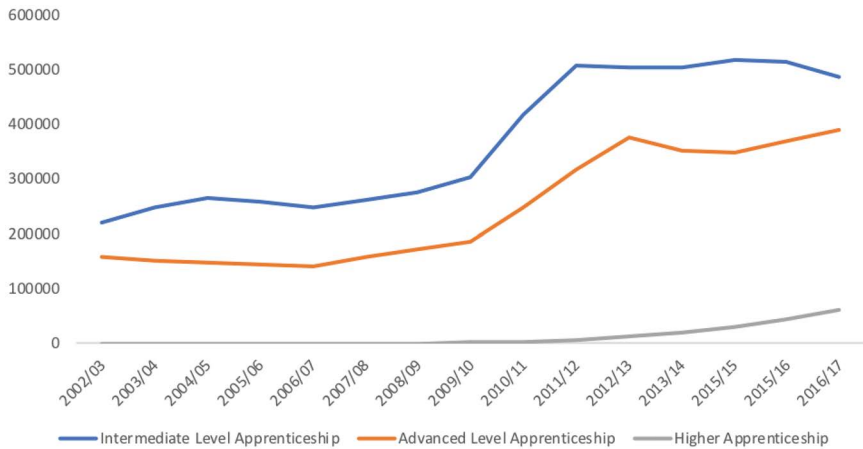


Figure 5.3 New apprenticeship starts in England 2002/3–2016/17 by level.

and 2010–11 for those aged 25 and over is likely to reflect, at least partly, the reduction of funding for the Train to Gain programme – which subsidized employer training of (primarily) those aged 25 and over – and the diverting of that funding towards apprenticeships. This implies that a lot of the increase is in fact “relabelling” of training as apprenticeships’. (*Sibieta, 2017*).

In 2017, the UK government introduced the Apprenticeship Levy to finance the creation of 3 million more apprenticeships by 2020. Since the introduction of the Levy, the number of new apprentices across all levels and age groups fell by about a third, with the effect particularly strong for the over 25s and for level 2 qualifications. Research by the Resolution Foundation (*Henehan, 2019*) suggests that changing regulations around expenditure and number of hours of training has forced the lowest quality apprenticeships out of the market.

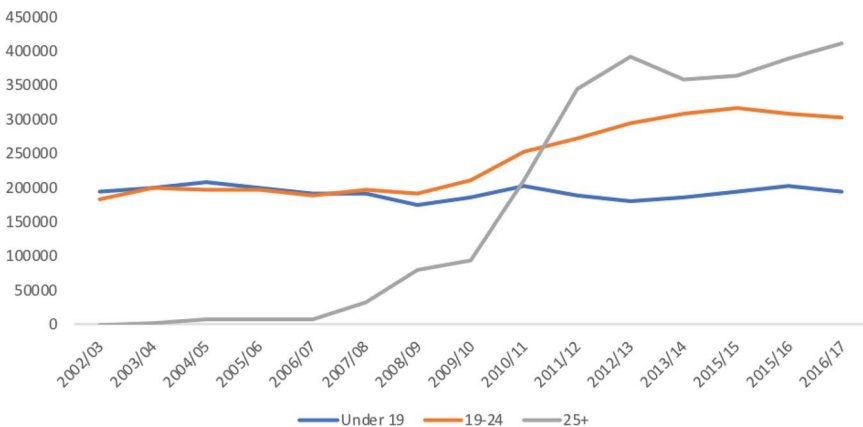


Figure 5.4 New apprenticeship starts, 2002/3–2016/17 by age group.

### **5.2.3 Labour market arrangements in England**

Employment legislation is not devolved from the central UK government – consequently, this subsection refers to the readily available UK data rather than England-specific data. The UK labour market is relatively fluid as compared to many other OECD countries. Turnover is higher with an average job tenure of around 8.5 years, as compared to an average of 10.5 years across all OECD countries. People transition out of unemployment relatively quickly – in 2018, around 40% of unemployed people remain so for less than three months, which is similar to the OECD average, although prior to the financial crisis this figure went as high as 45%, while the OECD average was below 40%. Across the EU, the proportion of people who are unemployed for less than three months is typically closer to 30%. At the same time, the incidence of long-term unemployment has typically been lower in the United Kingdom than it is across the OECD and in Europe – in 2018, 26.3% of unemployed people had been out-of-work for over year, compared to 29% in the OECD and 43.4% across the EU.

Part of the reason for this is that there are lower levels of employment protection legislation (EPL). The ability to challenge unfair dismissals and entitlement to compensation for being made redundant is usually only available to those who have worked for an employer for more than two years. As a result, the OECD indicator of EPL strictness is lower than many other European countries, and comparable to the United States, particularly in terms of protection for temporary employees. On the other hand, the United Kingdom spends relatively little on the sorts of active labour market policies, which help people move from periods of being NEET back into employment, as compared to other western European countries. Most spending is on job-search services, job-matching services and short-term training programmes designed to facilitate successful job-searches. The Work Programme, a workfare programme introduced under the Coalition government in 2011, which covered people of all ages, aimed to tackle longer term unemployment through involving private sector and third sector organizations in the task of finding sustained employment opportunities, and paid successful organizations by the results they achieved. The Work Programme was ended in 2017 and hasn't been replaced with any new major initiative – policy to get the unemployed back to work relies even more heavily on the administration of the welfare system, and sanctions that can be imposed through the payment or withdrawal of benefits.

### **5.2.4 Welfare arrangements**

The Department for Work and Pensions (DWP) is responsible for managing welfare support across Great Britain, including in England (but excluding Northern Ireland). Entitlement to independent welfare support begins at the age of 18, although a small number of under 18s are able to some benefits under some circumstances.

Under the existing system, young people have two sorts of welfare benefits available to them. Those who are unemployed and seeking work receive Jobseeker's Allowance (JSA), if they are registered for welfare support. Young people in receipt of JSA are required to attend a Job Centre on a regular basis and will be set targets by a Work Coach, to demonstrate that they are 'actively available' and 'actively seeking work'. There is a high rate of sanctioning among the young JSA claimants. For those who are not actively seeking work, for example due to ill health or caring responsibilities, there are a range of welfare benefits that can be claimed, such as Disability Living Allowance (DLA) for those with long-term health or disability, and Employment and Support Allowance (ESA) for those unable to work for health reasons. There are also benefits available to help with the cost of housing and tax credits for people with children.

Since 2010, DWP has been attempting to pilot and roll out Universal Credit (UC), which will replace all existing welfare support arrangements by 2022.<sup>1</sup> In UC pilot areas, there is also the Youth Obligation Programme, which focuses on offering young people intensive support to encourage early (re)entry into the labour market. For JSA, conditionality plays an important role in an attempt to push into employment under threat of losing benefits. Claimants may be sanctioned for voluntarily leaving a job without a good reason, leaving a job due to misconduct, or for not attending or accepting an interview for a new job. These benefits are low relative to the typical level across the European Union – for those who have been out of work for six months, benefit payments are around 13% of median earnings, as compared to 40% for the EU overall, although this gap narrows for longer term unemployed. For those not seeking work, benefits in the United Kingdom have typically been higher than the European average but have become significantly less generous since 2010. The OECD calculates that based on an individual or household's full entitlement, benefits for a single person with no children have fallen from 63% of median disposable income to 54% since 2010, while for a couple with two children, it has fallen from 65% to 54%. Across Europe, this percentage has remained constant or has increased slightly during this time period.

### ***5.2.5 Family policies***

One final issue relates to support with childcare costs, which many European countries subsidize. Across the United Kingdom, childcare costs have been rising faster than average wages over the past decade. Policy on this is devolved, so focusing on the response to this in England, the government has introduced some new policies during this time – the Coalition government introduced 15 hours of free childcare for each three and four year old in England, which was extended to two year olds from low income families in 2013, while the Conservative government introduced 30 hours of free childcare for three and four year olds from working families in 2017. As a



result, net childcare costs (as estimated by the OECD) have been reduced over the past few years – for a low-income couple (both on two-thirds of the median wage) with two children, the net cost of childcare rose from 34% to 60% from 2008 to 2015 but has since fallen to 46% in 2018. In comparison the other EU countries, however, this figure is very high – the comparable figure across Europe was 10% in 2018 and has not been higher than 15% during the 2000s. Therefore, for young people with children, childcare costs are a significant barrier to entering the labour force.

### 5.3 Hypotheses

The above discussion of the English institutional context leads to several specific issues, which we aim to investigate in this chapter, alongside other issues which are common themes across the chapters of this volume.

The first relates to the role of the education system. England has a large higher education sector which rapidly expanded during the 1990s and 2000s. On the other hand, it does not have a stable and established vocational educational pathway into the labour market, but rather a piecemeal collection of vocational programmes, many of which do not appear to be targeted at school-leavers. This chapter will examine the role how the higher education pathway affects the overall NEET population in the United Kingdom, and the way in which the vocational education system that exists fits into the transitions between school and the labour market.

The second issue relates to the perceived employment-friendly nature of the UK labour market, with lower levels of employment protection and an unemployment benefit scheme which aims to push people towards work. From this, we might expect that the experience of being NEET is generally short-term, and so we examine the extent to which being NEET is largely a transitory stage in some individuals' lives on the way towards employment and security.

The final issue relates to gender. From other work (see Holmes, Murphy and Mayhew, 2021), we know that historically in the United Kingdom, the majority of NEETs are female, and that the majority of female NEETs were not actively searching for work, very often due to having childcare responsibilities. In the previous subsection, we discussed how in England the cost of childcare is not subsidized by the state to the same extent as many other European countries, and we therefore might expect that in a country like the United Kingdom where the role of childcare more often falls upon women, those women as much more likely to be NEET long term. In this chapter, we try to examine what happens to this group over the longer term.

Hence, our hypotheses which we will evaluate in this chapter are:

- Being NEET is largely a short-term issue, with most NEETs quickly transitioning back into employment (H1), but a core of long-term NEET remaining (H2)

- Vocational education does not provide a significant and widespread route out of being NEET and into stable employment or further study, as compared to school and higher education qualifications (H3a, H3b);
- Having a child makes it more likely that women, rather than men, will be longer term NEETs (H4).

## 5.4 Data and measurements

### 5.4.1 Data

We use data from Next Steps (formerly, the Longitudinal Study of Young People in England), a cohort of secondary school pupils recruited from a single school year in England at age 13/14 in 2004 (Centre for Longitudinal Studies 2018). Recruitment to the study was carried out via stratified sampling, with individual schools the primary sampling unit. Individuals from minority ethnic groups and schools with a high proportion of students eligible for free school meals were oversampled. A total of 15,770 participants were initially recruited and a sample boost of 352 individuals from black and minority ethnic backgrounds was added at age 16/17.

Interviews were carried out annually from 2004 to 2010 (age 19/20) with another follow-up conducted at age 25 in 2015/16 (eight waves total). Parents were also interviewed in the first four waves. Interviews were carried out face-to-face or by telephone or computer, according to participant preference. From 2004 to 2010, only previous responders were followed across waves and per wave drop out varied between 8% and 14%. At the last wave, efforts were made to contact previous non-responders, and a final sample of 7,707 individuals was achieved. Our sample is all participants who participated at the age 25 follow-up. We use survey weights in each of the analyses to account for non-random attrition from the study and to account for item non-response, we impute missing data using multiple imputations by chained equations.<sup>2</sup>

From Wave 4 onwards, participants were asked for the list of activities, their start or end dates, carried out since their previous interview. Using this data, we create a monthly sequence of activities for each individual spanning September 2006 to August 2015. September 2006 marks the first month, post summer holidays, after participants left secondary school. August 2015 is the earliest interview date at the age 25 follow-up. The set of activities are employment, education, NEET and VET.

### 5.4.2 Measurements

One of our main objectives with our analysis was to explore differences by gender and by whether the participant is a parent or not. To this end, we include three variables to our models – gender, parenthood and age of parenthood – separately and interacted together. Another interest is in whether there are specific NEET trajectories among those who also spend time in VET.

We explore this by adding a binary indicator for 1+ months VET in the regressions specified above.

We also look at adolescent health. Several studies have shown that childhood and adolescent health is related to future unemployment and worklessness (Caspi *et al.*, 1998; Egan, Daly and Delaney, 2015). We also include several measures of adolescent health collected in Wave 2 of the study (age 14/15), when participants were in their penultimate year of secondary school. We measure mental health using the General Health Questionnaire 12-item score (range 0–12), general health using a single-item self-rated health question and physical health using a binary indicator for whether the participant had a disability.

To explore patterning of NEET experience by family background, we include measures for main household language (binary: English, other language), highest parental education (higher education, FE, secondary school and no qualifications), grandparental education (binary: 1+ grandparents attended university or not), family socio-economic class (highest parental NS-SEC occupational class higher, intermediate, routine/manual and long-term unemployed), neighbourhood deprivation (Index of Multiple Deprivation, range 0–100), household type (binary: two-parent, lone or other) and ethnicity (binary: White, non-White). All were measured in Wave 1, except neighbourhood deprivation which is from wave 2.

Finally, we include three measures related to adolescent risk behaviour, attitude to school and locus of control (LOC). Risk behaviours were measured in wave 1 using eight binary items on smoking, alcohol use, violence, anti-social behaviour and illicit substance use, which we sum into a continuous measure (range 0–8). Attitude to schools was collected in wave 2 using a 12-item measure on attitude to schooling and schoolwork. Each item was scored using a 4 point Likert scale, which we sum into a continuous measure (range 0–48; higher scores indicate more positive attitude).

LOC was measured as level of agreement (strongly agree, agree, disagree, strongly disagree and don't know) with six statements. Three of these were worded to reflect an internal LOC ('if someone is not a success in life, it is usually their own fault'; 'I can pretty much decide what will happen in my life'; 'if you work hard at something you'll usually succeed'), and three were worded to reflect an external LOC ('even if I do well at school, I'll have a hard time getting the right type of job', 'people like me don't have much of a chance in life', 'how well you get on in this world is mostly a matter of luck'). We use 'don't know' as the centre response category and reverse code the external-worded items then extract a (standardized) latent LOC factor using confirmatory factor analysis.<sup>3</sup> In the CFA model, we allow internal worded items to covary – a large literature shows that response on psychological scales differ according to whether items are worded positively or negatively. Higher scores on the factor indicate more internal LOC.

Next, we explore whether NEET experience are related to several important economic, wellbeing, health and psychosocial outcomes measured at age 25.

The economic outcomes we investigate are: financial difficulties (binary variable, finding it difficult or very difficult to manage vs living comfortably, doing alright or just getting by), current employment, (log) gross labour income, shift work and work precarity (employed in non-permanent or zero-hour work). The health outcomes and health behaviours we explore are: life satisfaction (range 1–5), GHQ-12 Likert score (range 0–36, higher scores indicate poorer mental health) and poor self-rated health and alcohol use (based on Alcohol Use Disorder scale). The psychosocial outcomes are adult identity, which is based on three items from Cote’s (1997) Adult Identity Resolution scale (sum score 0–8), and external LOC.

## 5.5 Analyses and results

We use sequence analysis to extract ‘typical’ labour market clusters from participants who were NEET in at least one month between September 2006 and August 2015. We use optimal matching (OM) with constant indel (1) and substitution (2) costs to measure sequence dissimilarity, the (weighted) Ward algorithm to cluster similar sequences together (2–10 clusters) and visual inspection of index and density plots to select the preferred number of clusters. As we impute missing data in a later step (see above), we only use participants with complete sequence data at this stage.

Next Steps contains rich data on adolescent health and behaviour, family background and demographic characteristics. We use this data to investigate which factors predict NEET experience, running three multivariate regressions:

- 1 A logistic regression predicting whether a participant experiences being NEET between September 2006 and August 2015.
- 2 A zero-inflated negative binomial regression predicting the number of months a participant was NEET between September 2006 and August 2015.
- 3 A multinomial logit model predicting which NEET cluster a participant belongs to, restricted to those with 1+ months NEET.

For each age 25 outcome, we estimate two models. In the first, we add a binary indicator for whether the participant experienced any months being NEET between September 2006 and August 2015. In the second, we add the NEET cluster categorical variable to explore whether there are differences in outcomes across trajectories. In both models, we include the variables from the NEET prediction regressions as covariates to account for possible confounding through these variables. For comparability with categorical covariates, we scale continuous covariates such that a 1 unit change is equal to 2 standard deviations (Gelman, 2008).

Most of the age 25 measures are not normally distributed continuous variables. We use Tobit regression for alcohol use and adult identity, and logit models for financial difficulties, current employment, smoking status and

self-rated health. Labour income, shift work and work precarity are only measured for those who are currently employed, so we use Heckman selection models for each of these outcomes (Heckprobit models for shift work and work precarity), with the covariates and NEET variables included in both the main and the selection parts of the models.<sup>4</sup>

### 5.5.1 Descriptive analyses: NEET in England

Table 5.2 below shows the descriptive statistics for the whole sample, which is then broken down into the subsample which has a minimum of one month as NEET and the subsample that has never been NEET. The average months being NEET for the whole sample is just over 15 – for those that ever experienced being NEET, the average is almost 31 months. The table shows that both groups are roughly equally represented by men and women, but that those who are ever NEET are more likely to have a child, less educated (although more likely to have completed some vocational education) and have a lower socio-economic background.

Figure 5.5 shows the results of regressing of 1+ months NEET experience (left panel, logistic regression) and cumulative NEET experience (right panel, zero-inflated negative binomial regression) on adolescent individual and family characteristics. For brevity, only the results from the count part of the zero-inflated negative binomial regression models are displayed.

First, we see gender differences, and these are linked to having children. Women without children are less likely to be NEET than men, but women with children are more likely to be NEET. Having children is not strongly related to NEET risk for men. Figure 5.5 further shows that the higher the level of education the lower the risk of being long NEET (the reference group here is NVQ5 or higher, which is the equivalent of a university degree). Those who have completed some VET are not more or less likely to be NEET at any point than those who have not done any VET.

We find that family background has some relationship with being NEET. Those from single parent families are much more likely to be NEET at some point. Young people with university educated parents are less likely to ever be NEET as compared to other young people. A good attitude towards school and a high LOC during adolescence is associated with a lower risk of being NEET, while those who engage higher risk activities are more likely to be NEET, holding other factors, such as education levels, constant.

### 5.5.2 Sequence analyses: Exploring pathways of NEET in England

Figure 5.6 describes the distribution of the four different outcomes – employment, full-time education, VET and NEET – are each moment in time. It shows that at age 16, the majority were in some form of full-time education. Far fewer were in employment or some form of VET at the age of 16, and then a small group were NEET at the age of 16. By the age of 25, the majority are

Table 5.2 Summary statistics by sample

	<i>Variable</i>	<i>Full sample</i>	<i>0 months NEET</i>	<i>1+ months NEET</i>
	Observations	7,707	3,838.13	3,868.87
	Months NEET	15.37 (26.8)	0 (0)	30.62 (31.05)
	NEET spells	0.79 (1)	0 (0)	1.58 (0.86)
	NEET spell duration	11.03 (21.72)	0 (0)	21.97 (26.45)
	Total spells	3.58 (1.9)	2.55 (1.13)	4.6 (1.95)
	Sequence entropy	0.45 (0.2)	0.38 (0.17)	0.53 (0.2)
	Female	3,874.96 (50.28%)	1,942.13 (50.6%)	1,932.83 (49.96%)
	Has child	1,786.43 (23.18%)	544.60 (14.19%)	1,241.83 (32.1%)
	Age at first birth	21.66 (2.59)	22.8 (2.22)	21.16 (2.58)
Gender × child	Male, no child	3,249.79 (42.17%)	1,652.03 (43.04%)	1,597.75 (41.3%)
	Female, no child	2,670.78 (34.65%)	1,641.49 (42.77%)	1,029.28 (26.6%)
	Male, with child	582.25 (7.55%)	243.96 (6.36%)	338.29 (8.74%)
	Female, with child	1,204.18 (15.62%)	300.64 (7.83%)	903.54 (23.35%)
	Non-White	1,213.28 (15.74%)	623.77 (16.25%)	589.50 (15.24%)
	Foreign household language	437.23 (5.67%)	220.59 (5.75%)	216.64 (5.6%)
	1+ months VET	1,358.45 (17.63%)	550.61 (14.35%)	807.84 (20.88%)
Highest qualification	NVQ 5	946.64 (12.28%)	658.70 (17.16%)	287.94 (7.44%)
	NVQ 4	1,674.29 (21.72%)	980.67 (25.55%)	693.62 (17.93%)
	NVQ 3	1,261.03 (16.36%)	759.23 (19.78%)	501.81 (12.97%)
	NVQ 2	1,928.32 (25.02%)	903.98 (23.55%)	1,024.33 (26.48%)
	NVQ 1	1,199.00 (15.56%)	298.12 (7.77%)	900.88 (23.29%)
	No/Other qual	697.71 (9.05%)	237.43 (6.19%)	460.28 (11.9%)
	GHQ-12 caseness	1.81 (2.61)	1.6 (2.41)	2.01 (2.78)
Self-rated health	Very good	3,308.92 (42.93%)	1,795.38 (46.78%)	1,513.54 (39.12%)
	Fairly good	4,044.66 (52.48%)	1,941.85 (50.59%)	2,102.81 (54.35%)
	Not good	353.42 (4.59%)	100.89 (2.63%)	252.52 (6.53%)
	Disabled	1,231.62 (15.98%)	508.08 (13.24%)	723.54 (18.7%)

(Continued)

Table 5.2 Summary statistics by sample (Continued)

	<i>Variable</i>	<i>Full sample</i>	<i>0 months NEET</i>	<i>1+ months NEET</i>
Family NS-SEC	Higher	2,725.79 (35.37%)	1,552.30 (40.44%)	1,173.49 (30.33%)
	Intermediate	1,552.20 (20.14%)	871.65 (22.71%)	680.56 (17.59%)
	Routine/manual	2,973.67 (38.58%)	1,264.09 (32.94%)	1,709.58 (44.19%)
	Long-term unemployed	455.33 (5.91%)	150.09 (3.91%)	305.24 (7.89%)
	IMD	23.22 (16.68)	20.75 (15.54)	25.68 (17.4)
	Lone/no parent	2,206.28 (28.63%)	871.94 (22.72%)	1,334.35 (34.49%)
Parental education	Degree	1,201.55 (15.59%)	671.51 (17.5%)	530.05 (13.7%)
	Other HE	1,160.11 (15.05%)	663.00 (17.27%)	497.11 (12.85%)
	A-Level	1,317.90 (17.1%)	703.51 (18.33%)	614.40 (15.88%)
	GCSE A-C	2,140.65 (27.78%)	1,051.96 (27.41%)	1,088.69 (28.14%)
	Other/none	1,886.78 (24.48%)	748.16 (19.49%)	1,138.62 (29.43%)
	Grandparent attended university	830.73 (10.78%)	451.53 (11.76%)	379.19 (9.8%)
	Attitude to school	31.78 (7.93)	33.21 (7.3)	30.36 (8.26)
	Risk behaviours	1.02 (1.55)	0.8 (1.34)	1.24 (1.7)
	Internal locus of control	-0.03 (1.01)	0.14 (0.93)	-0.21 (1.06)

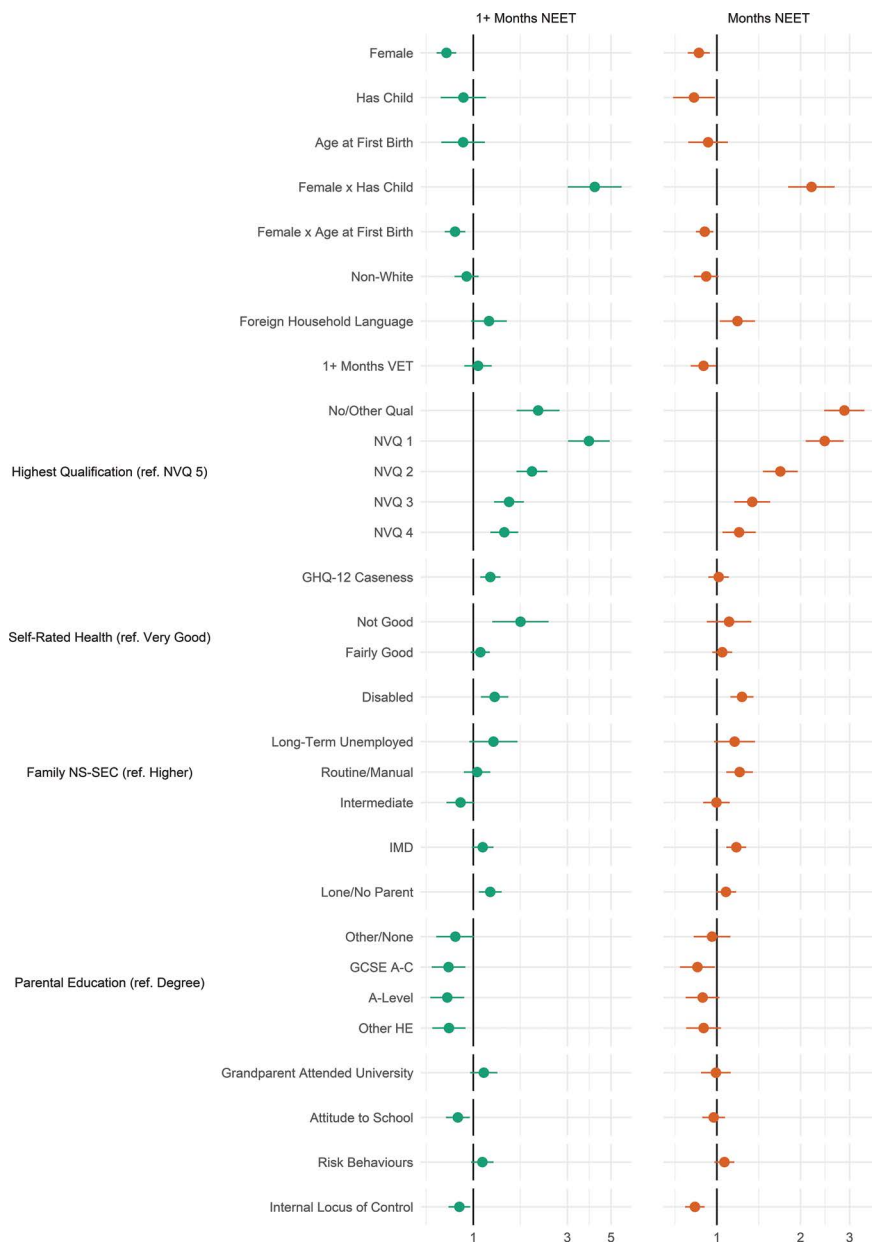


Figure 5.5 Logistic and binomial regression of variables on being NEET.



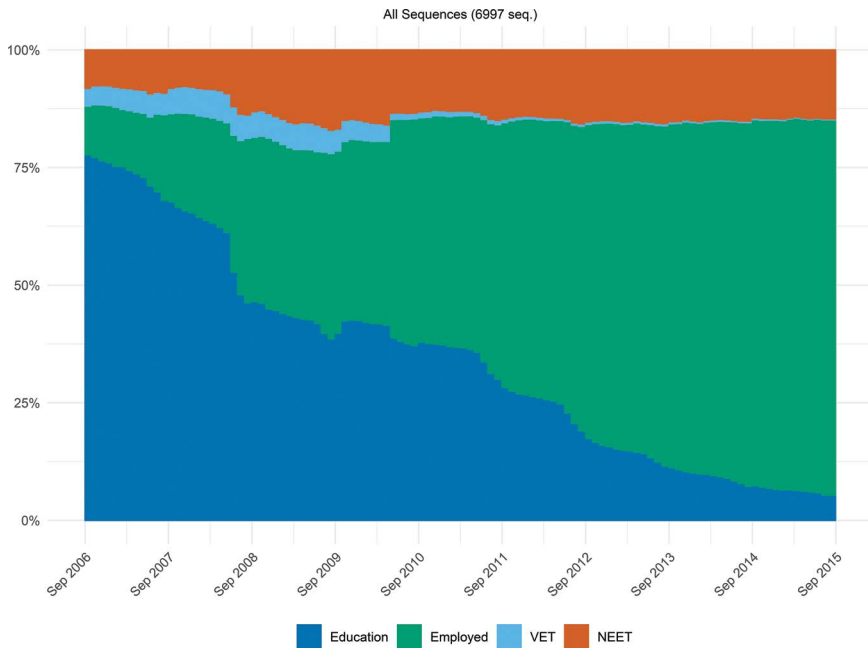


Figure 5.6 Transversal state distribution plot for the sample as a whole.

employed, and few are in full-time study or VET programmes. The NEET group increases in size between the age of 16 and 25 but is largely stable (as a proportion of the total sample) by the age of 22. Finally, it is striking how little VET activity we see, especially after individuals enter their 20s.

Figure 5.6 shows the cross-sectional picture, and not the trajectories individuals took having been, at age 16, in one of these four categories. The trajectories are shown in Figure 5.7. There is clearly a wide range of different experiences along the way – for example, many people return to study in their early 20s having been either employed or NEET before that. It is also clear how short periods of being NEET are common for a large number of individuals in the sample, so while the proportion of the population who are NEET at any point in time is stable, this involves a considerable amount of churn into and out of that group to both employment and further study or training. One final observation, picking up the point made about the limited amount of VET is that aside from those involved in VET at age 16, other instances of VET later in the life course are much more sporadic, and far less visible than spells of further study and inactivity for people in their late teens and 20s.

For all individuals who had at least one spell of being NEET (which accounts for approximately half of the full sample), our cluster analysis of the sequences identifies five clusters of broadly similar trajectories, which we label ‘Higher

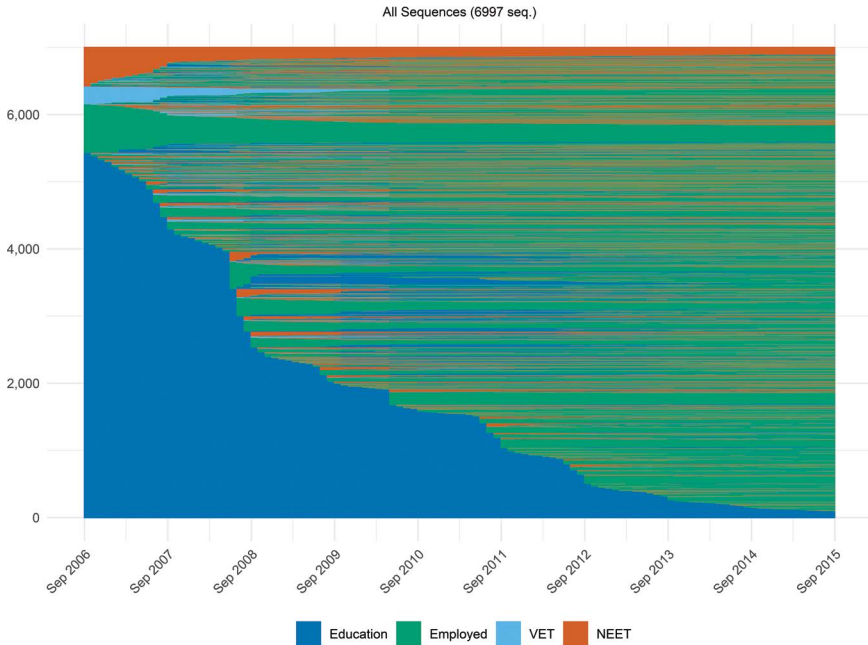


Figure 5.7 Individual trajectories.

Education' (27.6%), 'Long-Term NEET' (20%), 'Unstable Employment' (18.7%), 'Into Employment' (17.8%) and 'Further Education' (16%).

Figures 5.8 and 5.9 show the cross-sectional distribution of activities for each cluster and the individual trajectories within each cluster. Table 5.3 gives the summary statistics for each cluster. 'Higher Education', 'Into Employment' and 'Further Education' each have low incidences of being NEET over the time period – the key difference being at what point the transition between education and employment occurred. For the 'Into Employment' group, the overwhelming majority are out of education by the age of 18, and almost all are employed by the age of 21. Those in the 'Further Education' are generally in education until 18, but mostly out of education before the age of 20. For the 'Higher Education' group, the majority are still in education by the age of 21 or 22 (many of whom had a gap between the end of school and the start of the next period of education). Experiences of being NEET in this group are largely transitory, with very few long-term NEETs after education has completed. There are actually a larger proportion of NEET in the Higher Education group than the Into Employment group – in part because of the proportion of individuals who have a period of inactivity at age 18 between two spells of education, but this gap is also present if we compare people in their 20s, which reflects that for all individuals there is a significant probability of being NEET for a short while transition between education and work, and that for the Into

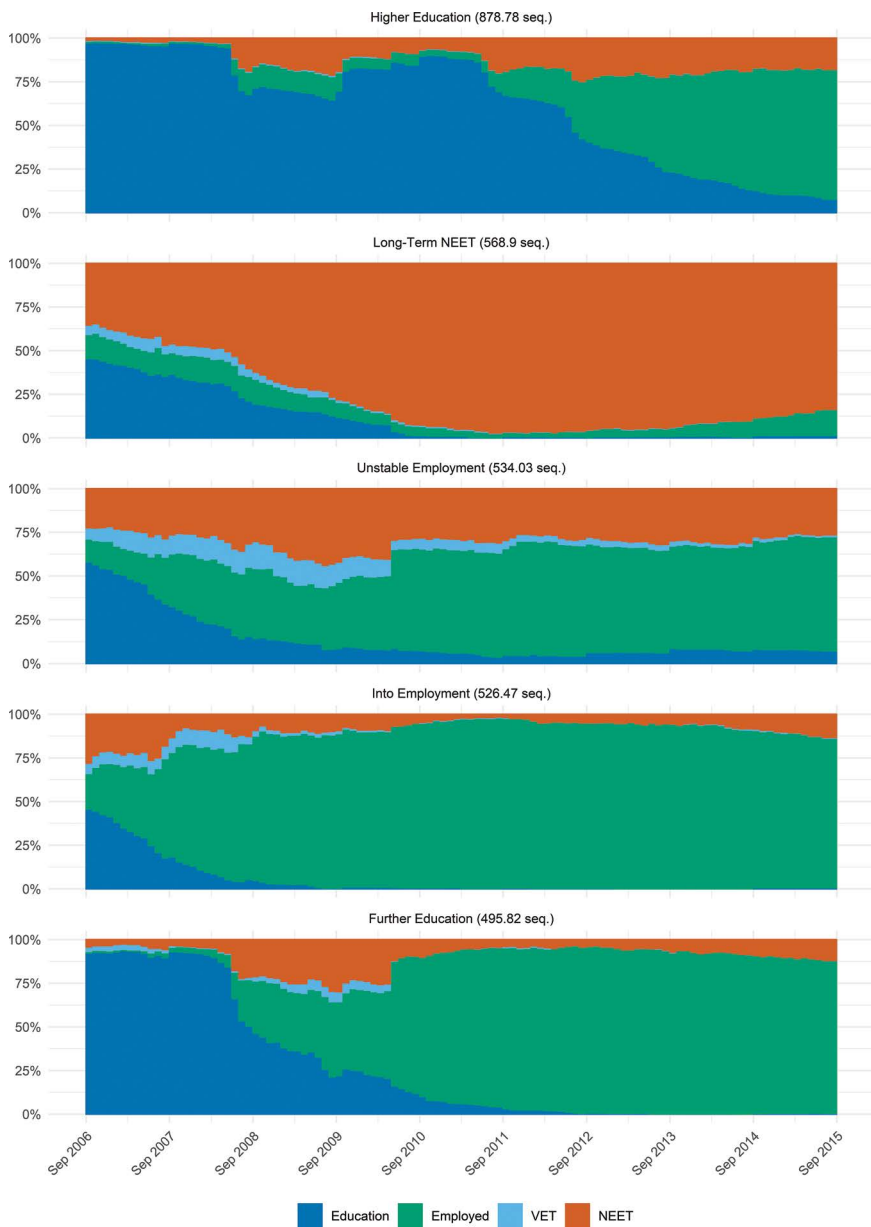


Figure 5.8 Distribution of activity over time, by cluster.

Employment group, this transition happened earlier. One minor observation is what is happening to the size of the NEET group around the age of 24 and 25 – for those who went straight into employment, it is starting to increase again, perhaps reflecting career breaks for starting a family. Such a pattern is not as

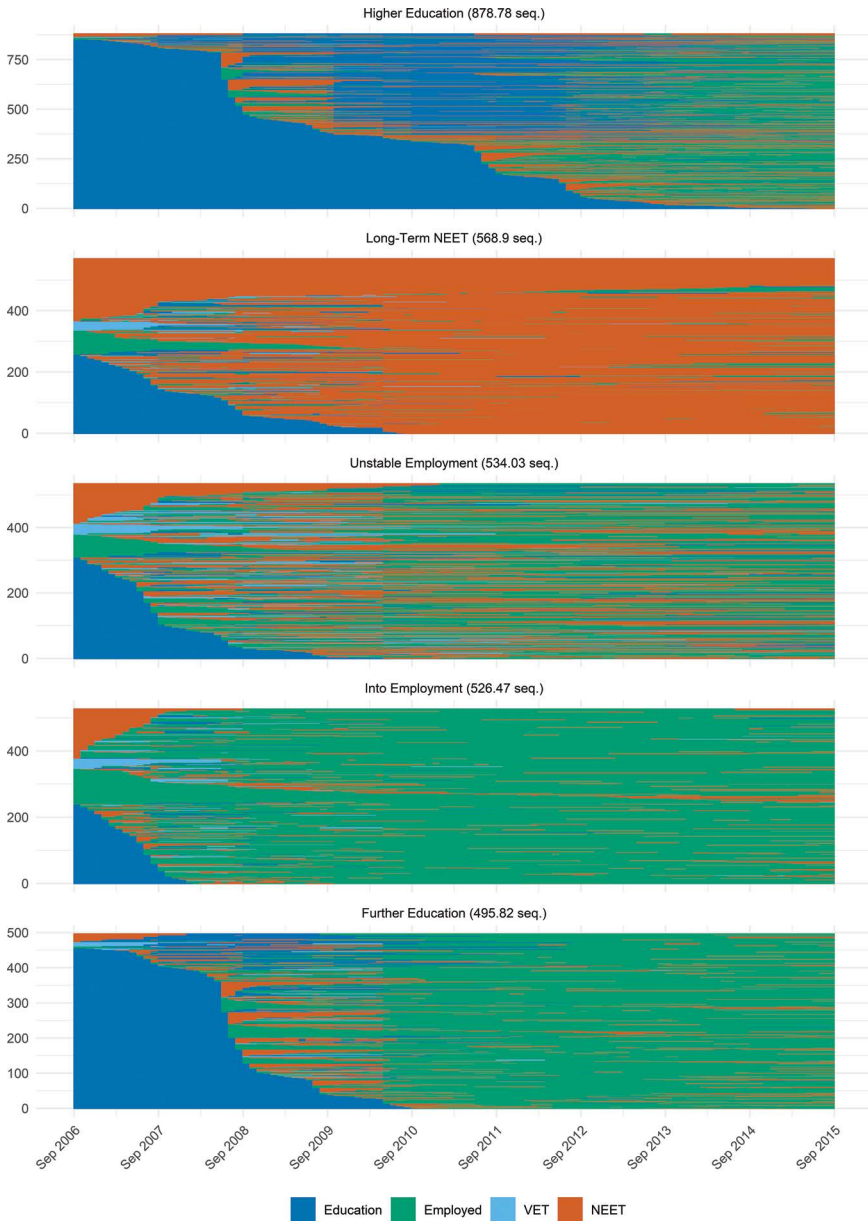


Figure 5.9 Individual trajectories, by cluster.

obvious for those who went to university, which might be to do with the older age at which many university graduates begin to think about having children.

The 'Unstable Employment' group have a similar initial educational profile to the 'Into Employment' and 'Further Education' groups – the majority are

Table 5.3 Summary statistics by cluster

		Full sample	Not NEET	Higher education	Long-term NEET	Unstable employment	Into employment	Further education
Gender × child	Observations	7,707	3,838.13	1,066.25	772.36	724.45	687.07	618.73
	Months NEET	15.37 (26.8)		14.91 (13.78)	84.26 (15.77)	33.2 (17.54)	9.73 (7.83)	10.89 (8.06)
	NEET spells	0.79 (1.00)		1.45 (0.79)	1.65 (0.87)	2.01 (1.06)	1.44 (0.71)	1.35 (0.63)
	NEET spell duration	11.03 (21.72)		11.01 (10.64)	63.72 (28.96)	19.42 (13.99)	6.93 (5.82)	8.41 (6.4)
	Total spells	3.58 (1.90)	2.55 (1.13)	4.82 (1.76)	3.5 (1.98)	5.71 (2.07)	4.33 (1.71)	4.62 (1.44)
	Sequence entropy	0.45 (0.20)	0.38 (0.17)	0.59 (0.13)	0.38 (0.21)	0.67 (0.14)	0.36 (0.16)	0.62 (0.11)
	Female	3,874.96 (50.28%)	1,942.13 (50.6%)	519.48 (48.72%)	473.97 (61.37%)	339.43 (46.85%)	288.74 (42.02%)	311.20 (50.3%)
	Has child	1,786.43 (23.18%)	544.60 (14.19%)	98.40 (9.23%)	409.62 (53.03%)	326.07 (45.01%)	258.80 (37.67%)	148.95 (24.07%)
	Age at first birth	21.66 (2.59)	22.8 (2.22)	21.92 (2.47)	19.68 (2.21)	21.55 (2.26)	22.03 (2.51)	22.33 (2.57)
	Male, no child	3,249.79 (42.17%)	1,652.03 (43.04%)	521.66 (48.92%)	245.88 (31.83%)	278.55 (38.45%)	281.95 (41.04%)	269.71 (43.59%)
	Female, no child	2,670.78 (34.65%)	1,641.49 (42.77%)	446.19 (41.85%)	116.87 (15.13%)	119.83 (16.54%)	146.32 (21.3%)	200.08 (32.34%)
	Male, with child	582.25 (7.55%)	243.96 (6.36%)	25.11 (2.35%)	52.51 (6.8%)	106.47 (14.7%)	116.38 (16.94%)	37.82 (6.11%)
	Female, with child	1,204.18 (15.62%)	300.64 (7.83%)	73.29 (6.87%)	357.11 (46.24%)	219.60 (30.31%)	142.42 (20.73%)	111.13 (17.96%)
	Non-White	1,213.28 (15.74%)	623.77 (16.25%)	273.12 (25.61%)	85.03 (11.01%)	84.73 (11.7%)	53.95 (7.85%)	92.68 (14.98%)
	Foreign household language	437.23 (5.67%)	220.59 (5.75%)	97.34 (9.13%)	34.97 (4.53%)	35.97 (4.97%)	10.75 (1.56%)	37.61 (6.08%)
	1+ months VET	1,358.45 (17.63%)	550.61 (14.35%)	39.55 (3.71%)	179.69 (23.26%)	310.94 (42.92%)	187.15 (27.24%)	90.51 (14.63%)

(Continued)

Table 5.3 Summary statistics by cluster (Continued)

	Variable	Full sample	Not NEET	Higher education	Long-term NEET	Unstable employment	Into employment	Further education
Highest qualification	NVQ 5	946.64 (12.28%)	658.70 (17.16%)	254.07 (23.83%)	10.30 (1.33%)	8.08 (1.11%)	1.54 (0.22%)	13.97 (2.26%)
	NVQ 4	1,674.29 (21.72%)	980.67 (25.55%)	420.72 (39.46%)	49.85 (6.45%)	67.27 (9.29%)	60.43 (8.79%)	95.36 (15.41%)
	NVQ 3	1,261.03 (16.36%)	759.23 (19.78%)	216.52 (20.31%)	29.73 (3.85%)	48.75 (6.73%)	38.18 (5.56%)	168.62 (27.25%)
	NVQ 2	1,928.32 (25.02%)	903.98 (23.55%)	85.74 (8.04%)	156.52 (20.27%)	269.35 (37.18%)	316.46 (46.06%)	196.26 (31.72%)
	NVQ 1	1,199.00 (15.56%)	298.12 (7.77%)	53.97 (5.06%)	301.19 (39%)	249.02 (34.37%)	188.97 (27.5%)	107.72 (17.41%)
	No/other qual	697.71 (9.05%)	237.43 (6.19%)	35.24 (3.3%)	224.77 (29.1%)	81.98 (11.32%)	81.49 (11.86%)	36.80 (5.95%)
	GHQ-12 caseness	1.81 (2.61)	1.6 (2.41)	1.98 (2.61)	2.3 (3.11)	2.1 (2.82)	1.92 (2.81)	1.72 (2.49)
Self-rated health	Very good	3,308.92 (42.93%)	1,795.38 (46.78%)	493.64 (46.3%)	254.77 (32.99%)	248.90 (34.36%)	265.62 (38.66%)	250.61 (40.5%)
	Fairly good	4,044.66 (52.48%)	1,941.85 (50.59%)	530.69 (49.77%)	424.02 (54.9%)	426.84 (58.92%)	382.17 (55.62%)	339.09 (54.8%)
	Not good	353.42 (4.59%)	100.89 (2.63%)	41.92 (3.93%)	93.57 (12.12%)	48.71 (6.72%)	39.28 (5.72%)	29.04 (4.69%)
	Disabled	1,231.62 (15.98%)	508.08 (13.24%)	165.10 (15.48%)	202.33 (26.2%)	138.84 (19.16%)	116.16 (16.91%)	101.12 (16.34%)
Family NS-SEC	Higher	2,725.79 (35.37%)	1,552.30 (40.44%)	522.01 (48.96%)	107.81 (13.96%)	156.55 (21.61%)	154.80 (22.53%)	232.32 (37.55%)
	Intermediate	1,552.20 (20.14%)	871.65 (22.71%)	206.44 (19.36%)	76.47 (9.9%)	142.70 (19.7%)	132.25 (19.25%)	122.71 (19.83%)
	Routine/manual	2,973.67 (38.58%)	1,264.09 (32.94%)	276.78 (25.96%)	489.04 (63.32%)	367.39 (50.71%)	352.15 (51.25%)	224.23 (36.24%)
	Long-term unemployed	455.33 (5.91%)	150.09 (3.91%)	61.03 (5.72%)	99.04 (12.82%)	57.81 (7.98%)	47.88 (6.97%)	39.48 (6.38%)
	IMD	23.22 (16.68)	20.75 (15.54)	20.41 (15.88)	32.14 (18.69)	28.2 (17.13)	25.49 (16.43)	23.95 (16.46)
	Lone/no parent	2,206.28 (28.63%)	871.94 (22.72%)	265.74 (24.92%)	369.63 (47.86%)	281.68 (38.88%)	221.44 (32.23%)	195.86 (31.66%)

(Continued)

Table 5.3 Summary statistics by cluster (Continued)

	<i>Variable</i>	<i>Full sample</i>	<i>Not NEET</i>	<i>Higher education</i>	<i>Long-term NEET</i>	<i>Unstable employment</i>	<i>Into employment</i>	<i>Further education</i>
Parental education	Degree	1,201.55 (15.59%)	671.51 (17.5%)	339.38 (31.83%)	43.32 (5.61%)	41.61 (5.74%)	31.44 (4.58%)	74.30 (12.01%)
	Other HE	1,160.11 (15.05%)	663.00 (17.27%)	186.54 (17.49%)	56.96 (7.37%)	84.62 (11.68%)	80.30 (11.69%)	88.69 (14.33%)
	A-Level	1,317.90 (17.1%)	703.51 (18.33%)	150.78 (14.14%)	90.93 (11.77%)	141.28 (19.5%)	128.84 (18.75%)	102.57 (16.58%)
	GCSE A-C	2,140.65 (27.78%)	1,051.96 (27.41%)	206.77 (19.39%)	194.95 (25.24%)	235.59 (32.52%)	263.81 (38.4%)	187.57 (30.32%)
	Other/none	1,886.78 (24.48%)	748.16 (19.49%)	182.79 (17.14%)	386.21 (50%)	221.35 (30.55%)	182.68 (26.59%)	165.59 (26.76%)
	Grandparent attended university	830.73 (10.78%)	451.53 (11.76%)	201.41 (18.89%)	53.31 (6.9%)	29.50 (4.07%)	41.44 (6.03%)	53.53 (8.65%)
	Attitude to school	31.78 (7.93)	33.21 (7.3)	33.67 (7.17)	27.28 (9.05)	29.28 (7.87)	28.76 (8.00)	31.53 (7.54)
	Risk behaviours	1.02 (1.55)	0.8 (1.34)	0.73 (1.3)	1.74 (2.01)	1.58 (1.87)	1.41 (1.69)	0.89 (1.37)
	Internal locus of control	-0.03 (1.01)	0.14 (0.93)	0.1 (0.98)	-0.58 (1.07)	-0.32 (1.09)	-0.25 (1.06)	-0.1 (0.98)

still in school at 16, with the share continuing to do so declining after the following two years. [Figure 5.8](#) shows that compared to the ‘Higher Education’, ‘Into Employment’ and ‘Further Education’ groups, this group is typified by many different short spells of different activity, with frequent moves between employment and NEET status. This is the cluster with the highest share engaged in VET, and the fact that it is this group and not the Into Employment group, which VET trainees have more in common with suggests that the sort of VET we are talking about in this context are short-term interventions without a shift towards stable long-term employment afterwards.

Finally, the Long-Term NEET group are the individuals who are NEET for the majority of this time period, with lengthy spells of being NEET around short periods of education or employment. Two further things are evident from these figures. First, around half of the people in this group are in education at age 16 and that share falls less quickly than for the Unstable Employment group, in part because many who are NEET at 16 return to education afterwards to give it another chance – this perhaps suggests this group involves some who left education involuntarily at before they were 16 and had the opportunity to return to school later – this might include young people having children or entering a period of inactivity due to health reasons. After schooling has concluded, there is some evidence of short spells of employment or VET, but the main experience is one of being NEET for multiple years. What we do also see is that between the ages of about 21 and 25, the group goes from practically nobody in employment to around 10% in employment. We observe that when individuals move from NEET to employment in this group, there does not seem to be much tendency to move back to NEET or cycle between different activities, as in the Unstable Employment group.

### ***5.5.3 Multinomial analyses: Explaining NEET pathways in England***

In the next part of the analysis, we look at which of these five types of trajectories different individuals are more likely to follow, conditional on having been NEET at some point. [Figures 5.10–5.14](#) show the results of a multinomial regression model of NEET trajectory on adolescent characteristics (conditional on having been NEET). The reference category for the trajectory graphs is the ‘Higher Education’ group.

We observe strong gender differences. Of those who are NEET at some point, women with children are more likely to be long-term NEET than men ([Figure 5.10](#)). Moreover, the risks of being in the long-term NEET group for women with a child is larger if the individual had a child at a younger age.

[Figure 5.11](#) shows that social background effects are rather limited. Those who are NEET at some point and have more highly educated parents are more likely to be in the Higher Education trajectory. Those from families



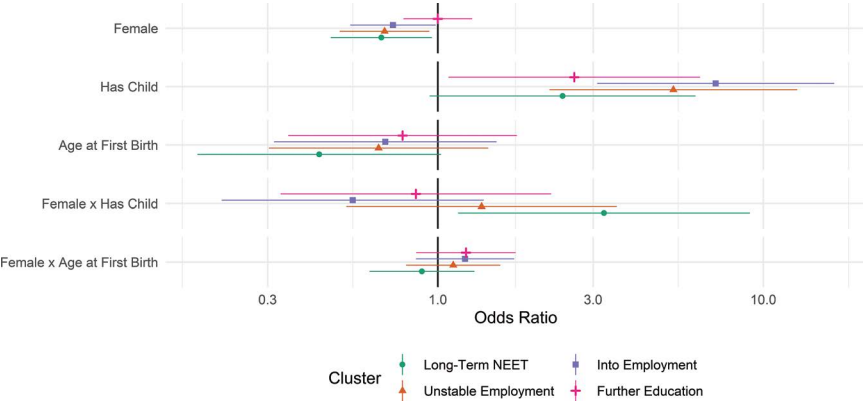


Figure 5.10 Gender and motherhood and NEET clusters (odds ratios).

where the household head was in a routine/manual occupation or in long-term unemployment is more likely to become long-term NEET.

Figure 5.12 shows that non-white individuals are more likely to be in the Higher Education trajectory. Those with some VET experience are less likely to find themselves in the Higher Education trajectory and are particularly likely to belong to the Unstable Employment group. There was some evidence that individuals from lone or no parent households were more likely to belong to the Long-Term NEET group.

Lastly, disability leads to a higher chance of being long-term NEET (Figure 5.13), and having a good attitude towards school or engaging in fewer risky behaviours makes it more likely to be in the HE group, while having a higher internal LOC is associated with a lower chance of being long-term NEET (Figure 5.14).

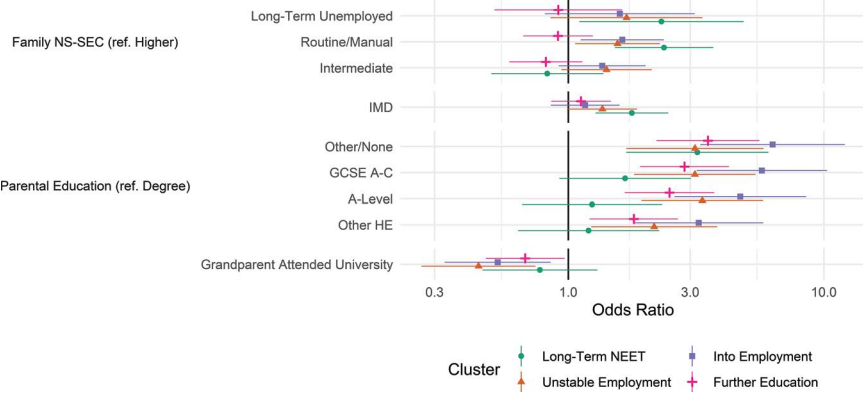


Figure 5.11 Social background and NEET clusters (odds ratios).

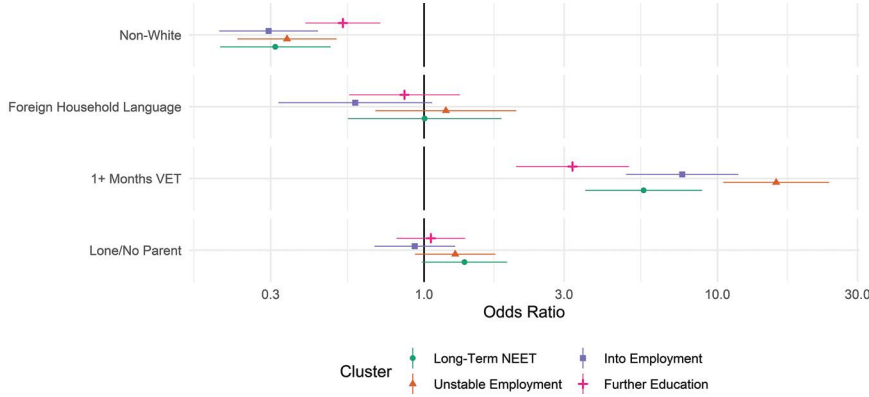


Figure 5.12 Migration status, family background, VET and NEET clusters (odds ratios).

5.5.4 Predictive analyses: The long-term consequences of NEET in England

Figures 5.15 and 5.16 summarize the analysis of the consequences of being NEET at age 25. In all of the figures, the outcome of interest at the left-hand side of the chart. The analysis includes all the explanatory variables included in the previous section, but not all effects are reported here – we focus here on the independent effect of being NEET at some point, and then the effect of each of the five NEET trajectories for those who are NEET at some stage. We find that being NEET at some stage before 25 is associated with a higher chance of not being employed at the age of 25, and that when work is found, it is more likely to be precarious and lower paid (Figure 5.15). They are also more likely to be in financial difficulty. There are some differences according to NEET trajectory: the likelihood of employment at age 25 is lowest

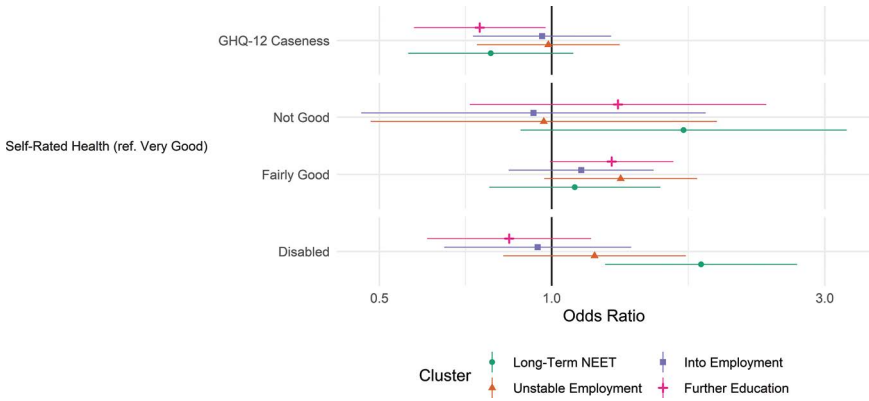


Figure 5.13 Health and NEET clusters (odds ratios).

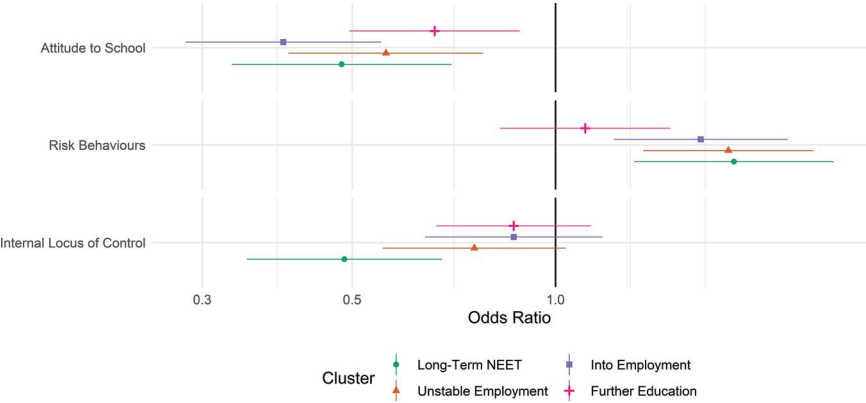


Figure 5.14 Attitudes and behaviour and NEET clusters (odds ratios).

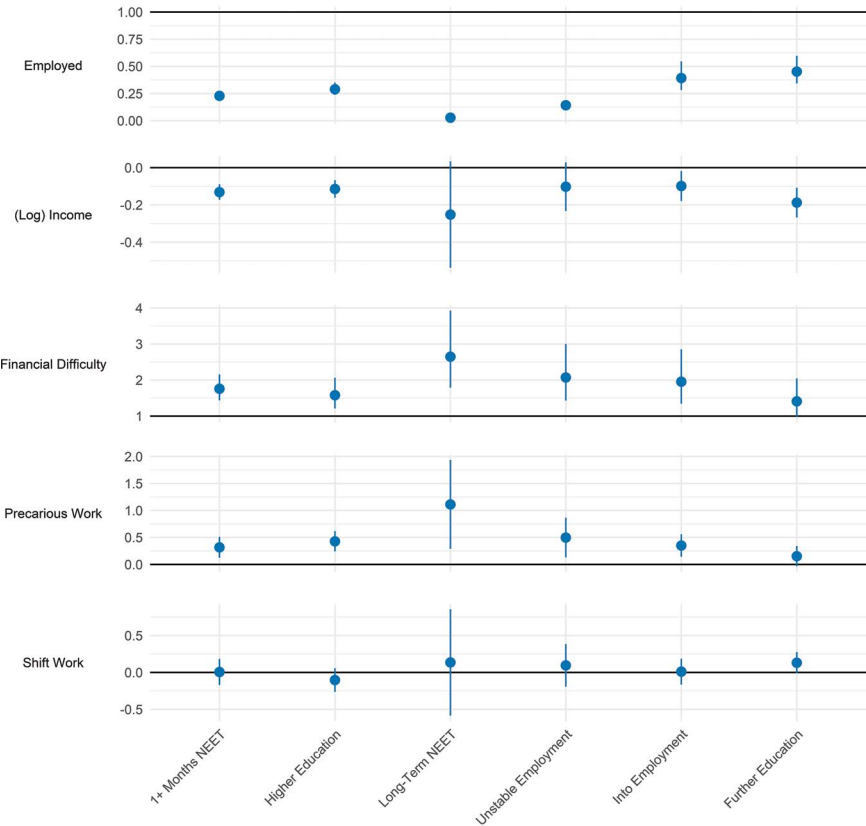


Figure 5.15 Consequences at age 25 of being NEET during the STW transition.

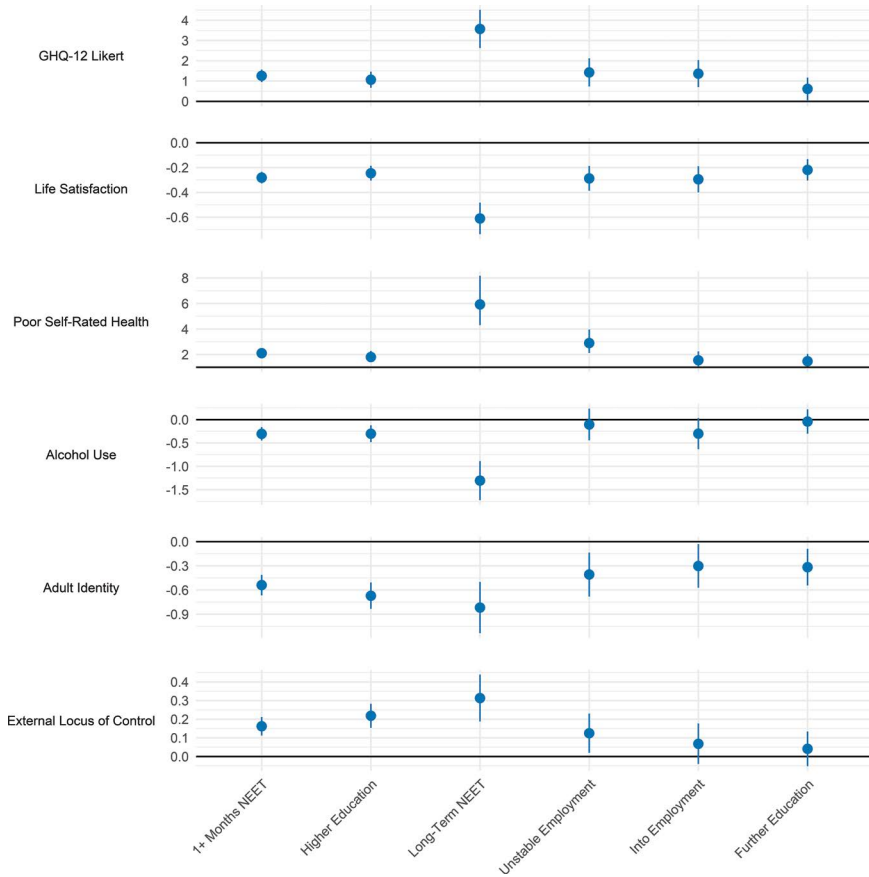


Figure 5.16 Consequences at age 25 of being NEET during the STW transition.

among the long-term NEET and Unstable Employment groups, and point estimates suggest the risk of financial difficulty or of working in a precarious job is greatest among the Long-Term NEET groups, though confidence intervals are wide. Interestingly, point estimates suggest that reductions to (log) income are similar for the Higher Education, Unstable Employment and Into Employment groups, controlling for education and other background characteristics.

In terms of more general wellbeing, being NEET during the school-to-work transition is associated with lower life satisfaction and worse health outcomes at age 25, though there is little evidence that alcohol use is higher among those who become NEET (Figure 5.16). Associations for health outcomes are strongest among the Long-Term NEET groups and generally similar for the other NEET groups. Young people who have been NEET and who have a lower adult identity score also report feeling less in control of

their lives. These effects are largest for the Long-Term NEET and Higher Education clusters. This could perhaps point to different life expectations and the relationship between employment status and self-perception – for example, it suggests that if we compared two similar individuals who had completed higher education, but one of the two had experienced a period of being NEET, that could lead to a difference in life satisfaction and identity that could be related to not achieving the level of labour market success a graduate might expect.

However, for two similar individuals who had the sorts of characteristics usually associated with being long-term NEET (for example, young women with children), it is plausible that expectations about finding work were already lower, or that the work found creates its own problems – for example, a parent balancing work and family may experience some form of life dissatisfaction or stress just as much as a parent who is unable to work due to childcare. We should be clear that for these final sets of outcomes, causality cannot be inferred – self-perception variables in [Figure 5.16](#) may be driven by an unobserved factor which also affects the chance of being NEET (for example, people who begin to suffer poor mental health or are seriously injured may find stable employment more difficult).

## 5.6 Conclusion and discussion

This chapter has analysed the experience of being NEET in England. Our key finding is that young people who experience a period of their lives being NEET tend to fall into one of five trajectories. Three of these represent a relatively stable transition from education into work, either from school, from FE beyond a school leaving age of 16, or from higher education. NEETs in this group tend to be such for a short period of time only, usually while making the transition from education to stable, ongoing employment.

For nearly two fifths of those who ever experience being NEET, however, there is not a relatively smooth transition towards employment: one of these groups tends to cycle between short spells in education, training, employment and being NEET, while the other may have some experience of employment or FE but are mostly characterized as being long-term NEETs.

In terms of our hypotheses from [Section 5.3](#), we are able to draw a few conclusions. First, it seems to be the case that vocational education does not provide a significant and widespread route in stable employment or further study as compared to school and higher education qualifications. Our cluster analysis did not identify a group of individuals for whom VET was an important pathway for anyone who had ever experienced being NEET – indeed those who did vocational training at any point during their early adult years were no less likely to be NEET at some stage, and those that were NEET were more likely than others to fall into the Unstable Employment group, suggesting that the type of VET here is largely short-term training episodes with little in the way of long-term returns.

Second, it does seem to be the case that being NEET is largely a short-term issue in England – around 62% of the individuals we looked at in our data who were ever NEET fell into either Into Employment, FE or Higher Education trajectory, where being NEET occurred for a limited period of time between education and employment. A further 18% of young people who have ever been NEET fell into the Unstable Employment group that frequently experienced short spells of being NEET, albeit without moving into stable long-term employment. The final 20% are into the Long-Term NEET group, for whom labour market flexibility is not the issue – childcare and individual health, (including both physical disability, as analysed in this chapter, and mental ill health, as examined in other work – see Holmes, Murphy and Mayhew, 2021), are major factors driving long-term economic inactivity.

This is not to say that being NEET cannot have longer term consequences, even if it is not a long-term experience. Our analysis shows that ever being NEET is associated with lower earnings, higher unemployment rates, greater financial difficulties and worse health by the middle of an individual's 20s. These effects, while not demonstrated as being causal, are generally more severe for the Long-Term NEET group, but are found across all the different trajectories, suggesting that it is the experience of ever being NEET, rather the duration or eventual outcome after a period of being NEET, that is most relevant here.

Finally, we find clear evidence that gender differences in being NEET are strongly linked to childcare – without a child, men and women are not more or less likely than each other to be NEET, and those that are follow very similar trajectories. Having a child, however, more than triples the risk of ever being NEET for women only, and more than quadruples the chance that, conditional on ever being NEET, they will be in the Long-Term NEET group. This accords with other UK data that childcare is a key reason why young women are more likely to be NEET (and not searching for work), and that while a reduction in fertility rates and increased opportunities for women to work alongside care have improved this since the 1980s, this inequality still persists (Holmes, Murphy and Mayhew, 2021).

## Notes

1. <https://www.gov.uk/government/publications/department-for-work-and-pensions-single-departmental-plan/department-for-work-and-pensions-single-departmental-plan>
2. We impute all continuous variables using predictive mean matching, binary variables with logit regression and other categorical variables with multinomial logit models. We impute 40 data sets, using a burn-in of 10. We use the imputed data sets for each regression except the Tobit models as, to our knowledge, imputed data results cannot be combined using Rubin's rules. The sample for our imputations is all participants at age 25 follow-up, but our sample for each substantive model is those for whom the outcome is observed. The NEET cluster variable is imputed as any of the other variables.
3. CFA; diagonally weighted least squares [D-WLS] estimator with survey weights.
4. The code used to carry out this analysis is available on the Open Science Foundation website (<https://osf.io/kfh67/>).

## 6 NEET in Japan

### Focusing on Gender and Cohort

*Mei Kagawa, Hirofumi Taki, Tomohiko  
Moriyama and Fumiaki Ojima*

#### 6.1 Introduction

The concept of not in education, employment, or training (NEET) has been used frequently in Japan as in many Western countries since 2000. However, the way the NEET concept is used in Japan is actually different from those countries. To understand the contribution of this chapter, and its place in this book, it is fruitful to first explain the unique circumstances which induced the Japanese government to make major changes from its original concept.

As already explained in [Chapter 1](#) of this book, the concept of NEET was originally created in the UK as an employment measure for non-employed youth (Social Exclusion Unit, 1999). One of the reasons why NEET caught on in the other countries may be that this concept was more inclusive in determining joblessness of youth than the conventional International Labour Organization (ILO) definition of “unemployment”. Although Japan tried to apply this NEET concept to deal with youth employment issues, it made some important changes to the original concept. The Japanese version of the NEET concept referred to as “Niito” are defined as *unmarried individuals aged 15–34 who were not seeking jobs, expressing no desire to work, were not engaged in any kind of education or training, and were not mainly engaged in housework*. The most crucial difference between NEETs and Niito thus is that the latter definition excludes unemployed youth who are actively searching for jobs, and married females. As a result, Niito is more limited in scope to the most inactive jobless youth and biased to males.

So why did Japan change the original NEET definition to the concept of Niito? The answer to this question is associated with three points: Japan’s high graduation rate of upper secondary school, its lower youth unemployment rate, and its strong male breadwinner model. We will briefly deal with these topics here and explain them further in the next section. First, the high school attendance rate is higher than 98% in Japan, and dropouts are rare (almost 1%). Thus, if Japan were to include the youth aged 16–18 years old (as the original NEET definition would suggest), it would only capture a very limited number of people. Therefore, to treat Japan’s youth non-employment problem as NEET, the age range was expanded into 15–34 years. Second,

although the youth unemployment rate in Japan has increased since the 1990s, it has long been and still is considerably lower than other countries. Furthermore, if all non-employed people between 15 and 34 years who are not looking for jobs were included, a large number of “housewives” would be included. However, according to the relatively conservative Japanese labour policy, housewives were not regarded as problematic NEETs. Rather, full-time housewives were preferred under the strong male breadwinner model. Therefore, to exclude full-time housewives from the definition of NEET, the Ministry of Health, labour and Welfare defined Niito as “those who have no job, not married, and not full-time housewives aged 15 to 34”.

Some scholars have strongly argued that the conceptualizing Niito instead of NEETs as a policy target was inadequate (Honda et al., 2006; Miyamoto, 2015). The conceptualization of Niito trivializes the structural problem of jobless youth and frames it as being the consequence of individualized will and self-responsibility. While the original NEET concept expanded the focus of youth employment policy, the Niito concept functioned to reduce the societal problem into individualized problem. As a result of sociologists pointing this out, the words Niito and NEET have become less popular in Japan (Toivonnen and Imoto, 2013).

However, looking back we can raise the following issues. First, the distinction between NEET and Niito has hampered comparisons between the Japanese jobless youth problem and those of other countries. Treating youth employment issues in Japan and other countries under a uniform NEET umbrella allows us to effectively compare them and better understand resolutions for these problems. The confusion regarding the different conceptualization also made it difficult to grasp the actual situation of Japanese jobless youth. Therefore, we apply the NEET concept to Japanese youth to analyse their transformation during the educational expansion and economic downturn that simultaneously happened in the 1990s.

This chapter contributes to existing literature as follows. From the comparative perspective, we describe the patterns of NEETs in a non-European institutional context. We believe that this can contribute to European research through providing an example of a society with highly expanded education, strong internal labour markets (ILMs), and relatively weak vocational education. This will also contribute to the previous studies concerning Japan in the following ways. First, we can categorize jobless males and females uniformly (without excluding “housewives”), which was not possible under the concept of Niito. This has rarely been done, except in descriptive reports using official statistics (JILPT, 2019). Second, we can capture NEET as a process, not as an instant picture, by using the longitudinal data on job (or jobless) histories before and after the 1990s. In Japan, there generally are too few jobless youths for detailed analyses of microdata (as an exception, see: Genda, 2007). Also, to analyse non-employed spells in a life-course perspective during youth has been rarely done (Moriyama, 2012; Mugiyama, 2017). By studying the case of Japan with appropriate longitudinal data and then comparing results with



European countries, we aim to contribute to both Japanese and European societies by providing important insights of the interplay of individual and institutional factors under different context.

## **6.2 Institutions and policies in Japan**

### **6.2.1 Education system**

The post-war Japanese education system was introduced as a comprehensive school to promote democratization under the American occupation. According to the School Education Law promulgated in March 1947, compulsory education was extended. The pre-war education system required attendance at a national primary school for six years, but the Occupation Forces General Headquarters called for a secondary school to be established above the primary education stage. Behind this, compulsory education, which was intended to promote democratization in Japan by extending the educational period under the single-track school education system, was expanded to nine years, which comprises six-year elementary school and three-year junior high school. Consequently, the post-war Japanese education system became characterized by the comprehensive school system with very weak vocational orientation under the influence of the United States.

Educational expansion in Japan advanced rapidly as a result of economic growth. As the Japanese middle class grew, parents began to send their children to higher levels of education than what they had achieved themselves. In the 1960s, parents generally aspired that their children attain at least a high school diploma (Kagawa et al., 2014: 48). However, the supply was still small compared to the demand at this time. Some students were unable to attend high school due to capacity, forcing the expansion of school districts in many areas. This created the need for “sorting” at the entrance and triggered the introduction of the selection system.

The popularization of upper secondary general education in Japan has been achieved by broadly establishing the level differentiation of schools in the form of school differences within one comprehensive track. The enrolment rate for high school reached 70% in 1965, 80% in 1970, and 90% in 1975. Relatedly, with the expansion of high school enrolment, the prestige of high schools has become more important. In every school district, high schools are informally ranked based on the mock-examinations conducted by the examination preparation industry (Takeuchi, 1997). This hierarchical structure of prestige among high schools constitutes an important dimension of “tracking” in Japan (Rohlen, 1983; LeTendre et al., 2003; Taki, 2011; Taki, 2019). Kariya referred to the unique characteristics of Japanese society as a “mass education society”, in which people share a high level of educational aspiration, receiving the common general education, and consider themselves to be middle class, despite the existence of inequality of opportunity related to (informal) tracking structure (Kariya 1995; Kariya 2013).

Educational expansion has continued until now. After the stagnancy in the 1980s, the university entrance rate has been steadily rising. This expansion has continued despite the economic downturn and the collapse of the school-to-work linkages. The advancement rate for the four-year university increased from 25% in 1990 to 40% in 2000 and exceeded 50% in the 2010s. The enrolment rate goes up around 80% if we include two-year college (*Tanki Daigaku*) and professional training college (*Senmon Gakko*). Dropout rate at all school levels are very low. Thus, there are only a small number of young people who are not enrolled in higher education (HE) until age around 20 years, and this is much lower than we observe in other countries.

### 6.2.2 Transition system

Japan has long been known as a country that has succeeded in keeping its unemployment rate low. The rate remained in the 2% range until the early 1990s. High enrolment rate for HE can be one of the reasons of low unemployment rate of young people in Japan. However, the most frequently cited reason for this low unemployment rate is the unique school-to-work transition system. Although the vocational specificity of the education system is extremely low, there are specific long term relationships between schools and workplaces that are efficiently matching supply and demand in the youth labour market (Rosenbaum and Kariya, 1989). These institutional ties were established during the period of high economic growth regulated by the Public Employment Security Office and functioned effectively until the 1990s (Brinton, 2011).

Unlike other countries, the schools in Japan occupy a decisive position as a route to school-leavers first jobs. This transition system between schools and workplaces and has been contrasted to free market model of the United States (Rosenbaum and Kariya, 1989; Rosenbaum et al., 1990; Okano, 1993; Ishida, 1998). Although this unique long term organizational relationship between schools and workplaces in Japan has been called as “institutional linkage” in the sociological literature, we call it “institutional ties” in this chapter to avoid confusion with “institutional linkage” used in the other chapters referring apprenticeship that combines school and work. In the specific Japanese context, most students directly go into work without any interruption after graduation. The institutional tie exists at junior high school level (Kariya et al., 2000), high school level (Rosenbaum and Kariya, 1989), and university level (Brinton and Kariya, 1998), but it works typically clear and strong at the high school level.

The most prominent feature of the institutional tie at the high school level is that school plays an exclusive role for the job-allocation process. As mentioned, Japanese high schools are hierarchically ranked in every school district. Both the employer of the company and students in the region recognize these academic rankings. Employers are prohibited from contacting

job applicants directly while they are students. They are only allowed to send job vacancies through high schools. Students apply to the company by looking at the job vacancies that are posted at their school. Based on these student applications, teachers at the Career Centres discuss which students to recommend to which companies. Their decisions are made mostly based on students' grade point averages. Teachers do their best to ensure that all students can smoothly get transferred to the labour market immediately upon graduation. Employers also try to hire students recommended by the school as much as possible.

This institutional tie between schools and workplaces benefits both the demand side and the supply side of the labour market. Since grade points strongly influence recommendations, students are strongly incentivized to study hard and try to behave well. Thus, this tie works well for the supply side: it manages incentives of students who are not willing to go on to HE. On the other hand, there are also some merits for the demand side. Corresponding to the weak vocational education at the high school level, companies train employee mostly by the on-the-job training. Thus, they attach great importance to the trainability of the candidates, which is believed to be reflected in the grade point average. Also, Japanese companies can anticipate a stable number of new employees each year and can also assess quality of the new employees based on trust made through long-term relationship.

This system also stimulates that employees work at the same company for a long time. The institutional tie between high schools and companies is not only a single year contract but is informally expected to continue for a longer period of time. Therefore, schools do not send academically low qualified students to positions for which they deem them to be unfit. This is especially true for the transaction with large, influential companies. Similarly, if possible, companies send the same number of job vacancies schools each year, even during recessions.

If the students quit early after allocation, the reputation of the high school would be damaged. Therefore, the repetitive transaction relationship pressures students to work hard and long. This institutional tie is one of the factors that support the Japanese long-term employment system in addition to the other related mechanisms such as weak vocational education and the periodic recruitment of new graduates. However, under the bubble burst economy, this institutional tie at the high school level has been weakened in the 1990s. It made the university entrance rate rise again. The educational expansion and the recession made school-to-work linkages collapse, especially at the high school level, except for vocational high schools (Brinton, 2011).

### **6.2.3 Labour market arrangements**

Large Japanese companies primarily utilize a combination of periodic recruitment of new graduates and the on-the-job training, which generally promises long-term employment under a strong ILM. It constitutes a somewhat similar

context to the Organizational Space of France contrasted to Qualification Space of Germany (Maurice et al., 1986). This specific practice, known as the Japanese Employment System, entails obligations and rewards (Abbeglen, 1958). Companies take the responsibility to protect employees even during economic recession and are expected to guarantee long-term employment and family security (Osawa, 2013). In return, employees owe their loyalty to the company. They also have an obligation to transfer to a distant place if the company decides to relocate them.

It should be noted that Japanese Employment practices traditionally mostly applied to men. Women also procure jobs through institutional ties, but most of them are employed as office workers (also known as Office Ladies, or OLs). Until 1990s, these OLs were expected to quit working in their 20s, around the time of their marriage (Brinton, 1992; Ogasawara, 1998). Furthermore, the structure of HE in Japan was not equally distributed according to gender. Women were more likely to enter two-year junior colleges than four-year universities. From junior college, some women took up professional jobs such as nursery teachers, but many entered the labour market as OLs. This strongly divided structure also prevented significant competition between men and women within companies (Brinton, 1993). The relatively high Japanese youth employment rates were partly caused by Japan's strong gender norms and asymmetric gender practices. However, such a practice was at risk of collapse in the 1990s.

The legal protection of permanent workers against dismissals is extremely strong in Japan under the practice of Japanese Employment System which premises long-term employment. Thus, the company suppresses hiring of new graduates under the circumstance of recession rather than firing the current employee. Under the strong ILM that recruits only new graduates as the standard employment status, a large number of the youth under the bubble burst economy went into unstable precarious work (nonstandard employment) or unemployed (Osawa et al., 2013). The Japanese Employment System thus preferentially protected senior workers during the recession. Thus, young people bore the brunt of the tragedy under the strong ILM supported by the specific institutional ties explained above. The youth unemployment rate almost doubled in the 1990s, and it resulted in a significant drop in the recruitment of high school graduates. This economic downturn not only worsened Japanese youth employment chances but also damaged the employment practice based on long-term relationship between specific high schools and workplaces. Youth unemployment after graduation worsened during the Great Recession, and the strong ILM made it difficult for young people to re-enter the labour market even after the economic recovery.

#### **6.2.4 Welfare state**

As can be seen from the ratio of the budget for the young people to the GDP, Japan can be definitely categorized as a weak welfare state. The social security system is extremely vulnerable. However, there are arguments

that Japanese Employment system has been functioned as a part of social security. Imai (2010) called the series of combinations of duties and favours of the system as company citizenship, which substitutes the weak welfare function of the state. This Japanese company-supported welfare system worked to some extent until the 1980s while the economic situation of Japan was good. However, the malfunction of this system had been shed light on after the bubble burst economy. Because this welfare function depends on the ability of companies to protect the welfare and well-being of individuals, it inevitably brings a hierarchical nature and dependence that is not found in state-supported welfare regimes.

### **6.2.5 Family policies**

As discussed above, the Japanese Employment System traditionally premises strongly gendered norms and practices. The timing of marriage and child-birth for Japanese women was strongly concentrated, indicating that there exists a strong pressure for women to quit jobs before a certain age (Brinton, 1992, 1993). In exchange for that, companies do not only take responsibility for their employees but also for the security of their employees' families (Abbeglen, 1958; Osawa, 2013). Relocating to a distant place for work purposes requires the full support of employees' families and spouses (which in practice are often wives). This is supported by the "spouse tax exemption". If salary income of the wife is 1.03 million yen or less, a husband can take this exemption, which provides financial support that enables wives to support their husbands at home rather than work by herself. Given that Japanese companies attach strong importance to seniority wage and on-the-job training, this policy is clearly disadvantageous for women who are expected to have a child. This gendered norm is explained from the viewpoint of institutional complementarities by Estevez-Abe (2001). Under the firm-specific skill formation regime of Japan, women will inevitably lag behind men in terms of skill development, because women cannot develop new or hone existing skills while they are on maternity leave. Given the strong ILM nature of the Japanese system, firm-specific skills and industry-specific skills are more gender-divided than in contexts that are based on general skills. Affordable childcare support is more important than family leave policies for women to invest in this skill formation regime.

### **6.3 Hypotheses**

Because this is one of the first studies to analyse NEET status as a career in Japan and because of the complex institutional context and its change depicted above, it is difficult to formulate clear hypotheses. We make the following predictions based on our knowledge so far, our understanding of Japanese society and its institutional characteristics, and the available theories.

First, from theoretical assumptions described in [Section 1.3](#), we deduce that in Japan, as in the other countries, most youth who are NEET for a short period of time (Hypothesis 1). However, we predict that there exists a group with long NEET spells (Hypothesis H2a). From the comparison of graduates before and after the 1990s, we predict that the number of young people who have experienced NEET status for a long time increased. From the knowledge that we have strong ILM under the Japanese Employment System, we expect that the youths who remain NEET for a long time are increasing after the economic downturn.

For the educational background, having only high school diploma or less will be disadvantageous compared to HE graduates (H3a). This hypothesis can be derived generally from Human Capital Theory (Becker, 1965). However, from our knowledge that there remain the specific institutional ties (especially for the vocational high school), we may also expect that having a high school degree is not disadvantageous compared to those with HE under the Japanese context (H3a, alternative). This hypothesis focuses on the embeddedness of the institutional network against general neoclassical economic perspective ([Rosenbaum et al., 1990](#)). We do expect that the role of gender in explaining NEET probabilities has changed over time. As female labour force participation has increased drastically after the 1990s, we expect that the career of men and women become more similar in more recent cohorts (H4). Finally, we hypothesize that the experience of being NEET will have negative effect on the consequence such as income of the later life because of the strong ILM structure which constitutes somewhat similar context to the Organizational Space of France (H2b).

## 6.4 Data and measurements

### 6.4.1 Data

To analyse NEETs in Japan, we use the data from Longitudinal Survey of Adults in the 21st Century conducted by the Japanese Ministry of Health, Labour, and Welfare. The subjects of this survey are men and women all over Japan that were between 20 and 34 years of age at the end of October 2002. This means that the subjects were born between November 1967 and October 1982. Respondents were asked to provide their job history on a monthly basis in this survey. This data set provides rich information on work trajectories, which enables us to conduct sequence analysis using month-level data.<sup>1</sup>

Although this survey is the only one that provides month-level data of job histories and harmonizes with data from European countries in our collaborative project (see acknowledgements), there are some possible shortcomings. First, this data set does not include important background variables such as parental background, place of residence, and area of study, which limits our scope of analysis. With cognizance of these limitations, we mainly focus on

gender, cohorts, and their interaction terms, which were not explored in previous studies. Our observation period is the ten-year (=120 months) period immediately following the time when the subjects leave school. For most of the cases, our observation starts after their high school graduation. The only exceptions are the cases who did not enter high school or who dropped out of high school.<sup>2</sup> Based on this definition, our sample is limited to 16,821 cases. We use this whole sample only for preliminary analysis, which intends to capture the characteristics of people who have been NEET for at least one month. After this preliminary analysis, we limit our sample to people who have been NEET for at least one month for the sequence analysis. This definition reduces our sample to 9,852 cases (3,502 males, 6,350 females), which means that 59% of the cases of our entire dataset have been NEET for at least one month.

#### **6.4.2 Measurements**

The survey had a question on respondents' gender, which we use. Based on the date of birth, we distinguish four birth cohorts: 1967–70; 1971–74; 1975–78; 1979–82. We measure educational attainment with a categorical variable that distinguishes between people that have completed junior high school, high school, professional training college, two-year college, four-year university, or graduate school. Finally, we are able to distinguish between people with and without children.

### **6.5 Analyses and results**

#### **6.5.1 Descriptive analyses**

To conduct the sequence analysis, we define status of the job histories exclusively into four categories, namely, Education, Employment, NEET, and Missing. Through this classification, we can distinguish those who have had the experience of NEET status for at least one month. Our survey enquired regarding education in Wave 2. Not many people re-enter school after having jobs; therefore, the most common educational trajectory of the respondents can be obtained from Wave 2. We imputed educational trajectory for certain exceptions using questions in each survey after Wave 3.<sup>3</sup> After identifying the educational qualification at the time using Wave 2, we first imputed other statuses by using the job history question, and then we substituted information queried in each wave.

As a preliminary analysis, Table 6.1 shows the distribution of variables for the overall sample, which also includes individuals who have not been NEET for at least one month. As far as we notice, this is the first attempt to show the distribution of NEETs in Japan as defined by monthly period data. Comparing respondents with at least one month of being NEET to those that never possessed NEET status in their trajectory, we see that the percentage

Table 6.1 How the different covariates distribute between the NEETs and non-NEETs

	<i>All</i>	<i>Non-NEET</i>	<i>NEET</i>
Total		41.4	58.6
<i>Gender</i>			
Male	46.9	63	35.6
Female	53.1	37	64.5
<i>Birth cohorts</i>			
1967–70	30.2	32.7	28.4
1971–74	34.4	37	32.6
1975–78	23.5	21.6	24.8
1979–82	11.9	8.7	14.1
<i>Education</i>			
Junior high school	2.4	1.1	3.3
High school	38	34.1	40.8
Professional training college	18.8	19.4	18.4
2-year college	14.4	12.1	16
4-year university	24.1	29.2	20.5
Graduate school	2.4	4.2	1.1
<i>Child born</i>			
No child	69.4	77.8	65.5
Child born	30.6	22.2	36.5

of the women is far higher among NEETs (64.5%) compared to non-NEETs (37.0%). This seems to support the sharp gender division in Japanese society. The distribution of birth cohort also supports the notion that the number of NEETs is increasing among the recent cohort. Those who leave school without an HE are found more frequently in the group without NEET experience. The percentage of people with no child is smaller among non-NEETs (22.2%) compared to NEETs (36.5%), which also suggests that having a child accelerates quit from the labour market for women. These facts seem to support the validity of our data and our definition of NEETs.

Figure 6.1 illustrates the result of the logistic regression, which compares NEETs and non-NEETs. This figure supports what we understand from Table 6.1. Women are generally more likely to become NEET. More recently born cohorts experience also a greater risk of becoming NEET. Being higher educated decreases the risk of becoming NEET. Finally, an interaction term between the university and birth cohort illustrates a significantly positive effect, which indicates that the bubble burst economy increases the risk of an individual becoming NEET, even if for university graduates.

### 6.5.2 Sequence analyses: Exploring NEET patterns in Japan

We conduct a sequence analysis of NEETs to describe their patterns. We use the optimal matching algorithm and cluster analysis (Ward's method) to generate a classification of the ideal types of status sequences (Brzinsky-Fay and Solga, 2016). Distinct types of trajectories are acquired through analysing



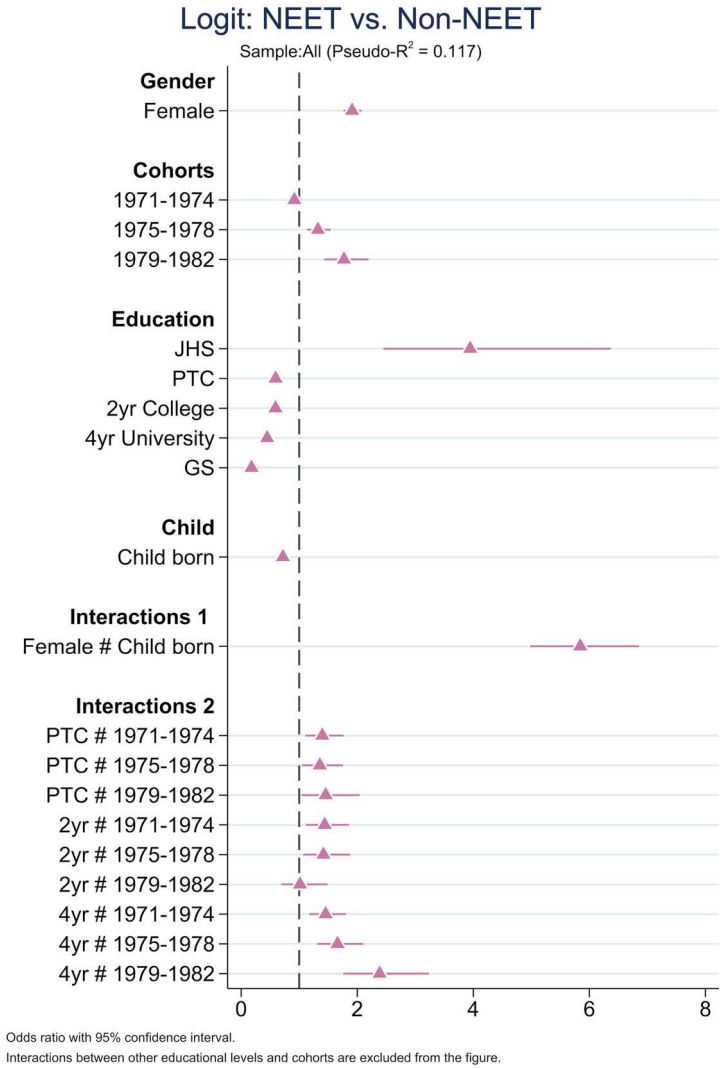


Figure 6.1 Logistic regression NEETs vs. non-NEET.

individuals who experience at least one month of NEET during the observation period, as shown in Figure 6.2. The Y-axis depicts the proportion, and the X-axis depicts the number of years after the graduation of high school. For people who do not have a high school diploma, the X-axis depicts the number of years after they graduated or dropped out of the last school they attended. From Figure 6.2, we can see that the number of NEETs is increasing, whereas the number of people enrolled in HE is decreasing over time along the X-axis. The reduction of the HE mostly signifies graduation or

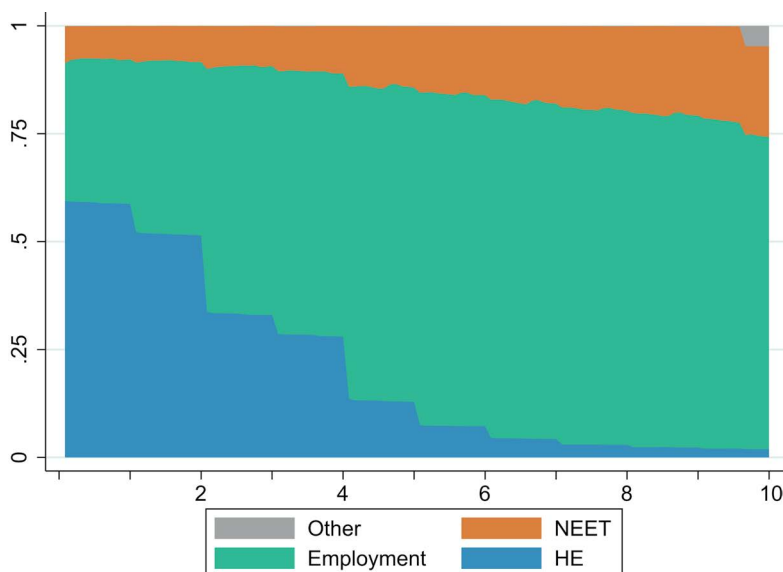


Figure 6.2 Status proportion plot across the whole sample.

dropouts from HE. Japanese HE mainly consists of a two-year short-term institution and a four-year university. Thus, HE decreases to about 10% after four years of observation.

Next, we conduct a sequence analysis for the monthly period status data. After conducting the optimal matching method (cost setting indel = 1 substitution = 2) and cluster analysis, we adopted a five-cluster solution. Figure 6.3 shows the status proportion plot of the cluster with proportions on the Y-axis and observation periods in the year term on the X-axis. Although Figure 6.3 provides an intuitive picture about the name of the clusters, this figure does not illustrate the continuity of persons' status histories. Therefore, we provide an index plot that illustrates the status transitions within persons (Figure 6.4). We briefly describe the characteristics of the five clusters below.

- i HE: This cluster is characterized by a long enrolment period in education during the early years. The average length of educational enrolment is 55 months, which suggests that the majority of this cluster graduate from four-year universities. The average NEET period for this cluster is 13 months. There seem to be two types of NEETs in this cluster; those who experience it after leaving school – which suggests failure to find a job – and those who experience it during the second half of the observation period.
- ii Later NEETs: This cluster consists of people who become NEET during the second half of the observation period. Most people in this cluster have job experience after leaving high school or short-term HE. The NEET

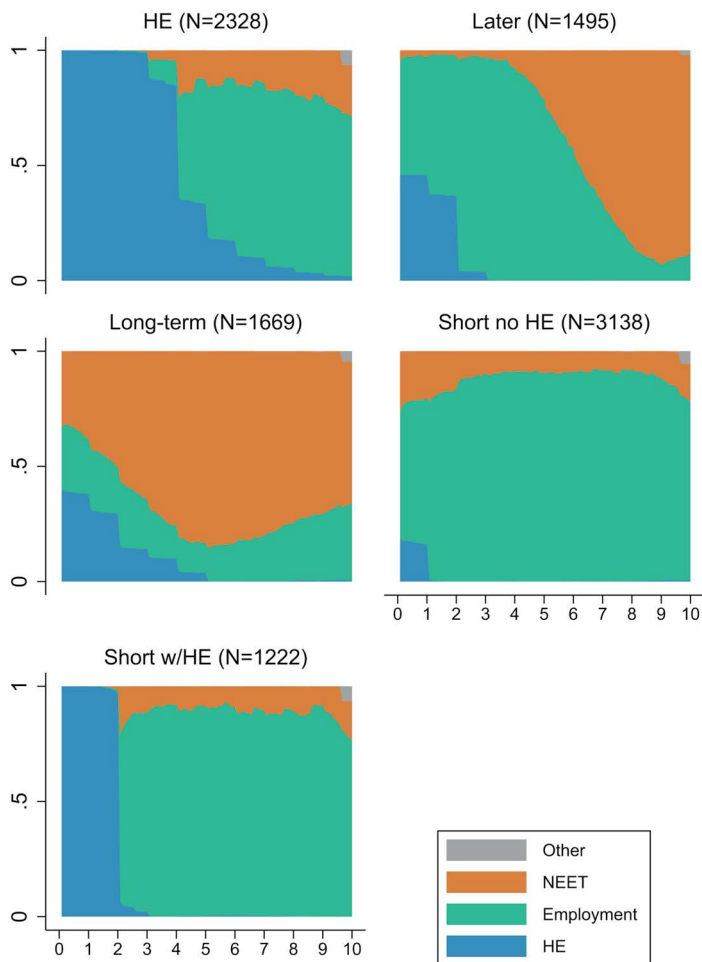


Figure 6.3 Sequence analysis – status proportion plot cluster solution of at least one month of being NEET.

status increases drastically in the middle of this cluster's X-axis, which implies that they quit their jobs when they are in their mid-20s. The average NEET period in this cluster is 45 months, which is the second-longest among the five cluster. This cluster fits the course of the life of a typical fulltime “housewife”.

- iii Long-term NEETs: The average NEET experience in this cluster is the longest and reaches 81 months. This cluster consists of people who experience NEET immediately after our observation window starts. Most come from lower educational backgrounds, but there is also a small number of people who attended HE before becoming NEET in this cluster.

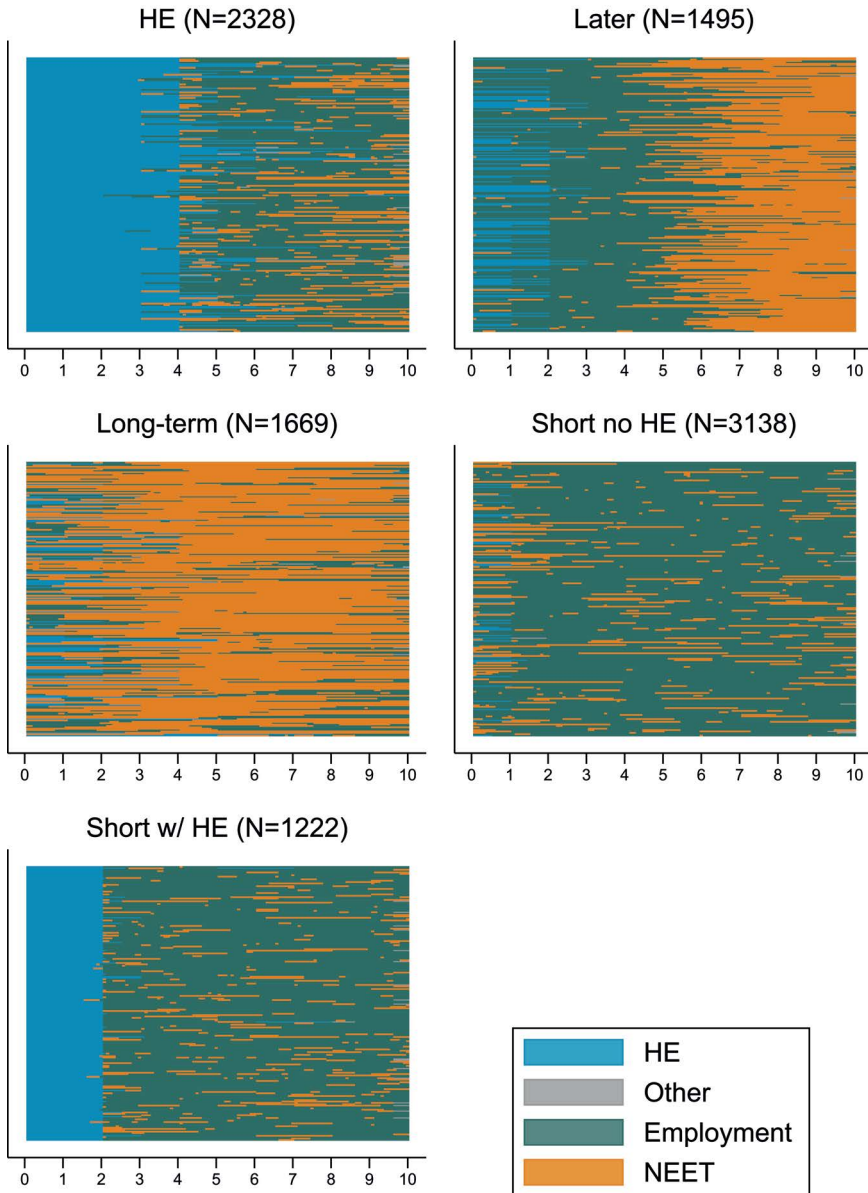


Figure 6.4 Sequence analysis – index plot cluster solution of at least one month of being NEET.

- iv Short term with a minimum education: This cluster (short with no HE) experiences a 14.45-month NEET period on average, which is relatively short. We do not see an enrolment period in education in Figure 6.3, which means that most respondents are high school graduates or junior

high school graduates. As a result, the employment period of this cluster becomes long compared to the other clusters. Respondents in this cluster sometimes become NEET. However, they tend to remain NEET for a relatively short time.

- v Short term with some HE: This cluster (short with some HE) also consists of people who experience NEET for a short period of time. The difference between this and the previous cluster is the individuals' period of enrolment in the educational institution. Most respondents in this cluster were enrolled in a short-term HE for two years.

We also look at the percentage of these five clusters based on gender and cohort in [Figure 6.5](#), which are essential factors in the Japanese context. First, the figure demonstrates that the number of highly educated NEETs is increasing among both men and women. Initially, this seems natural given educational expansion. However, this sample is already limited to respondents who have experienced NEET for at least one month. Thus, it suggests that the number of highly educated NEETs is increasing. Second, the number of Long-term NEETs has not increased or slightly decreased among the young cohorts, where labour market conditions should be worse. The Long-term NEET group has a certain layer in every cohort. Third, the Later NEET cluster hardly has any men and is overwhelmingly biased towards women. The percentage of Later NEET women drops significantly among the young cohorts as anticipated. Given that Later NEET has included homemakers after marriage and childbirth, a substantial decrease among the younger cohorts

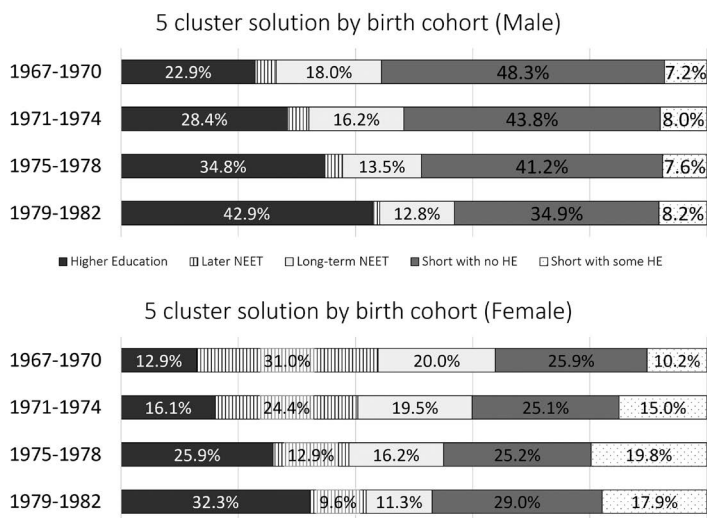


Figure 6.5 Percentage of the five-cluster solution according to birth cohort and gender.

possibly illustrates both the gradual transformation of gender norms and the economic downturn. It can thus be said that the gendered difference in the NEET distribution is decreasing. Other than these, the number of Short-term NEETs with and without HE is decreasing among men and increasing among women. It is presumed that the increase in the number of individuals experiencing NEET was caused by the rise in short-term experience, not by a long period of NEET.

### 6.5.3 Multinomial analyses: Explaining NEET patterns in Japan

So, can cluster membership indeed be explained by these characteristics? To explore this, we perform multinomial analyses. The dependent variables of our analysis are the five clusters obtained in previous section. We use gender, education, cohort, having a child, and some interaction terms as independent variables. Figures 6.6–6.10 depict the effects of multinomial regression variables of the independent variables shown as average marginal effects. The category shown to the left in each figure indicates average marginal effects compared to the reference category.

Figure 6.6 shows the average marginal effect of education on the probability of being in each NEET cluster. Compared to the respondents who have only finished junior high school, having at least high school education intensifies the probability of being HE NEET. However, this includes a tautology. What is worth considering here is the effect of education on Later and

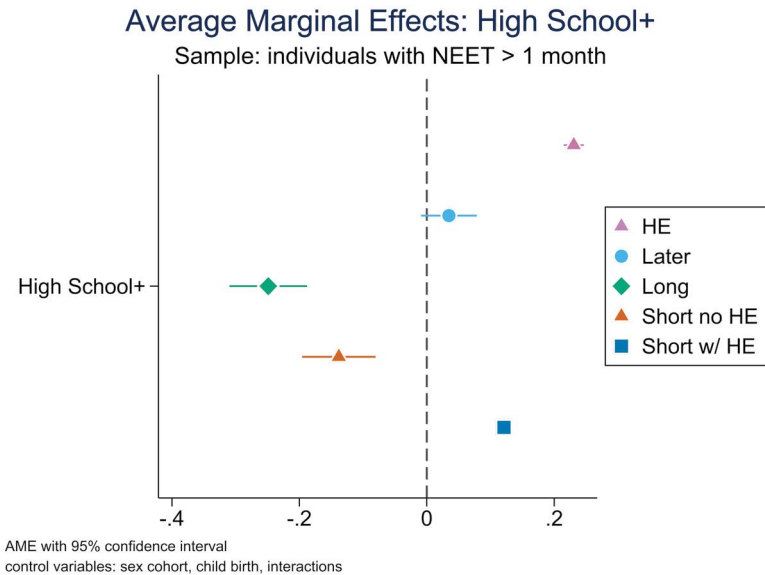


Figure 6.6 Multinomial regression on at least one month of being NEET: effect of education (average marginal effects).

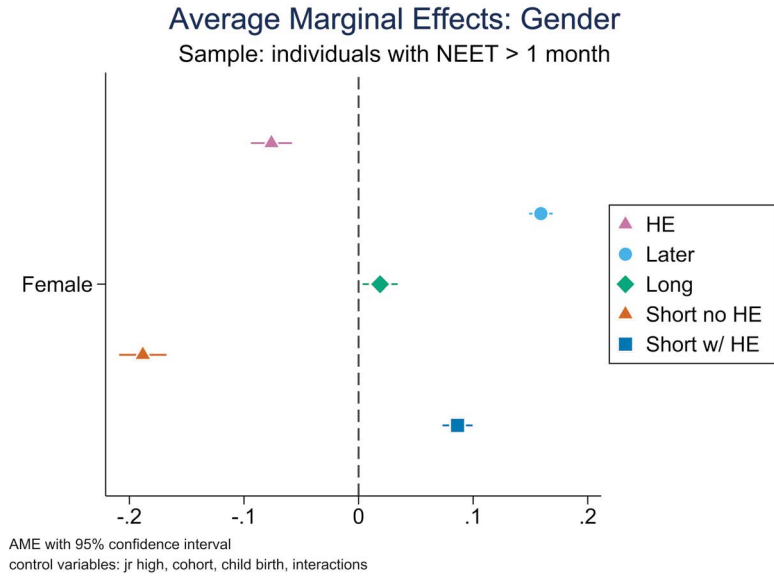


Figure 6.7 Multinomial regression on at least one month of being NEET: gender.

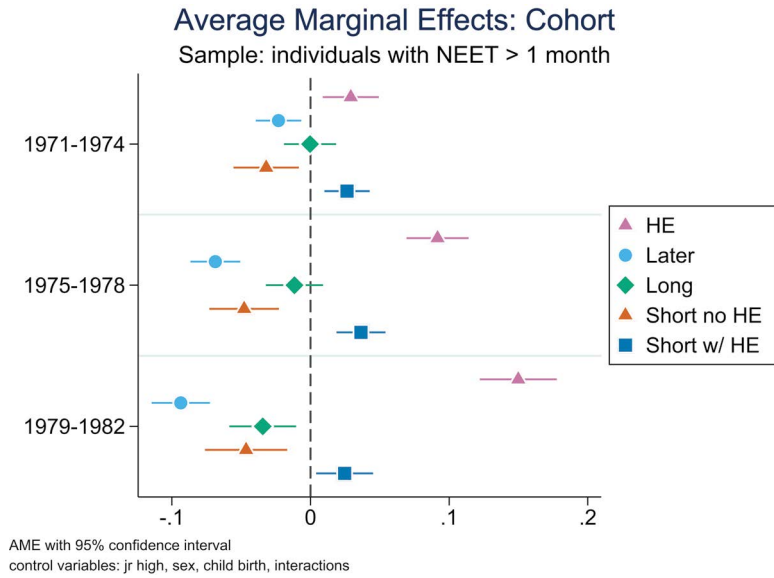


Figure 6.8 Multinomial regression on at least one month of being NEET: birth cohort.

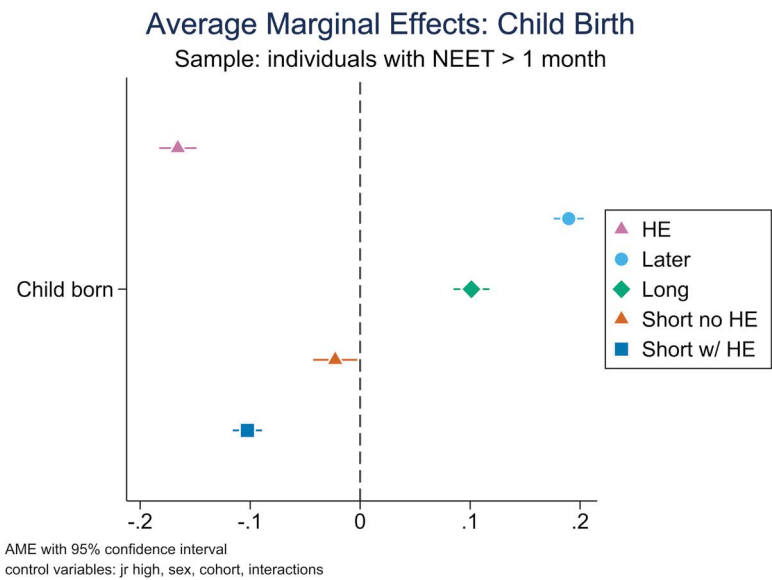


Figure 6.9 Multinomial regression on at least one month of being NEET: childbirth.

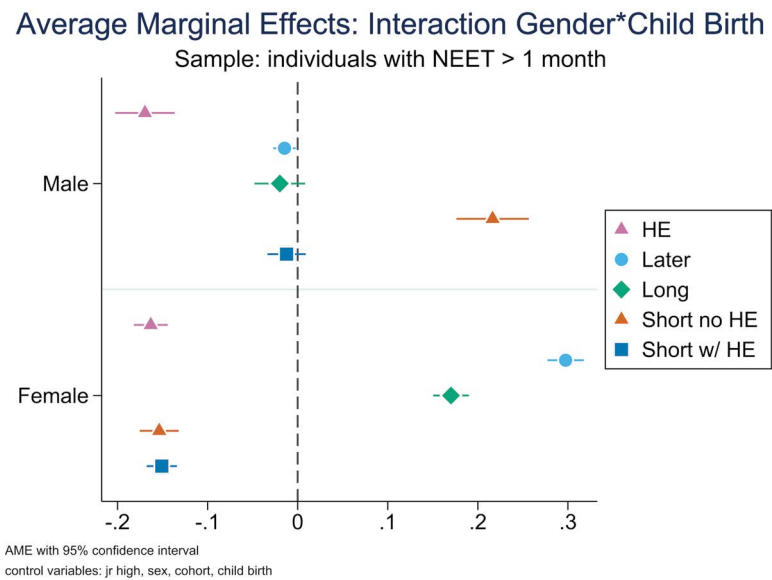


Figure 6.10 Multinomial regression on at least one month of being NEET: interaction effect of gender and childbirth.



Long-term NEET. Having a high school degree does not prevent one from becoming Later NEET (which would also be suggested from the descriptive statistics and the strongly gendered nature of this cluster) but strongly protects against being NEET for longer periods. The effect of gender is shown in [Figure 6.7](#). We see the expected results here. Compared to men, women are indeed much more likely to become Later NEETs, which is strongly substantiated by the predominant Japanese gender norms. However, the probability of becoming Long-term NEETs is not so different across genders. For other categories, we see consistent results across genders based on the distribution of educational degrees.

In [Figure 6.8](#), we see the effect of the cohort on the NEET clusters. The reference category here is respondents born from 1967 to 1970. When we focus on the highly educated NEET (HE), we see a clear pattern. Highly educated NEETs are continually increasing in the recent cohort, especially after those who were under the influence of recession after the bubble burst economy.

When we focus on Later NEETs, we see the opposite trend. Later NEETs are less likely among recent cohorts, possibly reflecting a change of gender norms, a decrease in the earning power of men, a decrease in the rate of marriage, an increase in the rate of later marriage, and a declining birth rate. Interestingly, the effect of birth cohorts on being Long-term NEET illustrates a trend that contradicts the public discourse: younger cohorts are not more likely Long-term NEET. Instead, the opposite seems to be true. The other two Short-term NEET clusters show opposite results, which appear to align with the expansion of education and the collapse of institutional tie between high school and work ([Brinton 2011](#)).

[Figure 6.9](#) shows the effect of having a child on ending up in each of the NEET clusters. Having a child is negatively associated with the probability of being a highly educated NEET. We need to be cautious against a causal interpretation here, because education precedes having children in most cases. The decision to have a child is possibly affected by some preceding variables such as education or financial situation. Also, we have to be aware of the exposure period, which differs based on the educational background. Longer the enrolment in education, the effect of childbirth has a negative effect of being the category. This is somewhat tautological. Childbirth strongly affects being Later NEET. This is known as a gendered pattern, which will be checked by including an interaction term below. Compared to this, the opposite effect of having a child is shown for becoming Long-term NEET. Besides these clusters, being Short-term NEETs is negatively related with a child born.

Finally, we added an interaction term of gender and childbirth in [Figure 6.10](#). We see a clear difference in the effect of having a child on Later NEET, Long-term NEET, and Short-term NEET. Women with children are much more likely to become Later and Long-term NEET; this relation is not clear for men. As expected, the effect of becoming Later and Long-term NEET is mostly explained by the consequences of childbirth for women. The

relation between childbirth and being Short-term NEET without HE is the opposite for men and women. In the Japanese context, norms related to having a child work differently according to gender. It intensifies pressures to get out of NEET status for men, but it works in the opposite way for women – forcing them out of employment. For women, childbirth decreases the probability of becoming Short-term NEET with some HE.

#### **6.5.4 Predictive analyses: The consequences of NEET in Japan**

We aim to clarify the consequences of NEET in this section. Due to the limitations of our data, we focus on two outcomes; total length of an individual's NEET status and their income at age 30 years. The sample for the analysis is the same as for the previous section, which are the respondents who were NEET for more than one month over the observation period of ten years.

We do not include patterns of NEET in the first analysis because NEET patterns already include information related to the total length of the NEET period. In [Figure 6.11](#), we see a substantial effect on two variables. The first one is the respondents' educational background. Having a high school degree or more shortens NEET duration. This figure already shows a full model with the interaction effect, but if we do not include them, the female dummy is strongly positively related to the length of NEET spells. This means that having a child intensifies the length of NEET periods, but only for women.

[Figure 6.12](#) then shows the result of the OLS regression analysis on income at age 30 years. We added the NEET cluster dummies obtained in the previous chapter as independent variables. Women tend to earn less than men at age 30 years, controlling for educational background. We also see strong scarring effects of Later and Long-term NEETs. This can be interpreted in relation to the Japanese context, which is embedded in a strong ILM structured in the organizational space. The effect of having a child is positively related to income, but we can see that it applies only to men because of the negative interaction effect for women. For interaction terms constructed by NEET cluster and gender, we see almost no effect on income. This makes sense in light of the institutional embeddedness. It does not matter whether the respondent is a man or a woman with respect to income. It is a structural, rather than a gendered norm.

## **6.6 Conclusion**

There have long been strong controversies about the definition of capturing jobless youth in Japan. Our study adopted NEETs as those individuals who are NEET for at least one month which is consistent with other European countries. According to this definition, the number of NEETs has been increasing in Japan, which is consistent with other statistics.

Then who becomes NEET by this definition? Logistic regression showed that the higher the educational background, the lower the risk of becoming



Figure 6.11 Regression analysis on NEET length (cumulative number of months).

NEET, which also fits with previous literature. However, the interaction term of education and cohort showed a significant negative relationship, which means that the effect of university disappeared in more recent cohorts. The risk of becoming NEET for at least one month is especially increasing for the highly educated Japanese youth. This indirectly supports the version of hypothesis H3a focusing on institutional ties (especially those remaining at vocational high schools), rather than the version of H3a deduced from general human capital theory.

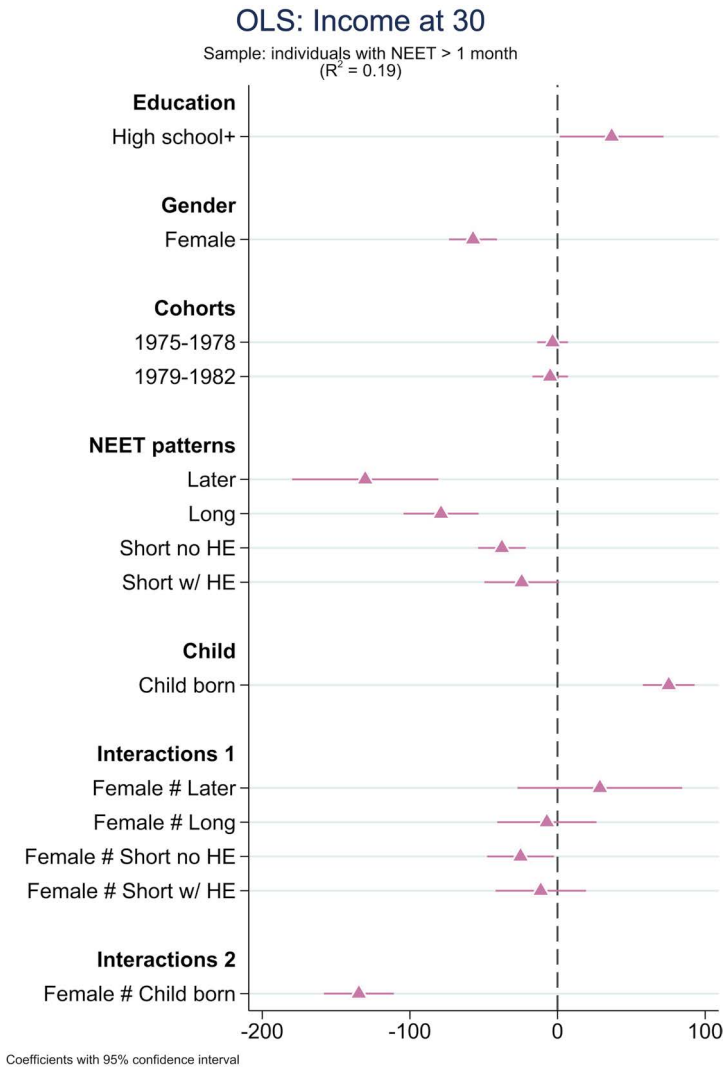


Figure 6.12 Regression analysis on income at age 30.

Next, we ran a sequence analysis and a cluster analysis to capture what the NEET patterns look like in Japan. We obtained five clusters – namely, HE, Later, Long term, Short term with no HE, Short term with HE. We find that the number of highly educated NEETs is increasing among both men and women. Later NEETs are shrinking rapidly among recent cohorts. This reflects the structure of gender division and its gradual transformation in Japanese society. Contrary to common sense, the youth who remain NEET for a long time (Long-term NEETs) are not increasing but decreasing. This

signifies that Long-term NEETs have been existing in Japanese society for a long time, and their emergence is not only related to the economic downturn. The relatively large decrease of female Long-term NEETs probably reflects the transformation of the existing gender norms or is a factor of the economic downturn.

All these changes in NEET patterns among more recent cohorts illustrate that gender-based differences in individuals' NEET experience are waning in Japan, which we expected under H4.

Although our independent variables are limited, we utilized a multinomial logit model to clarify the causes of these NEET patterns. The results of the analysis supported our aforementioned explanation. Highly educated NEETs and Short-term NEETs with higher educational backgrounds are increasing, which reflects the recent educational expansion. Women tend to become Later NEETs, but the risk of being within this typology is reduced among the recent cohorts. Having a child sharply increases the risk of becoming Later and Long-term NEETs, but only for women.

Finally, we conducted an additional regression model to observe the consequences of becoming NEET by setting length and income at 30 years as dependent variables. We showed that education is negatively related to the length of NEET spells and also corroborated again that the negative effect of childbirth applies only to women. Our analyses of income showed that a spell as Long-term or Later NEET is negatively related to income at 30 years. Although the risk of being Long-term NEETs or Later NEETs is quite high for women, the effect of being in those categories does not differ between genders. However, the main effect of gender and the interaction effect of childbirth for women both have a negative impact on income at 30 years.

In this chapter, we aimed to clarify the youth non-employment situation in Japan by applying a harmonized definition of NEET, which has not been previously done in our field. This strategy is beneficial to facilitate comparisons and promotes an understanding of the complete picture of jobless youth in Japan. Japan imported the term NEET in a specific way in the 2000s and devised the original term *Niito*. Although there are various definitions for the same, they both excluded unemployed youth and married women. This definition of *Niito* reflected commonly held beliefs in Japan, such as "unemployed youth can easily get jobs if they want" and "a married woman is the sub-earner of the household". Despite not sufficiently reflecting lived reality earlier, these beliefs are now even further from reality, post the Great Recession.

Our harmonized definition of NEET enabled us to not only analyse *Niito* or unemployed youth but also to grasp the entire picture of youth non-employment and its transformation before and after the Japanese economic downturn. The typologies derived in this chapter clearly illustrated the gendered structure of the labour market and the course of people's lives in Japan. Without introducing a gender-neutral definition of NEET, it would have been impossible to observe the contemporary state and the transformations

surrounding jobless youth in reality. The discourse surrounding the situation of the youth often does not present clear evidence regarding the same. Our analysis showed that Long-term NEETs are not increasing, but that of highly educated NEETs are indeed increasing. We believe that this type of empirical clarification can render labour market policies more effective.

However, there are a lot of limitations to our study. The NEET period is harmonized for at least one month. It is not clear whether this definition makes sense in the Japanese context. The increment of highly educated NEETs probably reflects the fluidization of the youth labour market, such as the collapse of lifetime employment in Japan. However, such fluidization does not necessarily mean that it is now less advantageous to have a higher degree. The validity of NEET defined in monthly terms should be carefully investigated through follow-up studies. We need to investigate the harmfulness of the situation in each typology. We also have to analyse household data to clarify gender differences within the household unit.

Although there are a lot of differences between Japan and the other East Asian societies such as South Korea and Taiwan, these countries share some similar characteristics for education (Aizawa et al., 2019; Arita, 2020) or families (Brinton, 2001) in comparison with European societies. Expanding the scope of comparison to different Asian societies is a challenging but attractive future task.

## Notes

1. Japanese General Social Survey Life Course Survey (JGSS-L) conducted in 2009 also has monthly level data of job histories. However, sample size and some other conditions of JGSS-L did not fit our purpose.
2. Compulsory education ends at junior high school in Japan. The high school enrolment rate is between 94% and 98% for the age groups surveyed. There are few repetitions or dropouts in high school, but for most of the cases, they graduate in three years.
3. Although there are some students who experience NEETs as ronin to prepare entrance examination for the university in Japanese context (Tsukada, 1988), it is typical for ronin to enter university after that. Thus, it is reasonable to assume that the final school they attended is defined by the question about the last school they attended in wave 2.

## 7 Policy Interventions

### Targeting NEETs in Different Institutional Settings

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Janine Jongbloed, and Hirofumi Taki*

#### 7.1 Introduction: Policies to reintegrate NEETs

This chapter will consider the types of policy initiatives which have been introduced to address concerns over the ongoing ‘problem’ of not in education, employment, or training (NEETs) young people. In doing so, it is important to understand that the definitions and measures of youth unemployment and NEET differ significantly across nations, with the result that the term NEET is now commonly used to capture disengagement and social exclusion, as well as levels of unemployment among young people. A distinction is often made among those young people who are already NEET, and those who are considered to be ‘at risk’ of becoming NEET. In addition, the labels of ‘early school leaving’ (ESL) or of being ‘disengaged’ are commonly used. ‘Early school leavers’ are defined in different ways by national governments and international organizations such as the Organisation for Economic Co-operation and Development (OECD) and Eurostat (European Parliament, 2011). Throughout Europe, this primarily refers to those leaving education at the age of 16,<sup>1</sup> with qualifications below Level 2 of the International Standard Classification of Education (below upper secondary qualification, such as General Certificate of Secondary Education (GCSEs) qualifications) and who were not in education or training in the 4 weeks prior to being interviewed for the Labour Force Survey. In the United States, although there is no agreed definition of ESL, it tends to be used in the literature to describe those who leave full-time education before graduation and therefore do not gain their high school diploma (Neild and Balfanz, 2006). ‘Disengaged’ is a broader term that is interpreted in a number of ways, often subsuming the NEET group and early school leavers. It includes disengagement through low or under achievement, and poor attendance at school (Callanan et al., 2009). The literature also defines disengaged in terms of young people’s motivations, attitudes, and behaviour (Morris and Pullen, 2007), as well as incorporating wider definitions, including youth offending and harm (Hull, 2005). Approaches to identifying those who are disengaged from school focus on whether pupils are engaged during their compulsory school age, both in terms of being in school and also being engaged in learning

whilst at school (Ross, 2009). Here, there is a concentration on reducing the likelihood of their becoming ‘disengaged’ by intervening earlier.

When considering policies focusing on NEETs, it is important to understand the distinction between ‘preventive’ and ‘reintegration’ approaches. ‘Preventive’ strategies are early interventions designed to reduce the likelihood of dropout at a later stage. ‘At risk’ young people are identified predominantly on the basis of school-based data, such as their neighbourhood, school, and family background. Reintegration, on the other hand, focuses on those who are already NEET and seeks to introduce measures to re-engage those individuals. This is likely to require the input of a range of agencies and takes place once an individual has fallen out of the system (Dale, 2010).

### 7.1.1 Early intervention policies

Early intervention policies have been introduced in many countries in an attempt to provide early identification of young people who may be at risk of becoming NEET or dropping out of education. For example, studies in the United States have highlighted the use of ‘early warning systems’ to obviate the likelihood of students dropping out of school (Heppen and Therriault, 2008; Pinkus, 2008). Here, it is important to emphasize that ‘early school leavers’ can include some young people who leave school in order to take up employment or training. They are therefore not identified as being NEET. Approaches for identifying those at risk of becoming NEET are therefore focused on whether young people will remain in education, employment, or training (EET) following the completion of compulsory education. In order to identify those individuals who may be deemed vulnerable or ‘at risk’, Lehr et al. (2004) made a distinction between ‘status variables’ or characteristics, such as ‘socio-economic standing’, family structure and disability, and ‘alterable variables’ or indicators, such as attendance, attainment, and behaviour.

Maguire (2013) noted that the following elements were prevalent in the types of preventive interventions which have been shown to be successful:

- 1 Investment in good quality *Early Childhood Education and Care* to reduce the propensity of ESL/NEET status (Reynolds et al., 2004).
- 2 The use of assessment tools and one-to-one intensive mentoring support to identify, target, and support ‘at risk’ student.
- 3 Offering *financial support* to those from lower income households and other vulnerable groups in order to encourage and sustain their participation in learning (Maguire and Rennison, 2005).
- 4 Within schools:
  - a the introduction of *alternative curricula*;
  - b the provision of more *vocational and technical education*; and
  - c *working in partnership with other organizations*.



- 5 *Identifying the triggers of disengagement from school.*
- 6 *Raising the participation age at which young people can leave education or training.*

### 7.1.2 Policies to reintegrate NEETs

Reintegration strategy at the level of the individual should involve having systems which identify young people who become NEET and support them to achieve positive outcomes in terms of re-engagement. In order to do this, there needs to be an agency or agencies, which has the capacity and capability to identify and support the breadth of the target population. Moreover, it should be remembered that the NEET population is not homogeneous. As far as specific measures are concerned, outreach services have been shown to be successful but are resource intensive. At the same time, young people who are NEET have been found to need *financial support mechanisms, intensive support* (from trained advisers) and *tailored education, and employment and training solutions* to achieve long-term, sustainable outcomes.

An example of a programme which combined all three types of intervention was Activity Agreements, which was piloted in England between 2006 and 2010 (DfE, 2011). It should be emphasized that this required substantial financial investment. Types of reintegration programmes which have been introduced to support young people's transitions into the labour market include those which

- stimulate the demand for young people in the labour market, through offering wage and training subsidies or tax and national insurance breaks/credits to employers;
- offer a bridge between education and work, through:
  - providing training and work experience; broadening apprenticeship programmes;
  - providing training in entrepreneurship and interpersonal skills; and
  - work preparation courses for young people who lack the immediate skills to enter the workplace;
- identify young people who become NEET or are part of other disadvantaged groups and support them to achieve positive outcomes in terms of re-engagement (including employment).

Policies and programmes which are designed to prevent and reduce unemployment, including for young people who are NEET, are regularly termed active labour market policies (ALMPs). These can broadly be categorized into five types:

- 1 *Job-search assistance:* Measures aimed at helping job search have been found to be as effective as more expensive programmes such as job creation and job subsidies (OECD, 1993). More recently, research has suggested that

job-search assistance and monitoring programmes have positive effects on employment take-up, are cost-effective and work in different settings (Caliendo and Schmidl, 2016). They can also act as an early intervention strategy to reduce such risk. A downside of job-assistance programmes is that they may result in some young people accepting any form of work, including precarious employment, for fear of being sanctioned or by discouraging young people from unemployment registration and withdrawal from the labour market. A reduction in the subsequent earnings of participants was also found to occur in some countries, such as Canada (O'Higgins, 2001).

- 2 *Training programmes*: Internationally, there has been widespread implementation of training programmes to support young people's transitions into the labour market. However, evaluations of training programmes targeted at disadvantaged young people, using predominantly hard outcomes, such as numbers becoming employed, point to poor programme performance (Martin and Grubb, 2001). The absence of a consideration of 'soft' outcomes, such as 'distance travelled', is a shortcoming of such evidence.
- 3 *Subsidized employment*: Subsidized employment may include wage subsidies or wage cost subsidies, both of which are found to have a positive impact on employment outcomes, especially if they are well-targeted towards disadvantaged groups, including young people (Duell, 2012). In times of recession, employment subsidies can play an important role in helping maintain the attachment of young people to the labour market and offer employers training subsidies, as well as incentives to sustain their recruitment.
- 4 *Direct job creation and public employment programmes*: Combining job creation programmes with vocational training is a more expensive model, although it does not necessarily eradicate negative perceptions about programme value. Speckesser et al. (2019), using a macroeconomic database with repeated observations for all EU-Member States for a time series (1998–2012), conclude that older groups in the youth cohort, namely 20–24-year olds, appear to be more likely to benefit from job creation programmes than younger groups. This is attributed to older groups having a greater propensity to have experienced prolonged detachment from the labour market, and from education and training intervention (Speckesser et al., 2019).
- 5 *Start-up subsidies, self-employment assistance, and support* (Eichhorst et al., 2016): Programmes which are designed to encourage young people to become self-employed have been developed in many countries and are popular among policymakers. However, take-up rates tend to be poor. According to O'Higgins (2001: p. 125), self-employment programmes may typically comprise one or several of the following elements:

- promoting and introducing the self-employment option;
- training in skills development;

- mentorship;
- financial support;
- access to workspace;
- business expansion support; and
- networking.

In addition to introducing individual ALMPs, policymakers have devised multi-element programmes to form an integrated offer. This may include job search and counselling, education and training, wage incentives, and job creation. The most recent and powerful evidence, which has assessed the extent to which labour market interventions have successfully improved young people's employment outcomes, concluded that programmes which integrate a number of interventions and services are more likely to be successful, in particular in low- and middle-income countries (Kluve et al., 2019). Crucially, being underpinned by effective and efficient profiling and follow-up systems was found to be pivotal to their success.

Shortcomings of ALMPs, which have been voiced in relation to their impact on young people, include the propensity, particularly for training and subsidized employment programmes, to demonstrate large deadweight, substitution, and displacement effects; their tendency to focus on 'work ready' young people, at the expense of 'harder to help' and 'harder to reach' groups; and a lack of evidence about 'what works and at what cost', notably a 'short-sighted' emphasis on measuring job outcomes, rather than on the 'distance travelled' by individuals and the impact which training and/or work experience may have on their attachment to the labour market (Caliendo and Schmidl, 2016). Also, the costs of programmes are often vague, inconsistent, and incomplete.

Overall, ALMPs are unlikely to work for the most disadvantaged groups unless accompanied by re-engagement strategies. Characteristics of programmes which have been found to be effective include:

- being closely targeted rather than generic;
- outreach services to extend and encourage engagement and participation;
- providing intensive support for young people furthest away from the labour market;
- having pre-vocational programmes for low-skilled young people;
- multi-element programmes forming an integrated offer;
- effective and efficient profiling and follow-up systems.

### ***7.1.3 Profiling and tracking***

Whether policies are identified as 'preventive' or 'reintegration', there is a weight of evidence about the importance of the role of profiling, early intervention, and following up with those young people who are most vulnerable at early stages of their unemployment/inactivity (Martin and Grubb, 2001,

Quintini et al., 2007). Together they are able to monitor the status of target groups of young people at regular intervals and ensure that appropriate provision is being offered. It has been suggested that with proper targeting and in periods of economic recession, the effects of ALMP participation might be more positive, due to the fact that the volume and range of participants is different to that observed during non-recession periods (Card et al., 2015; Kluve et al., 2016). Mapping and tracking groups of young people that have been identified as being ‘at risk’ of given outcomes are common approaches, which are typically employed by organizations in monitoring the status of target groups of young people at regular intervals and ensuring that appropriate provision is being offered. Green et al. (2001: p. 44) stated that establishing a robust tracking system ‘needs to be regarded as a tool by which support and help may be provided more effectively to individuals, and especially to vulnerable young people’. Where tracking systems have been used to identify those deemed to be at risk and to direct resources efficiently, emphasis has been placed on the importance of joint agency working, coupled with a need to ensure a shared understanding of why particular tracking and monitoring practices are in place. Targeted programmes that are better tailored to meet the needs and abilities of specific groups have been more successful (O’Higgins, 2001). Furthermore, this success is dependent on having in place tracking systems which can produce robust, reliable, and efficient data on young people’s intended and actual destinations alongside accurate labour market information (LMI), which is sensitive to the needs of regional and local labour markets.

## **7.2 Institutions and policy effectiveness**

While the term ‘NEET’ has become embedded internationally as a category to define young people’s detachment from formal education, employment, and training systems, its applicability is fraught with difficulty. In particular, the broadening of the age range of young people defined within the NEET group has coincided with attempts to impose segmentation, in recognition that different groups of young people occupy NEET status for a number of reasons and for differing periods of time. Specific policy interventions to address the needs of this cross-section of subgroups are less in evidence. Moreover, significant variations in how countries apply the term ‘NEET’ make comparisons of population sizes and interventions fraught with difficulties.

Many countries, like France and the UK, have focused on employment remedies to ‘fix’ the NEET agenda, with a succession of short-term initiatives targeted at improving young people’s employability and access to the labour market, and a strong focus on tackling youth unemployment. However, such policy direction risks ignoring, or at best leaving behind certain groups within the NEET population, namely the NEET Economically Inactive (EI)

group and young women with children. That is, the term ‘NEET’ masks their existence and fails to recognize their needs. This points to the need to take down the boundaries between unemployment and economic inactivity, within NEET status, and highlights the existence of a population which is largely isolated and forgotten and to question their disengagement, vulnerability from the labour market and education.

### **7.2.1 Funding and delivery models**

In seeking to establish what programmes will be most effective in addressing, it is axiomatic that it will be highly dependent on the characteristics of the target group and their circumstances. Thereafter, they need to be underpinned by costs, implementation, and performance issues. Although, in general, government funding is responsible for financing programmes, it is often supplemented by contributions from employers through paying a proportion wages or the costs of off-the-job training. The most widely used method of financing programmes is through government funding, which, depending on the type of programme, can be supplemented with contributions from employers. For example, employers may be asked to pay towards trainees’ allowances or the costs of off-the-job training. Since the 1980s, there has been an increased focus in the UK on the use of outcomes-based commissioning and contracts within public services. This follows a trend in most OECD countries, where at least some employment and training programmes are outsourced, although significant differences exist, in terms of where responsibility for purchasing is devolved, how contracts are managed and the degree to which outsourcing is commonplace. As far as cost-effectiveness is concerned, there is a dearth of information, as evaluations of employment programmes do not address the issue. Meta-analyses of youth employment programmes have commented on the lack of standardized information on programme costs, with the result that it is difficult to draw conclusions about how resources could be allocated more efficiently in order to improve outcomes. For example, Kluve et al. (2019: p. 252) conclude ‘*The sporadic presentation of standardized program costs alongside impact evaluation results may be one of the largest remaining gaps in our knowledge of what works and how to improve labour outcomes for youth.*’

## **7.3 Policies in practice: Examples of successful and unsuccessful policies**

### **7.3.1 The Netherlands**

Policies to address the NEET agenda in the Netherlands need to be contextualized in relation to: the small overall size of the NEET population in the country (Eurofound, 2016); the significant regional variation in the prevalence of young people in the NEET group, and finally, the heterogeneous

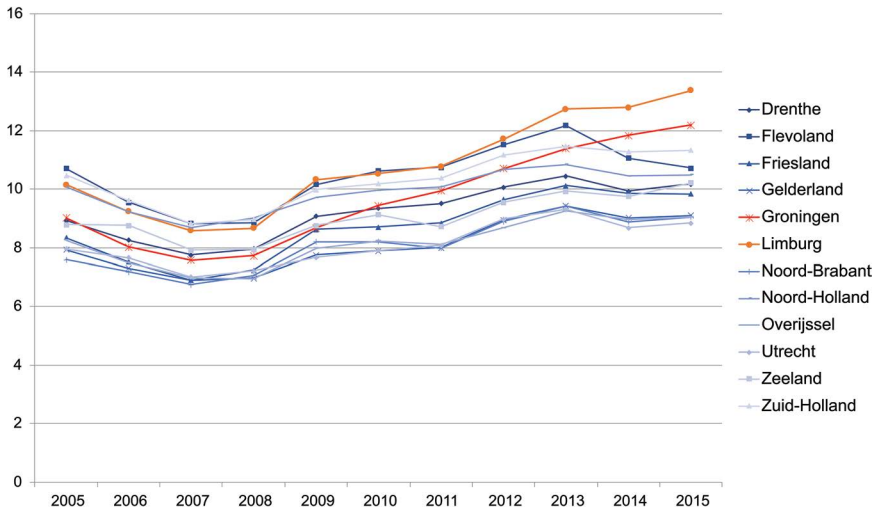


Figure 7.1 Number of NEETs as part of the 15–27-year-old population in Dutch provinces.

nature of the NEET population. Consequently, the small and diverse nature of the NEET group has resulted in a modest government policy response. Specific programmes that affect NEET rates generally target youth unemployment, or specific vulnerable groups.

Figure 7.1 demonstrates NEET trends between 2005 and 2015 across each Dutch province. NEET rates fell in every province until 2008 and rose from that point due to the impact of the financial crisis. Consequently, between 2013 and 2015, NEET rates fell due to enhanced labour market performance, except in the provinces of Limburg and Groningen where they continued to rise above the national average. Limburg has the highest NEET rate due to the structural inequalities that persist from the demise of the mining industry in the 1970s. This has resulted in regional targeted interventions to tackle local disadvantage. There are also a large number of young people in the NEET group who are defined as EI, due to health and/or social issues. This often leads to long-term welfare dependency and labour market detachment. In contrast, many young people (over 50 per cent) in the NEET group across the Netherlands are exposed to NEET status for relatively short periods due to unemployment. With targeted intervention to support their transitions into the labour market, the period of time they spend in the NEET group can be minimized (Dicks and Levels, 2018; Levels et al., 2020). Policies have tended to focus on the young unemployed in the NEET group, who are generally easier to reach and help, with the hardest to help/reach, i.e. young people who are economically active being less of a policy focus (see, for example, Oostveen et al., 2017; Dekker and Bertling, 2019).

**Combating early school leaving to prevent NEETs:** One of the main predictors for becoming NEET in the Netherlands is ESL. Although the Netherlands has relatively few early school leavers, further reducing their numbers is considered a prime policy objective and the subject of several large-scale policy interventions. Implementation of policies takes place at the regional level, where the responsibility lies with the so-called Regionale Meld-en Coördinatiecentra (RMCs). The RMCs are regional centres, in which schools and municipalities work together to prevent ESL through: identifying and registering young people between the ages of 18 and 23 who neither studying nor attending school; establishing contact with young people and offering tailored support; and establishing and co-working with a network of local stakeholders to tackle ESL. The Netherlands currently has 40 RMCs.

Regional interventions targeted at reducing ESL include: individualized mentoring and coaching; dedicated learning support; information, advice, and guidance (IAG); and tackling health barriers reducing absence for health reasons by tackling underlying problems, or concrete help finding jobs (Rijksoverheid, 2020a). While the creation and execution of plans to reduce ESL takes place at the regional level, national government is tasked with creating the context for regional centres to be successful. This is achieved through: setting ambitious targets; introducing a statutory requirement that makes collaboration between schools and municipalities obligatory; and improving information exchanges and data sharing between key local stakeholders. From 2006, in order to improve the registration system and facilitate the sharing of information, a new plan called *Aanvalsplan Voortijdig Schoolverlaten* [Attack Plan Early School Leaving] was introduced which ensured that every pupil in the Dutch educational system is registered centrally with a unique personal identification number. The number stays the same throughout the educational career and is used by schools to track students' trajectories, including dropout rates. Student data are used to target interventions to curb ESL, including data sharing between schools to identify 'at risk' students (De Witte et al., 2014).

Another recent national policy change was the requirement for all young people to obtain a 'starting qualification'. In the Dutch system, specified diplomas (i.e. HAVO; VWO; MBO levels 2, 3, and 4; and HBO or university; see Chapter 2) are minimal requirements for labour market entry. Before 2007, the minimum school leaving age was 17, when it was subsequently raised to the age of 18 and, for students without a starting qualification, to the age of 23 years. An evaluation of the effectiveness of this legal requirement found a small short-term reduction in ESL rates (Cabus en De Witte, 2011). Effect evaluations (De Witte et al., 2014) have demonstrated three types of policies that were most successful in reducing ESL rates. These include interventions aimed to reduce absenteeism, grade retention, and intensive counselling (e.g. mentoring, home visits, and personal support to students and parents) (De Witte and Csillag, 2013; De Witte et al., 2014).

**Active mediation policies to help NEETs find work:** Reintegration policies and ALMPs mostly aim to reduce youth unemployment, and as such target NEETs who are labour market ready. In a similar vein to initiatives targeted at combating ESL, mediation policies largely have a decentralized organization, in which the targets are set by the national government and delivered by regional and local governments. A good illustration of the way in which this works in the Netherlands is a broad policy initiative called the *Youth Unemployment Approach* (YUA), which was initiated nationally between 2015 and 2018 and aimed at creating employment opportunities for young people (Ministry of Social Affairs and Employment, 2015a). The programme targeted two groups: (a) young people claiming social assistance or unemployment benefits, and (b) unemployed young people without a labour market ‘starting qualification’ not in receipt of benefits. The overall goal was to match unemployed young people to work opportunities and to bridge the mismatch between young people’s skills and labour market demands. The programme excluded young people who were NEET and EI on the premise that their inactivity was caused by major underlying (psychological, health-related, social, or financial) problems and not by a skills mismatch (cf. Oostveen et al., 2017).

While the YUA programme was initiated and coordinated by national government, it was operationalized by regional governments (municipalities), regional coordination centres to combat ESL (RMCs), and unemployment agencies (UWV). The approaches to implementation of the policy varied widely. In many regions, the various partner institutions cooperated regionally to create an employer service point that could serve to match labour supply to demand. Partners also commonly shared information about vacancies and candidates, engaged in joint mediation, and coordinated mediation targets. They also collaborated with temporary employment agencies, whose pool of low-skilled jobs ensured easy access to work for jobseekers. Some organized matching events or incentivized on-the-job training for early school leavers with vouchers. To ensure effective matching of young people to local labour market opportunities, regions adopted both demand- and supply-oriented strategies. ‘Aftercare’ was also offered in some localities, in which the progress of the newly placed young people would be followed, and potential problems could be addressed (ibid).

Evaluations of the programme (Visser et al., 2016; Oostveen et al., 2017) identified crucial success factors for the YUA programme. First, relevant and up-to-date data about young people were made available. This was achieved by matching various datasets and data sources, in order to maximize intelligence and understanding about the eligible population (Dekker and Bertling, 2019). Second, careful matching between employers and young people was a critical success factor. Third, outreach was important, in order to engage with a wide spectrum of young people and to engender



their confidence. This included working through youth networks in local neighbourhoods and maximizing the use of social media platforms such as WhatsApp or Facebook (*cf.* IZI Solutions, 2016a, 2016b). Successful intervention involved brokering individualized relationships among young job-seekers and employers and mediating relationships to ensure that both sets of needs were met.

### **7.3.2 Germany**

ALMPs to support young people who are defined as NEET or classified as unemployed are not widespread in Germany due to the nominal scale of the problem. For example, the 2008 economic crisis did not significantly impact the German economy and consequently, NEET and youth unemployment rates remained low (*cp.* [OECD, 2016](#)). Moreover, given these trends, Germany did not qualify for EU funding from the Youth Employment Initiative (YEI), which was set up to tackle the significant impact on young people emanating from the 2008 financial crash ([Eurofound, 2015](#)). The focus within Germany remains on providing structured qualifications and skills provision to all groups of young people. This has priority over support with job search and social assistance. The general orientation of policy programmes is therefore preventive or early intervention with respect to vocational skills. Young people who leave school and are unable to access suitable for training are prepared for vocational training in the first instance.

The advantage of the structured education-work nexus and the dual system of apprenticeship in Germany is the success in securing and sustaining a high rate of participation among young people in education and training. This is gained by the corporatist organization of skill formation, where employers invest in apprenticeships and, in return, are assured of qualifications and skills that meet their demands. However, the system is highly selective and difficult to navigate for some groups who face specific barriers to labour market entry, most notably migrants and young people with low or no qualifications ([OECD, 2016](#)). The requirement of a vocational degree for getting employment leads to higher barriers for those without a degree than in countries, where on-the-job training is predominant.

**Targeting specific bottleneck transition points in VET to prevent NEET:** Given the institutional setting of the German general and vocational education system (see Chapter 3.2), which provides well-coordinated skill formation, policies are often targeted at specific transition points. [Mertens \(1976\)](#) proposes a ‘2-threshold-model’ in which young people complete two transitions before being integrated into the labour market. These include the transition from school to vocational training and the transition from vocational training to employment within a firm. Both transitions represent markets with different actors and requirements or signals. The vast majority of policies in Germany are located at the first threshold, i.e. between

education and training. Young people who enter the apprenticeship market must demonstrate their suitability for vocational training (*'Ausbildungsreife'*). Employers as providers for training places, as well as vocational schools are the key actors in selecting school leavers for dual apprenticeships or school-based training. At this transition between school and vocational training, policy interventions focus on preparing school leavers, in order to enhance their chances in the apprenticeship market. This is based on five goals (cp. Kohlrausch, 2012):

- 1 Offering second-chance qualification: Young people with low classification degrees or without degrees (school dropouts) can obtain general school degrees at vocational schools (*'Berufsfachschulen'*).
- 2 Vocational orientation: School leavers who are experiencing difficulties in finding suitable vocational training are encouraged to re-evaluate their occupational choices and improve their skills, in order to access VET. This is achieved through participation in the vocational preparatory year (*'Berufsvorbereitungsjahr'*, BVJ). BVJ programmes address barriers young people face to continuing in learning.
- 3 Vocational preparation: School leavers who enter this route are identified as 'training ready' and are helped to prepare for the competitive apprenticeship market. The vocational basic school year (*'Berufsgrundschuljahr'*, BGJ) focuses on young people learning occupational skills, which can be accredited as part of an apprenticeship framework, when they enter the workplace.
- 4 'Glue effects': These interventions support youth transitions into the labour market through creating (and funding) internships or by wage subsidies to firms for providing apprenticeships. These policies are aimed at creating screening opportunities for firms, in which low-achieving school leavers and graduates receive the chance to demonstrate their skills and abilities. Another type of intervention in this category includes the entrance qualification year (*'Einstiegsqualifikationsjahr'*, EQJ). This work preparation programme offers work taster programmes across a number of different occupation settings and includes company-based subsidized internships.
- 5 Preventative measures: These include introducing low-achieving students to the world of work during their general schooling, in order to boost their aspirations and attainment. Here, employment agencies and school authorities cooperate strongly.

Most of these programmes are offered as prevocational courses or 'pre-apprenticeships' (OECD, 2016). Additionally, employment agencies can also provide support to young people who are already in vocational training by offering additional help and intervention. This training-accompanying assistance measure (*'ausbildungsbegleitende Hilfe'*, abH) includes additional learning opportunities, language training, or social pedagogical assistance.

This kind of support is also offered directly by some firms. All these programmes were introduced in the 1970s and aim to prepare young people for apprenticeships or school-based vocational training. Their long durations (1 year or 2 years, if combined) have helped to establish a transition system. Since the 1990s, the number of participants in the transition system has grown to such an extent that it has become labelled by some commentators as the ‘third pillar of German VET system’ (Baethge, 2008; Kohlrausch, 2012), with the other two pillars being the apprenticeship and school-based systems. The growth in the transition system is attributable to an enduring deficit in the supply of training places for young people. Because of the economic upswing and demographic changes, the transition system loses relevance to a small extent, but numerically it remains important.

The establishment and maintenance of the raft of interventions outlined above, which now form an important part of youth transitions into the labour market, have become so engrained that they have changed their focus from being *policy programmes* to *institutional elements* that constitutes (cp. Achatz et al., 2020). While evaluation evidence is broadly positive (e.g. Heyer et al., 2012), some studies have shown that some groups of young people, for example, low-achievers (Caliendo et al., 2011) and migrants (Bergseng et al., 2020) do not benefit to the same extent from participation. The sustained presence of these programmes, which also act as a buffer to support young people in times of recession, has resulted in the absence of targeted interventions to specifically support those in the NEET group. Programmes offered at regional level (*Bundesländer*) focus on one or more of the goals mentioned above. These programmes are developed by the regional employment services and conducted by social agencies or organizations. For example, in Bavaria, the so-called practical classes ‘*Praxisklassen*’ were introduced within low-attaining schools (*Hauptschule*), in order to facilitate internships in firms and to introduce young people to the world of work. The objective of this programme is to motivate students who are disengaged from learning, with ‘real work’ opportunities and to prevent early leaving. Another example is the vocational entrance year (‘*Berufseinstiegsjahr*’, BEJ) in Baden-Württemberg, which is a vocational orientation and work preparation programme targeted at low-attaining school leavers, who are unable to find suitable local training opportunities. Interventions to support young people (and adults) have traditionally been grouped in clusters linked to specific social security codes. For example, the various measures outlined above fall into Social Security Code III (*Sozialgesetzbuch III*). With respect to young people, there are also measures in the SGB VIII, which relates to youth welfare, family support, childcare, etc. and in the SGB II, which comprises basic social assistance. In 2011, one integrated administrative agency was created for young people, following the principle of ‘one-stop-government’, with the aim of providing one

single public service agency, which is able to provide integrated and coordinated support and reduce bureaucracy.

### 7.3.3 France

Since the 1980s there has been a significant government-led effort in France to address the challenges faced by 16–25-year olds in their transition to adulthood, due to high youth unemployment rates. This has included:

- Increasing educational attainment rates among young people (Giret et al., 2020), as well as government action instigated by the Ministry of National Education called *Mission de lutte contre le décrochage scolaire* (Mission to Combat School Dropout) to reduce the number of young people leaving school without a secondary school diploma (Danner et al., 2020).
- Offering individual support to young people, notably through the *Missions Locales* (Local Missions), to improve the professional and social integration of young people (Aeberhardt et al., 2011).
- Encouraging more employers to recruit young people through the offer of financial incentives, including wage subsidies and tax breaks.
- Implementing the Youth Guarantee, funded by the European Council, which was piloted from October 2013 in a few regions, then extended to the whole country in 2017. It is targeted at supporting 16–25-year olds to access employment or training, in-line with a ‘work first’ strategy (European Commission, 2016).

However, the succession of different employment, educational, and welfare policies have had limited impact on job creation and decreasing youth unemployment (Aeberhardt et al., 2011). Most notably, the French Council of Economic Analysis asserted that the introduction of a multitude of different policies over a 30-year period (more than 80 different measures), without any coherent strategy, has achieved little in terms of eradicating the problem (Cahuc et al., 2013a, 2013b).

There are four types of policy focuses that have been implemented to support young people in the NEET group, which comprise: targeted financial support, further education programmes, work experience and training initiatives, and social assistance programmes. However, individual ALMPs in France have tended to be characterized by overlapping policy domains, which blur the limits between these four categories.

**Financial support:** Between 2005 and 2017, young people could access a *Contrat d’insertion dans la vie sociale* (Contract for social inclusion, CIVIS) through their Missions Locales or Office for information and guidance. This allowed them to receive an allowance of €900 a month if they were at least 18 years old, had a low level of education, and had no income from work. Alongside this financial support, young people also received personalized

guidance for up to a year from a guidance counsellor or until they found stable employment. Approximately one-and-a-half million young people benefited from this programme, and a third of them found stable employment (Aeberhardt et al., 2011; Gautié, 2018).

**Further education:** There are a number of programmes that have been put in place in the area of education, but most notable is the *Ecoles de la deuxième chance* (E2C), which has been delivered in over 124 sites in France since 1997. This programme supports 16–25-year olds who are at risk of economic marginalization due to their lack of qualifications and work experience. It offers vocational training of variable length, which is underpinned by financial assistance of 300 euros per month. The goal is for young people to access employment directly following the completion of their training period. It is targeted at young people from low-income backgrounds as well as offering training to obtain recognized qualifications, it provides basic academic education and job search assistance. E2C institutions attempt to take into consideration young people's social situation and potential feelings of exclusion and are built upon a foundation of active pedagogy. They welcome 15,000 young people each year who did not succeed in their first educational pathway and re-engage them with the educational system.

Further education is also available to young people through the French military. From 2005 onwards, the *Établissement public d'insertion de la défense* (EPIDE) has offered training to young people without qualifications or a job in 20 centres across France. Also, since 2011, the *Plateforme de suivi et d'appui aux décrocheurs* (Platform for early school-leavers, PSAD) has tried to guarantee a continued education for young school-leavers through coordination between various programmes. This platform is a coordination effort between *Missions Locales*, E2C, *Pôle Emploi*, and other actors concerned with education and employment in France at all levels (regional, national, etc.).

**Work experience and training:** Other policies have aimed at easing the school-to-work transition through workplace experience or training programmes. For example, until 2018, the *Emplois d'Avenir* provided subsidized jobs with a training component to help 16–25-year olds in precarious life situations gain work experience. It provided employers with financial assistance in return for recruiting a young person (mainly in the not-for-profit sector). More than a quarter of jobs for young people under the age of 26 were financed by subsidized contracts (Aeberhardt et al., 2011) in 2015 (this comprised 510,000 beneficiaries, including 400,000 apprenticeship contracts).

In 2017, the *Garantie jeunes* (Youth Guarantee) was rolled out throughout France. In order to reach the same population, the 440 *Missions locales jeunes* agree and sign contracts with young people to develop a personalized work and training plan, as well as to offer them financial assistance (Loison-Leruste et al., 2016). This programme is part of a larger initiative (*parcours contractuelisé d'accompagnement vers l'emploi et l'autonomie*, PACEA)

that provides support for young people in finding training opportunities and work experience. It benefits from the coordination of the PSAD platform for early school-leavers. Additionally, it offers personalized social and professional guidance to young people. Young people are able to continue to find government-subsidized employment through their *Mission Locale* by signing a *Contrat unique d'insertion* (CUI).

Digital support is offered through the 'Emploi Store', where youth can find help in choosing and finding a job, preparing an application and job interview, or creating a company. The '*Agence France Entrepreneur*' attempts to promote entrepreneurship amongst young people (European Commission, 2016). The government also subsidizes driving classes for young people living in remote areas, to help overcome transport and rural barriers to finding work and training opportunities.

**Social assistance programmes for marginalized youth:** The *revenu de solidarité active* (RSA) provides financial support to 18–24-year olds who are estranged from their parents, although have some work history or are young single parents. The allocations are approximately 500 euros a month. However, most young people are not eligible for these benefits because of the eligibility criteria. Economic Insertion Structures (*Structures d'Insertion par l'Activité Economique*) allow a select group of youth to access housing along with employment.

The target group of young people who are the focus of these policy initiatives are often those living in the *Zones Urbaines Sensibles*. They experience multiple disadvantages, both socio-economic and geographical, as well as comprising an over-representation of young people who come from migrant backgrounds. These programmes offer young people a top-up income, which is more or less equivalent to the out-of-work benefits (*revenu minimum d'insertion*). However, access to the programmes remains selective. More recently, an association fighting discrimination in hiring practices, called '*Nos quartiers ont du talent*', has partnered with the state to allow young people coming from disadvantaged suburbs to benefit from a 'mentors network' in finding a job and learning how to effectively communicate with potential employers.

The future of these policy initiatives, particularly in the policy areas of further education and training, is unclear. Liberalizing reforms, such as the *Avenir professionnel* law in 2019, have shaken the previously coordinated state-led approach. Private companies can now create training centres (*centres de formation d'apprentis*, CFA) and thus be eligible for financing based on the number of young people enrolled. Furthermore, during the obligatory apprenticeship period of the training, companies employing a young apprentice are paid a financial incentive directly by the government that covers the costs of the young person's wages, which displaced responsibility for training costs.

Overall, despite reaching a large number of youths – over 80 per cent according to the European Commission – public financial aid to support the needs of disaffected and disengaged groups of young people through social

assistance remains relatively small scale (European Commission, 2016; Bussi and Graziano, 2019). Insufficient investment and constantly changing programmes and strategies may exacerbate the negative effects of NEET status in France.

### **7.3.4 Japan**

In post-war Japan, education and employer links were first established at the junior high school level under the cooperation of the Ministry of labour and the Japan Transportation Corporation in the 1950s (Kariya et al. 2000). This linkage has been extended to high school level, but without such a direct coordination by the government. After the high school enrollment rate exceeded 90% in the 1970s, the labour administration shifted its role on managing supply and demand between these institutions. Japanese youth employment policy does not have to tackle unemployment issues seriously prior to the economic downturn in 1990s, because unemployment rate stood around 2 per cent. This low unemployment rate was also made possible by the strong male breadwinner model which imposes women to be the buffers of the labour market. Young people who were not employed and not actively seeking jobs were remained a low government priority.

However, the prolonged recession in the 1990s seriously damaged the youth labour market. This economic downturn not only worsened Japanese youth employment chances but also damaged the employment practice based on long-term relationship between high schools and workplaces as explained in Chapter 6. The strong internal labour markets (ILMs) of Japanese management practice made it difficult for young people to re-enter the labour market even after the economic recovery, because. The periodic recruiting of new graduates is one of the important components of such practice. A marked increase in the number of times that the term ‘NEET (Niito)’ and ‘Fleeter’ is used at the end of 1990s signified recognition of a growing problem.

The term ‘NEET’ was first introduced in Japanese policy circles by a 2003 report, which was published by the Japan Institute for Labour Policy and Training (JILPT), an independent administrative agency related to the jurisdiction of the Ministry of Health, Labour and Welfare. It received widespread attention following the publication of the book called “Niito” in 2004 (Genda and Maganuma 2004). Partly due to these influences, the Japanese government developed the term ‘Niito’ as follows 15–34-year olds who are unmarried, not seeking work, express no desire to work, not engaged in any kind of education or training, and not mainly engaged in housework (see Chapter 6). The most crucial difference between NEET and Niito was that the latter excluded unemployed young people who were actively seeking work, as well as married females. As a result, Niito limits its scope to the most inactive groups, apart from significant numbers of young women who are defined as EI due to their marital status.

In 2003, the ‘Youth Independence/Challenge Support Strategy Conference’ was established by government to address the problem. Various initiatives were subsequently developed based on the ‘Action Plan for Youth Independence and Challenges’ (December 2004), which became a policy framework to tackle youth unemployment. In 2004, the Ministry of Health, Labour and Welfare also established the ‘Young Employment Counterplan Office’. The main objectives of the 2004 action plan are as follows: (a) to promote career education, (b) to increase youth motivation to find employment, (c) to promote in-work progression, (d) to run work cafes as a resource to support young people, and (e) to raise public interest in and awareness of youth unemployment issues. The focus of these policy developments was to improve young people’s employability rather than tackle the underlying structural problems relating to the causes of youth unemployment and increased levels on job insecurity (Kanazaki, 2017).

The first sign of change came with the publication of the interim report ‘Re-challenge Promotion Conference’ in 2006 which focused on labour supply problems, specifically, non-regular employment and the promotion of career development pathways. This was followed by the 2015 ‘Law on Promotion of Youth Employment’ which established a legal basis for youth policies. However, despite recent decrease of the youth unemployment rates due to the declining population, government policies do not seem to be fully effective. Large companies still retains periodic recruiting of new graduates connected with internal promotion which constitutes strong ILM. Young people who fail to make smooth transitions between school and work are in a serious condition on an ongoing basis under such institutional configuration.

Japanese NEETs countermeasures have traditionally been carried out within the wider framework of unemployment countermeasures. Prior to 1990, young people were out of the scope to be covered with policy, as most of them got a stable job. However, since the 1990s, employment problems of young people became obvious, and measures for youth out of stable employment (i.e. NEETs and Fleeters) have been implemented.

**Trial employment to increase employment opportunities:** Training programmes are generally not successful in Japan. Japanese companies recruit young people right after school graduation, and develop employees’ skills through on-the-job training under the practice of long-term employment. Because of this strong ILM, applicants with externally acquired skills generally end up in non-regular employment with low wages, instability, and insufficient training opportunities. The Japanese government has trying to launch a system to promote recruitment in order to overcome this situation through trial employment. However, this programme has not been effective enough in reducing the number of NEETs because of skill formation systems relying on firm-specific skills prevalent in Japanese society.



**Reintegration programmes for NEETs with health problems:**

Although employment policies targeting young people are concentrated on who are labour market ready (including the unemployed and those in precarious employment), other interventions for NEETs do exist. This includes initiatives targeted at the NEET inactive group (including social withdrawal youth called “Hikikomori” for instance). The ‘Youth independence cram school’ (2005–2010), and ‘Regional youth support station’ (2006–to date) backed up by the Ministry of Health, Labor and Welfare aim to encourage young people through undertaking volunteer activities, taking business seminars, and experiencing workplace apprenticeship through cooperative relationships with companies and so on. Some young people are housed in communal living environments that provide housing and meals to take social support via music therapy and psychological counselling interacted with local community. These programmes aim to build social connections, thereby leading to subsequent occupational and social independence. They strongly rely on providing close personal support, although sometimes they lack the infrastructure to ensure the quantity of provision needed. This is attributable to the governance structure, i.e. the programme is not executed by government administrators but by NPOs (non-profit organizations), who are too few in number to supply support for the number of young people who need it.

In general, from the above, it can be said that Japan’s countermeasures against NEETs have the following four problems.

- A lack of skills or qualification scheme which can effectively use under the context of strong ILM and predominant employment practice of Japanese large companies
- A social security system which has limited funding to support NEET initiatives.
- A lack of sustainable intervention to support young people in key policy areas, such as employment, welfare, and housing.
- A need for improved targeted, individualized, and ongoing support mechanisms.

**7.3.5 The United Kingdom**

The past 40 years have seen a plethora of policy initiatives introduced across the UK in response to fluctuating, yet stubbornly persistent NEET rates. Within the UK, responsibility for the NEET agenda is complex, as there is no UK-wide NEET policy or strategy. While the UK government retains responsibility for welfare-related policies (except in Northern Ireland) and NEET policy in England, the devolved administrations, i.e. the Northern Ireland Assembly, the Scottish Government, and the Welsh Government are able to develop and implement their own NEET policy initiatives.

**Youth obligation support programme:** Before the onset of COVID-19 pandemic, the sole policy intervention targeted specifically at economically

active young people within the NEET group was the Youth Obligation Support Programme (YOSP), which was introduced in England, Scotland, and Wales in 2017, but not in Northern Ireland. Furthermore, rather than applying to the whole 18–24 age group, it was restricted to 18–21-year olds who are new claimants to Universal Credit (UC). Participants are provided with intensive support for up to 6 months, after which they are expected to move into some form of EET. This initiative is considerably smaller than earlier comparable programmes, such as the Work Programme and the Youth Contract, which, with bigger budgets and wider coverage, had a degree of success in terms of EET outcomes (Newton et al., 2014; National Audit Office, 2014). Key criticisms of the implementation of the YOSP are:

- The concentration on areas operating the new welfare system of UC, rather than targeting areas of high youth unemployment.
- Focusing on new claimants, rather than encompassing young people who are long-term unemployed 18–21-year olds who are actively seeking work.
- It has been reported that large numbers of young people are leaving the programme with unrecorded destinations (*Independent* 16 June 2018).

Second, while there is commonality across the UK about who is defined as NEET and the age group that it embraces, that is 16–24-year olds, there are significant differences between the four nations with regard to the range and scope of interventions to support young people defined as NEET. Thus, where a young person happens to live within the UK shapes the scale and type of support that they will receive. Furthermore, the impact of austerity has led to key differences between the four nations in terms of how interventions to support the NEET group are being sustained (if at all), the funding sources employed, and the role and type of different delivery agents in programme implementation. Overall, there is a scattergun approach to policy-making (Maguire and Keep, forthcoming).

Another overarching issue to consider in relation to NEET policy in the UK is that, since 2010, a combination of austerity measures, budget cuts, and, more recently, the policy focused on Brexit, has pushed the NEET agenda further down the list of priority areas. The overall impact of these factors has seen a reduction in the interventions available to support young people who are NEET, and significant disparities in this support, depending on where they live (Maguire, 2015). Victims of the cuts have included the Education Maintenance Allowance (EMA), which gave young people from lower income families a financial incentive to continue in post-16 learning,<sup>2</sup> and Activity Agreement pilots, which provided financial support, intensive support, and tailored learning packages to young people in the under 18s NEET group. Perhaps the greatest loss was the demise of the New Deal for Young People (NDYP) programme, which was introduced in 1998.

**New Deal for Young People:** The multi-element NDYP was operational for a considerable period of time (1998–2010) before being abandoned, as part of austerity measures. This large-scale programme was funded through the UK Government having levied a £5.2 billion Windfall Tax on the privatized utilities in 1997 to pay for its welfare to work programme. The first key element of NDYP was a 4-month period of intensive and supported job search – the gateway period. This was followed by entrance into one of four options, if the young person remained unemployed after the gateway period:

- employment option offering subsidized support;
- full-time education and training; voluntary sector option, or
- the environment task force option.

Extensive evaluation of NDYP provided robust evidence about its overall impact. For example, Van Reenen (2003) and De Georgi (2005) found that the NDYP raised the number of people going into work by 5 per centage points (a 20 per cent increase) and that the costs (net of benefit payments) were more than justified by the savings.

**Reintegration of NEETs through the youth contract:** The only national NEET intervention introduced by the coalition government was the Youth Contract, which was launched in 2012. It spanned two government departments, the Department for Work and Pensions (DWP) covering the UK and the Department for Education (DfE), which operated the programme for 16- and 17-year olds in England. The aim of the YC was to assist young people aged between 16 and 24 who were NEET. The statistical results from the delivery of the YC for 18–24-year olds show that only a nominal 2070 YC wage incentive payments were made to employers for young people who completed the full 26 weeks employment between June 2012 and May 2013 (Jordan *et al.*, 2013). The evaluation of the scheme highlighted that take-up had been slower than anticipated largely due to providers being unable to identify the eligible population. From the providers' perspective, the programme was underfunded, and that its funding mechanism focused too heavily on the delivery of hard outcomes, i.e. progression to EET provision in relatively short time periods (Newton *et al.*, 2014). The YC was the first youth training programme in the UK that operated through an outsourced and payment by results (PbR) delivery model. It was never piloted before being fully rolled out and its performance was questionable. For example, a £126 million budget (Work and Pensions Select Committee, 2012) for the YC for 16- and 17-year olds was spent to engage fewer than 20,000 young people and to achieve sustained outcomes for approximately 2,500 of them (March 2014 figures).

Perhaps in response to budget cuts and austerity measures, the DWP in the UK has, in recent years, sought alternative funding models to support policy implementation targeted at NEET prevention and re-engagement of

young people who had become NEET. Most notable has been the use of Social Impact Bonds (SIBs) in England. SIBs comprise capital generated from social investors to fund delivery services which act on behalf of government to achieve social outcomes, using a payment-by-results funding model. For example, in the UK, a social investment bank has been created, which is called Big Society Capital (BSC). BSC is an independent financial institution funded through an investment of £50 million from each of the four large banks – Barclays, HSBC, Lloyds Banking Group, and Royal Bank of Scotland, as well as funding from the Dormant Accounts Scheme. It aims to utilize finance from capital markets for social purposes (McHugh et al., 2013). The Innovation Fund Pilot (2012–2015), with a budget of £30 million, and the Youth Engagement Fund (2014–2017), totalling £16 million, were both funded using SIBs.

**Issues and problems with NEET programmes in the UK:** While there is consistency across the UK in terms of who is defined as NEET (16–24-year olds), including the distinction between young people in the NEET group in terms of EI or EA status, there is no policy framework or intervention funded by the UK government which addresses their very different needs. Emphasis has been placed on reducing the number of young people who are classified as ‘unemployed’ and nearest to the labour market through a variety of UK-wide programmes. Increasingly, each of the four UK nations offers a different set of policies, which is leading to a growing diversification in policymaking and practice emerging across the UK.

Another significant feature is the strategic importance of EU funding and programmes to support the needs of young people in the NEET group across the UK. This has increased since 2010, due to UK government-led austerity measures and budget cuts that have impacted the availability of other funding sources. Significantly, the UK did not implement the Youth Guarantee programme, on the grounds that similar provision already existed, most notably through the UK-wide Youth Contract programme, which was targeted at 16–24-year olds. Subsequently, this programme, which offered a range of provision to young people in the NEET group, was wound up in 2015 (Maguire, 2015).

At the same time, the UK has benefited substantially from the huge investment in the YEI and the European Social Fund (ESF), which are the key EU financial resources to support the implementation of the Youth Guarantee for the 2014–2020 programming period. For example, the YEI attracted overall funding of €8.8 billion in 2017 (European Commission, 2018). YEI is targeted at regions with rates of youth unemployment which exceed 25 per cent and associated economic inactivity, and funds initiatives such as increasing apprenticeships, traineeships, job placements, and qualification attainment. Concerns have been expressed about what will happen post-Brexit to NEET projects, programmes, and initiatives which are currently supported by YEI and ESF funding (Maguire and Keep, forthcoming).

Apart from in Northern Ireland,<sup>3</sup> the DWP has primary responsibility for managing welfare support for all groups (including 16–24-year olds who are NEET). In the UK, young people who claim inactivity benefits (the majority of whom are women) tend to be welfare dependent for much longer periods than their counterparts who are registered as unemployed and are actively seeking work. Research by Cooke (2013) found that over half of young people (under 25 years) claiming welfare support due to economic inactivity (as opposed to unemployment) had been in receipt of benefit for over a year.

Another issue identified in research is the position of young women who have NEET EI status and are often ‘written off’ because of the types of welfare support they may claim, resulting in them receiving limited support or intervention (Maguire, 2017). Moreover, no distinction is made between whether they are young mothers, carers or have physical and/or mental health issues (*ibid*). However, the advent of welfare reforms in the UK over recent years, most notably the introduction and gradual roll-out of the new welfare programme in the UK from 2013, namely UC, has fundamentally changed how welfare assessments are calculated. As far as young women who are EI due to childcare responsibilities are concerned, the length of time that they are able to claim UC before being expected to (re)enter the labour market has been reduced.

In England, for example, government has rowed back from ownership of the delivery of interventions to young people in the NEET group, leaving the role of charities and philanthropy to be amplified in recent years, in terms of determining what is available and where. While this has enabled some organizations to take an active role in supporting their local communities, it raises very important questions about coverage, quality, and availability of provision, as well as whether funding for interventions should be so heavily reliant on charity and philanthropy.

At the same time, it was apparent from the evidence from recent research (Maguire and Keep, forthcoming) that charities across the UK play a very important role in delivering EU/government led initiatives, particularly in identifying and supporting hard-to-help/hard-to-reach groups and by acting as a powerful lobby on government. This centres around the outreach work undertaken by local community-based charities, which enables programmes to engage with young people who fail to register or engage with statutory support or welfare services.

Three key issues facing the NEET in the UK are:

- 1 While the UK as a whole has embraced a wider definition of the NEET group, this has failed to be accompanied by mechanisms to map and track the wider population coherently. The focus has remained on tracking the destinations of the 16–18-year-old group, despite evidence which suggests that the post-18-group struggle with adult employment services.

- 2 Although there is an array of policy interventions, there remains a paucity of evidence about what works, and when and where to support young people who are defined as 'NEET'. Too many young people churn between different programmes and initiatives without coherence or planning. The implementations of all-age employability services with a much greater emphasis on voluntary participation in Wales and Scotland are examples of innovative practice which should be carefully monitored for wider implementation.
- 3 Most existing programmes and initiatives have issues relating to their sustainability, due to their funding being time-limited and to a lack of strategic overview. This also raises questions around value for money, when programmes and their expected outcomes are subject to constant change and review.

## **7.4 Conclusions**

The vexing issue of how to minimize the NEET population, which includes the young unemployed and young people who are EI, continues to challenge policymakers. This chapter has demonstrated that interventions fall into two broad groupings. First, there are early intervention measures, which are designed to prevent young people from becoming NEET in the first place. ESL measures, such as those adopted in the Netherlands, are a good example of this type of intervention. Second, a whole range of ALMPs have been adopted in a number of different countries to reduce the size of the NEET population and to act as reintegration programmes. Multidimensional programmes which combine a selection of re-engagement programmes and outreach measures, in order to reach the breadth of the population have been shown to be most effective.

Research evidence tells us that introducing 'knee-jerk' policies without understanding the needs of young people and the labour market can be both costly and damaging. Programme evaluation has highlighted the importance of targeting. Achieving this objective is dependent upon having in place tracking systems which can produce robust, reliable, and efficient data on young people's intended and actual destinations alongside accurate LMI, which is sensitive to the needs of regional and local labour markets.

It is also crucially important that programmes and interventions are designed to identify and engage with all groups of young people, not only the 'labour market ready'. This involves recognizing and meeting the needs of all groups of young people, including the hardest to help/reach and young people who are defined as EI, due to their caring responsibilities or ill health (including the growing number of young people with mental health problems). Establishing or maintaining services which facilitate early identification and early intervention are critical components to improve the effectiveness of ALMPs. This process is enhanced by

offering young people who require support an individualized and person-centred approach. Moreover, on-programme support and follow-up once young people enter the labour market are also likely to improve sustainability impacts. The evidence suggests that a ‘one size fits all approach’ simply will not work and that a range of interventions, while costly, will be needed to meet the diverse needs of the NEET population. While there will be assertions that the financing of delivering such ambitions may be prohibitive, a counterargument must be that the repercussions from failing successive generations of young people remain both unacceptable and short-sighted.

## Notes

1. The OECD definition is focused on 20–24-year olds.
2. EMA is still in operation in Scotland and Wales.
3. The devolved executive and assembly in Northern Ireland which have powers over welfare policy collapsed in January 2017 and was reinstated in February 2020.

## 8 The Role of Education Systems in Preventing NEETs

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### 8.1 Introduction

The education system is one of the crucial institutional arrangements that shape young people's school-to-work transition (Raffe, 2008). In this chapter, we explore to what extent different aspects of education systems across countries are associated with the likelihood to become long-term NEET. Education teaches young people relevant skills, sort them over various tracks, and prepare them for a specific occupation (Bol and Van der Werfhorst, 2012). However, the way education is organised differs across countries (Shavit and Müller, 1998) and this could also influence the decisions young people make about their participation in education and the labour market (Breen, 2005; Levels et al., 2014). Subsequently, we expect that this will affect the likelihood of becoming long-term NEET.

We will look at three different characteristics of education systems. First, the level of stratification of education systems which refers to the extent to which students with different ability levels are enrolled in different educational tracks is based on the age of selection and the number of tracks available within education (Bol and Van der Werfhorst, 2012). We expect that young people are more successful during the school-to-work transition when their education system is highly stratified. Based on the perspective of the job-matching process, we expect that differentiated levels of education inform employers better about the skills of young people (Müller, 2005; Andersen and Van der Werfhorst, 2010) and that their diploma serves as a reliable signal for skills proficiency. Therefore, we assume that young people in these education systems are more likely to find a job (at the right level of education) and subsequently are less likely to become long-term NEET. From the five countries that we included in this book, we see that Germany and the Netherlands have the highest level of stratification, France and Japan the lowest.

Second, the level of vocational orientation of an education system could be an important factor as well. Education systems that are teaching specific skills rather than only general skills increase the link between the education system and the labour market (Ryan, 2001). Scholars have long argued that



vocationally trained students are more successful in entering the labour market than youth with similar educational attainment but who are educated in programmes that more strongly emphasise general academic skills (Hannan et al., 1996; Shavit and Müller, 1998; Müller and Gangl, 2003; Breen, 2005; Levels et al., 2014). Vocationally trained school-leavers need less occupationally specific training in comparison to students from an academic track. The strong emphasis on occupationally specific skills should make vocationally trained school-leavers more in demand by employers (Ryan, 2001) and therefore we expect that they are less likely to become long-term NEET. Based on the education systems across the five countries in this book, we can see that the Netherlands and Germany have the highest level of vocational orientation, while in Japan this level is relatively low.

However, the way the vocational education and training is organised differs across countries. Therefore, it is also important to look at the institutional linkages between education systems and the labour market. The way education systems are providing vocational education and training depends on the combination of school- and work-based education. Countries that incorporate a strong work-based element in their education systems are more likely to let employers determine the curriculum of vocational education and training (Andersen and Van der Werfhorst, 2010) and also influence the size of the output (Culpepper and Finegold, 1999; Thelen, 2004). In this way, employers already know what kind of skills the school-leaver has before hiring, and this increases the likelihood of higher vocationally educated young people. Therefore, we assume that vocationally educated young people living in countries with high institutional linkages are less likely to become long-term NEET compared to vocationally educated young people living in countries with low levels of institutional linkages. The institutional linkages are highest in Germany, followed by the Netherlands. In Japan and the UK, institutional linkages (dual system) are not available.

Based on these expectations, we formulate the next research question: *To what extent are different characteristics of education systems associated with the likelihood to become long-term NEET?*

From the harmonised country analyses, we learned that the probability for experiencing long NEET periods and their negative consequences vary to some extent across social groups and institutional contexts. In other words, it seems that the structure of the education system influences which groups are more or less affected by NEET in their school-to-work transition. The highly and medium-stratified education systems in the Netherlands, Germany, and France seem to produce disadvantages for lower qualified (or early school-leavers) and youth with migrant background, whereas, in the lower-stratified education systems of England and Japan, the disadvantage of these groups is not that predominant. In Japan, we find a strong disadvantage for women because of the strong occupational and family gender division. It seems that stratification is a double-edged sword: on the hand, it enhances

the opportunities for insiders, while, on the other hand, it decreases employment chances for those who fall out of the system.

The other institutional factor of the education system that seems to play an important role is the degree and form of vocational orientation. The two countries with occupational labour markets (OLMs), i.e. a strong vocational orientation – the Netherlands and Germany – indeed show diverging effects of vocational training: in the Netherlands, it does not protect youth against NEET, but in Germany it does. The difference is in the institutional structure of vocational training: in Germany, the dual system tightly connects learning and working, including clear signals, whereas in the Netherlands, vocational training is mainly school based. In the countries with internal labour markets (ILMs), i.e. without or with only low vocational orientation – namely England and France – vocational training does not provide a secure route into employment. In the case of France, there are still stigmatisation effects existing, which seem to worsen the situation of vocational degree holders. These observations should now be tested in an integrated analysis.

We use data from the Program for the International Assessment of Adult Competencies (PIAAC) (OECD, 2013a) to find out to what extent different characteristics of education systems are associated with long-term NEETs. This dataset exists of a large cross-national survey of adults in 33 high- and upper-middle-income countries. For our analyses, we selected young people aged 16–29 in 31 countries. In the first part of the analyses, we compare the five countries that are studied in-depth in the country chapters: France, Germany, Japan, the Netherlands, and the UK via logistic regression analysis. In the second part, we explore the generalisability of findings on approximately 30 OECD countries by using multilevel logistic regression.

## **8.2 Theory: Understanding differences**

First, we will look at the level of stratification within a country. This refers to the extent to which students are enrolled in different educational tracks, based on their ability levels. Characteristics of the level of stratification are based on the age of selection and the number of tracks (Bol and Van der Werfhorst, 2012). We expect that in highly stratified education systems, the value of the diploma is more detailed and transparent towards employers which in return will serve as a signal to screen prospective employees (Spence, 1973; Müller and Gangl, 2003; Breen, 2005; Shavit et al., 2007). Therefore, we expect that *in countries with higher levels of stratification, young people are less likely to become long-term NEET (Hypothesis 5a).*

Second, the level of vocational orientation within a country refers to the opportunity for students to continue studying in vocational track during upper secondary education. In countries with a relatively high level of vocational orientation, vocational education offers the lower skilled students an

alternative for general education. Furthermore, in these countries, vocationally educated young people are more protected in the labour market (Shavit and Müller, 2000; Ryan, 2001). On the other hand, in countries with lower levels of vocational orientation, young people who have a vocational degree are to a larger extent stigmatised since here the vocational education serves as safety net for young people who do not have the ability to pursue in general education (Shavit and Müller, 2000; Solga, 2002; Iannelli and Raffe, 2007). Therefore, we hypothesise that *in countries with higher levels of vocational education, young people are less likely to become long-term NEET (Hypothesis 7).*

Third, within vocational-oriented countries, education systems differ in the way their vocational education is designed: a combination of school and workplace training (dual system) or a school-based system. In the dual system, there is a closer link between the employers and schools, the so-called institutional linkages (Bol and Van der Werfhorst, 2012). This means that in countries with higher institutional linkages the transition from school to work is better organised since students learn more specific occupational skills that are demanded by employers (Wolbers, 2003; Levels et al., 2014). Moreover, employers are able to help develop the curriculum of vocational education (Andersen and Van der Werfhorst, 2010) and the size of the output (Culpepper and Finegold, 1999; Thelen, 2004). Therefore, we expect that *in countries with higher institutional linkages, vocational educated young people are less likely to become long-term NEET (Hypothesis 8).*

Next to these main effects, we also expect that the institutional characteristics have a different effect for different subgroups of the youth population. For example, in [Section 1.4](#), we hypothesised that youth from lower educational tracks may be more likely long-term NEETs in strongly stratified systems (Hypothesis 5b). This expectation does not seem to be corroborated by the country comparisons: those with lower educational backgrounds are more likely to end up in problematic school-to-work transitions, both in the highly stratified system in Germany and in systems with a relatively lower educational stratification (e.g. Japan and the UK). In this chapter, we further explore whether education systems have a different effect on youth from different educational attainment levels. We also gauge the extent to which education system characteristics interact with gender, to explore whether the differences between men and women we observed in the country chapters vary with educational system characteristics in a meaningful way.

## 8.3 Data and measurements

### 8.3.1 PIAAC data

For this chapter, we analyse data from the PIAAC, collected in 24 participating countries between August 2011 and March 2012 and in 9 additional countries between April 2014 and March 2015. The survey is designed

to provide valid and reliable estimates of adults' competences in key information-processing skills, to identify proficiency differences between subgroups of the population, to understand development, maintenance and use of skills, and to determine the impact of proficiency levels on life chances. Country samples contain over 5,000 adults between the age of 16 and 65. Young people were interviewed using computer-assisted personal interviews, although pencil-and-paper data collection strategies were also used. Young people were given assessment tests designed to directly measure their general skills. More specifically, these tests measure numerical and literacy skills, and young people's capacity to solve problems in technology-rich environments. The survey is cross-culturally and cross-nationally valid (for detailed information about PIAAC and technical issues, see OECD, 2013a, 2016).

To prepare the data for analyses, we selected young people between ages 16 and 29. Data from Russia and Australia were not analysed for technical-administrative reasons. We also deleted the specific oversample of PISA 2000 survey young people aged 25–27 because these targeted young people were not part of the international target population definition (OECD, 2013a). Finally, we weighted data from Canada, since the original Canadian sample was much larger than the samples in other countries. To weight back, we drew a random sample of 35%. These selections resulted in a total sample of  $N=53,776$ . Next, we deleted cases with missing values on the long-term NEET variable ( $N=610$ ). For the analyses, we deleted missing values on the individual-level variables gender, age, education level, numeracy score, migration background, having children and parental education level ( $N=302$ ). These selections resulted in a total working sample of  $N=52,864$  young people aged 16–29 from 30 countries. Depending on the available information about the contextual indicators, the number of observations could differ across analyses.

### **8.3.2 Measurements**

The descriptive statistics of the variables are presented in [Table 8.1](#). We describe how the variables are measured below.

#### *8.3.2.1 Dependent variable*

- *Long-term NEET*: Based on whether the young people (a) have had paid work, (b) participated in formal education, or (c) participated in non-formal education during last 12 months preceding the survey, we constructed the variable of long-term NEET. Young people who did not participate in any of these activities within the last 12 months preceding the survey are labelled as long-term NEETs. Young people who participated in paid work, formal education, or non-formal education during the last 12 months form the reference category.

Table 8.1 Descriptive statistics

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
<i>Dependent variable</i>					
Long-term NEET	52,864	6.80	0.25	0	1
<i>Country-level variables</i>					
Stratification	26	0.00	0.96	−1	2
Vocational orientation	27	0.22	0.91	−2	2
Institutional linkages	27	11.69	14.47	0	48
<i>Individual-level variables</i>					
Female	52,864	51.20	0.50	0	1
<i>Age</i>					
Age 16–19	52,864	26.76	0.44	0	1
Age 20–24	52,864	40.38	0.49	0	1
Age 25–29	52,864	32.85	0.47	0	1
<i>Level of education (low = ref.)</i>					
Low	52,864	26.01	0.44	0	1
Medium	52,864	49.41	0.50	0	1
High	52,864	24.58	0.43	0	1
Numeracy score	52,864	271.16	47.52	39	444
<i>Migration background</i>					
Native	52,864	88.84	0.31	0	1
First-generation migrant	52,864	7.98	0.27	0	1
Second-generation migrant	52,864	3.18	0.18	0	1
Having children	52,864	15.50	0.36	0	1
<i>Parental education</i>					
Both lower educated	52,864	16.18	0.37	0	1
At least one medium educated	52,864	46.00	0.50	0	1
At least one high educated	52,864	36.49	0.48	0	1
Missing	52,864	1.33	0.11	0	1

Source: Program for the International Assessment of Adult Competencies (PIAAC) (OECD, 2013a). Continuous variables are standardised before analyses.

### 8.3.2.2 Country-level variables

The indicators on education systems are provided by data from Bol and Van der Werfhorst (2012, 2014).

- *Stratification*: The level of tracking in secondary education is based on the age of first selection, the percentage of the total curriculum in primary and secondary education that is stratified, and the number of tracks (Bol and Van der Werfhorst, 2012, 2014). The variable is standardised by the original authors (mean 0, standard deviation 0.96, range from −1 to 2). A higher score means a more highly stratified education system. Data was missing for Cyprus, Estonia, Lithuania, and Singapore.
- *Vocational orientation*: The proportion of students enrolled in upper secondary vocational programmes (Bol and Van der Werfhorst, 2012, 2014). The variable is standardised by the original authors (mean 0,

standard deviation 0.91, range from  $-2$  to  $2$ ). A higher score indicates a more strongly vocationally oriented system. Data from New Zealand and Singapore was not available.

- *Institutional linkages*: The proportion of students enrolled in upper secondary vocational education as part of dual systems (Bol and Van der Werfhorst, 2012, 2014). We standardised this variable for analyses (mean 11.69, standard deviation 14.47, range from 0 to 48). A higher score indicates stronger institutional linkages between schools and the labour market. Analyses that include this variable are only based on the sample of young people that obtained vocational degree in International Standard Classification of Education (ISCED) 3–4 as highest education level. Data from Cyprus, Lithuania, and Singapore was not available.

### 8.3.2.3 Individual-level variables

- *Female*: A dummy signifies whether young people were male or female. Males are the reference category.
- *Completed education level*: Based on a collapsed version of the ISCED 2011, we distinguish three levels: low education (ISCED 0/1/2/3C short), medium education (ISCED 3A/3B/3C long/4A/4B/4C), and high education (ISCED 5A/5B/6). A low education level forms the reference category.
- *Numeracy scores*: PIAAC measures three types of general skills, i.e. literacy skills, numeracy skills, and skills related to problem-solving in technology-rich environments (OECD, 2013b, 2016). In our analyses, we control for numeracy skills. Literacy is defined as ‘as the ability to access, use, interpret and communicate mathematical information and ideas in order to engage in and manage the mathematical demands of a range of situations in adult life.’ (OECD, 2012). After the test, 10 plausible values were generated that represent the respondent’s numeracy skills, we averaged these scores per individual. We standardised this variable before analyses.
- *Age*: We used data from young people aged 16–29 and divided age into three categories (16–19 years, 20–24 years, and 25–29 years); the youngest group is the reference category.
- *Having children*: A dummy distinguishes between young people who have children or not. Stepchildren and children not living in the household are included in this variable. Young people without a child are the reference category.
- *Migration background*: Measured using dummies to distinguish natives, first-generation immigrants (both parents and respondent were foreign born) and second-generation immigrants (both parents foreign born, respondent born in test country). Natives are the reference category.

- *Parental education:* Measured in categories: Both lower-educated (ISCED 0/1/2/3C short), at least one medium-educated parent (ISCED 3A/3B/3C long/4A/4B/4C), at least one high-educated parent (ISCED 5A/5B/6). We included a category ‘missing’ for young people who did not provide information about their parental education. When only information about one parent was present, we used that information.

## 8.4 Analyses and results

In the first part of the analyses, we compare the five countries that are studied in-depth in the country chapters: the Netherlands, Germany, France, the UK, and Japan. For this set of analyses, we use a logistic regression design with a country-cluster approach. Next, we explore generalisability of findings on 30 OECD countries by using multilevel logistic regression techniques that correct standard errors for the hierarchical clustering of young people within countries (Snijders and Bosker, 2012).

### 8.4.1 *Education systems in the Netherlands, Germany, France, the UK, and Japan*

Tables 8.2–8.4 show the results of the logistic analyses about the relation between education systems and the risk to become long-term NEET across the five countries participating in this book. All tables present odds ratios (ORs) whereas an estimate below 1 means a negative relation; an estimate of 1 or above means a positive relation. Table 8.2 shows the relation between the level of stratification within a country’s education system and the likelihood to become long-term NEET. It shows that if we only include the Netherlands, Germany, France, the UK, and Japan in the analyses, stratification seems to be a significant predictor ( $OR = 0.461/0.685$ ). The higher the level of stratification within a country, the less likely young people are to become NEET, which is in line with our hypothesis. While the interaction with gender does not seem to show a significant result (Model 3), in Model 4, the interaction with completed level of education is included. Here, we find a significant moderating effect with medium-educated young people and the level of stratification on the likelihood to become long-term NEET ( $OR = 0.889$ ).

Next, in Table 8.3, we continue with the indicator about the level of vocational orientation within a country. Model 1 shows that when we only include the macro-indicator of vocational orientation in the model, we do not find a significant effect. However, when we control for gender, age, completed education level, numeracy score, migration background, having children and parental education level, the relation between vocational orientation and long-term NEETs becomes significant ( $OR = 0.549$ ). It shows that higher level of vocational orientation within a country decreases the probability to become long-term NEET. This is in line with

Table 8.2 Logistic regression: estimates of the relation between stratification and long-term NEETs (odds ratios)

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Stratification	0.461** (0.133)	0.651** (0.090)	0.661** (0.098)	0.685** (0.096)
Stratification * Female			0.977 (0.048)	
Stratification * Medium educated				0.889* (0.053)
Stratification * High educated				0.962 (0.194)
<i>Control variables:</i>				
Female (male = ref.)		1.817*** (0.204)	1.801*** (0.202)	1.816*** (0.204)
Age (age 16–19 = ref.)				
Age 20–24		2.971*** (0.403)	2.971*** (0.405)	3.018*** (0.392)
Age 25–29		3.943*** (0.522)	3.944*** (0.523)	4.020*** (0.565)
Completed education level (low = ref.)				
Medium		0.479*** (0.034)	0.479*** (0.034)	0.454*** (0.028)
High		0.298*** (0.050)	0.298*** (0.050)	0.294*** (0.058)
Numeracy score		0.464*** (0.033)	0.464*** (0.033)	0.464*** (0.033)
Migration background (native = ref.)				
First-generation migrant		0.412* (0.149)	0.413* (0.151)	0.410* (0.146)
Second-generation migrant		0.969 (0.381)	0.970 (0.382)	0.964 (0.374)
Having children (no = ref.)		5.313*** (0.908)	5.309*** (0.911)	5.281*** (0.916)
Parental education (both lower educated = ref.)				
At least one medium educated		0.748~ (0.114)	0.748~ (0.115)	0.743* (0.109)
At least one high educated		0.716 (0.167)	0.716 (0.167)	0.712 (0.165)
Missing		0.756** (0.066)	0.756** (0.066)	0.749** (0.067)
Pseudo <i>R</i> <sup>2</sup>	0.055	0.328	0.328	0.328
<i>N</i> country	5	5	5	5
<i>N</i> individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Standard errors in parentheses.



*Table 8.3* Logistic regression: the relation between vocational orientation and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Vocational orientation	0.766 (0.340)	0.549* (0.160)	0.763 (0.326)	0.756 (0.343)
Vocational orientation *			0.608* (0.124)	
Female				
Vocational orientation *				0.635~ (0.155)
Medium educated				
Vocational orientation *				0.511* (0.169)
High educated				
<i>Control variables:</i>				
Female (male = ref.)		1.887*** (0.231)	2.296*** (0.295)	1.892*** (0.236)
Age (Age 16–19 = ref.)				
Age 20–24		3.171*** (0.526)	3.161*** (0.531)	3.044*** (0.575)
Age 25–29		4.066*** (0.556)	4.056*** (0.551)	3.933*** (0.446)
Completed education level (low = ref.)				
Medium		0.508*** (0.044)	0.509*** (0.045)	0.629** (0.090)
High		0.335*** (0.062)	0.334*** (0.061)	0.419*** (0.072)
Numeracy score		0.433*** (0.035)	0.434*** (0.035)	0.430*** (0.036)
Migration background (native = ref.)				
First-generation migrant		0.377** (0.132)	0.383** (0.136)	0.375** (0.130)
Second-generation migrant		0.879 (0.370)	0.886 (0.382)	0.879 (0.379)
Having children (no = ref.)		5.884*** (1.185)	5.941*** (1.262)	5.973*** (1.309)
Parental education (both lower educated = ref.)				
At least one medium educated		0.655*** (0.071)	0.658*** (0.072)	0.659*** (0.075)
At least one high educated		0.548*** (0.088)	0.541*** (0.082)	0.538*** (0.082)
Missing		0.735** (0.086)	0.738* (0.088)	0.734* (0.091)
Pseudo $R^2$	0.003	0.323	0.324	0.325
$N$ country	5	5	5	5
$N$ individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Standard errors in parentheses.

Table 8.4 Logistic regression: the relation between institutional linkages and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>
Institutional linkages	0.424** (0.111)	0.482** (0.111)	0.720* (0.111)
Institutional linkages * Female			0.489 (0.264)
<i>Control variables:</i>			
Female (male = ref.)		1.779~ (0.597)	1.641~ (0.418)
Age (Age 16–19 = ref.)			
Age 20–24		2.372 (1.334)	2.410 (1.332)
Age 25–29		2.482 (1.595)	2.531 (1.585)
Numeracy score		0.458*** (0.059)	0.453*** (0.057)
Migration background (native = ref.)			
First-generation migrant		0.673 (0.788)	0.700 (0.900)
Second-generation migrant		1.041 (0.704)	1.034 (0.719)
Having children (no = ref.)		4.461*** (1.674)	4.473*** (1.634)
Parental education (both lower educated = ref.)			
At least one medium educated		0.806 (0.474)	0.767 (0.448)
At least one high educated		0.709 (0.488)	0.640 (0.428)
Missing		1.619 (0.545)	1.612 (0.560)
Pseudo $R^2$	0.059	0.217	0.223
<i>N</i> country	5	5	5
<i>N</i> individual	1,427	1,427	1,427

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Standard errors in parentheses.

our expectation. In Models 3 and 4, we include interaction terms and the significant main effect of vocational orientation on becoming long-term NEET disappears. Model 3 shows that females are significantly more likely to become long-term NEET; however, in countries with high levels of vocational orientation, the differences between males and females become smaller (OR = 0.608). Model 4 shows that medium- and higher-educated young people are less likely to become long-term NEET compared to low-educated young people. In addition, this relationship becomes even stronger in highly vocationally oriented systems (OR = 0.635/OR = 0.511).

Lastly, we look at the relation between the level of institutional linkages and the risk to become long-term NEET in [Table 8.4](#). Since institutional linkages are only useful for young people that studied vocational education or training, we only focus on young people with a vocational degree on ISCED 3–4 level. We find that in countries in which the vocational programmes are more work-based, the likelihood to become NEET becomes smaller ( $OR = 0.424/0.720$ ). This is in line with what we expected. Although Model 3 shows that females are more likely to become long-term NEET than males, we do not find a significant cross-level interaction between gender and institutional linkages regarding NEET risks.

With some exceptions, across all analysis the control variables show that females are more likely to become long-term NEET. The same holds for older young people (age 20–29) compared to younger cohorts (16–19). In addition, medium- and higher-educated young people are less likely to become long-term NEET compared to low-educated young people. Subsequently, the higher the numeracy score is, the lower the risk to become long-term NEET. We also found that first-generation migrants are less likely to become NEET than natives; however, for second-generation migrants, we did not find a significant relationship. Having children increases long-term NEET risks and having at least one medium- or highly educated parent decreases the chance to become long-term NEET compared to having two lower educated parents.

#### **8.4.2 Exploring the generalisability of conclusions:**

##### ***A cross-national analysis***

[Figure 8.1](#) shows the results of the association between the different education system characteristics and the likelihood to become long-term NEET, presented in margins plots. We found in the previous analyses based on five countries that the level of stratification was positively correlated with the likelihood to become NEET, while vocational orientation and institutional linkages were negatively correlated. However, we do not find any significant relationship between the education systems characteristics and the likelihood to become long-term NEET when we include approximately 26 OECD countries. Neither do we find significant cross-level interactions, except for the interaction between the level of stratification and gender. Based on the multilevel estimates, we find significant evidence that females living in countries with highly stratified education systems are more likely to become long-term NEET compared to males living in countries with highly stratified education systems.

## **8.5 Conclusion and discussion**

In this chapter, we examined whether different characteristics of education systems are associated with the likelihood of becoming long-term NEET. When we analysed the five countries presented in this book, we did find

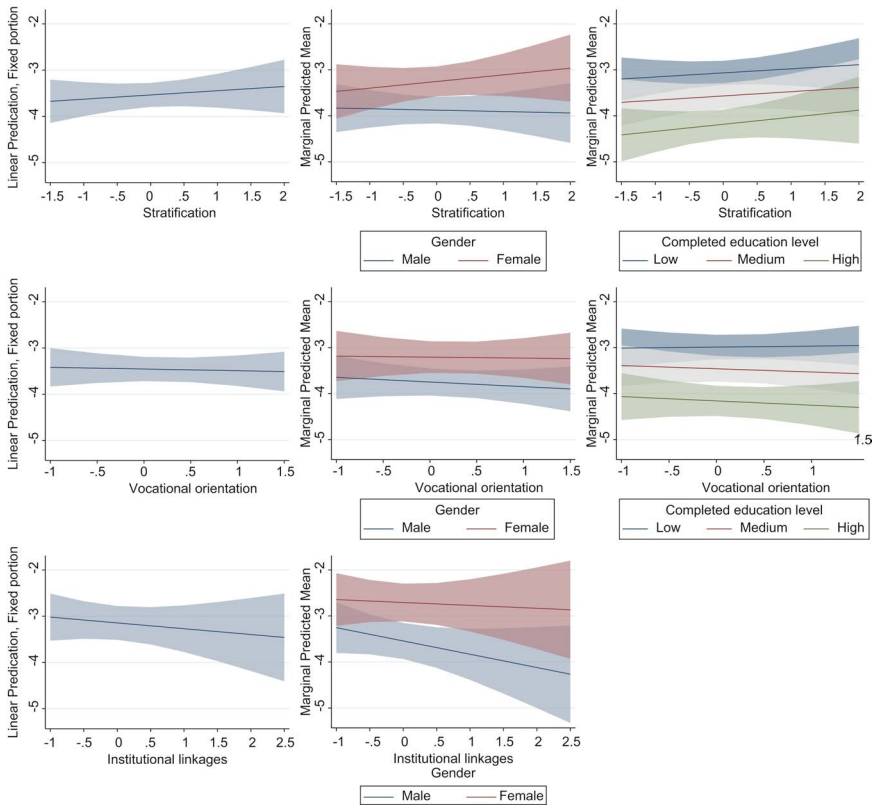


Figure 8.1 Margins plots after multilevel regressions on education systems on long-term NEETs.

some interesting results. First, regarding the level of stratification within an education system, we found that the higher the level of stratification, the less likely young people are to become long-term NEET. This indicates that countries with stratified education system form better signals about young people to employers than less stratified education systems do. In addition, we found that the lower the level of stratification within a country, the more likely low-educated young people are to become long-term NEET, compared to medium-educated young people.

Second, we found that in strongly vocationally oriented education systems, young people are less likely to become long-term NEET. This is in line with the expectation that in countries with higher levels of vocational orientation, vocational educated young people are better protected in the labour market. Especially for females and medium- or high-educated young people, their likelihood to become long-term NEET decreases when they live in a country with high levels of vocational orientation.

Third, we looked at young people with a vocational education and training degree in ISCED 3–4 to examine the relation between institutional linkages and the likelihood to become long-term NEET. We found that these young people are less likely to become NEET when they studied in education systems that focus on institutional linkages by combining school and work. This is in line with our expectation because employers that are able to determine the curriculum of vocational education and training (Andersen and Van der Werfhorst, 2010) and also influence the size of the output (Culpepper and Finegold, 1999; Thelen, 2004) are better in assessing a future worker.

To explore potential generalisability of these findings, we examined young people aged 16–29 and used PIAAC data of 30 countries. When doing logistic multilevel analyses across approximately 26 countries, we found no strong evidence that characteristics of the education system are related to long-term NEET probabilities. Our findings suggest a significant interaction with gender; women living in countries with highly stratified education systems are more likely to become long-term NEET compared to males living in countries with highly stratified education systems.

# 9 Can Labour Market Policies Help to Reduce Long-term NEETs?

*Lynn van Vugt and Mark Levels*

## 9.1 Introduction

In this chapter, we are interested in the way labour market policies are associated with young people's long-term NEET risk. The previous literature has shown that labour market policies affect young people's decisions on the labour market (Gebel and Giesecke, 2011). However, labour market policies could also provide opportunities for young people to go back to education or participate in training.

We will look at different labour market policies. First, the level of permanent employment protection legislation (EPL) is often seen as a central labour market policy that affects young people's school-to-work transitions (Gebel and Giesecke, 2011; Barbieri et al., 2018). We expect that in countries with stricter levels of EPL, young people are less likely to find a job because they are more often seen as an outsider in the job market. Of the five countries in this book, Germany, France and the Netherlands have higher levels of EPL, while Japan and the UK have lower levels. Second, we analyse differences between the relevance of various active labour market policies (ALMPs). ALMPs aim to improve the educational and labour market possibilities of young people. We focus on the general spending on ALMPs; however, based on Knotz (2012), we also divide the concept of ALMPs into enabling and enforcing ALMPs. While the incentives to get young people back to education or training, or to work, differ, all the ALMPs have the intention to lower NEET risks. The Netherlands and the UK have the highest spending on ALMPs, followed by France and Germany. Japan spends relatively little on ALMPs. Third, we analyse labour market transition systems. Most countries can be divided into internal labour markets (ILM) or occupational labour markets (OLM). Japan, is an ILM country, France and the UK are generally classified as ILM countries but have some components of OLMs, while Germany and the Netherlands have labour market arrangements that are mostly based on OLM.

In this chapter, we answer the following research question: *To what extent are different characteristics of labour markets and labour market policies associated with the likelihood to become long-term NEET?* To answer this question, we use data from the Program for the International Assessment of Adult Competencies (PIAAC) (OECD, 2013a). This international survey is conducted in 33 high- and

upper-middle-income countries. For our analyses, we selected young people aged 16–29 from 28 OECD countries. In the first part of the analyses, we compare the five countries that are studied in-depth in the country chapters: the Netherlands, Germany, France, the UK, and Japan via logistic regression analyses. In the second part, we explore the generalizability of findings on 29 OECD countries by using multilevel logistic regression.

## 9.2 Theory: Understanding differences

First, EPL is often seen as a central labour market legislation that might influence young people's school to work transition (Gebel and Giesecke, 2011; Barbieri et al., 2018). In labour markets with strict EPL regulations, it might be harder for outsiders, such as school-leavers, to find a job because for employers it is harder to dismiss redundant workers (Bentolila and Bertola, 1990; Breen, 2005), and when they have to hire outsiders, they have to take into account the additional training costs and the costs of dismissals in the case of economic downturns (Müller and Gangl, 2003; Scherer, 2005). For young people this means that they have longer periods of job-searching (Wolbers, 2007) and are less likely to find a job (Russell and O'Connell, 2001). Therefore, we expect that in countries with higher levels of EPL, young people are more likely to become long-term NEET (Hypothesis H9a).

However, an alternative expectation is also possible. Youths who do find jobs are less likely to be dismissed, even if training costs for skill insufficiencies may be higher. We could therefore also expect that in countries with higher employment protection, youths who do find jobs are more likely to keep those jobs, which implies a lower number of NEETs, and a higher likelihood that those who experience NEET spells become long-term NEETs (Hypothesis H9b).

ALMPs aim to improve the educational and labour market possibilities of young people. Therefore, we expect that in countries with higher ALMP spending, the transition from school-to-work is better organized, for instance, by giving extra training to young people to update their skills to meet requirements on the labour market. Therefore, we expect that in countries with higher levels of ALMPs, young people are less likely to become long-term NEET (Hypothesis H10a).

However, ALMPs can be divided in two types (Dingeldey, 2007; Knotz, 2012). Some countries focus more on enabling ALMPs. These policies focus on finding a job that matches one's skills, for example, by (re-)training job seekers in skills that are demanded on the labour market, or by helping to combine work and family responsibilities. By contrast, ALMPs could also force young people into work. These so-called enforcing ALMPs assume that people lack the motivation or incentives to search for work. As a result, these policies aim to force young people into school or work by, for example, lowering the level and duration of financial benefits (Knotz, 2012). Thus,

even though the underlying policies are different, they both aim to lower the chances for young people to become NEET. Therefore, we hypothesize that in countries with higher levels of enabling ALMPs, young people are less likely to become long-term NEET (Hypothesis H10b). We also expect that in countries with higher levels of enforcing ALMPs, young people are less likely to become long-term NEET (Hypothesis H10c).

Lastly, countries can have internal (ILM) or occupational labour markets (OLM). Following the literature, we expect the school-to-work transition to be more successful in OLMs and hypothesize that young people living in OLM-countries are less likely to become long-term NEET compared to young people living in ILM-countries (Hypothesis H11).

In addition to these main effects, we may also expect that labour markets have a different effect for different subgroups of the youth population. For example, in [Section 1.3](#) we reasoned that signalling theory would predict that school-leavers from lower educational tracks may be seen as less attractive to employers, partly because employers may expect them to be less productive. In more strongly protected labour markets, employers may be less likely to hire lower educated school-leavers. Likewise, enabling ALMPs may be more successful for higher educated school-leavers, who may more easily engage with training (see [Section 1.4](#)). We explore whether labour market characteristics have a different effect for school-leavers with different educational attainment levels. We also explore the extent to which labour markets shape the relationship between gender and the probability that school-leavers become long-term NEET.

## **9.3 Data and measurements**

### **9.3.1 PIAAC**

We use data from the PIAAC, collected from 24 participating countries (2011/2012) and from 9 additional countries (2014/2015). The PIAAC provides valid and reliable estimates of adults' competences in numeracy and literacy skills. Country samples contain over 5,000 adults between the age of 16 and 65 (for detailed information about PIAAC and technical issues, see: OECD, 2013a, 2016). To prepare the data for analyses, we selected young people between the age of 16 and 29. Data from Russia and Australia were not analysed for technical-administrative reasons. We weighted data from Canada, since the original Canadian sample was much larger than the samples in other countries. To weight back, we drew a random sample of 35%. These selections resulted in a total sample of  $N=49,523$ . Next, we deleted cases with missing values on the long-term NEET variable ( $N=609$ ). For the analyses, we deleted missing values on the individual-level variables like gender, age, education level, numeracy score, migration background, having children and parental education level ( $N=294$ ). We analysed only those



countries for which we have reliable macro data. These selections resulted in a total working sample of  $N=48,620$  young people aged 16–29 from 28 countries. Depending on the available information about the contextual indicators, the number of observations could differ across analyses.

### 9.3.2 Measurements

The descriptive statistics of the variables are presented in [Table 9.1](#). We describe how the long-term NEET and the country-level variables are measured below. Please see Chapter 8.3 for the measurements of the individual-level variables.

#### 9.3.2.1 Dependent variable

- Long-term NEET: PIAAC measures whether young people (a) have had paid work, (b) participated in formal education, or (c) participated in non-formal education during last 12 months preceding the survey. Young people who did not participate in one of these activities within the 12 months preceding the test are considered long-term NEETs.

#### 9.3.2.2 Country-level variables

- *EPL*: We use the indicator of legal protection of permanent workers against individual and collective dismissals from the OECD (OECD, 2013c). This includes: “(i) procedural inconveniences that employers face when starting the dismissal process, such as notification and consultation requirements; (ii) notice periods and severance pay that typically vary by tenure of the employee; and (iii) difficulty of dismissal, as determined by the circumstances in which it is possible to dismiss workers, as well as the repercussions for employers if a dismissal is found to be unfair (such as compensation and reinstatement)” (OECD, 2013c). We use data from the year of interview and standardized this variable (mean 2.06, standard deviation 0.60, range from 0 to 3). A higher score indicates a stricter level of EPL within a country.

*Table 9.1* Descriptive statistics of country characteristics

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
EPL permanent	28	2.06	0.60	0	3
ALMP	26	0.52	0.40	0	2
Enabling ALMPs	17	0.40	0.13	0	1
Enforcing ALMPs	17	0.65	0.09	0	1
Labour market arrangement					
ILM	21	0.42	0.49	0	1
OLM	21	0.44	0.50	0	1
South	21	0.14	0.34	0	1

*Continuous variables are standardized before analyses.*

- *ALMP*: We use the public expenditure on ALMPs as percentage of GDP from the OECD (OECD, 2020a). We use data of the year of interview and standardized this variable (mean 0.52, standard deviation 0.40, range from 0 to 2). A higher score indicates a higher expenditure on ALMPs.
- *Enabling ALMPs*: We use the indicator of enabling ALMPs from Knotz (2012), based on wage subsidies, job counselling, training, and family services. (see Knotz, 2012). We standardized this variable before analyses (mean 0.40, standard deviation 0.13, range from 0 to 1). A higher score indicates more effort in enabling ALMPs.
- *Enforcing ALMPs*: We use the indicator about enforcing ALMPs from Knotz (2012), including low benefit level and obligation to job-search (see Knotz, 2012). We standardized this variable (mean 0.65, standard deviation 0.09, range from 0 to 1). A higher score indicates more effort in enforcement ALMPs.
- *Labour market arrangements*: measured using three dummies to distinguish ILM, OLM, and Southern countries. Countries with an ILM are the reference category. Categorization is based on the previous research (Müller and Shavit, 1998; Gangl, 2001; De Grip and Wolbers, 2006; Kogan et al., 2008; Raffe, 2011).

## 9.4 Analyses and results

We start with logistic regression analyses (including a country-cluster approach) comparing the five countries that are studied in-depth in this book: the Netherlands, Germany, France, the UK, and Japan. In the second part, we explore the generalizability of findings by analysing 17–28 OECD countries using multilevel logistic regression analyses in which we correct the standard errors for the hierarchical clustering of young people within countries (Snijders and Bosker, 2012).

### 9.4.1 Comparing labour markets in the Netherlands, Germany, France, the UK, and Japan

In Tables 9.2–9.5, we show the results of the logistic analyses on the relation between labour market policies and the risk to become long-term NEET across the five countries: the Netherlands, Germany, France, the UK, and Japan. All tables present odds ratios (ORs), so an estimate below 1 means a negative relation, an estimate of 1 or above means a positive relation. We start with the level of EPL within a country. Table 9.2 shows the relationship between the level of EPL (permanent) and the likelihood to become long-term NEET. We find that the higher the level of employment protection is within a country, the less likely it is that young people become long-term NEETs (Models 1–4; OR = 0.535/0.695). This indicates that youth are less often long-term NEET in countries that protect their permanent workers. This refutes Hypothesis H9a and

Table 9.2 Logistic regression: relation between EPL and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
EPL permanent	0.535** (0.109)	0.659*** (0.081)	0.728* (0.114)	0.695** (0.082)
EPL permanent * Female			0.864 (0.109)	
EPL permanent * Medium educated				0.904 (0.098)
EPL permanent * High educated				0.938 (0.214)
<i>Control variables:</i>				
Female (male = ref.)		1.815*** (0.219)	1.715*** (0.166)	1.814*** (0.221)
Age (age 16–19 = ref.)				
Age 20–24		2.922*** (0.474)	2.916*** (0.479)	2.961*** (0.474)
Age 25–29		4.004*** (0.563)	4.016*** (0.567)	4.071*** (0.629)
Completed education level (low = ref.)				
Medium		0.506*** (0.046)	0.505*** (0.045)	0.484*** (0.050)
High		0.321*** (0.061)	0.321*** (0.061)	0.311*** (0.043)
Numeracy score		0.452*** (0.024)	0.452*** (0.024)	0.453*** (0.024)
Migration background (native = ref.)				
First-generation migrant		0.405** (0.138)	0.409* (0.143)	0.400** (0.134)
Second-generation migrant		1.041 (0.422)	1.042 (0.427)	1.030 (0.412)
Having children (no = ref.)		5.152*** (0.999)	5.117*** (0.998)	5.140*** (1.004)
Parental education (both lower educated = ref.)				
At least one medium educated		0.699** (0.091)	0.699** (0.092)	0.694** (0.088)
At least one high educated		0.635* (0.119)	0.633* (0.119)	0.629** (0.112)
Missing		0.731** (0.072)	0.735** (0.071)	0.727** (0.074)
Pseudo $R^2$	0.045	0.329	0.329	0.329
$N$ country	5	5	5	5
$N$ individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; odds ratios; standard errors in parentheses.

Table 9.3 Logistic regression: relation between ALMP and long-term NEETs

	M1	M2	M3	M4
ALMP	0.494★ (0.160)	0.642★ (0.120)	0.729 (0.171)	0.667★ (0.117)
ALMP ★ Female			0.830 (0.130)	
ALMP ★ Medium educated				0.923 (0.109)
ALMP ★ High educated				0.989 (0.246)
<i>Control variables:</i>				
Female (male = ref.)		1.818*** (0.218)	1.819*** (0.235)	1.816*** (0.219)
Age (age 16–19 = ref.)				
Age 20–24		2.926*** (0.491)	2.922*** (0.494)	2.950*** (0.486)
Age 25–29		4.027*** (0.568)	4.045*** (0.570)	4.066*** (0.624)
Completed education level (low = ref.)				
Medium		0.517*** (0.045)	0.516*** (0.044)	0.515*** (0.056)
High		0.339*** (0.066)	0.338*** (0.065)	0.340*** (0.057)
Numeracy score		0.438*** (0.022)	0.438*** (0.022)	0.438*** (0.022)
Migration background (native = ref.)				
First-generation migrant		0.388** (0.121)	0.392** (0.125)	0.385** (0.117)
Second-generation migrant		1.001 (0.394)	1.004 (0.401)	0.995 (0.386)
Having children (no = ref.)		5.190*** (0.969)	5.151*** (0.971)	5.183*** (0.974)
Parental education (both lower educated = ref.)				
At least one medium educated		0.679** (0.086)	0.680** (0.087)	0.677** (0.086)
At least one high educated		0.608* (0.119)	0.607* (0.119)	0.605** (0.115)
Missing		0.730** (0.079)	0.734** (0.077)	0.727** (0.079)
Pseudo R <sup>2</sup>	0.039	0.326	0.326	0.326
N country	5	5	5	5
N individual	7,689	7,689	7,689	7,689

~  $p < 0.10$ , ★  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; odds ratios; standard errors in parentheses.

Table 9.4 Logistic regression: the relation between enabling ALMPs and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Enabling ALMPs	0.899 (0.194)	0.856 (0.100)	1.054 (0.139)	0.959 (0.137)
Enabling ALMPs * Female			0.731* (0.112)	
Enabling ALMPs * Medium educated				0.853 (0.145)
Enabling ALMPs * High educated				0.784 (0.240)
<i>Control variables:</i>				
Female (male = ref.)		1.840*** (0.215)	1.831*** (0.248)	1.845*** (0.224)
Age (age 16–19 = ref.)				
Age 20–24		3.024*** (0.530)	3.026*** (0.524)	3.038*** (0.546)
Age 25–29		3.974*** (0.515)	4.000*** (0.501)	3.990*** (0.484)
Completed education level (low = ref.)				
Medium		0.531*** (0.040)	0.528*** (0.039)	0.523*** (0.054)
High		0.379*** (0.074)	0.377*** (0.072)	0.363*** (0.076)
Numeracy score		0.428*** (0.038)	0.429*** (0.038)	0.430*** (0.039)
Migration background (native = ref.)				
First-generation migrant		0.350*** (0.099)	0.356*** (0.102)	0.345*** (0.096)
Second-generation migrant		0.860 (0.290)	0.862 (0.291)	0.837 (0.279)
Having children (no = ref.)		5.796*** (1.100)	5.758*** (1.134)	5.849*** (1.165)
Parental education (both lower educated = ref.)				
At least one medium educated		0.688* (0.120)	0.688* (0.120)	0.684* (0.120)
At least one high educated		0.593* (0.139)	0.588* (0.133)	0.584* (0.128)
Missing		0.787 (0.135)	0.790 (0.134)	0.785 (0.136)
Pseudo $R^2$	0.001	0.316	0.318	0.317
<i>N</i> country	5	5	5	5
<i>N</i> individual	7,689	7,689	7,689	7,689

~  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; odds ratios; standard errors in parentheses.

Table 9.5 Logistic regression: the relation between enforcing ALMPs and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Enforcing ALMPs	1.076 (0.327)	1.037 (0.168)	0.908 (0.159)	0.982 (0.164)
Enforcing ALMPs * Female			1.216* (0.117)	
Enforcing ALMPs * Medium educated				1.092 (0.082)
Enforcing ALMPs * High educated				1.095 (0.224)
<i>Control variables:</i>				
Female (male = ref.)		1.846*** (0.207)	1.850*** (0.220)	1.847*** (0.210)
Age (age 16–19 = ref.)				
Age 20–24		3.059*** (0.501)	3.057*** (0.498)	3.090*** (0.497)
Age 25–29		3.954*** (0.483)	3.957*** (0.465)	3.999*** (0.517)
Completed education level (low = ref.)				
Medium		0.519*** (0.029)	0.518*** (0.029)	0.515*** (0.032)
High		0.374*** (0.068)	0.375*** (0.068)	0.370*** (0.063)
Numeracy score		0.432*** (0.037)	0.432*** (0.038)	0.433*** (0.038)
Migration background (native = ref.)				
First-generation migrant		0.343*** (0.099)	0.345*** (0.100)	0.341*** (0.097)
Second-generation migrant		0.804 (0.235)	0.796 (0.226)	0.789 (0.226)
Having children (no = ref.)		5.926*** (1.154)	5.896*** (1.173)	5.926*** (1.158)
Parental education (both lower educated = ref.)				
At least one medium educated		0.698* (0.106)	0.698* (0.107)	0.694* (0.106)
At least one high educated		0.615~ (0.154)	0.613~ (0.154)	0.610* (0.149)
Missing		0.796 (0.120)	0.797 (0.118)	0.793 (0.122)
Pseudo R <sup>2</sup>	0.001	0.315	0.315	0.315
N country	5	5	5	5
N individual	7,689	7,689	7,689	7,689

~  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; odds ratios; standard errors in parentheses.

corroborates Hypothesis H9b. When we moderate this relationship with gender (Model 3) or education level (Model 4), we do not find any significant results.

Next, we look at the relationship between the level of ALMPs within a country and the likelihood to become long-term NEET. Table 9.3 shows that in countries that spend more on ALMPs, young people are less likely to become NEET (Models 1–4; OR = 0.494/0.667) which is in-line with Hypothesis H10a. We explored potential interactions with gender or education level; however, the estimates in Models 3 and 4 are insignificant.

Furthermore, we look to what extent the level of enabling ALMPs is correlated with long-term NEET risks. Table 9.4 shows that enabling ALMPs are not significantly associated with long-term NEET risks. This is not in-line with our expectations (Hypothesis H10b). However, when we include a cross-level interaction with gender, we find that while women are significantly more likely to become long-term NEET, in countries with high levels of enabling ALMPs, the differences between men and women become smaller (Model 3; OR = 0.731). The cross-level interaction with education is not significant.

In Table 9.5, we do not find a significant relationship between enforcing ALMPs and the likelihood to become long-term NEET. For the cross-level interaction between enforcing ALMPs and gender we find that the differences between men and women become larger as the country implements more enforcing ALMPs (Model 3; OR = 1.216). The cross-level interaction with education is not significant.

Lastly, we look at the relationship between labour market arrangements and long-term NEETs in Table 9.6. In line with Hypothesis H11, we find that young people living in OLM countries are less often long-term NEET, compared to young people living in ILM countries. The cross-level interaction with gender is not significant (Model 3). Model 4 shows that for medium educated young people living in OLM countries, the likelihood to become long-term NEET is lower compared to lower educated young people (Model 4; 0.680). In general, we find the same results for our control variables across all models. We find that women are more often long-term NEET than males. Older age groups are also more often long-term NEET than our youngest age group (16–19).

In addition, medium and higher educated young people are less often long-term NEET than lower educated young people, and higher numeracy scores are related to lower long-term NEET risks. Also, natives are more often long-term NEET compared to first-generation migrants, and young people with children are more often long-term NEET than young people without children. Lastly, parental education seems to be important. Young people from whom one of the parents is medium (or highly) educated are less likely to become long-term NEET compared to young people with low educated parents.

Table 9.6 Logistic regression: the relation between labour markets and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Labour market arrangement (ILM = ref.)				
OLM	0.220*** (0.090)	0.342*** (0.086)	0.372*** (0.105)	0.419*** (0.104)
OLM * Female			0.882 (0.157)	
OLM * Medium educated				0.680* (0.113)
OLM * High educated				0.462 (0.285)
<i>Control variables:</i>				
Female (male = ref.)		1.845*** (0.212)	1.883*** (0.281)	1.847*** (0.213)
Age (age 16–19 = ref.)				
Age 20–24		3.069*** (0.388)	3.066*** (0.390)	3.107*** (0.403)
Age 25–29		4.013*** (0.559)	4.013*** (0.560)	4.088*** (0.600)
Completed education level (low = ref.)				
Medium		0.470*** (0.036)	0.470*** (0.036)	0.501*** (0.050)
High		0.290*** (0.049)	0.289*** (0.049)	0.311*** (0.061)
Numeracy score		0.466*** (0.033)	0.466*** (0.033)	0.466*** (0.032)
Migration background (native = ref.)				
First-generation migrant		0.414* (0.149)	0.415* (0.150)	0.411* (0.148)
Second-generation migrant		0.926 (0.374)	0.927 (0.376)	0.920 (0.370)
Having children (no = ref.)		5.419*** (0.929)	5.414*** (0.925)	5.385*** (0.934)
Parental education (both lower educated = ref.)				
At least one medium educated		0.719** (0.090)	0.720** (0.090)	0.713** (0.084)
At least one high educated		0.677~ (0.135)	0.677~ (0.135)	0.674* (0.131)
Missing		0.732*** (0.062)	0.732*** (0.062)	0.726*** (0.065)
Pseudo $R^2$	0.043	0.330	0.330	0.330
<i>N</i> country	5	5	5	5
<i>N</i> individual	7,689	7,689	7,689	7,689

~  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; odds ratios; standard errors in parentheses.



#### **9.4.2 Exploring the generalizability of conclusions: A cross-national analysis**

Now we explore whether the relationship between labour market policies and the likelihood to become long-term NEET across approximately 28 OECD countries. The results from the multilevel logistic regression are presented in margins plots in [Figure 9.1](#).

Based on the previous analyses based on five countries, we found that EPL, ALMP, and labour market arrangements were associated with long-term NEET risks. When we gauge generalizability of our results, we find that the estimates of EPL are not significantly associated with the likelihood to become NEET, neither the cross-level interactions with gender nor educational attainment. With regard to ALMP, we find that in countries that spend more on ALMP, young people are less likely long-term NEET. Additionally, the interactions with gender and education are significant. It seems that gender differences become smaller as spending on ALMP rises. On the other hand, while in countries with high levels of ALMP, the chances of becoming NEET are smaller, the differences between education levels arise as the level of ALMP increases within countries. This indicates that there is more educational inequality in countries with high levels of ALMPs.

Enabling and enforcing ALMPs are not significantly associated with the likelihood to be long-term NEET. However, we find that higher educated young people are less likely long-term NEET than lower educated young people, and this likelihood is even smaller in countries with high levels of enabling ALMPs. Differences are rather small, though. Cross-level interaction with gender or education level are not significant.

Lastly, we find that young people living in OLM countries are less often long-term NEET than young people living in ILM countries, but we do not find statistical evidence for this when we control for gender, age, education level, numeracy score, migration background, having children and parental education level. Gender and education level also do not seem to moderate in this relationship.

### **9.5 Conclusion and discussion**

In this chapter, we examined to what extent labour markets are associated with the likelihood of becoming long-term NEET. For a good interpretation of results, it is essential to observe that the analyses in this chapter are descriptive and exploratory in nature, and that the research design does not allow for strict causal inference of policy effectiveness. Further research could progress by analysing the causal impact of natural experiments, such as policy reforms. The analyses presented in this chapter can only be interpreted cautiously.

The chapter can further be seen as a cautionary tale about country selections. We found that the results based on analyses of the five countries that are the core cases in this book (Netherlands, Germany, France, the UK,

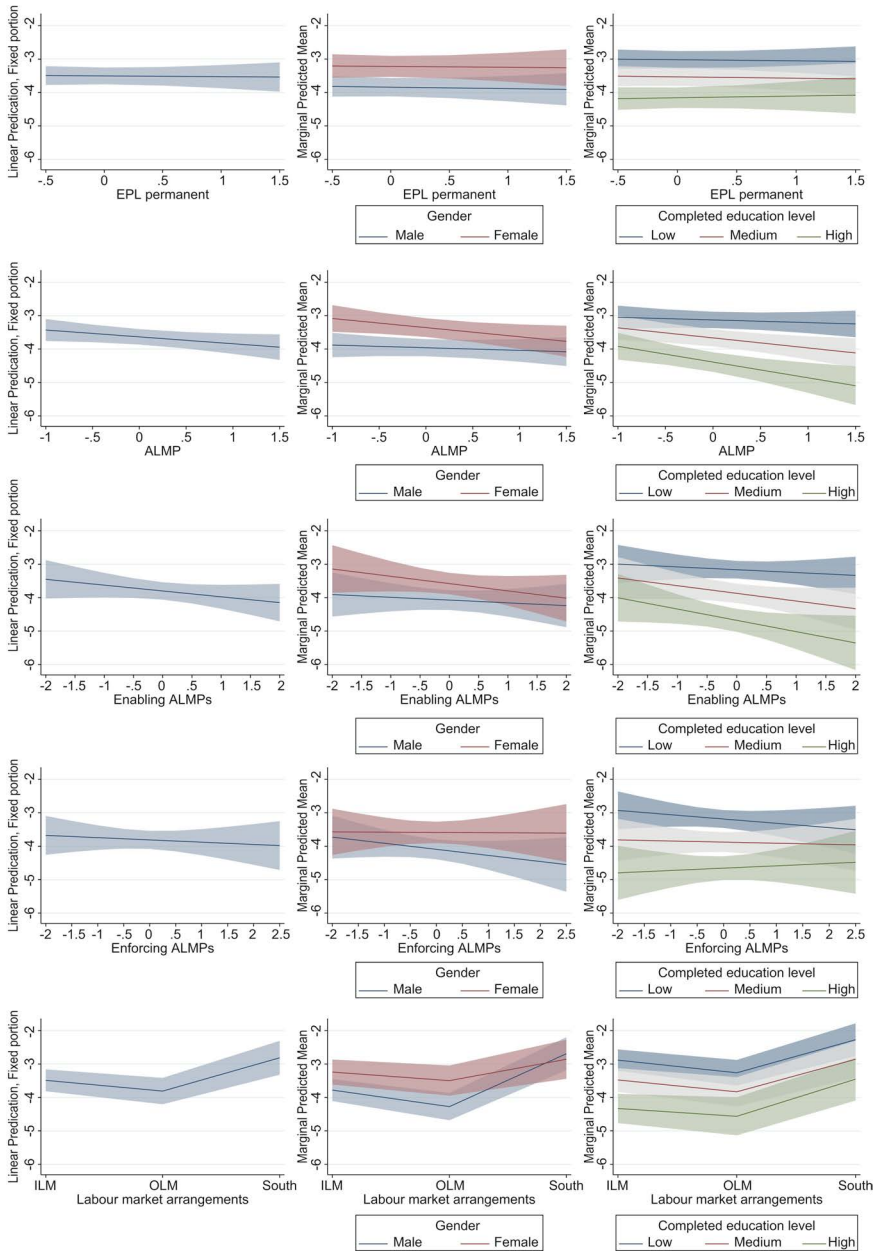


Figure 9.1 Margins plots multilevel regressions of labour market policies on long-term NEETs.

and Japan) could not always be generalized to the full sample of countries in the PIAAC data. First, in the analyses based on the five countries, we found some support for the hypothesis that higher levels of EPL within a country are associated with lower long-term NEET risks. However, when we analysed this association on 28 countries, EPL seems not to be significantly associated with the likelihood to become long-term NEET. The negative relationship is very small, and not significant. It should be noted, though, that we do feel safe to cautiously draw one important conclusion: our results seem to contradict the theoretical expectations that employment protection hampers youth labour market integration.

Second, the countries that spend more on ALMPs have fewer long-term NEETs, which is in line with expectations that such policies may help NEETs back on track. Further exploratory analyses on the consequences of enabling and enforcing ALMPs do not inform us better about which type of ALMP works, though.

Third, we assessed whether labour market arrangements were associated with long-term NEET risks. While we found in the five-country analysis that young people living in countries that were predominantly OLM were less likely to become NEET, the evidence for this assumption is rather weak. The negative relation was not confirmed in the analyses based on 21 countries.

# 10 How long-term NEET are explained by family policies in OECD countries

*Lynn van Vugt, Mark Levels and Janine Jongbloed*

## 10.1 Introduction

In this chapter, we examine the association between family policies and the likelihood that young people become long-term not in education, employment, or training (NEET). In the introduction to this book, we explored the ways in which institutional contexts might shape gendered pathways into NEET statuses. We emphasized that in all countries, young mothers in particular face greater risks of income loss, work interruptions, and dismissal – and thus NEET statuses and potential skill depreciation – due to family-related contingencies. However, these risks differ both qualitatively and in magnitude depending on specific institutional factors. To support parent's education and employment, leave schemes and affordable childcare services are considered reconciliation policies (Gornick and Meyers, 2003; Olivetti and Petrongolo, 2017).

We examine several different kinds of family policies. First, job-protected leave schemes. These leave schemes enable parents to temporarily disengage from the labour market to take care of their children without losing their job. While some studies suggest that paid maternity and parental leave benefits are most beneficial to women's relative economic position (Estévez-Abe and Hethey-Maier 2013), this depends on the length of paid parental leave. Short or no leave policies tend to result in young mothers being more likely to become NEET (Nieuwenhuis et al., 2012), but very long parental leave makes returning to work more difficult (Boeckmann, Misra, and Budig, 2014). We expect that young people living in countries with relatively longer durations of leave schemes will be less likely to become long-term NEET. From the five countries, we analyse in this book, Germany and France are countries with relatively long durations of job-protected parental leave, while, in the Netherlands, the duration is shorter.

Second, the affordability of childcare services. Childcare services may facilitate parental leave to combine parental obligations with work or education obligations. We expect that in countries where childcare services are more affordable, young people will be less likely to become long-term NEET because they are able to use the childcare services. When we look at the five countries in this chapter, childcare costs for couples with two children are relatively expensive in the UK, where they constitute a significant barrier to

entering the labour force, followed by Japan and the Netherlands, but relatively more affordable in Germany and France.

The findings from the country chapters illustrated that NEET statuses are highly related to having children for women specifically. In the Netherlands, there are 16 weeks of fully paid maternity leave, but longer parental leaves are generally unpaid. Childcare is partly subsidized by the government for working parents on a sliding scale according to income. However, parents generally do not use formal childcare options, but rather rely on informal care and most particularly grandparents. Within this context, we found that women with children were more likely to become late NEET, but not necessarily long-term NEET, while men with children were less likely to become long-term NEET.

In Germany, although maternity leave is technically shorter (14 weeks), there also exists a parental leave allowance (*Elterngeld*) and three years of job-protected parental leave (*Elternzeit*). Furthermore, although public childcare provision has greatly increased in recent years, the traditional male-breadwinner model is still strong, and most often women care for young children for the first year of life. In this context, we found that women with children were both more likely to follow a late NEET pathway or a long NEET pathway.

In France, 16 weeks of maternity leave are supplemented by parental leaves (*Congé parental d'éducation*) that guarantee a return to work until the third birthday of the youngest child. However, these longer parental leave policies, mainly taken up by women, have been described as 'poisoned chalices' that perpetrate gender inequalities (Fagnani, 2000). However, public childcare is widely available and heavily subsidized in France. Perhaps due to this fact, we found that being a woman with a child only had a relatively small effect on the likelihood of reporting a long-term NEET status, but that women with children did also tend to have more accumulated months of NEET status.

In the UK, where leave is relatively long and childcare costs are high, women with children are much more likely to be long-term NEET. This is the case even though women are less likely to experience being NEET overall than men in the UK. In Japan, again, having a child strongly influences women, but not men, to become late- and long-term NEET. This also relates to social norms associated with motherhood, which differ strongly between countries.

We explore the following research question: *To what extent are different characteristics of family policies associated with the likelihood to become long-term NEET?* We analyse data from the Programme for the International Assessment of Adult Competencies [PIAAC] (OECD, 2013a). This data is conducted in 33 advanced countries. For our analyses, we selected young people aged 16–29 in approximately 28 countries. We start with logistic regression analyses to compare the five countries that are studied in-depth in the country chapters: the Netherlands, Germany, France, the UK, and Japan. Additionally, we test whether the findings are generalizable on 28 OECD countries by using multilevel logistic regression.

## 10.2 Theory: Understanding differences

In this section, we develop hypotheses on how family policies are associated with the likelihood of becoming long-term NEET. Based on ‘New home economics’ (Becker, 1965, 1981), we expect that time devoted to parental obligations cannot be spent on work or education. Therefore, young people have to decide whether the benefits of continuing education or work outbalance the time spent on taking care of children. We expect that certain family policies can influence these decisions, such as the option to use leave schemes and childcare.

First, job-protected leave schemes allow young parents to devote themselves to temporary caregiving after the child is born before they return to the same job as they had before childbirth. In most cases, young parents also get some level of income replacement. However, large variation in terms of length of leave and the level of income exist (Thévenon, 2011; Thévenon and Luci, 2012; van Belle, 2016). We expect that depending on the length and compensation level, young people consider their decision about reallocation of time between caregiving and work differently. We expect that in countries with shorter periods of leave, young people will be more likely to quit their job or education to take care of their children. In contrast, in countries with longer leave durations, young people can take up relatively long leave durations without losing their attachment to the labour market. Therefore, we hypothesize that *In countries with longer leave schemes (e.g., maternity, paternity, parental), young people are less likely to become long-term NEET (Hypothesis 12).*

Second, childcare is another option that might influence young people’s decision to continue with school or work after having children. However, the effectiveness of childcare depends, among other things, on the affordability of childcare services (Eurofound, 2013; Gambaro, Stewart, and Waldfogel, 2015; Yerkes and Javornik, 2018). These criteria may be crucial in the decision-making process by which young people choose to allocate their time between parental obligations and work/education obligations. We expect that the lower childcare costs, the more likely that they are affordable for young people across all income distributions, and thus the more likely they are to continue their studies or work. Therefore, we expect that *In countries where childcare is more affordable, young people are less likely to become long-term NEET (Hypothesis 13).*

In addition to these main effects, we also expect that family policies have a different effect not only for men and women but also on people with different educational attainment levels. The generosity of paid leave benefits improves women’s position as compared to their partners (Estévez-Abe and Hethey-Maier, 2013). The country chapters suggest cross-national variation in the extent to which women become long-term NEETs, and also in the extent to which having a child is associated with higher risks of long-term disengagement. Here, we investigate whether family policies plausibly affect gendered NEET differences, and whether they work differently for school-leavers with different educational attainment levels.

### 10.3 Data and measurements

#### 10.3.1 PIAAC

We analyse data from the PIAAC from 28 countries (OECD, 2013). The survey provides valid and reliable estimates of adults' competencies in numeracy and literacy skills, as well as relevant characteristics. Respondents were interviewed using computer-assisted personal interviews, although pencil-and-paper data collection strategies were also used. We analyse a total working sample of  $N=47,456$ , young people aged 16–29. Depending on the available information about the contextual indicators, the number of observations could differ across analyses.

#### 10.3.2 Measurements

The descriptive statistics of the variables are presented in [Table 10.1](#). We describe how the long-term NEET and the country-level variables are measured below. See Chapter 8.3 for the measurements of the individual-level variables.

##### *Dependent variable*

- *Long-term NEET*: As in [Chapters 8 and 9](#), we use information about whether young people (a) have had paid work, (b) participated in formal education, or (c) participated in nonformal education during last 12 months preceding the PIAAC survey to construct the variable that measures long-term NEET. Here too, we define young people who have not participated in any of these activities within the last 12 months preceding the survey as long-term NEETs.

##### *Country-level variables*

- *Length of maternity leave*: Number of weeks of job-protected maternity leave available for mothers just before and after childbirth ([OECD, 2020b](#)).

*Table 10.1* Descriptive statistics

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Length of maternity leave (weeks)	25	21.08	10.86	0	52
Length of parental leave with job protection (weeks)	25	83.45	56.96	12	156
Length of paid father-specific leave (weeks)	25	7.21	13.41	0	53
Total length of paid maternity and parental leave (weeks)	25	57.98	45.64	0	166
Childcare costs – couple with 2 children	28	13.64	8.04	0	26

Note: Continuous variables are standardized before analyses.

We standardized this variable (mean 21.08, standard deviation 10.86, range from 0 to 52). A higher score means a longer period of job-protected maternity leave.

- *Length of parental leave*: Number of weeks after maternity leave which a woman can take up as parental leave with job protection, disregarding payment conditions (OECD, 2020b). We standardized this variable (mean 7.21, standard deviation 13.41, range from 0 to 53). A higher score indicates a longer period of parental leave.
- *Length of paid father-specific leave*: Number of paid weeks reserved for the exclusive use of fathers (OECD, 2020b). We standardized this variable (mean 83.45, standard deviation 56.96, range from 12 to 156). A higher score reflects a longer period of paid father-specific leave.
- *Total duration of paid maternity and parental leave*: Total number of weeks which women can take as paid leave after childbirth (OECD, 2020b). We standardized this variable (mean 57.98, standard deviation 45.64, range from 0 to 166). A higher score means a longer period of paid maternity- and parental-leave.
- *Childcare costs*: Net costs for full-time centre-based childcare paid by a couple with two children expressed as a percentage of their disposable household income and after any benefits designed to reduce the gross childcare fees in 2012 (OECD, 2019b). We standardized this variable. A higher score indicates higher childcare costs.

## 10.4 Analyses and results

We start with analyses on the five countries that are studied in-depth in the country chapters: the Netherlands, Germany, France, the UK, and Japan. We perform logistic regression analyses with a country-cluster approach. Following this, we perform multilevel logistic regression modelling to test the generalizability of the findings to approximately 28 OECD countries.

### 10.4.1 Comparing family policies in the Netherlands, Germany, France, the UK, and Japan

In Tables 10.2–10.6, results are shown describing the relationship between different kinds of family policies and the risk to become long-term NEET across the five countries: the Netherlands, Germany, France, the UK, and Japan.

As before, we present odds ratios where an estimate below 1 indicates a negative relationship and an estimate of 1 or above indicates a positive relationship. First, in Table 10.2, we focus on the length of maternity leave. We find that more weeks of maternity leave are positively correlated with the likelihood of becoming long-term NEET (Models 1–4; 1.824/1.421). This is in the opposite direction of what we expected in Hypothesis 12. Surprisingly, gender does not seem to significantly moderate this relationship



*Table 10.2* Logistic regression: estimates of the relation between length of maternity leave and long-term NEETs (odds ratios)

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Length of maternity leave (weeks)	1.824*** (0.228)	1.293* (0.145)	1.346* (0.160)	1.421*** (0.140)
Length of maternity leave (weeks) × female			0.945 (0.137)	
Length of maternity leave (weeks) × medium educated				0.909 (0.101)
Length of maternity leave (weeks) × high educated				0.688* (0.122)
<i>Control variables:</i>				
Female (male = ref.)		1.803*** (0.204)	1.849*** (0.330)	1.799*** (0.205)
Age (Age 16–19 = ref.)				
Age 20–24		2.902*** (0.478)	2.902*** (0.479)	2.781*** (0.467)
Age 25–29		3.945*** (0.491)	3.937*** (0.472)	3.772*** (0.347)
Completed education level (low = ref.)				
Medium		0.507*** (0.037)	0.508*** (0.038)	0.539*** (0.065)
High		0.344*** (0.071)	0.344*** (0.071)	0.414*** (0.093)
Numeracy score		0.452*** (0.029)	0.452*** (0.030)	0.448*** (0.029)
Migration background (native = ref.)				
First-generation migrant		0.373** (0.118)	0.372** (0.118)	0.386** (0.119)
Second-generation migrant		0.919 (0.334)	0.919 (0.333)	0.956 (0.339)
Having children (no = ref.)		5.295*** (1.050)	5.318*** (1.110)	5.300*** (1.085)
Parental education (both lower educated = ref.)				
At least one medium educated		0.721* (0.117)	0.721* (0.117)	0.737~ (0.127)
At least one high educated		0.678 (0.177)	0.678 (0.178)	0.683 (0.183)
Missing		0.767* (0.090)	0.765* (0.090)	0.762* (0.086)
Pseudo <i>R</i> <sup>2</sup>	0.055	0.321	0.322	0.323
<i>N</i> country	5	5	5	5
<i>N</i> individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Standard errors in parentheses.

Table 10.3 Logistic regression: estimates of the relation between length of parental leave and long-term NEETs (odds ratios)

	M1	M2	M3	M4
Length of parental leave with job protection (weeks)	0.700 (0.217)	0.846 (0.105)	0.935 (0.173)	0.862 (0.118)
Length of parental leave with job protection (weeks) × female			0.864 (0.091)	
Length of parental leave with job protection (weeks) × medium educated				0.950 (0.065)
Length of parental leave with job protection (weeks) × high educated				1.039 (0.194)
<i>Control variables:</i>				
Female (male = ref.)		1.823*** (0.203)	1.778*** (0.202)	1.821*** (0.205)
Age (age 16–19 = ref.)				
Age 20–24		2.977*** (0.485)	2.972*** (0.488)	2.996*** (0.459)
Age 25–29		3.919*** (0.469)	3.922*** (0.459)	3.949*** (0.509)
Completed education level (low = ref.)				
Medium		0.523*** (0.039)	0.522*** (0.038)	0.517*** (0.040)
High		0.369*** (0.078)	0.370*** (0.078)	0.373*** (0.063)
Numeracy score		0.432*** (0.038)	0.432*** (0.038)	0.432*** (0.039)
Migration background (native = ref.)				
First-generation migrant		0.359*** (0.102)	0.361*** (0.103)	0.358*** (0.099)
Second-generation migrant		0.882 (0.265)	0.875 (0.256)	0.876 (0.252)
Having children (no = ref.)		5.736*** (1.154)	5.699*** (1.162)	5.720*** (1.156)
Parental education (both lower educated = ref.)				
At least one medium educated		0.726~ (0.126)	0.725~ (0.126)	0.725~ (0.127)
At least one high educated		0.646~ (0.158)	0.644~ (0.158)	0.643~ (0.156)
Missing		0.807 (0.135)	0.808 (0.134)	0.803 (0.136)
Pseudo R <sup>2</sup>	0.014	0.317	0.317	0.317
N country	5	5	5	5
N individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Standard errors in parentheses.

*Table 10.4* Logistic regression: relation between length of paid father-specific leave and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Length of paid father-specific leave (weeks)	0.603 (0.247)	0.923 (0.225)	0.653 (0.171)	0.638* (0.143)
Length of paid father-specific leave (weeks) × female			1.599*** (0.069)	
Length of paid father-specific leave (weeks) × medium educated				1.564*** (0.085)
Length of paid father-specific leave (weeks) × high educated				2.094*** (0.301)
<i>Control variables:</i>				
Female (male = ref.)		1.846*** (0.212)	2.128*** (0.203)	1.857*** (0.226)
Age (age 16–19 = ref.)				
Age 20–24		3.065*** (0.506)	3.063*** (0.504)	2.882*** (0.490)
Age 25–29		3.970*** (0.474)	3.934*** (0.438)	3.756*** (0.340)
Completed education level (low = ref.)				
Medium		0.510*** (0.043)	0.511*** (0.044)	0.595*** (0.038)
High		0.366*** (0.081)	0.365*** (0.080)	0.422*** (0.066)
Numeracy score		0.439*** (0.030)	0.440*** (0.031)	0.442*** (0.033)
Migration background (native = ref.)				
First-generation migrant		0.342*** (0.103)	0.344*** (0.103)	0.353*** (0.104)
Second-generation migrant		0.780 (0.279)	0.772 (0.267)	0.778 (0.265)
Having children (no = ref.)		5.855*** (1.177)	5.947*** (1.275)	5.916*** (1.260)
Parental education (both lower educated = ref.)				
At least one medium educated		0.695* (0.118)	0.693* (0.116)	0.706* (0.122)
At least one high educated		0.625~ (0.154)	0.619* (0.146)	0.618* (0.147)
Missing		0.784~ (0.109)	0.772~ (0.103)	0.771* (0.100)
Pseudo <i>R</i> <sup>2</sup>	0.021	0.315	0.317	0.320
<i>N</i> country	5	5	5	5
<i>N</i> individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Odds ratios; standard errors in parentheses.

Table 10.5 Logistic regression: relation between total length of paid maternity and parental leave and long-term NEETs

	M1	M2	M3	M4
Total length of paid maternity and parental leave (weeks)	0.579* (0.135)	0.866 (0.162)	0.730*** (0.052)	0.727*** (0.056)
Total length of paid maternity and parental leave (weeks) × female			1.277 (0.295)	
Total length of paid maternity and parental leave (weeks) × medium educated				1.774* (0.432)
Total length of paid maternity and parental leave (weeks) × high educated				1.210 (0.326)
<i>Control variables:</i>				
Female (male = ref.)		1.831*** (0.211)	1.981*** (0.294)	1.829*** (0.216)
Age (age 16–19 = ref.)				
Age 20–24		3.021*** (0.468)	3.032*** (0.465)	2.854*** (0.484)
Age 25–29		3.916*** (0.495)	3.923*** (0.494)	3.661*** (0.298)
Completed education level (low = ref.)				
Medium		0.505*** (0.047)	0.506*** (0.047)	0.546** (0.110)
High		0.356*** (0.087)	0.356*** (0.086)	0.417*** (0.098)
Numeracy score		0.441*** (0.043)	0.442*** (0.043)	0.441*** (0.044)
Migration background (native = ref.)				
First-generation migrant		0.354*** (0.110)	0.354*** (0.109)	0.364*** (0.109)
Second-generation migrant		0.816 (0.280)	0.823 (0.284)	0.857 (0.294)
Having children (no = ref.)		5.813*** (1.186)	5.873*** (1.259)	5.922*** (1.307)
Parental education (both lower educated = ref.)				
At least one medium educated		0.733* (0.110)	0.732* (0.110)	0.757~ (0.119)
At least one high educated		0.673* (0.121)	0.674* (0.119)	0.673* (0.125)
Missing		0.804 (0.128)	0.802 (0.129)	0.811 (0.126)
Pseudo R <sup>2</sup>	0.028	0.316	0.317	0.319
N country	5	5	5	5
N individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Odds ratios; standard errors in parentheses.

*Table 10.6* Logistic regression: relation between childcare costs and long-term NEETs

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>
Childcare costs – couple with 2 children	1.618 (0.475)	1.224~ (0.127)	1.138 (0.193)	1.244~ (0.156)
Childcare costs – couple with 2 children × female			1.111 (0.129)	
Childcare costs – couple with 2 children × medium educated				1.004 (0.060)
Childcare costs – couple with 2 children × high educated				0.879 (0.145)
<i>Control variables:</i>				
Female (male = ref.)		1.814*** (0.202)	1.767*** (0.203)	1.810*** (0.201)
Age (age 16–19 = ref.)				
Age 20–24		2.942*** (0.481)	2.940*** (0.482)	2.930*** (0.441)
Age 25–29		3.930*** (0.477)	3.939*** (0.469)	3.914*** (0.482)
Completed education level (low = ref.)				
Medium		0.523*** (0.042)	0.522*** (0.041)	0.524*** (0.043)
High		0.365*** (0.078)	0.365*** (0.078)	0.382*** (0.067)
Numeracy score		0.436*** (0.035)	0.436*** (0.035)	0.435*** (0.036)
Migration background (native = ref.)				
First-generation migrant		0.365*** (0.104)	0.366*** (0.106)	0.367*** (0.101)
Second-generation migrant		0.911 (0.297)	0.908 (0.293)	0.919 (0.293)
Having children (no = ref.)		5.571*** (1.062)	5.537*** (1.075)	5.555*** (1.063)
Parental education (both lower educated = ref.)				
At least one medium educated		0.723~ (0.132)	0.722~ (0.132)	0.726~ (0.136)
At least one high educated		0.649~ (0.165)	0.648~ (0.166)	0.650~ (0.166)
Missing		0.795 (0.128)	0.797 (0.128)	0.791 (0.129)
Pseudo <i>R</i> <sup>2</sup>	0.027	0.318	0.319	0.319
<i>N</i> country	5	5	5	5
<i>N</i> individual	7,689	7,689	7,689	7,689

~  $p < 0.10$  \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; Odds ratios; standard errors in parentheses.

(Model 3). Model 4 shows that for highly educated young people, the relationship between the length of maternity leave and the risk of becoming long-term NEET is weakened (Model 4; 0.688). In other words, while youth in countries that offer more weeks of maternity leave have higher probabilities of reporting long-term NEET statuses, this effect is less pronounced for the highly educated.

Next, we look at the estimates of the length of parental leave with job protection in [Table 10.3](#). While the estimates are in the expected direction (Hypothesis 12), it seems that the number of weeks of job-protected parental leave does not significantly affect the likelihood of becoming long-term NEET (Models 1–4). Additionally, the cross-level interactions with gender and education level do not show significant relationships (Model 3 and Model 4).

In [Table 10.4](#), we look at the relationship between the length of paid father-specific leave within a country and the likelihood of becoming long-term NEET. Overall, Models 1–3 show that the length of paid father-specific leave is not significantly correlated to long-term NEET risks. However, females are more likely to become long-term NEET, and according to Model 3, this relationship becomes stronger for females as the number of paid father-specific leave increases within a country (OR = 1.599). This counter-intuitive finding may be driven by the fact that in our five countries, there is a great variation between short-term father-specific leave (France and the UK: 2 weeks) and long-term father-specific leave (Japan; 52).

When we turn to Model 4, we see that higher numbers of weeks of paid father-specific leave decrease the likelihood of becoming long-term NEET for young people (OR = 0.638). In addition, we find that this relationship is less strong for medium- and high-educated young people (OR = 1.675/2.094). This indicates that for the medium- and high-educated young people, the length of paid father-specific leave has less influence on their chances of becoming long-term NEET, while for the low-educated young people, the negative relationship between father-specific leave and NEET is stronger.

The relationship between the length of paid maternity and parental leave and long-term NEET is presented in [Table 10.5](#). Here we see that the higher the number of weeks of paid maternity and parental leave within a country, the less likely young people are to become NEET (Model 1; OR = 0.589). While this is in line with our expectations formulated in Hypothesis 12, this estimate turns insignificant after controlling for the individual-level characteristics.

When we include the interaction with gender, the estimate of the total length of paid maternity and parental leave becomes significant again (OR = 0.730). However, we do not find statistical evidence for the cross-level interaction with gender. In Model 4, we included a cross-level interaction with education level. We find that the number of weeks of paid maternity and parental leave is negatively associated with the risk of becoming long-term NEET (OR = 0.727), but this relationship is stronger for low-educated young people than highly educated young people (OR = 1.774).

In [Table 10.6](#), we show our results concerning the relationship between childcare costs (couples with two children) and the likelihood of becoming long-term NEET. We find that this relationship becomes significant when we control for individual-level characteristics in Model 2. We find that higher childcare costs are related to higher chances of becoming long-term NEET (Model 2; OR = 1.224). This is in line with our expectation in Hypothesis 13: In countries where childcare is more affordable, young people are less likely to become long-term NEET. We do not find statistical evidence for the cross-level interactions with gender and education level.

The control variables generally show the same results across our analyses. Women are more likely to become long-term NEET as compared to men. Having children increases the risk of becoming long-term NEET. Young people aged 20–29 are more likely to become long-term NEET than 16- to 19-year olds. Looking at education level, we find that young people with a medium or high education level have lower chances of becoming long-term NEET as compared to low educated young people, and that higher numeracy scores are associated with lower long-term NEET risks. In addition, young people with a migration background are less likely to become long-term NEET than their native-born counterparts. Also, young people with at least one medium- or highly educated parent are less likely to become long-term NEET.

#### **10.4.2 Exploring the generalizability of conclusions:**

##### ***A cross-national analysis***

In this section, we test whether the previous findings are generalizable to multilevel analyses based on a larger sample of OECD countries. We look at the extent to which family policies affect the chances of becoming long-term NEET in 28 OECD countries. We present the results of the multilevel logistic regression analyses in the margins plots in [Figure 10.1](#). Consistent with the logistic regression analyses on data from the Netherlands, Germany, France, the UK, and Japan, we do not find a great deal of support for our hypotheses that family policies are associated with the likelihood of becoming long-term NEET. Analysing the different measures of leave schemes, we find that the length of maternity leave is significantly associated with long-term NEET risks. This means that the more weeks of maternity leave a woman receives in a country, the more likely young people are to become long-term NEET. This is in line with what we found in the logistic regression analyses based on our five key countries.

Second, we find that in countries with longer durations of paid father-specific leave, the likelihood of becoming long-term NEET is generally reduced, but for highly-educated young people, this relationship is less strong and even seems to become positive as the length of paid father-specific leave increases. Regarding the length of parental leave and total length of paid maternity and parental leave, we do not find any significant association with the likelihood

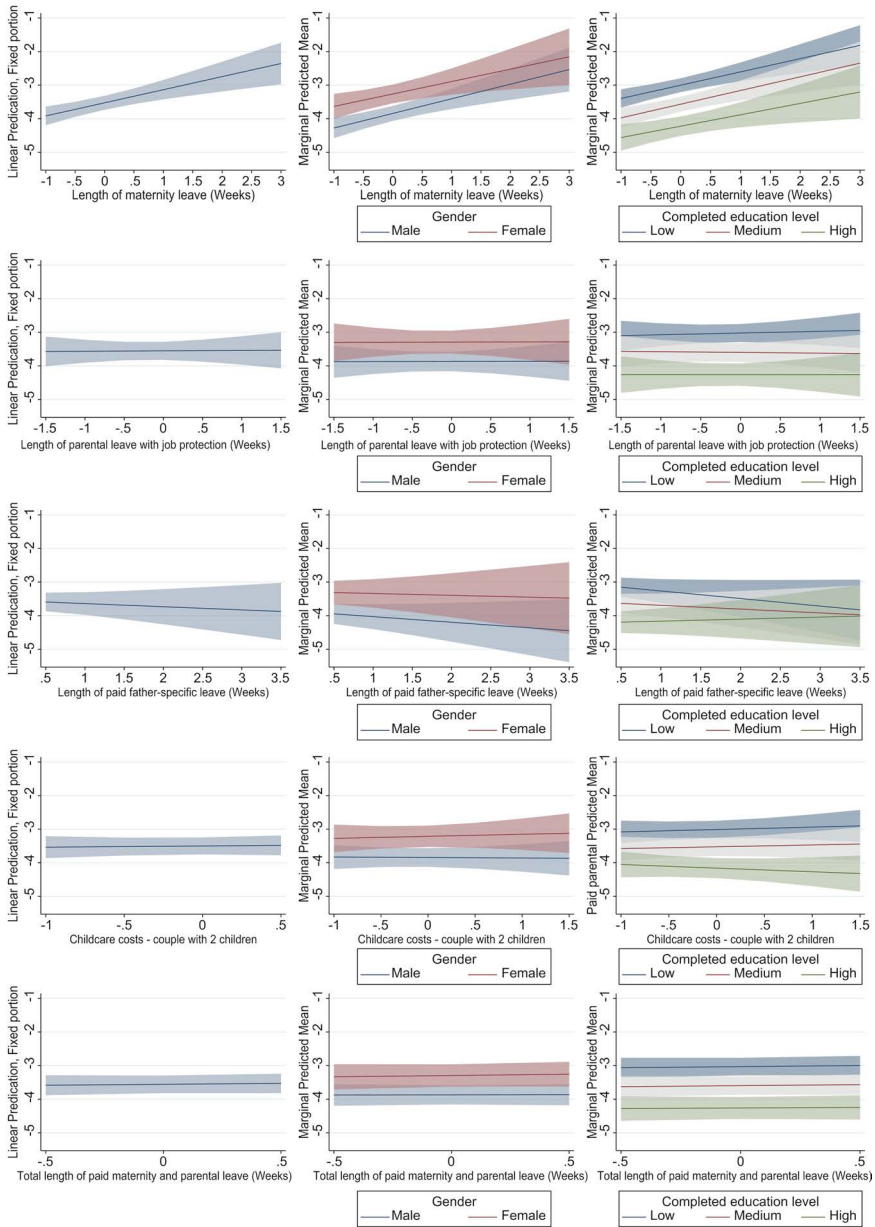


Figure 10.1 Margins plots after multilevel regressions on family policies on long-term NEETs.



of becoming long-term NEET. The cross-level interactions with gender and education level are not significant either. Furthermore, while childcare costs for couples do not seem to be directly related to the likelihood of becoming long-term NEET, we find that high educated young people are less likely to become NEET and that this relationship becomes more pronounced in countries with higher childcare costs.

## 10.5 Conclusion and discussion

In this chapter, we examined to what extent family policies are related to long-term NEET risks. We hypothesized that the length of leave schemes and the affordability of childcare services were important factors in predicting young peoples' NEET risks because they help parents reconcile their family obligations with work or education.

Concerning leave schemes, we expected that longer leave schemes within a country would be associated with lower NEET risks because this would give parents time to spend with their child without losing their attachment to the labour market. However, we found that young people living in countries where women had access to longer maternity leaves were more likely to become long-term NEET. This could be due to the use of overly long leaves that have a negative impact on education and labour market outcomes. For example, previous literature has shown that overly long leave schemes create more distance from the labour market due to human capital depreciation and experience loss (Pettit and Hook, 2005; Boeckmann, Misra, and Budig, 2014; Nieuwenhuis, Need, and Van der Kolk, 2017). This makes it more difficult for women to get back into employment or education after their leave.

Next, we found that the total length of paid maternity and parental leave was significantly related to lower NEET risks when we only examined the Netherlands, Germany, Japan, France, and the UK. However, when we included 20 additional countries, these results were not generalizable. Similar findings between our two types of analyses were found for the length of paid father-specific leave: In countries with longer durations of paid father-specific leave, the likelihood of becoming long-term NEET is reduced, but not for the highly educated young people. We also found that for females, the strength of the association with long-term NEET statuses increased with the duration of paid father-specific leave. However, this only held true for the analyses on the five key countries.

The other family policy that we expected to reconcile the conflict between parental obligations and work, or education, was the affordability of childcare costs. We expected that lower childcare costs would be related to lower long-term NEET risks. This is what we found in our analyses on the five countries, but this was not generalizable to the 28 countries. We did find that highly educated young people were less likely to become long-term NEET, and that this association became more pronounced in countries with higher childcare costs. However, childcare options also differ in both their

availability and social acceptability across countries, which may also impact these results.

To conclude, family policies seem to affect young peoples' long-term NEET risks differently than we thought they would. Our findings suggest that factors other than leave schemes and childcare costs might be more important in young people's decision-making processes. This may be because, while the legal limits differ between countries, social norms also play a strong role in shaping country differences. For example, in Germany, there is a strong belief that young children should be taken care of by their mother in their home until at least the age of one. In France, on the other hand, it is socially acceptable for mothers to place their young children in public childcare or in the care of an *assistante maternelle*, both of which are heavily subsidized by the government. These different social contexts have clear effects: Regardless of how many children they have or the ages of their children, French mothers are more likely to be employed and more likely to be employed full-time than German mothers (Fagnani, 2012). Social norms might thus also be impacting these relationships above and beyond the legal limits of leave schemes. Another potential weakness of these analyses is the fact that family policies are likely only important for young people with at least one child. We conducted our analyses on the whole sample of young people aged 16–29, but these policies may not be important in determining NEET statuses for the part of the sample of young people without children.

# 11 Conclusions and Discussion

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## 11.1 Study findings

This volume has attempted to go beyond existing research on young people who are not in education, employment, or training (NEETs), addressing some of the important limitations that had remained largely unexplored to date. We have attempted to tease out the heterogeneity in life-course patterns, individual and institutional correlates, and later consequences of prolonged NEET statuses. In doing so, we have added to a new literature tackling longitudinal descriptions of individual life trajectories and pathways through NEET statuses (Gutiérrez-García et al., 2018; Contini et al., 2019; Giret et al., 2020) but from a novel comparative perspective. Indeed, our life-course perspective enabled us to consider how NEET patterns are both shaped by earlier life experiences and are themselves defining characteristics that influence later income and occupational statuses. Finally, our multi-faceted comparative analyses also allowed us to explore and discuss how national and global opportunity structures affect youths' lives in different contexts (Holte, 2018; Holte et al., 2019).

We argued that this was necessary to distinguish more at-risk NEET youth from those requiring less policy attention. Our research underscores the heterogeneity of NEET youth (Furlong, 2006, 2007) and lends support to the notion that NEET in its broadest sense is not a sociologically meaningful category. While often viewed as more vulnerable, persistently inactive, and less responsive to policy initiatives than unemployed youth, we find that not all NEETs are equally disadvantaged and that most NEETs (re-)enter the educational system or labour market within a ten-year period. Thus, only a small proportion of youth remain in a NEET status long-term. Indeed, we find that less than 18% of youth with at least one month of NEET in the Netherlands, about 13% in France, about 12% in Germany, and just shy of 20% in England should be considered problematic because of extended or later occurring but long NEET pathways. This percentage is quite a bit higher in Japan, where more young people with one month of NEET status or more are engaged in these prolonged NEET pathways (32%). However, generally, from this longitudinal perspective, we argue that NEET spells are best understood as part of the normal school-to-work (STW) transition. Thus, for the vast majority of youth, being NEET is not a long-lasting pathway, but rather a short, transitory life stage.

The central research goals of our research project were threefold. We aimed to outline different longitudinal patterns of being NEET across our sample of countries using a life-course perspective. Another objective was to identify individual predictors of NEET status in different countries, exploring how individual characteristics and countries' institutions and policies interact to explain why young people are more likely to become NEET in certain countries and less in others. Finally, we intended to identify some of the key consequences of being NEET, and how this differed across countries.

To accomplish these objectives, we used longitudinal national databases from the five countries in our core country sample. We used register data from the Social Statistical Database (SSD) of Statistics the Netherlands (CBS) (Bakker et al., 2014), retrospective longitudinal data from the German National Education Panel Study (NEPS) (Blossfeld et al., 2011b), longitudinal labour market entry data from the *Génération* survey of the French Centre for Research on Education, Training and Employment (*Céreq*) (Joseph et al., 2008), longitudinal secondary school cohort data from Next Steps (formerly known as the Longitudinal Study of Young People in England) in England (Centre for Longitudinal Studies, 2018), and data from the Longitudinal Survey of Adults in the 21st century conducted by the Japanese Ministry of Health, Labour, and Welfare. In addition, we used the Programme for the International Assessment of Adult Competencies (PIAAC) data to conduct cross-national analyses on a larger sample of countries to tease out interactions between micro and macro variables at the individual and country levels and test the generalizability of our findings.

## 11.2 Cross-national differences in individual determinants of NEET

Based on existing literature, it was clear that many different micro-level explanations would be required when attempting to predict NEET statuses. We found that multiple complementary factors each explained a piece of the puzzle of this diverse category of youth, including educational attainment, gender, health, immigration status, growing up with parents of low socio-economic status (SES), and living in poor housing. We used our in-depth analyses of different types and patterns of NEET in various countries to predict how these variables related to different NEET patterns. These individual factors played different roles in each of the five country case studies in this volume, with several key commonalities emerging from our analyses.

Our main findings from these country analyses are:

- A brief period as NEET is in most cases a part of the normal STW transition.
- Only a relatively small subgroup of those that experience a period as NEET, remain NEET for a long time.
- These long-term NEETs are the most vulnerable and experience the most scarring effects.

- Low SES, low educational attainment, truancy, early school leaving, and bad health are associated with long-term NEET risks in the various countries we studied.
- Women who have children are more likely to become long-term or late NEET, but not men.

### **11.2.1 The Netherlands**

The Dutch case study in [Chapter 2](#) uncovered six longitudinal patterns in youth NEET statuses in the STW transition. The largest group of youth followed a typical higher education trajectory after leaving secondary education, with very short and infrequent NEET episodes. Three other large groups experienced different STW-patterns through vocational education and training (VET), either through the classical vocational training trajectory, finding employment relatively soon after secondary education and some vocational training, or first attending VET then higher education and then transitioning to the labour market. Two distinctive groups showed patterns dominated by NEET. Long-term NEET youth often became NEET right after secondary education and failed to integrate into the labour market. Late NEET most often participated in some VET, experienced short spells of employment, and then ended up NEET.

In the Netherlands, women were more likely than men to experience Long-term and Late NEET patterns than men. Women with children were not more likely to be Long-term NEET but were more likely to become Late NEET, consistent with the Dutch social norm of making the transition into motherhood at relatively older ages. This suggests that motherhood does not lead to long-term disengagement in this context, although it does indeed represent a penalty in the labour market and reflects the continued dominance of the male breadwinner model. Migrants also more often experienced Late NEET, but not Long-term, NEET trajectories, and those whose father was not employed had a higher risk of becoming both Late NEET and Long NEET.

Overwhelmingly, early school-leavers (without a diploma) were much more likely to follow both problematic NEET trajectories in the Netherlands, and this was the strongest predictor of problematic transitions. We described the Netherlands as having a highly stratified educational system with a rather strong vocational orientation that tracks early into many discrete tracks and selects students through standardized high stakes tests. Our analyses suggested that in this context, early school-leavers are much more likely to be NEET for at least a month, but also that having a vocational education does not necessarily protect against being NEET. While those with a VET qualification were less likely to find themselves in problematic NEET trajectories, we saw that *unfinished* VET education was an important correlate of a Long NEET trajectory. While these two types of pathways are driven by different life-course impetuses, they both have important scarring effects in the Netherlands: at age 30 years, those young people who were either Long-term

NEET or Late NEET had a considerably lower monthly salary than those who follow more standard trajectories.

### 11.2.2 Germany

The German case study in [Chapter 3](#) hypothesized that due to the conservative German welfare state and its traditional orientation towards the male-breadwinner model, women would be more engaged in family care and, therefore, make up a higher share of long-term NEET. We also expected that disadvantaged groups such as migrant and low-qualified youth would experience more NEET periods and longer NEET durations. These differences in individual characteristics of gender, origin and children stood out starkly. Mothers, youth born abroad, and low qualified had a higher probability of reporting NEET status. On the other hand, holding an upper secondary degree (Abitur/FH) and having a father with a higher level of education decreased the probability of experiencing NEET. Since the German data allow a comparison across time, we also find that younger cohorts clearly are more affected by NEET experience than older cohorts, which supports the deregulation hypothesis as well as the de-standardization of life-courses.

Eight separate NEET patterns were distinguished, with three of these suggesting problematic STW transitions: an exit pattern (late NEET), where people dropped out of VET or employment and remained NEET afterwards, a secondary school dropout pattern (long NEET), where school-leavers did not even start a labour market integration process, and a back-and-forth pattern (discontinuity), comprised of many changes between different activity statuses, including NEET. The ‘classical’ trajectories (long VET, short VET) accounted for half of the NEET trajectories, emphasizing the structured nature of the German education and transition system.

The risks of falling into a Late or Long NEET pathway were particularly high for women with children. Young mothers had a much higher probability of entering the labour market via a pattern with Long NEET periods and – to a lower extent – via the Long NEET pathway or repeated NEET pattern. They also showed much longer cumulative NEET lengths. Thus, the gender effect mentioned above can be more specifically identified as a mother effect in Germany, as was the case in the Netherlands as well. Youth born abroad were also more likely to enter the labour market via patterns involving long NEET periods or an unstable trajectory (discontinuity or repeated NEET) and not by classical institutional pathways (long VET, short VET). Younger cohorts were more likely to report NEET statuses but did not show more risk of explicitly problematic NEET trajectories. Traditional labour market entry patterns through VET study were also less common in these more recent cohorts, where university pathways become more dominant along with higher educational expansion.

In terms of outcomes of NEET in Germany, occupational statuses at age 30 years were affected by the NEET pattern itself as well as by cumulative

NEET length and educational level. Youth with university credentials had higher occupational statuses than others and did not appear to experience negative repercussions from short NEET periods during their STW transition. Surprisingly, the effect of NEET length on occupational status for males was *positive*, while it was negative (as would be expected) for women. Youth in the discontinuity pathway also had a higher occupational status at the age of 30 years. We hypothesized that this may reflect a sort of adaptive flexibility in the job market: these youth may have been able to upskill and adjust their qualifications more often than other youth who remained in the same job.

Overall, NEET in Germany was found to be mainly female and strongly connected to family formation. We suggested that policy recommendations should be retargeted away from their conventional focus on inactive youths and dropouts in Germany and towards young mothers.

### 11.2.3 France

The French case study in [Chapter 4](#) described France's strongly academically oriented educational system, which is characterized by internal stratification based on types of *baccalauréats*, and its largely 'insider' labour market, which disadvantages young people and the least qualified. We argued that a gendered occupational structure continues to exist in France today, even though family policies, social norms, and childcare provisions are more advantageous than in many other countries. Based on this institutional context, we hypothesized that young women with children, and youths with immigration backgrounds, lower socio-economic statuses, living in sub-urban or rural areas, and youths who performed less well early in their educational trajectories would have higher probabilities of reporting NEET statuses and remaining NEET for longer periods of time. We were unsure of the effect of apprenticeships, based on the existing literature.

In our logistic regression model predicting the probability of experiencing at least one month of NEET status, we found that those who repeated at least one grade before entering middle school, and those whose parents were not born in France were significantly more likely to experience at least one month of NEET status. On the other hand, those with children, those who had at least one parent with a professional occupational status, those who completed an apprenticeship, and those with mothers who were employed when the individual left the educational system were less likely to report at least one month of NEET status in the ten-year period.

In our classification of the trajectories of those individuals who experienced at least one month of NEET status, we identified five distinct types: Long Higher Education, Short Higher Education, Return to Formal Education or Training, Direct-to-Employment, and Long-term NEET. Our 'Long-term NEET' cluster showed a cluster membership of youth with lower socio-economic statuses and educational levels, along with young mothers and men who had not participated in an apprenticeship at the end of

secondary schooling. We found that women only had a higher probability of entering the NEET trajectory when they have a child during their studies (a moderated effect of gender by childbirth). However, this effect was relatively small, while the effects of grade repetition before middle school, mother's employment status, and immigration background were much stronger. However, later analyses showed that women with children also tended to have more accumulated months of NEET status.

Parental employment statuses were important predictors and having an employed mother in particular reduced the risk of falling into a NEET-dominated pathway. We interpreted this as suggesting that female labour market participation may have a significant cross-generational effect on long-term NEET statuses in France (Berloff et al., 2017). Having at least one parent who works in a white-collar or professional occupation and participating in an apprenticeship programme were also protective against long-term NEET pathways. In contrast, having inactive or unemployed parents, as well as those from working-class or immigrant backgrounds, increased the chances of following a long-term NEET trajectory. Overall, regional characteristics appeared to have a relatively weak impact.

When looking at outcomes of NEET statuses and patterns, monthly income after seven years in the labour market significantly differed by both the qualitative cluster groups and the quantitative cumulative NEET length indicator. These indicators both had a strong negative impact on earnings. These findings underscore the difficulties that the one in ten young people in France who experienced NEET-dominated STW transitions face. While these youth are characterized by a diversity of situations that require different policy responses, a focus on promoting young mothers' employment opportunities through childcare and information campaigns and addressing social inequalities within the educational system will have cross-generational benefits and remain key to solving the 'problem' of NEET youth in France.

#### 11.2.4 *England*

In the English context, as described in [Chapter 5](#), NEET pathways unfold within an institutional context where, unlike in the other European countries in this book, there is no established vocational route prior to the end of compulsory secondary schooling and where – similar to France – VET continues to have a second-class status amongst students and parents as compared to academic qualifications. However, lower levels of employment protection legislation (EPL) and high job turnover also mean that youth can transition out of unemployment relatively quickly. Similar to the case in the Netherlands, childcare availability and costs are a significant barrier to entering the labour force. These contextual features led us to expect that while the experience of being NEET would generally be short-term, for some female NEETs this might be lengthier and involve having childcare responsibilities and not actively searching for work.



Specifically, we hypothesized that vocational education would not be protective against NEET statuses nor provide a significant route out of being NEET. We argued that NEET should be seen predominately as a transitory stage before employment and security. Finally, we predicted that childcare would make women, rather than men, more likely to embark on a long-term NEET pathway.

We found that those who experience at least one month of NEET status are more likely to have had a child, to be less educated but more likely to have participated in VET and have a lower socio-economic background. In terms of patterns in STW transitions for those with at least one spell of being NEET, we identified five clusters of trajectories, which we described as 'Higher Education', 'Into Employment', 'Further Education', 'Long-Term NEET' and 'Unstable Employment'. These clusters notably overlap with those found in France. The first three clusters are characterized by very few months of NEET, but rather a more or less neat transition from school or higher education into employment. The Unstable Employment group have relatively low education attainment and is typified by many different short spells of different activity and frequent shifts between employment and NEET status, like we saw in the 'Discontinuity' cluster in Germany. However, in the English context, this is the cluster with the highest share engaged in VET, which was a 'Traditional' pathway in the German context. Finally, as in the other countries, we find a Long-Term NEET cluster of youth who are NEET for the majority of the time period we examined.

The strongest findings relate to gender and having children: women without children were less likely than men to report at least one month of NEET status, but women with children had triple the risk of being NEET. In terms of patterns in NEET statuses, women with children were much more likely to end up in a Long-Term NEET pathway than men and these risks were larger if the woman had a child at a younger age. For men, we found no such differences. This corroborates other findings in the UK that suggest that childcare is key to the over-representation of young women in NEET.

In contrast to the findings in the Netherlands and Germany, VET completion was not a safeguard against experiencing NEET statuses. Those who did vocational training at any point during their early adult years were no less likely to be NEET for at least one month over the study time period and those who had completed VET were more likely to belong to the Cyclers cluster, who tended to experience difficulties finding stable employment.

In terms of the outcomes of NEET pathways, English youth with at least one month of NEET status had a higher chance of not being employed at the age of 25 years, or if they were employed, it was more likely to be precarious and lower paid. They were also more likely to report lower life satisfaction and worse health at age 25 years, have a lower adult identity score, and report feeling less in control of their lives. The consistency of these findings across the different trajectories suggests that even the experience of having been NEET for only one month – without a drawn-out period – has lasting effects.

Two-fifths of the youth who experienced NEET statuses did not show the relatively smooth transition towards employment that we had hoped to see: instead, they tended to either cycle between short spells in education, training, employment and being NEET, or experience extended periods of NEET after short spells in employment or further education. This latter group represents the key policy target group and are unlikely to be affected by labour market flexibility. Rather, this finding underscores the need for affordable childcare and preventative physical and mental health interventions to stem long-term economic inactivity amongst English youth.

### 11.2.5 Japan

In [Chapter 6](#), we investigated problematic NEETs in the very idiosyncratic transition-system in Japan. In Japan, the STW transition is characterized by very strong institutional linkages, and a relatively closed job market in which firms recruit school-leavers at universities. This system ensures a relatively efficient allocation of school-leavers to vacant jobs but also provides a barrier for those that do not make the cut directly.

To contribute to this book, we deviated from normal research practices on Japanese marginalized youths, and used a harmonized definition of NEET, which allowed us to for the first time compare Japanese jobless youth with comparable youths in other countries. It also allowed us to paint a more complete picture of Japanese vulnerable youth than is normally given. This is due to the very specific definition of vulnerable youth commonly used in Japan. Whereas in other countries, the NEET definition is commonly used, Japanese policy-makers forewent the NEET category for a more specific definition of so-called Niito. The Niito definition excludes unemployed youth and married women. This definition has cultural roots that overestimate the ease with which unemployed can find jobs and also reflects strict traditional gender norms. By studying NEETs and not Niito, we are better able to describe all youth non-employment and understand its transformation before and after the Japanese economic downturn. As such we are able to clearly illustrate the divided gender structure of the Japanese labour market and observe the way joblessness in Japan is transforming.

Our analyses showed that Japanese school-leavers are less likely to become NEET if they are higher educated, but that higher educated school-leavers are increasingly likely to become NEETs. Our sequence analyses on NEETs allowed us to distinguish five NEET clusters, namely HE (Higher Education), Later NEETs, Long-term NEETs, Short-term NEETs with no higher education, and Short term NEETs with higher education. We drew four general conclusions.

First, we pick up signals from slowly shifting gender norms. Japanese women still tend to become Later NEETs. However, we also found that Later NEETs are less probable in recent cohorts, which we interpret as a manifestation of the gradual transformation of gender divisions in Japanese society.

We also observed a relatively large decrease of female Long-term NEETs, which also probably reflects the transformation of the existing gender norms. Various other changes in NEET patterns among the recent cohort also suggest that gender-based differences in individuals' NEET experience are reducing in Japan. For example, we see that women are increasingly likely among highly educated NEETs and Short-term NEETs. However, having a child still sharply increases the risk of becoming Later and Long-term NEETs, but only for women.

Second, we could make an interesting observation about Long-term NEETs. Contrary to what we expected, the youth who remain NEET for a long time (Long-term NEETs) were not more likely among younger cohorts. Rather, we found the opposite, which would indicate that Long-term NEETs are not a recent phenomenon but have been existing in Japanese society for a long time. It also suggests that the emergence of Long-Term NEETs is not, or at least not only, related to economic downturns.

Third, we found that the number of highly educated NEETs is increasing among men and women. Educational expansion increased the number of highly educated NEETs and Short-term NEETs with higher educational backgrounds. Finally, we studied the long-term consequences of becoming NEET in Japan by studying length and income at age 30 years. We found that higher education still protects against longer NEET spells, but also that there is a negative effect long-term effect of childbirth that applies only to females. We also found considerable scarring effects of being Long-term or Later NEET, in the sense that they have a much lower income at age 30 years than the other groups. The size of scarring effects do not differ between men and women in general, but women with children are much less-well off at age 30 years, in terms of their income.

### **11.3 Institutional effects on NEET**

In the introduction to this volume, we argued that NEET needs to be viewed as an emergent process that cannot be reduced to either individual characteristics or institutional environments, but instead is shaped by an interplay between the two. Important differences in NEET rates, longitudinal patterns, and individual determinants of NEET statuses make clear the need for additional theories incorporating contextual effects to predict probabilities of reporting NEET across countries. Our longitudinal data analysis therefore leaves room to recognize that life-courses and decisions are affected by various institutional configurations. The ten-year periods of youths' lives that we describe are also reflections of the societal context in which they take place. To address this interplay, we examined key institutional characteristics that may lead to increased probabilities of long-term NEET periods in youth and young adulthood. We combined these macro variables with individual-level data from the PIAAC. We then tested several key theoretical insights from education, labour economics, and sociology using cross-national analyses to

determine how NEET risks and patterns depend on individual characteristics and their interaction with institutional configurations.

### ***11.3.1 Education system characteristics***

First, we focused on the education system, analysing the extent to which it succeeds in promoting labour market engagement for youth – or rather reducing the number of youths who experience long-term periods of NEET status – through its stratification, vocational orientation, and institutional linkages. We hypothesized that in countries with higher levels of these three institutional characteristics, young people would be less likely to become long-term NEET. We also predicted that young people with vocational credentials would be particularly protected against long-term NEET periods in countries with higher institutional linkages. Thus, countries in our key sample with a well-established VET system, high on these three measures, particularly Germany and the Netherlands, should show lower NEET risks for youth in general and particularly those with a VET qualification.

We found support for our hypotheses when examining the five countries in our case study sample. The higher the level of stratification and vocational orientation within a country, the less likely young people were to become long-term NEET. In terms of interactions with individual characteristics, we found that lower levels of stratification increased the probability that low-educated youths reported long-term NEET statuses, and that higher levels of vocational orientation reduced gender differences in these probabilities (as mentioned earlier, young women are significantly more likely to report long-term NEET statuses). When focusing on young people with a vocational degree, we found that countries with higher institutional linkages – in other words, where vocational programmes are more work-based – had lower likelihoods of long-term NEET periods in our five-country sample. However, these relationships were no longer significant in the sample including 26 OECD countries. The only exception was for young women in highly stratified education systems, who were significantly more likely to become long-term NEET as compared to young men in these contexts than in contexts where the education system was less stratified.

### ***11.3.2 Labour market institutions***

Next, we examined labour market policies in relation to long-term NEET. We again analyse three different country-level characteristics: the level of permanent EPL; general spending on different types of active labour market policies (ALMPs), including enabling and enforcing ALMPs; and labour market arrangements, which are categorized as internal labour markets (ILM) or occupational labour markets (OLM). We hypothesized that youth would be more likely to report long-term NEET periods in countries with stricter levels of EPL, such as Germany and the Netherlands, due to their outsider

status in the labour market. We expected that high spending on ALMPs, such as is the case in the Netherlands, France, and Germany, would lower NEET risks. Finally, we predicted that young people living in OLM-countries, such as Germany and the Netherlands, would be less likely to become long-term NEET than those in ILM-countries, such as France, Japan, and the UK, because they have less difficulties when entering the job market due to enhanced matching processes based on standardized, vocationally specific qualifications.

We found moderate support for our hypotheses. In our five-country analyses, we found that higher levels of EPL, higher spending on ALMPs and OLM labour market organization were indeed associated with a decreased probability of long-term NEET. Furthermore, these institutional factors interacted with individual characteristics. The significant differences in the probabilities of reporting long-term NEET statuses between young women and men were reduced in contexts with high levels of enabling ALMPs but were augmented in contexts with higher spending on enforcing ALMPs. Importantly, this suggests that policy initiatives directed at young women – and the young mothers we described in each of our country findings – might benefit from focusing on enabling rather than enforcing measures to address this key NEET sub-group.

However, when we enlarge our sample to 29 OECD countries, the results are less clear-cut. While spending on ALMPs remains a significant correlate of lower long-term NEET probabilities, levels of EPL and OLM versus ILM distinctions are no longer significant factors in explaining long-term NEET statuses. Spending on ALMPs thus emerges as the most robust finding, with varying effects for individual youth depending on their gender and educational attainments. As spending on ALMPs increases, NEET probabilities become more similar between young women and men. This suggests rising gender equality, however, in contrast, disparities in the probabilities of reporting long-term NEET between different education levels become larger with more ALMP spending, suggesting greater educational inequality. Thus, policies helping one group may hinder another, highlighting the complex nature of directing and optimizing policy responses.

### ***11.3.3 Family policies***

In our final set of analyses on institutional configurations, we concentrated on two types of family policies: job-protected leave schemes and the affordability of childcare services. These types of policies appear to be central based on our findings in the country chapters: in all contexts, women with children faced significantly greater chances of belonging to a prolonged NEET pathway, particularly for entering extended NEET patterns late in young adulthood. Leave schemes allow parents to leave the labour market temporarily to take care of their children while ensuring that they can return to their previous job (or an equivalent one). We hypothesized that young people living

in countries with longer leave schemes (e.g., maternity, paternity, parental) would be less likely to become long-term NEET because they would be less likely to leave their job or education to take care of their children. Affordable childcare services allow parents to combine family and professional responsibilities. In countries where childcare is more affordable, we expected that young people would be better able to access these services and thus less likely to become long-term NEET. We noted in the English country chapter that childcare costs are very expensive in the UK, and much more so than in the rest of Europe.

Contrary to our hypothesis, youth in countries where women had access to longer maternity leaves were actually *more* likely to become long-term NEET. This suggests that these longer leaves do weaken labour market attachment, as was suggested in the German country chapter. This suggests that despite having safeguarded a particular job, young women still suffer from the effects of human capital depreciation and experience loss. While the total length of paid maternity and parental leave was significantly related to lower NEET risks in our five-country sample, this was not generalizable to the larger country sample of OECD countries. Lower childcare costs were significantly associated with lower long-term NEET risks in our 5-country but not our 28-country analyses. Interactions with individual characteristics were, however, significant, with education inequalities in long-term NEET statuses becoming more pronounced in countries with higher childcare costs. This is likely related to the fact that more educated youth earn higher incomes and are thus better able to pay elevated childcare costs. This points again to the complex interrelations between various individual and institutional factors, where different policies promote certain forms of equality and diminish others. Disengaged youth in long-term NEET pathways with low education will not be responsive to the same institutional incentives as young mothers with higher levels of education, nor will the same policy measures reach both of these target groups. Thus, policy responses must also be diverse enough to reach the multiple sub-populations of NEET youth highlighted in this volume.

### 11.4 Policy implications

We emphasized the heterogeneous nature of NEET status, capturing not only youth unemployment, but also disengagement and social exclusion, throughout this volume. Our country chapters showed that NEET patterns are incredibly diverse, but all linked to significantly poorer outcomes after ten years. This fact poses great challenges for effective policy responses.

Existing policies in our five case study countries can be characterized along numerous dimensions. First, we can distinguish ‘preventive’ and ‘reintegration’ programmes. ‘Preventive’ policies attempt to reduce the likelihood of disengagement at a later stage. These may include good quality Early Childhood Education and Care; tracking and supporting groups of

young people that have been identified as being ‘at risk,’ including offering financial support; allowing multiple pathways through school, in particular in vocational programmes; and raising the participation age at which young people can leave education or training. Some examples included the *Aanvalsplan Voortijdig Schoolverlaten* (Attack Plan Early School Leaving) in the Netherlands and the *Mission de lutte contre le décrochage scolaire* (Mission to Combat School Dropout) in France. Differences in the success of these two programmes may be linked to the crucial step of identifying and following young people through data collection. However, this also requires a shared understanding of why individuals are being monitored and the use of this information to create programmes that meet the needs and abilities of specific groups. Our German example showed another way in which preventative policies can be integrated into a state’s institutional fabric: the so-called third pillar of German VET system, the transition systems including measures such as the ‘*ausbildungsbegleitende Hilfe*’ (abH) prepares school-leavers for the labour market with additional learning opportunities, language training and social pedagogical assistance.

In contrast, reintegration programmes attempt to re-engage those youth who are already NEET. These policies often take the form of various ALMPs and may include job-search assistance; training programmes; subsidized employment; direct job creation and public employment programmes; and start-up subsidies, self-employment assistance and support. Some examples included the *Ecoles de la deuxième chance* (E2C) in France and the New Deal for Young People (NDYP) in the UK. However, these programmes tend to work best for those who are the ‘labour market ready’ but are often ineffective for the most disadvantaged groups. Harder-to-reach groups require further re-engagement strategies, such as outreach services, pre-vocational programmes, multi-element programmes, and follow-up systems. An important problem may be just identifying the eligible population, as was highlighted in the case of early school-leavers as well. One potential solution was brought to light in the UK case study, where charities play a large role in finding and helping groups that might otherwise not be reached.

Thus, current policy directions risk completely overlooking certain NEET sub-groups, including the economically inactive (EI) and young women with children. Indeed, the term ‘NEET’ may even hide them – and their unique needs – from view. While the size of NEET problem differs strongly between our case study countries, varying from very low in the Netherlands, Germany and Japan to quite high in France and the UK, one constant across our analyses was the particular risk for young women with children to become NEET later in young adulthood. NEET policies often do not even try to address their unique challenges, which might hinge on policies such as one mentioned in the preventative strategies above: affordable and good quality Early Childhood Education and Care. These types of policies would ‘hit two

birds with one stone,’ by allowing one generation economic participation and encouraging a future generation’s participation. We provided some evidence for these types of policies in the chapter on family policy, where long maternity leaves tended to exacerbate labour market disconnection rather than protect against long-term NEET statuses, and [Chapter 4](#), where mothers’ labour force participation was shown to have a positive impact on young people’s labour market entry pathways in France.

This ‘motherhood’ effect was one of our key findings: although it varied in size, the gender-child nexus emerged in all countries as a strong predictor of NEET patterns. Our analyses of institutional configurations of family policies underscored that overly long maternity leaves may indeed exacerbate this problem. What is more, reducing childcare costs is only a partial solution: Individual levels of education will remain strongly determinate in predicting long-term NEET statuses across these contexts. Vocational education appears to be helpful in this regard, based on our comparative analyses. However, high levels of educational stratification, shown to be helpful for reducing long-term NEET overall, may indeed increase gender inequalities in NEET risks. Moreover, we also showed that enabling but not enforcing ALMPs reduced the long-term NEET risks of young women. These results warn against simple solutions. For example, encouraging individual human capital development through supportive measures remains as important as offering affordable and socially accepted childcare for young mothers, and the two need to be developed conjointly.

Another sub-group within the NEET concept is those youth who are EI due to psychological, health-related, social, or financial problems. These youth are ‘buried’ within the NEET term in all countries. In Japan, these youth are given the name Niito: they are unmarried, not seeking work, do not express a desire to work, and are not engaged in any kind of education or training. Multi-dimensional policy responses including housing and meals, social contact, and psychological counselling, such as those introduced by the Japanese government, may indeed help youth to build social connections and economic independence. This type of approach requires governments to invest sufficiently to reach these EI groups who need more than just work skills, but rather point to the need for affordable housing and nutrition, as well as publicly funded mental health programmes and professionals to address increasingly diverse aspects of ill health.

However, it is necessary to urge caution in focusing on vulnerable NEET sub-groups such as EI or young women with children as a policy target. Learning from the Japanese experience, just focusing these categories may also pose a risk. Niito in Japan has not been treated as societal problem but trivialized to the problem of their individual motivation or their own life choice (Honda et al. 2006). Society needs to understand that the heterogeneous nature of NEET is embedded in the institutions and policies of the society as discussed in this book.



### 11.5 Discussion: Limitations and topics for further research

Our goals in this book were to:

- advance on common theoretical explanations that are adequate for explaining youth unemployment but fail to explain certain types of NEETs, such as the EI;
- use data that allow for distinguishing different NEET categories and age groups and conduct analyses on assumptions behind the NEET concept;
- analyse individuals becoming NEET as a dynamic process and not a single event, using longitudinal studies and sequence analyses;
- study the interplay of individual and institutional factors, which might affect the incidence and the age-specific risks of NEET periods, as well as the probabilities of short- and long-term durations of NEET-status.

To reach these goals, we proposed an approach in which we combined longitudinal analyses of STW transitions with cross-national analyses of institutional and policy effects. This approach has several limitations. First and foremost, the combination of different research techniques and data sources limits the extent to which we can formally compare the results of analyses from the different countries, and limits the extent to which we can use cross-national data to make inferences about the generalizability of conclusions from such comparisons. The ideal large-scale cross-nationally comparable longitudinal data sets that would be required to make formal inferences do not exist. We invested a lot of effort to harmonize the country datasets regarding scope and concepts, but a few differences remained, e.g. the opportunity to analyse different cohorts of graduates varies between datasets. Therefore, we cautioned against formally comparing the results from the country chapters and tried to carefully examine whether results from the countries were in line with theoretical expectations.

However, our conclusions would be much stronger if we could have analysed a more cross-nationally comparable longitudinal data set. The fact that there is no longitudinal comparative dataset available that includes information on NEET in all of the five countries of the analysis stays an obstacle for international comparisons, that needs to be addressed. Existing data sets form potential starting points. The ‘European Union Statistics of Living and Income Conditions (EU-SILC)’ provides longitudinal micro-data, but the rotating panel structure allows only observation windows of a maximum of four years, which is even insufficient for classifying NEET trajectories, not to mention short- or mid-term consequences. The Cross-National Equivalent File (CNEF), which ex-post combines a common set of variables from a set of national household panel surveys only covers nine countries so far. France and the Netherlands are among the not included countries. Researchers should aim to construct a large scale cross-nationally comparable data set with longitudinal information about STW trajectories.

Second, there are limitations related to the decisions we made when analysing our data. One consideration in this regard is for example related to the time period studied and its effects on our clusters in the longitudinal analyses. A significant portion of NEET youth, especially women, became NEET later in the STW transition. Since our data are right-censored by our ten-year time frame, these young people may actually be long-term NEET that do not in fact re-enter the labour market and might thus experience further problems later on. This can only be addressed by longitudinal research using even longer periods of time (and thus stretching beyond the traditional period of young adulthood included in the NEET definition). We could not do this here; the best we could do was reason that these ‘Late NEETs’ should be regarded as potentially vulnerable.

Another limitation regards the relatively limited explanatory power of our models. We aimed to predict and explain vulnerable NEET clusters in a series of multinomial regression models and were able to identify patterns in different countries. However, the number of potentially relevant explanatory variables in these models was limited, both because of data limitations, and because of our attempts to perform analyses that were as comparable as possible. This of course limits our understanding of the characteristics of vulnerable NEETs.

Finally, another important limitation regards the causal interpretation of our analyses. While we use one of the most comprehensive cross-nationally and cross-culturally comparative data sets on education, skills, and work, the cross-sectional data and the multilevel analyses we use to analyse them do not allow to formally identify causal effects of institutions and policies on long-term NEET risks. As such, we have to caution against a causal interpretation of the correlations in our models. We use the estimated parameters to help us understand whether institutions and policies could be expected to affect the STW-transition at all, and also to explore potential mechanisms.

These limitations imply that the research in this book should by no means be seen as the final word on NEETs. We see our main contribution in the observations that (a) not all NEETs are equally vulnerable and thus should not be treated as such, and (b) that the most vulnerable NEETs are very irresponsive to institutional or policy incentives.

We believe that further research should first and foremost focus on the most vulnerable NEETs. The NEET definition is too opaque and lumps together too many different groups of young people. By continuing to use the definition of NEET without making further qualifications about NEETs actual vulnerability, researchers that are interested in youth marginalization risk studying the wrong people. Distinguishing vulnerable NEETs from the others is therefore of crucial importance.

To increase our understanding of policy effectiveness, future research should focus on the causality issue that we could not address in this book. To build on our work and further the state-of-the-art, researchers may want to investigate the causal effect of policies and institutional reforms have on

the reintegration of vulnerable long-term and late NEETs, using appropriate experimental or quasi-experimental designs. The policy examples in this book may be useful as an important source of information on potentially relevant policies and institutions.

Furthermore, further research could more strongly delve into the relevance of specific economic conditions and how they change the impact of personal characteristics on the chances of being NEET. This is particularly relevant in light of economic crises, such as the Great Recession or the Covid-19 economic crisis. During the Great Recession in Ireland, education and nationality became more important factors for finding a job, while there was ‘a fall in the scarring impact of unemployment durations’ (Kelly and McGuinness, 2015, p. 59). This suggests that NEET status alone may lose some of its stigmatizing effects during periods of economic downturn, but social class effects may be exacerbated. These two forces may work in contrast: there is evidence of higher incidences of long-term unemployment for youth whose parents experienced unemployment in previous recessions, which creates new forms of societal polarization in the form of ‘family work history legacies’ (O’Reilly et al., 2015). Thus, while unemployment may lose its stigma for one generation, its cross-generational impacts may grow in importance. This will also be central to understanding the repercussions of the Covid-19 crisis on youth.

Furthermore, the increasingly important place of temporary and short-term work contracts creates inequalities between cohorts, where younger generations may also face scarring processes due to precarious employment (O’Reilly et al., 2015). However, perceptions of social disadvantage may paradoxically be more limited in recent years, due to the fact that ‘our subjective awareness of social structures has become increasingly obscured as collective approaches are displaced by individualist values, and young people are encouraged to conceptualize their biographies as the outcome of individual choice, aspiration or failure’ (Thompson, 2011, p. 787). These generalized global patterns interact with national contexts, in some cases exacerbating already existing challenges.

Moreover, more indicators are needed ‘to draw attention to the marginalization of the millions of youth working in poor quality employment,’ which cannot be characterized as a successful alternative to or exit from NEET status (Elder, 2015, p. 9). Such an indicator would capture the ‘vulnerable employment rate’ (Elder, 2015) and requires further development.

Likewise, exits from NEET status cannot always be considered a success story: research does not find that ‘any job is better than no job’ in terms of future earnings or quality of life (Voßemer et al., 2018). For example, when an unemployed youth accepts a job for which she or he is overeducated, monthly transition rates into adequate employment fall drastically, although this also depends on the elapsed unemployment duration (Baert et al., 2013). These findings are at odds with the ‘career mobility thesis’ and

suggest that ‘the short-term benefits of policies that generate quick transitions into employment must be traded-off against the long-term costs of an inadequate job match’ (Baert et al., 2013, p. 123). Furthermore, these risks operate in a global context of ‘overschooling,’ where ‘employers are increasingly demanding higher levels of education even for jobs that do not require much education’ in an intensified screening process (Bol, 2015, p. 108). However, these personal risks are often overlooked, and governments may even assume that young people are ‘avoiding’ permanent work, rather than searching unsuccessfully for stable employment, such as has been argued to be the case for ‘freeters’ in Japan (Inui, 2005, p. 244).

## **11.6 To conclude**

This book aimed to add to scholarship in youth Not in Employment, Education, or Training, which remains an important target group for policy-makers. All throughout the book, we hinted that the categorization of youths as NEET maybe problematic in itself. The focus on NEET status is based on ‘a conception of social exclusion in which the central policy focus is on moving young people across a boundary between participation and non-participation,’ while ‘inequalities within education and employment receive less attention’ (Thompson, 2011, p. 785). As we have suggested, the ‘muddled’ nature of the NEET category is useful to governments: by lumping different types of inactive youth together, they can make improvements while only addressing the easiest and most superficial problems of a select part of this group, and turning a blind eye to the rest of more systemic and hard-to-solve problems (Jongbloed and Giret 2021).

To further the debate about the usefulness of the NEET definition, the longitudinal analyses in this book serve to demonstrate that most NEET spells are best understood as part of the normal STW transition. This indicates that not all school-leavers who experience a period as NEET are actually vulnerable. Indeed, by far the most who experience NEET eventually find jobs or find their way to education. However, we also show that there exist a sizable group of long-term NEETs in each of the countries. While this group has slightly different characteristics in each of the countries, what they have in common is that long-term NEET pathways involve serious scarring effects.

If governments aim to aid vulnerable, marginalized youth, these long-term NEETs should be the focus of policies. But our book also suggests that it will be hard to help long-term NEET back on track. The cross-national analyses in our book suggest that long-term NEETs are remarkably resistant to institutional configurations and government policies. While we did find that some institutional characteristics and policies may be predictive of long-term NEET risks, the overall picture suggests that long-term NEETs will be hard to reintegrate.

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