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**Working Paper**

## Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

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# Mapineq

## Decomposition of between and within- country (regional) differences in the labour market attainment of young adults

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Website: [www.mapineq.eu](http://www.mapineq.eu)

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## Executive summary

Enhancing the labour market prospects of young adults is a major concern in European countries. From a life-course perspective, young people's entry into the labour market in general, and into rewarding jobs in particular, is important to promote positive career trajectories. Research has widely demonstrated that labour market entry is an important phase in individuals' life courses, as it also strongly influences their subsequent career trajectories and their success in other life domains such as their ability to start a family.

This report looks at inequalities in school-to-work transitions (hereafter STWT). We explore the role of contextual and individual factors in shaping young people's early-career labour market outcomes. We examine differences between 27 European countries and, for 14 of them, also between the main socio-economic (NUTS 1) regions within countries, using the 2021 wave of EU-SILC and comparing it with 2018 to assess any potential impact of the COVID-19 pandemic. We map success and inequalities in STWTs of young adults (aged 16–34) using six indicators – for labour market integration: unemployment and NEET risks of and occupational attainment; for income in/security: young adults' disposable income and poverty risks; and for young adults' well-being: life satisfaction. We also explore whether these different STWT aspects (indicators) are associated with inequalities in other transitions to adulthood, such as economic independence (leaving parental home) or starting a family (entry into marriage/cohabitation and parenthood). In other words, whether there are spillovers across life domains at the time of labour market integration. We also examine whether success and inequalities in STWTs are associated with inequalities in young adults' health, and not only with differences in education system characteristics and labour market regulations, but also with country and regional differences in health policies (i.e., spillovers across policy domains) – both factors are often missing in STWT research. The research questions addressed in this report are:

1. Whether differences in early labour market outcomes and well-being (life satisfaction) are related not only to standard demographic characteristics of young adults (such as gender, age, migration background) and their educational attainment but also to their health status and other transitions into adulthood (such as partnership, parenthood and living arrangements) at the individual level.
2. Whether, and to what extent, differences between and within countries in early labour market inequalities and life satisfaction can be explained by (regional) compositional differences in young adults' educational attainment, socio-demographic characteristics and status transitions into adulthood.
3. Whether additional contextual factors (beyond compositional differences) influence young people's early careers.

Our analyses show:

- considerable regional variations in young adults' labour market attainment, economic in/security, and life satisfaction.
- that looking beyond the standard determinants in STWT research – such as age, gender, migration background, or education – is important. Moreover, young adults' health and status in the family formation processes (partnership and parenthood)



and the transition to economic independence (leaving the parental home) are also very important. Young adults with higher educational attainment and better health have better employment outcomes, higher disposable income and greater life satisfaction. Parenthood (especially single parenthood) makes it more likely that young adults will be unemployed or poor. Being unemployed or poor makes it harder for young adults to become economically independent (as indicated by the fact that they are more likely to still live with their parents). Notably, once education and family formation are taken into account, there are only small gender differences in the six STWT outcomes.

- that differences in these socio-demographic and socio-economic profiles of young adults account for substantial part of country-level and regional variation in the labour market attainment and well-being. Family composition and, for labour market attainment, also health seem to be most important for understanding cross-national variation. Education seems to be the most important factor for understanding regional variation in young adults' financial well-being and life satisfaction.
- that, in addition to the aforementioned compositional differences across countries and regions, young adults' labour market integration and economic security are influenced by contextual factors at both the national and regional levels. Favourable factors are education systems that result in high(er) educational attainment, an economic structure comprising larger firms and innovative industries, good overall employment levels, good childcare provision and higher health expenditure. Characteristics of favourable regions are again high(er) overall educational attainment and good overall employment levels.
- finally, that young adults living in rural areas are severely disadvantaged in comparison to their urban counterparts: They are more likely to be NEET, to have lower occupational status, and to experience income insecurity (in terms of both disposable income and poverty risk), despite facing lower unemployment risks. This suggests that they are more likely to accept "any" job available in rural areas (as indicated by their concurrent lower occupational attainment and lower unemployment risk) or to be inactive (as indicated by higher NEET rates). They lack both "good jobs" (with higher income and status) and childcare facilities to reconcile work and childcare.

Inequalities in young adults' labour market attainment are a phenomenon common to many countries and regions, with some countries and regions performing better than others. The regional variations and their explanations identified in this report thus provide opportunities for mutual learning, even beyond times of crisis, as indicated by the consistency of results observed for the years 2018 and 2021 (i.e., pre- and during the COVID-19 pandemic). The allocation of resources towards the creation of quality employment opportunities and the provision of career guidance represents a pivotal approach to address the pressing issue of young people's unemployment and underemployment. Similarly, investments aimed at enhancing the educational and healthcare outcomes of young adults, both before and during their entry into the labour market, emerge as a promising avenue for consideration. In addition, it is vital to address regional disparities in labour market outcomes, with a particular focus on young adults in rural areas. This may include targeted interventions in education, job opportunities and childcare. Importantly, strategies to directly reduce poverty should also be prioritised, as



young adults with children (especially single parents) are at higher risk of poverty and the spillover effects of poverty on their children are detrimental to their cognitive development and educational attainment.



## Abbreviations

<b>AME</b>	Average marginal effects
<b>EPL</b>	Employment protection legislation
<b>ESS</b>	European Social Survey
<b>EU-LFS</b>	EU-Labour Force Survey
<b>EU-SILC</b>	European Union Statistics on Income and Living Conditions Survey
<b>EVS</b>	European Value Survey
<b>GDP</b>	Gross domestic product
<b>ISCED</b>	International Standard Classification of Education
<b>ISEI</b>	International Socio-Economic Index
<b>NUTS</b>	Nomenclature of Territorial Units for Statistics
<b>PISA</b>	Programme for International Student Assessment
<b>STWT</b>	School-to-work transition
<b>VET</b>	Vocational education and training
<b>WVS</b>	World Value Survey

## ISO codes of countries included

Austria – AT – AUT	Italy – IT – ITA
Belgium – BE – BEL	Latvia – LV – LVA
Bulgaria – BG – BGR	Lithuania – LT – LTU
Croatia – HR – HRV	Luxembourg – LU – LUX
Cyprus – CY – CYP	Malta – MT – MLT
Czech Republic – CZ – CZE	Poland – PL – POL
Denmark – DK – DNK	Portugal – PT – PRT
Estonia – EE – EST	Romania – RO – ROU
Finland – FI – FIN	Serbia – RS – SRB
France – FR – FRA	Slovakia – SK – SVK
Germany – DE – DEU	Spain – ES – ESP
Greece – GR – GRC	Sweden – SE – SWE
Hungary – HU – HUN	Switzerland – CH – CHE
Ireland – IE – IRL	

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# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

This report provides insights into inequalities in school-to-work transitions (hereafter STWT) by exploring the role of contextual and individual factors in shaping the experiences of young people. We examine differences between 27 European countries and, for 14 of them, also within countries across major socio-economic (NUTS 1) regions, using EU-SILC data from 2021 (during the COVID-19 pandemic) and comparing it with 2018 to assess whether the COVID-19 pandemic had an impact. We map success and inequalities in the labour market outcomes of young adults using six indicators – labour market integration with risks of unemployment and NEET, and occupational attainment, and as related outcomes, income in/security with young adults' disposable income and poverty risks, and young adults' life satisfaction. We explore whether labour market integration and related outcomes are associated with other life domains, i.e. whether there are spillovers in both directions between labour market entry and other transitions to adulthood, such as economic independence (leaving parental home) or family formation (entry into marriage/cohabitation and parenthood). We also examine the interaction with young adults' health, a factor that is often missing in STWT research. Key findings are:

The most important individual-level factors are young adults' educational attainment, health and family living arrangements (defined by partnership, parenthood, living in or out of the parental home). Once these differences are taken into account, there are only small gender differences in the six STWT outcomes.

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Differences in these socio-demographic and socio-economic profiles of young adults account for substantial part of country-level and regional variation in the labour market attainment and well-being.

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Young adults living in rural areas are severely disadvantaged compared to their urban counterparts. Moreover, labour market integration is influenced by factors from different policy areas at both the national and regional level, such as education, labour market and economic conditions, and family and health.

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# 1. Introduction

Enhancing the labour market prospects of young adults is a major concern in European countries. From a life-course perspective, young people's entry into the labour market in general, and into rewarding jobs in particular, is important to promote positive career trajectories. Research has widely demonstrated that labour market entry is an important phase in individuals' life courses, as it also strongly influences their subsequent career trajectories (e.g., Manzonni et al., 2014) and their success in other life domains such as family formation (e.g., Lorentzen et al., 2019).

The aim of this report is to provide new insights into inequalities in school-to-work transitions (hereafter STWT) by examining the role of contextual and individual sources of heterogeneity (youth's educational attainment, their health, and regional resources). Given the capabilities of EU-SILC data and the availability of regional macro indicators, we are able to examine regional resources and constraints by comparing across 27 European countries and, for 14 of them, across the NUTS 1 level (major socio-economic regions) within countries. We also examine whether and how levels of urbanity influence the labour market outcomes of young adults within countries; and how young adults' labour market outcomes in turn influence their economic situation and life satisfaction.

Labour market entry and early career development are a crucial part of young people's transition to adulthood. On the one hand, success and problems in **labour market integration** may interact with the region in which young adults live. On the other hand, educational careers and labour market entry may be associated with inequalities in other transitions to adulthood, such as economic independence (leaving parental home) or starting a family (entry into marriage/cohabitation and parenthood) (Buchmann and Kriesi, 2011). We therefore explore such **spillovers across life domains at the time of labour market integration**. We also examine whether success and inequalities in STWTs are associated with inequalities in young adults' health – a factor that is often missing in STWT research.

By looking together at STWT and other status transitions into adulthood, as well as health, we firstly go beyond standard labour market outcomes and provide a more **comprehensive account of young adults' labour market integration and related outcomes**, such as income security and well-being (life satisfaction). Second, we go beyond standard determinants such as age, gender, migration background, or education and explore the interplay of labour market entry with health, and various aspects of family status and living arrangements. That is, we examine the association between labour market integration and related outcomes (as dependent variables) and other status transitions into adulthood (as independent variables). Third, we investigate these aspects **across countries, but also across regions within countries** (NUTS1 regions, and whether there is an urban-rural divide), whereas existing research is often limited to within-county variation within single countries. Fourth, we consider not only the role of standard contextual factors (from education systems, labour market regulations, and the economic situation), but also indicators from the family and health policy domains to assess potential spillovers across policy domains.



We use the most recent EU-SILC wave 2021 (which also includes life satisfaction), but also compare it to 2018 (pre-COVID-19 pandemic period). We study 16–34 year olds because research has shown that STWTs and other status transitions into adulthood are delayed well into the third decade of life for a substantial share of younger cohorts (Aassve et al., 2006; Billari and Liefbroer, 2010; Buchmann and Solga, 2017; Cinquegrana et al., 2023). The report’s **research questions** are:

1. Whether differences in early labour market outcomes and well-being (life satisfaction) are related not only to standard demographic characteristics of young adults (such as gender, age, migration background) and their educational attainment, but also to their health status and other transitions into adulthood (such as partnership, parenthood and living arrangements) at the individual level.<sup>1</sup>
2. Whether, and to what extent, differences between and within countries in early labour market inequalities and life satisfaction can be explained by (regional) compositional differences in young adults’ educational attainment, socio-demographic characteristics and status transitions into adulthood.
3. Whether additional contextual factors (beyond compositional differences) influence young people’s early careers.

## 2. Mapping inequalities in labour market attainment of young adults

We map success and inequalities in labour market attainment of young adults by six indicators (outcome variables). As indicators of **labour market integration**, we examine the risks of unemployment and NEET, and occupational attainment (measured by achieved occupational status). In addition, we explore **income security** of young adults in terms of disposable income and their poverty risks, and also how this relates to their labour market integration. Finally, we investigate young adults’ **subjective well-being** (measured by their life satisfaction), and also whether their well-being correlates with their labour market integration and economic situation.

Unequal success in labour market integration can lead to inequalities in income security and the risk of poverty. Irregular and unpredictable incomes may be associated with difficulties in achieving economic independence and starting a family. All this can lead to inequalities in the well-being (life satisfaction) of young adults. Thus, our different outcomes of STWTs together cover different dimensions of social inclusion/exclusion of young adults.

**Youth unemployment** is defined as young people who do not have a job but are actively seeking work. Unemployment in early careers clearly has a scarring effect on subsequent employment opportunities and wages (Arulampalam, 2001; De Fraja et al., 2021; Gangl 2006; Schmillen and Umkehrer, 2017), as unemployed young adults accumulate little or

<sup>1</sup> Indicators on social origin (social family background) were only collected in the *ad hoc* modules on the “Intergenerational transmission of disadvantage” (2005/2011/2019) and are not available for 2018 and 2021. Life satisfaction was only collected in *ad hoc* modules of 2018 and 2021 (and 2022, not yet fully available). We therefore decided to use the 2018 and 2021 waves. By including educational attainment, which is highly correlated with social background, we can partially account for the impact of social origin on our outcome variables, specifically the effects mediated through educational attainment, in our analyses.

less work experience, may experience a deterioration in their general skills, and suffer from a lack of workplace context for building new work-related social networks. In addition, youth unemployment has been shown to have both short- and long-term negative effects on mental health (Strandh et al., 2014).

Unemployment as an employment-related concept does not cover all facets of exclusion, including being outside the labour force (Jenkins 1991). **NEET** – “not being integrated into education, employment, or training” – is therefore used as an indicator of lack of attachment not only to work but also to school. NEET during the school-to-work transition is known to have long-lasting negative consequences for young people’s labour market entry (Luijkx and Wolbers, 2009; Ralston et al., 2022) as well as for other life domains, such as life satisfaction (Bynner and Parsons, 2002; Eurofound, 2012; Jonbloed and Giret, 2022; Nordenmark et al., 2015). The concept of NEET has been criticised for its negative definition of “what they are not” and for encompassing a rather heterogeneous group of young people (e.g. Furlong, 2006). Yet, analytically (rather than theoretically), it has the advantage of being a “comprehensive indicator” of exclusion from both education systems and labour markets during the school-to-work transition (Schoon, 2014: 13; see also Ralston et al., 2022).

Besides employment status (employed vs. unemployed), achieved **occupational status** is used as a broad and reliable indicator of labour market integration and performance. It is commonly measured using the International Socio-Economic Index of Occupational Status (ISEI) (Ganzeboom and Treiman, 1996). The ISEI score indicates the relative position of occupations in the hierarchical occupational stratification system.

Rather than market income, we use **disposable income** to examine the economic insecurity of young adults, in order to reflect differences in household formation and fertility decisions at this stage of the life course.

As a relative measure (and also an indicator of income inequality), we consider being at risk of (income) **poverty**, defined as household equivalence income below 60 per cent of median income (Atkinson et al., 2010). Research has shown that even employment does not necessarily protect young adults from poverty, partly because wages are often low at labour market entry (Goebel et al., 2015).

Subjective well-being is a multifaceted concept. **Life satisfaction** is one dimension of it. It is a global judgement of individuals’ perceived distance from personal aspirations (Diener et al., 1999; Van Hoorn, 2007) and an aggregate of its different evaluative dimensions (Bradford and Dolan, 2010). Life satisfaction is considered an important psychological resource for individuals to cope with problems (Gilman and Huebner, 2003). It correlates more strongly with important life circumstances than with the affective dimensions of subjective well-being. Research has shown that young adults’ life satisfaction is strongly related to their employment status, health and other life domains, such as family composition or housing situation (D’Agostino et al., 2019; Proctor et al., 2009).

### 3. Literature review

The aim of the literature review is not to provide a meta-analysis or systematic review in its own right. Rather, it is to provide some background (and rationale) for the factors that we have included. Our focus is on research where the dependent variables are our six indicators of labour market integration, income security and well-being (see Section 2).

#### 3.1. The role of young adults' socio-demographic and socio-economic characteristics

The review of research on the role of individual characteristics uses the grouping of the outcome indicators (see Section 2) and discusses their association with educational attainment, socio-demographic characteristics (gender, age groups within the 16–34 age bracket, migration background), family formation status (partnership and children), economic independence (leaving parental home), health, and level of urbanisation of the place of residence.

##### 3.1.1. Labour market integration

Educational attainment is the most protective factors against the risk of **unemployment** in young age (De Lange et al., 2014; Gebel and Giesecke, 2016; Morris, 2023). The reasons for this are that better educated young people are less likely to be “at risk” due to longer educational participation and enter faster the labour market (Barbieri et al., 2018) – because higher education is associated with higher skills (Heisig and Solga, 2016) and signalling processes that indicate higher trainability of more educated individuals to employers (Spence, 1973).

Unemployment risk decreases with age due to longer search time (time since leaving education) and work experience (De Lange et al., 2014). Young women have a higher risk of unemployment than young men (De Lange et al., 2014; Genda, 2007; Morris, 2023; Smyth, 2005) for a number of reasons, including less flexibility in terms of time and space due to caring responsibilities (Rahmani and Groot, 2023). Unemployment risks seem to be higher for non-native or ethnic minority young adults than for their native/ethnic majority counterparts, after controlling for educational attainment (Blackaby et al., 1999; De Lange et al., 2014).

Health problems (and disabilities), if long-standing, are associated with a higher unemployment risk. On the one hand, health limitations may have already influenced the educational attainment of young adults. Beyond this mediated effect, health also has a direct influence: Young adults with poor health, especially with poor mental health, are more likely to be unemployed, for example, due to job search restrictions or labour market discrimination (Alaie et al., 2023; de Groot et al., 2021; Hale et al., 2015). On the other hand, unemployment can lead to (an increase in) health problems (Lager and Bremberg, 2019).

Finally, regional conditions can pose challenges to labour market participation for young adults living in rural areas (Culliney, 2014b). Among these challenges are a lack of higher-skilled job opportunities (due to fewer/larger companies) for young people and a lack of contacts to employers. At the same time, young adults have limited housing opportunities





and fewer financial resources to relocate/migrate to areas with job vacancies (Koreman, 2023).

The influences of these individual characteristics and their explanations are very similar for **NEET** risks (Eurofonds, 2012; Rahmani and Groot, 2023). Again, the most important factor is young adults' education: Higher levels of education are typically associated with a lower risk of becoming NEET (Malo et al., 2023; see review in Rahmani and Groot, 2023). Gender is another important factor: Women have a higher risk of becoming NEET, especially when they transition into motherhood and have young children, as staying at home because of children is defined as "inactive" and therefore one of the NEET statuses. Some studies have found that young adults from ethnic minorities appear to be less likely to become NEET (see review in Rahmani and Groot, 2023). Poor health in adolescence and young adulthood is associated with a higher risk of NEET (Hale and Viner, 2018; van der Wel, 2011; see also review in Rahmani and Groot, 2023). However, the longitudinal study by Gariépy et al. (2022) shows that poor health predicts later NEET, while the evidence for the inverse relationship is mixed (see also Rasalingam et al., 2021). Again, young people living in rural areas are at significantly higher risk of NEET (Hango et al., 2021).

Finally, a cumulative effect for both unemployment in young adulthood and NEET is worth noting: Young (male and female) adults who have experienced previous unemployment are more likely to become NEET (Vancea and Utzet, 2018) and unemployed again (Dvouletý et al., 2020).

As expected, occupational attainment, measured by the **occupational status** achieved in young adulthood, increases with an individual's educational attainment (Barbieri et al., 2018; Morris, 2023; Wolbers 2007), partly indicating the consequences of the strong relationship between education and both unemployment and NEET (see above). This strong link between educational and occupational attainment contributes to differences by migrant background: ethnic patterns of educational attainment and their consequences for youth unemployment and NEET risk (see above) translate into differences in the occupational status achieved by young adults (Heath et al., 2008). Occupational status has been shown to increase with age (between 16 and 30) as the time since labour market entry increases and so does work experience (Morris, 2023).

Existing research has also found that the occupational status achieved is higher for men than for women with equivalent levels of education (Barbieri et al., 2018; Morris, 2023; Vogtenhuber, 2014; Wolbers 2007). This is partly due to the gender segregation of the labour market (with female-dominated occupations having a lower ISEI than male-dominated occupations; Smyth, 2005) and partly due to less work experience (among other things, because of higher unemployment and NEET risks, and caring responsibilities, see above).

Finally, disadvantages in terms of unemployment and NEET, for example, due to health problems or rural location, are also likely to cumulate into lower occupational attainment (in terms of occupational status), although this has not (to our knowledge) been studied yet.

### 3.1.2. *Income in/security*

Employment with decent earnings is an important prerequisite for young adults' economic independence and family formation (Aassve et al., 2013). Delays in leaving the parental home are associated with postponing forming stable partnerships and transitioning to parenthood, thus prolonging the overall transition to adulthood (Billari and Liefbroer, 2010; Aassve et al., 2013). Major risk factors for economic insecurity among young adults are unemployment, NEET and thus lack of personal income (Aassve et al., 2006, 2013; Kłobuszewska et al., 2021). What matters for living conditions is the disposable income at household level and whether this translates into poverty risk. That is, how many people contribute to the household income and how many people have to live on this income. This is why we use disposable income.

As young people's **disposable income** depends on their employment situation, occupational attainment and living conditions, it varies considerably between and within countries (Aassve et al., 2006). Moreover, the educational attainment of young adults is an important determinant of their personal earnings and thus strongly influences their disposable income and, in turn, their risk of poverty (see overview in Mendola et al., 2009). Research also shows that young adults living in rural areas earn less than those living in urban areas (due to more limited opportunities for higher-skilled employment). At the same time, they are more likely to live with their parents, as the cost of living is often higher (because of higher rents due to lack of affordable housing in the form of small or shared flats, lack of public transport and the need for a car, which is then often shared with parents) (Culliney, 2014a). Differences in education and living arrangements also translate into differences between young men and women, and between young adults with and without a migrant background. Finally, health problems may reduce access to (well-paid) secure jobs and thus lead to lower disposable income (Saltnkjel and Malmberg-Heimonen, 2017).

Differences in labour market integration and in earned and disposable income translate into differences in (economic) **poverty** among young adults (Aassve et al., 2006). This is also why the educational attainment of young adults is so important: it is important both for getting a job and for getting a well-paid job (Aassve et al., 2006; Kłobuszewska et al., 2021). The same may be true of the relationship between differences in young adults' health and their risk of poverty (see above). Similarly, research has shown that young adults with migration backgrounds face a higher risk of poverty (Kłobuszewska et al., 2021). In terms of living arrangements, living with parents is a protective factor against poverty for young adults with low or no income (Aassve et al., 2006). In almost all European countries, young adults with children are at higher risk of poverty, especially if they are lone parents, especially young single mothers (Aassve et al., 2006; Kłobuszewska et al., 2021; Mendola et al., 2009). This, together with their lower earnings, is one of the reasons why women face a higher risk of poverty than men (Kłobuszewska et al., 2021). The difference in poverty risks by age reflects the increasing proportion of young people who have left the parental home and the increase in earnings after adjusting for family formation factors (such as partnership and children) (Aassve et al., 2006). However, the timing of leaving the parental home, entering a first union or marriage and having a first child varies widely across countries (Billari and Liefbroer, 2010) and may therefore explain





some of the cross-country variation in the proportion of young adults living in poverty (Aassve et al., 2006). Finally, differences in disposable income may translate into differences in the risk of poverty between young adults living in rural and urban areas.

### 3.1.3. Life satisfaction

Young adults' life satisfaction varies widely across Europe (OECD, 2024). Country differences in unemployment rates are one explanation. At the individual level, unemployment is strongly and negatively correlated with life satisfaction (D'Agostino et al., 2019; Dolan et al., 2008; Högberg et al., 2019; Nizalova et al., 2021; Taht et al., 2020; Wulfgramm, 2014). Unemployed young adults may not only suffer from economic insecurity (see above) and greater social isolation, but may also be more worried about their future and their degree of control over their life course (Strandh, 2000). There is a possibility of reverse causality: unhappy young adults may be more likely to be unemployed (e.g. they may be less productive or in poorer health). However, studies have found that the unemployed do not return to their pre-unemployment levels of life satisfaction, contradicting this assumption (Dolan et al., 2008).

Life satisfaction is positively associated with educational attainment (D'Agostino et al., 2019; Taht et al., 2020) and good health (D'Agostino et al., 2019; Dolan et al., 2008) – both of which are related to income (see above). This may partly explain the positive correlation between income and life satisfaction (D'Agostino et al., 2019; Dolan et al., 2008; Nizalova et al., 2021).

Women are more satisfied than men, and married young adults are more satisfied than unmarried individuals (D'Agostino et al., 2019; Dolan et al., 2008; Taht et al., 2020). Having children is also positively related to life satisfaction, but only for couples. In contrast, single parents are less satisfied – for them, children may represent an additional challenge in managing everyday life and impact on their sense of personal control (Dolan et al., 2008). Young adults living with their parents are also less satisfied (D'Agostino et al., 2019) – perhaps due to a delay in family formation transitions. On the other hand, life satisfaction has been shown to decline with age (D'Agostino et al., 2019; Dolan et al., 2008; Taht et al., 2020) – likely due to age-related differences in life circumstances.

Some studies have shown that people living in large cities are less satisfied, while those living in rural areas are more satisfied (Dolan et al., 2008). However, many of these studies control for income, and as income is likely to be lower in rural areas (discussed above), they may give the misleading impression that overall life satisfaction is higher in rural areas (Dolan et al., 2008).

In conclusion, and addressing **research question 1** of this report, we will examine whether and how this broad range of individual-level factors – educational attainment, socio-demographic characteristics (gender, age groups within the 16–34 age bracket, migration background), family formation status (partnership and children), economic independence (leaving parental home), health, and level of urbanisation of the place of residence – influence young adults' labour market integration and related outcomes.



### 3.2. Contextual (regional) influences

Compositional differences in these individual-level characteristics (including differences in transitions to adulthood, such as family formation or leaving parental home) between and within countries may also partly explain regional differences in young adults' labour market integration and related outcomes. **Research question 2** of this report examines whether this is the case, and which individual-level characteristics are most important for which outcomes.

Several of the comparative studies reviewed in Subsection 3.1 do not include contextual indicators. However, life course opportunities and constraints are conditioned by the institutional and structural contexts in which young people live (Blossfeld et al., 2005; Buchmann and Kriesi, 2011). These contexts are shaped by policies in different areas and by national institutional arrangements. They can influence labour market integration and its consequences for economic in/security and life satisfaction, over and above compositional differences across countries and regions. This is therefore **research question 3** addressed in this report.

In the following, we review research on contextual factors (see Table 1). We consider factors that have been used in several studies. For the policy areas of family and health, there are too few studies on contextual factors; in this case we use the single studies that do exist to indicate the factors used. Our aim is to identify those factors that have emerged as important from the existing research. We use this overview to help us select the contextual factors for our analyses, as we have a limited number of cases at the country/regional level in our regression (see Section 4). We present this overview in tabular form to improve the readability and accessibility of the large number of results.

The majority of the studies reported in Table 1 are cross-country comparisons, and the few that examine regional differences within countries are either macro-level studies (i.e., they do not include individual-level variables) or single-country studies (e.g., Bacher et al., 2017; Bradley et al., 2020; Cinquegrana et al., 2023; Vogtenhuber, 2014). Table 1 also shows that the influence of contextual factors has been studied much more frequently for labour market integration than for economic in/security and life satisfaction. Thus, factors that capture the “economy”, “labour markets” and “education systems” have been studied more often than contextual factors in the areas of family and health. This is interesting because the latter two areas are important not only for economic in/security (income and poverty) but also for life satisfaction, as the discussion in Subsection 3.1 has shown.

Table 1. Overview of contextual factors covered by prior research

Domains	Operationalizations (Indicators used with different specifications)	Studies on labour market integration	Studies on income and poverty	Studies on life satisfaction
<b>A. Economy</b>				
<i>Economic situation</i>	GDP (mostly: per capita)	Avagianou et al. 2022; Caroleo et al. 2020; Cefalo and Scandurra 2023; Hörberg et al. 2019; Passaretta and Wolbers 2019; Raileanu Szeles and Simionescu 2021; Scandurra et al. 2021; Scherer 2005; Spörlein 2018	Kłobuszewska et al. 2021; Passaretta and Wolbers 2019	Anderson 2009; Nizalova et al. 2021; Voßemer et al. 2018
<i>Inequality</i>	Gini coefficient of income inequality			Taht et al. 2020
	Poverty levels	Raileanu Szeles and Simionescu 2021		
<i>Business cycles (and labour market competition)</i>	Total unemployment rate	Baranowska and Gebel 2010; Bradley et al. 2020; De Lange et al. 2014; Gangl 2002; Högberg et al. 2019; Morris 2003; Passaretta and Wolbers 2019; Scherer 2005; Spörlein 2018; Wolbers 2007	Gangl 2002; Passaretta and Wolbers 2019; Vogtenhuber 2014; Wolbers 2007	Anderson 2009; Högberg et al. 2019; Lager and Bremberg 2009; Nizalova et al. 2021; Voßemer et al. 2018
	Youth unemployment rate	Gangl 2003; Scherer 2005	Kłobuszewska et al. 2021; Vogtenhuber 2014	
	Adult unemployment rate	Breen 2005; Hörberg et al. 2019; Scherer 2005		
	Employment rate	Scandurra et al. 2021		Anderson 2009; Lager and Bremberg 2009
<i>Intra-cohort competition and labour supply</i>	Median age	Tomić 2018		
	Size of birth cohort	Scherer 2005		
	Age ratio: young people as % of population	Speckesser et al. 2019; Bradley et al. 2020; Gebel and Giesecke 2016; Gangl 2002; Avagianou et al. 2022	Gangl 2002	
	% migrants	Bradley et al. 2020; Cefalo and Scandurra 2023 (both studies at the country level only)		
<b>B. Labour markets</b>				
<i>Qualificational structure</i>	Share of population with tertiary educational attainment (ISCED 5-8) (also used as indicator for extent of educational expansion, Gangl 2002)	Bradley et al. 2020; Cefalo and Scandurra 2023; Cinquegrana et al. 2023; Dietrich 2013; Fusaro and Scandurra 2023; Raileanu Szeles and Simionescu 2021; Scandurra et al. 2021; Tomić 2018		Högberg et al. 2019



Domains	Operationalizations (Indicators used with different specifications)	Studies on labour market integration	Studies on income and poverty	Studies on life satisfaction
	Share of population with upper secondary educational attainment (ISCED 3-4)	Cefalo and Scandurra 2023; Cinquegrana et al. 2023; Dietrich 2013; Fusaro and Scandurra 2023; Speckesser et al. 2019		
	Share of population with less than upper secondary educational attainment (ISCED 0-2)	Cefalo and Scandurra 2023; Fusaro and Scandurra 2023; Raileanu Szeles and Simionescu 2021; Speckesser et al. 2019		
<i>Flexibilization and part-time</i>	Share of part-time employment	Speckesser et al. 2019		
	Share of fixed-term employees	Bradley et al. 2020; Caroleo et al. 2020; Dietrich 2013; Passaretta and Wolbers 2019; Speckesser et al. 2019; Tomić 2018	Passaretta and Wolbers 2019	
<i>Industrial structure</i>	Sector sizes (service, industry, construction)	Bradley et al. 2020; Cefalo and Scandurra 2023; Dietrich 2013		
	Number of small and medium enterprises	Bradley et al. 2020		
<i>Employment Protection Legislation (EPL)</i>	Facets of EPL	Assmann and Broschinski 2021; Baranowska and Gebel 2010; Breen 2005; Brzinsky-Fay 2017; De Lange et al. 2014; Gangl 2003; Gebel and Giesecke 2016; Högberg et al. 2019; Noelke 2016; Passaretta and Wolbers 2019; Scherer 2005; Spörlein 2018; Tomić 2018; van Vugt and Levels 2022; Wolbers 2007	Barbieri et al. 2018; Gangl 2003; Passaretta and Wolbers 2019; Wolbers 2007	Voßemer et al. 2018
<i>Active Labour Market Policies (ALMP)</i>	Different facts of expenditure on ALMPs	Assman and Broschinski 2021; Bacher et al. 2017; Biegert 2019; Caroleo et al. 2020; Cefalo and Scandurra 2023; Gebel and Giesecke 2016; Speckesser et al. 2019; van Vugt and Levels 2022	Kłobuszewska et al. 2021	Anderson 2009; Högberg et al. 2019; Voßemer et al. 2018
<i>Trade union power</i>	Level of collective wage bargaining	Speckesser et al. 2019		
	Collective bargaining coverage	Baranowska and Gebel 2010; Gebel and Giesecke 2016; Högberg et al. 2019; Noelke 2016		
	Union density	Biegert 2019; Caroleo et al. 2020; Noelke 2016; Passaretta and Wolbers 2019	Passaretta and Wolbers 2019	



Domains	Operationalizations (Indicators used with different specifications)	Studies on labour market integration	Studies on income and poverty	Studies on life satisfaction
<b>C. Education systems</b>				
<i>Vocational orientation of upper secondary education</i>	Prevalence of vocational education and training (VET)	Assman and Broschinski 2021; Breen 2005; Brzinsky-Fay 2017; Caroleo et al. 2020; De Lange et al. 2014; Högberg et al. 2019; Scherer 2005; Speckesser et al. 2019; Spörlein 2018; van Vugt et al. 2022b; Wolbers 2007	Barbieri et al. 2018; Wolbers 2007	Högberg et al. 2019; Voßemer et al. 2018
<i>Tracking in secondary education</i>	Degree of stratification	Brzinsky-Fay 2017; Spörlein 2018; van Vugt et al. 2022b		Högberg et al. 2019; Voßemer et al. 2018
<i>Standardization</i>	Degree of standardization	Brzinsky-Fay 2017; Spörlein 2018	Schmelzer and Ramos 2016	Voßemer et al. 2018
<b>D. Family &amp; Health</b>				
<i>Family</i>	Length of maternity (parental) leave	van Vugt et al. 2022a		
	Living with parents (at age 20–29)	Tomić 2018		
<i>Health</i>	Expenditures on health care in % of GDP	Assmann and Broschinski 2021		

Note: Studies reported in alphabetical order. Copyright 2024 by Hornberg/Heisig/Solga.



### 3.3. Summary and implications

Comparative research on cross-country variations in young adults' labour market outcomes and life satisfaction is well established. The vast majority of these studies argue that educational attainment is the most important factor at the individual level (see e.g. Rahmani and Groot, 2023). However, most of these studies did not include indicators of health or family formation. It therefore remains to be seen whether this central importance of education remains when health and family formation indicators are included. We therefore extend the list of indicators included in this report (see **research question 1**).

In addition, we directly examine how much of the regional variation (defined as differences between and within countries) is due to compositional differences in this broad set of individual level characteristics (**research question 2**). For this, we will conduct a decomposition analysis and thereby also examine the relative importance of different characteristics in explaining regional differences in the different outcomes (labour market integration, economic insecurity and life satisfaction).

The impact of contextual factors has only been examined in either macro-level studies or single-country studies, and limited attention has been paid to family and health contextual factors in existing research on young adults' early careers and life satisfaction (see Subsection 3.2). In this report, we extend the examination of contextual factors in three ways: (i), we examine them by accounting for individual-level factors; (ii) we include 27 European countries and regions within countries (see Section 4); and (iii) we include contextual factors from a wider range of policy areas (**research question 3**), recognising potential spillovers from health and childcare policies to the labour market.

We cannot include all the indicators (contextual factors) listed in Table 1, but are constrained by what is available for the European countries included in our study, especially at NUTS 1 level (see Section 4), and what is possible with the limited number of cases at the country level. We have therefore selected three to five **contextual indicators** per domain to be included in our analyses, based on existing research and additional considerations:

- **A. Economy:** GDP, total unemployment rate (not youth unemployment because of its strong correlation with the total rate and with our outcome variable “unemployment” and “NEET”), income inequality (as the ratio between the top and bottom 20 per cent of disposable income, to capture economic exclusion better than the GINI index) and the age ratio 15–34 to 35–64 as a demographic competition factor.
- **B. Labour markets:** EPL, total employment rate, employment shares of economic sectors and employment shares in larger enterprises (more than 50 employees). Indicators of trade union power or active labour market policies are not included because of their high correlation with total unemployment and employment rates (thus, their impact is to some extent covered by these two context indicators).
- **C. Education systems:** the widely used indicators of vocational orientation and stratification (tracking) in (upper) secondary education, the share of less-educated young adults (ISCED 0–2) and of highly educated young adults (ISCED 5+), and expenditure on tertiary education.

- **D. Family and health (“care”):** The availability of indicators is rather limited. To capture support for young parents with young children, the share of young children in formal childcare is included (this indicator is only available at national level); at the regional level within countries, “employment-related gender role attitudes” are included as an indicator of the “acceptance” of formal childcare (this indicator has been constructed from survey data; see Section 4). For health, health expenditure and the number of physicians per 100,000 inhabitants (controlled for median age to account for regional differences in demand) are included.

## 4. Data and methods

This section describes the data and methods used to examine regional variations in labour market integration, income in/security and life satisfaction among young adults. Section 4.1 begins with an overview of the EU-SILC survey as the primary individual-level database used in this report, along with the sample restrictions implemented. Sections 4.2 and 4.3 detail the operationalisation of the variables used at both the individual and regional levels. Finally, Section 4.4 outlines our analytical strategy.

### 4.1. Data and sample

We use individual-level data from the *European Union Statistics on Income and Living Conditions* (EU-SILC).<sup>2</sup> EU-SILC is an international household survey, which was launched by the European Commission in 2004 with the declared aim of collecting “timely and comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social exclusion, and living conditions” (Eurostat, 2021a). Since then, data collection has been annual. Notably, data on life satisfaction, which is a central outcome variable examined in this report, has only been collected in four waves (2013, 2018, 2021, and 2022). We focus on the wave 2021 for the main analysis in order to obtain the maximum number of countries and regions belonging to the EU (see below). As a robustness check, we replicate all analyses for 2018 to verify that the results hold before the outbreak of the COVID-19 pandemic (see at the end of Sections 5.2, 5.3.1, and 5.3.2). However, due to missing regional information, Germany as the largest EU member state is excluded from these 2018 additional analyses.

Data collection for EU-SILC 2021 took place in all 27 EU member states plus in Norway, Switzerland, and Serbia. We exclude Norway because data files are not yet available (as of July 2024) and the Netherlands and Slovenia because of missing variables. Our country sample thus comprises a total of 27 European countries, 25 of which are EU member states. For regions within countries, we refer to major socio-economic regions, defined as NUTS 1 geocodes. More fine-grained information (e.g. at the NUTS 2 level) is not available for all countries. After excluding 12 countries from our country sample because they do not have distinct NUTS 1 regions (i.e. the administrative region is the same at the NUTS 1 and national level) and Finland because of missing regional coverage, we remain with 75 NUTS 1 regions in 14 countries for the within-country analysis (see Appendix, Table A 1).

<sup>2</sup> For merging files, we used the Stata routine provided by GESIS.



For the analysis of STWTs and other status transitions to adulthood, we focus on young adults aged between 16 to 34 years. Moreover, we restrict our sample to individual respondents<sup>3</sup> and further exclude cases with missing information on key individual-level predictors (i.e. highest educational degree, gender, age, migration background, family composition, health status, residential area; see Section 4.2 for more details).

A total of 85,115 cases meet the above sample restrictions, including 56,816 cases for the regional subsample. The final sample size varies depending on the specific outcome studied, due to additional sampling restrictions (e.g. focus on the labour force for unemployment analysis) and missing data on dependent variables. Consequently, the final sample ranges from 85,115 (56,816) cases for NEET to 51,401 (33,759) cases for unemployment.

The primary source for contextual-level variables at both the national and NUTS 1 level is Eurostat. Additional individual indicators come from various surveys and research centres (see Section 4.3). Due to limited data availability, particularly at the NUTS 1 level, different contextual domains required further adjustments to the individual-level sample for the between- and within-country analyses. More details are provided in Section 4.3.

## 4.2. Individual-level variables

### 4.2.1. Measures for STWT outcomes

To operationalize young adults' labour market integration and related outcomes, we consider a total of six STWT outcome variables (see Section 2 and Table 2). Three key variables are related to the **labour market integration** of young adults: Unemployment status (yes/no), NEET status (yes/no), and ISEI scores (as indicator occupational attainment/status). Both unemployment and NEET are constructed on the basis of the main activity status reported by respondents. **Unemployment** is defined only for young adults who are part of the labour force (i.e. they are employed or actively seeking employment; they are not in education, training, or inactive). In contrast, individuals are classified as **NEET** if they report being either unemployed or inactive, and as non-NEET if they are in employment, education, or training. **ISEI scores** are calculated based on two-digit 2008 International Standard Classification of Occupation (ISCO) codes, following the framework established by Ganzeboom and Treiman (1996). An exception is made for Malta, where only one-digit information is available. For employed respondents, the ISEI score refers to the current job. For those who are not currently employed but have been employed before, we use information on their last job.

Regarding **income in/security**, we include two variables: equivalised disposable income as an absolute measure (for differences across Europe) and poverty risk (yes/no) as a relative income measure (that account for differences in the national income distribution).<sup>4</sup> Both variables are supplied with the EU-SILC data and are generated from EU-SILC comprehensive income module. **Equivalised disposable income** is calculated from total

<sup>3</sup> The main sources are the personal respondent file (if information was not available there, we used information from the personal registers) and income data from household file.

<sup>4</sup> In addition, the ISEI score scale for measuring occupational attainment, which correlates with relative income positions within countries and regions, can also be considered as a proxy for differences in relative income positions.



disposable household income (i.e., income after social transfers), adjusted for household size and referring to a fixed 12-month period.<sup>5</sup> For the analysis, we use the logarithm of the equivalised disposable income, as common in income analyses to minimize over-proportional influence of outliers. Income data are not adjusted for purchasing power parities. **Poverty** risk status is a measure of social exclusion within countries and regions (at least in economic terms). Respondent are considered “poor” if their income is below the 60 per cent of the median income in their country of residence.

Finally, we include a variable measuring overall **life satisfaction** on a 10-point scale. After reverse coding the variable from the EU-SILC data for easier interpretation, its values range from (1) “not satisfied at all” to (10) “very satisfied”.

#### 4.2.2. Measures for young adults’ socio-demographic and socio-economic profiles

The operationalisation for young adults’ socio-demographic and socio-economic profiles are summarised in Table 2. **Educational attainment** distinguishes three broad categories: less-educated young adults with formal qualifications corresponding to ISCED levels 0–2, intermediate-educated workers at ISCED levels 3 and 4, and tertiary-educated workers with qualifications at level 5 and above – based on the 2011 revision of the ISCED.

Our demographic and socio-economic characteristics include **gender** (male/female)<sup>6</sup>, **age** (grouped into four 5-year categories), and **migration background** (yes/no). Migration background indicates whether a respondent’s country of birth and/or citizenship is outside of the country of residence.

To study spillovers (dynamic associations) between life domains, we include young adults’ **family composition** (indicating family formation processes) and leaving the parental home (as indicator of economic independence), we constructed a variable with five categories distinguishing between couples without children, couples with children, living with parents, living alone, and other forms with children.

**Health** is measured on a 4-point scale ranging from (1) “very good” to (4) “(very) poor”.<sup>7</sup>

We also include a variable indicating the **degree of urbanisation** of the place of residence, distinguishing between cities, towns and suburbs, and rural areas (Eurostat, 2021b).<sup>8</sup>

For the analyses of occupational status, income in/security and life satisfaction, we also include young adults’ (self-reported) employment status, indicating whether a person is employed, unemployed, in education, or inactive. The models on life satisfaction additionally include the two income in/security measures (i.e., logarithm of disposable income and poverty status).

Table 2 shows an overview of the individual-level socio-demographic and socio-economic profile variables used for the analysis and also the sample specification for each of the six

<sup>5</sup> The income reference period is usually the previous calendar year. To standardise household income, EU-SILC uses an equivalence scale which gives a value of 0.5 for each additional adult household member and of 0.3 for each child. For more detailed information, see Eurostat (2021a).

<sup>6</sup> EU-SILC does not include “diverse” as an additional gender category.

<sup>7</sup> We have merged the categories “poor” and “very poor” into one due to very small case numbers for both.

<sup>8</sup> For Estonia and Latvia, urban and suburban regions are combined into one category. For Malta, suburban and rural regions are combined.

STWT outcome variables. Descriptive statistics for the STWT outcome variables are included in Section 5.1 and in the Appendix, Table A 1 (for NUTS 1-level statistics). Descriptive statistics for the socio-demographic and socio-economic profile variables are included in the Appendix, Table A 2 (for national-level statistics) and Table A 3 (for NUTS 1-level statistics).

*Table 2. Individual-level variables used in the analyses*

	Operationalization	Sample specification
<b>STWT outcome variables</b>		
<b>Unemployment</b>	Unemployed/employed	Only labour force (excluding respondents who are inactive or in education/training)
<b>NEET</b>	NEET: unemployed or inactive/employed or in education or training; non-NEET: everyone else	All young adults
<b>ISEI</b>	Derived from 2-digit ISCO codes (current or last job) (Malta = 1-digit ISCO codes)	currently or previously employed
<b>Equivalised disposable income</b>	Total disposable household income (income after social transfers), adjusted for household size and referring to a fixed 12-month period	All young adults
<b>Poverty</b>	“Poor”: disposable household income below 60 per cent of median income	All young adults
<b>Life satisfaction</b>	10 categories (from 1 = not at all satisfied to 10 = completely satisfied)	All young adults
<b>Variables for young adults’ socio-demographic and socio-economic profiles</b>		
<b>Educational attainment</b>	3 categories (ISCED 0–2, 3–4, 5+)	
<b>Health status</b>	4 categories (from 1= very good to 4 = (very) poor)	
<b>Family composition</b>	5 categories (couple without children, couple with children, living with parents, living alone, other forms with children)	
<b>Gender</b>	Male/female	
<b>Age</b>	4 categories (16–19, 20–24, 25–29, 30–34)	
<b>Migration background</b>	Yes: born in foreign country and/or foreign citizenship	
<b>Residential area</b>	3 categories (cities, towns/suburbs, rural areas)	
<b>Individual-level variables partly included in the analyses</b>		
<b>Young adults’ employment status</b> (only for analyses of ISEI, income in/security and life satisfaction)	4 categories (employed, unemployed, in education, inactive)	
<b>Young adults’ income in/security</b> (only for analyses of life satisfaction)	Equivalized disposable income, poverty	

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### 4.3. Contextual variables

As outlined in Section 3, we account for contextual indicators across four broad domains. Table 3 provides an overview of the contextual variables used, including sources. All contextual variables are measured at both the national and the NUTS 1 level, unless otherwise specified, and refer to 2021 or the closest year available for the main analysis, and to 2018 (or the closest year available) for the comparison to the pre-COVID-19 pandemic period.

We capture regional differences in the **economy** by including the following variables retrieved from Eurostat:

- GDP per capita
- Income inequality (only available at national level): ratio of disposable income at the top and bottom quintile (S80/S20)
- Total unemployment rate in the adult population (age 15-74)
- Demographic labour market competition: ratio of young adults aged 15–34 to adults aged 35–64.

Regarding **labour markets**, we include five variables:

- Total employment rate in the adult population (age 16-64)
- Employment shares of economic sectors – indicator 1: percentage of employed adults working in the traditional primary sector
- Employment shares of economic sectors – indicator 2: percentage of employed adults working in large scale engineering
- Employment shares in larger enterprises (only at the national level): percentage of employed adults working in enterprises with more than 50 employees<sup>9</sup>
- Employment protection legislation (only at the national level): an indicator on regulation of dismissals constructed from the Cambridge Labour Regulation Indicator (CBR LRI; Adams et al., 2023).

To capture differences in the **education system**, we use five indicators:

- Vocational orientation of upper secondary education: percentage of students attending vocational programs in upper-secondary education
- External stratification of secondary education (only at the national level): an indicator of early and strict tracking developed by Bol and van de Werfthorst (2013). The indicator combines information on the age of first selection into different educational programmes, the percentage of total compulsory education that is tracked, and the number of tracks available for 15-year-olds using factor analysis. We collect the data needed to calculate this indicator from recent education reports from Eurydice (2018, 2021) and the system-level PISA surveys 2018 and 2022.
- Total skills supply – indicator 1: Share of less-educated individuals (ISCED 0-2) in the adult population (age 25-64)

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<sup>9</sup> This indicator is not included in the within-country analyses because of high correlations with the total employment rate (Pearson's  $r = 0.69$ ) and employment shares in traditional primary sector (Pearson's  $r = -0.64$ ).

- Total skills supply – indicator 2: Share of tertiary-educated individuals (ISCED 5+) in the adult population
- Overall education expenditure (only at the national level): public expenditure on tertiary education per student (relative to GDP per capita).<sup>10</sup>

Finally, we use several measures relating to **family and health (“care”)**:

- Childcare: percentage of 0-2 year olds in formal childcare or education (only available at national level; source: Eurostat). For the within-country analyses: an indicator of employment-related gender role attitudes calculated from the EVS/WVS, which is very highly correlated with the childcare indicator (Pearson’s  $r = -0.74$ ).<sup>11</sup>
- Health care system – indicator 1: number of physicians per 100,000 inhabitants
- Health care system – indicator 2 (only at national level): total health care expenditure per inhabitant<sup>12</sup>
- To control for the health care demand: inclusion of population median age.

Descriptive statistics and correlation matrices of the contextual variables are included in the Appendix A (see Table A 4 to Table A 7). Due to very high correlation between contextual variables at the national and the NUTS 1 level, we include group-mean centred regional variables for the within-country variables. This means that we calculate the difference between each regional-level score and the mean of the national cluster to which it belongs (i.e. the national variables) (Finch et al., 2014, p. 34). In addition, we z-standardise all contextual variables before including them in our models with a mean of zero and a standard deviation of one. This ensures that each variable is measured on a consistent scale, enhancing the comparability and interpretability of the analysis.

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<sup>10</sup> Pearson’s  $r$  for the correlation with expenditure on primary and lower secondary education is 0.97, and 0.98, respectively.

<sup>11</sup> Data are aggregated from NUTS 2 level. For Belgium, we use data from the European Social Survey (ESS).

<sup>12</sup> Data are aggregated from NUTS 2 level.

Table 3. Contextual variables used in the analyses

	Operationalization	Sample specification		Data source
		<i>country</i>	<i>NUTS 1</i>	
<b>Economy</b>	GDP per capita	all 27 countries	all 75 regions	Eurostat
	Income inequality (S80/S20 disposable income)	all 27 countries	N/A	Eurostat
	Total unemployment rate	all 27 countries	all 75 regions	Eurostat
	Demographic competition (age ratio 16-34 to 35-64)	all 27 countries	all 75 regions	Eurostat
<b>Labour markets</b>	Total employment rate	25 countries (w/o EE, RS)	73 regions (w/o RS)	LFS
	Employment shares in economic sectors (traditional & engineering)	25 countries (w/o EE, RS)	73 regions (w/o RS)	LFS
	Employment shares in larger enterprises (>50 employees)	25 countries (w/o EE, RS)	Not included due to high correlation	LFS
	Employment Protection Legislation (EPL)	26 countries (w/o IE)	N/A	CBR
<b>Education system</b>	Vocational orientation in upper secondary education	all 27 countries	all 75 regions	Eurostat
	Tracking in secondary education	all 27 countries	N/A	Eurydice/PISA
	Share of less- and tertiary-educated adults	all 27 countries	all 75 regions	Eurostat
	Expenditure on tertiary education	all 27 countries	N/A	Eurostat
<b>Care system</b>	Share of young children in formal childcare NUTS 1: Employment-related gender role attitudes (“When jobs are scarce, men should have more right to a job than women.”)	all 27 countries	71 regions (w/o PT and Corse/FR)	Eurostat / EVS and WVS, ESS for BE
	Health care expenditure	all 27 countries	N/A	Eurostat
	Number of physicians per 100.000 inhabitants	all 27 countries	59 regions (w/o DE)	Eurostat
	Demand for health care services (median age)	all 27 countries	all 75 regions	Eurostat

Notes: N/A not available; w/o without. For country codes see Section “ISO codes of countries included”. Copyright 2024 by Hornberg/Heisig/Solga.

#### 4.4. Analytical strategy

To examine the associations of our six STWT outcome variables with the socio-demographic and socio-economic profile variables and with the contextual factors, we fit multilevel regression models with a linear function for continuous and ordinal outcomes (ISEI, income, satisfaction) and a logistic function for binary outcomes (NEET, unemployment, poverty).<sup>13</sup> To account for the hierarchical structure of our data (i.e., individuals are grouped within 27 countries), we estimate two-level models with random intercepts at the national level. Additionally, for the 14 countries with distinct NUTS 1 regions available (i.e., individuals are grouped within regions, which are grouped within countries), we estimate three-level models with random intercepts both at the national and the NUTS 1 level. This multilevel approach recognises that individuals within the same country or region may share common characteristics or experiences that differ from those in other groups. By allowing each group to have its own intercept, we can more accurately model the variability in outcomes attributable to these higher-level contexts (Raudenbush and Bryk, 2002).<sup>14</sup> We refer to multilevel models that only include random intercepts at the regional level (and no contextual factor variables) as our ‘baseline models’ in the following. Depending on the research question addressed, we add further covariates at the individual and/or regional level (see below). We estimate the models using the R package `lme4` (Bates et al., 2015). For better interpretation of the results of the multilevel logistic regressions, we report average marginal effects (AME).

The first part of the empirical analysis (Section 5.2) addresses **research question 1** and seeks to explore how differences in early labour market integration and related outcomes are associated not only with standard demographic characteristics of young adults and their educational attainment, but also with their health status and other transitions to adulthood. To answer this RQ1, we include all socio-demographic and socio-economic profile variables (i.e., educational attainment, health status, family composition, gender, age, migration background, and residential area) into our baseline models. To examine whether ISEI, income, poverty and life satisfaction outcomes are influenced by young adults’ labour market integration, we include employment status in the analysis of these outcomes. For the analysis of life satisfaction, we also include measures of income in/security. In this way, we can determine whether the impact of the socio-demographic and socio-economic profile variables on these STWT outcomes operates through influencing young adults’ employment status and economic situation.

In the second part of the empirical analysis (Section 5.3.1), we address **research question 2** by turning to the analysis of regional and country-level variation in our STWT

<sup>13</sup> Several studies have demonstrated that using the OLS framework to analyse ordinal outcomes measured on a Likert scale – in this report, life satisfaction – is a robust approach that yields results comparable to those obtained from ordered probit/logit models. For a general discussion on this topic, see Norman (2010); for analyses focusing on individual well-being, see Ferrer-I-Carbonell and Frijters (2004), Ferrer-I-Carbonell and Ramos (2014), and Flavin et al. (2014).

<sup>14</sup> We do not include random slopes for the predictor variables included to account for effect heterogeneity across countries or NUTS 1 regions. Modelling random slopes for all our seven to ten predictor variables across a total of 12 models (6 outcome variables in 3-/2-level models) is beyond the scope of our research, which aims to identify the role of compositional differences.



outcome variables and examining whether compositional differences explain differences in early labour market inequalities and life satisfaction between and within countries. More specifically, we examine whether, and to what extent, the seven socio-demographic and socio-economic variables explain outcome variation at the national and regional levels. Given our focus on explained STWT outcome variation, we are interested in  $R^2$ -like measures of explained variance for each of these two upper levels.

Our measures are based on the framework of Rights and Sterba (2019) and, more specifically, its application to model comparison problems (Rights and Sterba, 2020), in combination with its extension to three-level settings (Rights and Sterba, 2023) and its R implementation in the package `r2mlm` (Shaw et al. 2022). The framework differentiates between a total of 12 different measures of total, within-cluster, and between-cluster explained variance. The relevant one for our purposes is what the authors refer to as the “[p]roportion of between-cluster outcome variance explained by level-2 predictors via fixed slopes” (Rights and Sterba, 2019, p. 315). Intuitively, this measure captures how much of the total cluster-level (i.e., country or regional [NUTS 1] level variation) can be attributed to predictors at that level, based on models that separate all lower-level variables into their between- and within-cluster components. In the present case (see also Brincks et al., 2017), this means that each individual-level socio-demographic and socio-economic profile variable is decomposed into its country-level component (i.e., the country mean), regional component (i.e., the deviation of the regional [NUTS 1] mean from the corresponding country mean) and individual-level component (i.e., the individual deviation from the respective regional [NUTS 1] level mean). Our  $R^2$  of interest is then defined as the between-cluster variance implied by the variables capturing variation at the level of interest (i.e., country or [NUTS 1] region) in combination with their associated coefficients/slopes, divided by the sum of this implied variance and the random effects variance at the level of interest (Rights and Sterba, 2019, p. 315).

As with the standard version of  $R^2$ , the increase in explained (between-cluster) variance due to an additional (set of) variable(s) depends on which, if any, other variables are already present in the model. We address this “path dependency” by using a computationally intensive Shapley decomposition approach that defines the contribution of a given set of variables as its average marginal contribution to the (between-cluster)  $R^2$  across all possible elimination sequences leading from the full model including all predictors to the empty model that includes none of them (Shorrocks, 2013).

The third part of our empirical analysis (Section 5.3.2) addresses **research question 3**, whether additional contextual factors, beyond compositional differences, influence young people’s early careers and life satisfaction. To investigate this, we estimate multilevel models that include all individual-level socio-demographic and socio-economic profile variables (see above) and indicators from four contextual domains (i.e., education system, labour markets, economy, care). For the two-level models, we include national-level contextual factors, separately for each contextual domain analysed. For the three-level models, we include mean-centred regional variables at the NUTS 1 level alongside their respective national averages, again analysing each domain separately. This centring technique isolates the specific contribution of regional deviations from the national mean, thus allowing a more precise measurement of contextual associations between NUTS 1

regions within countries. As discussed in Section 4.3, this approach also addresses issues of multicollinearity between national and within-country regional contextual variables.

All our models are weighted using personal respondent weights provided by EU-SILC to ensure that our samples are representative of all individuals aged 16 and older residing within households in each country (Eurostat, 2022). However, these sample weights disproportionately favour respondents from larger countries or NUTS 1 regions, potentially skewing our pooled model estimates towards these larger groups. To address this (and give all countries and regions, respectively, the same weight), we rescale survey weights using the `rescale_weights` function from the R package `easystats` (Lüdtke et al., 2022; see also Asparouhov, 2006; Carle, 2009).

The rescaling process involves two methods: Method A adjusts the sample weights by a factor that equals the proportion of the group size to the total of sampling weights within each group. This adjustment results in the new weights summing to the actual cluster sample size. In method B, the adjustment factor is calculated by dividing the sum of sample weights within each group by the sum of the squared sample weights within the same group. This results in the new weights summing to the effective cluster size, which is a measure reflecting the group's actual contribution to the overall sample variance (see Carle, 2009).

As recommended, we test each model both unweighted and weighted with the two rescaling methods to see if inference decisions are consistent across approaches. The results of these comparisons indicate that our estimations are quite robust. For regression analyses, we opt for method A, which is better suited for discussing specific point estimates and is advisable when dealing with small or insufficient group sizes (see Carle, 2009). For decompositions, we use method B, which is preferred for analyses that focus on the residual variance between groups.

## 5. Results

We start the presentation of our empirical analyses with some descriptions on variations in young adults' labour market integration and related outcomes between and within countries (Section 5.1). We then address our three research questions:

- RQ 1: the influence of socio-demographic/socio-economic profile characteristics, including life domain spillovers (Section 5.2)
- RQ 2: whether between- and within-country compositional differences in these young adults' profile explain regional variations in young adults' STWT outcomes (Section 5.3.1)
- RQ 3: the influence of contextual factors (Section 5.3.2).

### 5.1. Regional variations in young adults' STWT outcomes

This section details the six STWT outcome variables of our study, focusing on variations between and within countries in young adults' labour market integration, income in/security and life satisfaction.





### 5.1.1. Differences between countries

Table A 4 presents descriptive statistics for our six STWT outcome variables across the 27 countries studied. Starting with **labour market integration**, there is considerable between-country variation in all three dimensions considered: NEET rates range from 7 per cent in Luxembourg to 25 per cent in Serbia, unemployment rates from 3 per cent in Luxembourg and Malta to 33 per cent in Serbia, and the average ISEI scores from 37 in Bulgaria to 51 in Luxembourg. As expected, the correlation between NEET and unemployment rates is high at country level (Pearson's  $r = 0.76$ ), with Luxembourg, Switzerland and Malta having very low NEET and unemployment rates, while Serbia, Greece and Italy have very high rates.

An examination of the average ISEI scores shows that high employment is not at the expense of occupational quality. Countries such as Switzerland, Luxembourg, and Malta show not only high employment of young adults, but also employment in high-status occupations. Conversely, countries with lower employment rates often also have lower average ISEI scores among young adults, such as Bulgaria, Greece and Serbia. The correlation is more pronounced with NEET (Pearson's  $r = 0.74$ ) than with unemployment (Pearson's  $r = 0.59$ ). For example, Romania has a very low average ISEI despite its low unemployment rate.

Turning to **income in/security**, Table 4 again reveals considerable differences between countries. Average equivalised disposable income per year ranges from 4,614 euro in Serbia to 54,211 euro in Switzerland. It is important to note that disposable income is not adjusted for purchasing power parities, so the differences also reflect substantial differences in living standards between countries. More important however is the fact that disposable income depends on the composition of the household (and thus on the income contributions of the household members). In this respect, leaving the parental home is very important – and this varies greatly between countries (see Appendix, Table A 2): while in Switzerland 43 per cent still live with their parents, in Serbia only 11 per cent do. Poverty rates range from 8 per cent in Czechia to 24 per cent in Italy. As the poverty indicator takes into account national income distributions, there is no significant correlation between the two measures of income in/security (Pearson's  $r = -0.21$ ).

There are notable associations between labour market integration and income in/security. As expected, occupational status (ISEI scores) and income are positively correlated at the country level (Pearson's  $r = 0.63$ ), indicating that young adults' average disposable income is higher in countries with greater opportunities to enter into high-status occupations, such as Switzerland and Luxembourg, and lower in countries with more low-status jobs, such as Bulgaria, Romania, and Serbia. Poverty rates, in turn, are most strongly correlated with unemployment rates (Pearson's  $r = 0.54$ ), underlining the adverse economic impacts associated with youth unemployment. Countries hit particularly hard by the economic crisis in 2008, such as Greece, Spain, and Italy, are notable examples of this.

Finally, average **life satisfaction** ranges from 6 points in Bulgaria to 8 points in Austria, Finland and Romania. Interestingly, countries that perform poorly in terms of labour market integration and economic security do not necessarily have the lowest levels of satisfaction. For example, young Romanians have the highest average life satisfaction,



despite having one of the highest poverty risks and low average occupational attainment. Conversely, despite its excellent employment opportunities and high disposable income, life satisfaction in Luxembourg is only average – the same as in Italy, where labour market integration is rather poor and economic insecurity is high. Correspondingly, the correlation with labour market integration is moderate (Pearson's  $r = -0.51$  for unemployment,  $-0.41$  for NEET, and  $0.37$  for ISEI), and small and insignificant with income security (Pearson's  $r = 0.23$  for income and  $0.30$  for poverty). This distinctive country ranking of life satisfaction highlights unique regional variations that cannot be solely predicted by economic factors.



Table 4. Country variation in STWT outcomes

Country	ISO codes	Unemployment rate (%)	NEET rate (%)	ISEI scores (average)	Equivalised disposable income per year (in Euro)	Log disposable income	Poverty rate (in %)	Life satisfaction (average)
Austria	AT	9.25	14.46	45.58	28882.32	10.14	15.06	<b>8.18</b>
Belgium	BE	7.86	11.50	49.44	27925.70	10.15	11.84	7.71
Bulgaria	BG	20.09	21.00	<b>36.89</b>	6546.69	8.51	22.88	<b>6.29</b>
Switzerland	CH	6.62	8.43	49.70	<b>54210.77</b>	<b>10.75</b>	11.30	7.81
Cyprus	CY	12.30	15.44	43.35	18798.50	9.73	12.46	7.15
Czechia	CZ	8.04	15.90	44.95	12779.21	9.34	<b>7.83</b>	7.77
Germany	DE	7.18	15.02	47.50	28523.53	10.08	19.46	7.40
Denmark	DK	13.99	10.94	44.69	29914.60	10.19	23.42	7.09
Estonia	EE	10.54	16.50	48.44	15665.50	9.50	14.46	7.55
Greece	EL	31.73	23.83	40.11	9362.20	8.97	23.64	7.13
Spain	ES	22.50	17.46	41.96	17060.90	9.54	23.83	7.46
Finland	FI	12.49	14.96	43.73	25652.18	10.05	15.87	8.01
France	FR	17.61	14.51	43.41	25099.74	9.98	16.93	7.15
Croatia	HR	20.80	15.47	43.21	9602.01	9.04	12.77	7.61
Hungary	HU	12.44	17.85	42.03	7339.90	8.76	11.90	7.08
Ireland	IE	14.13	14.87	42.26	33530.98	10.31	9.04	7.11
Italy	IT	23.58	20.67	41.27	18646.01	9.64	<b>24.16</b>	7.50
Lithuania	LT	12.22	14.41	49.52	13225.13	9.28	16.11	7.67
Luxembourg	LU	<b>3.22</b>	<b>6.89</b>	<b>50.62</b>	45997.16	10.61	17.16	7.51
Latvia	LV	9.81	14.35	46.38	12557.72	9.25	14.34	7.16
Malta	MT	3.42	7.85	49.07	21518.79	9.84	9.48	7.36
Poland	PL	7.62	11.88	42.80	9427.44	9.02	13.68	7.94
Portugal	PT	16.22	12.23	43.81	12393.18	9.26	17.24	7.66
Romania	RO	4.07	16.87	37.93	5527.17	8.37	23.11	8.00
Serbia	RS	<b>33.45</b>	<b>24.79</b>	39.80	<b>4614.25</b>	<b>8.22</b>	22.18	6.68
Sweden	SE	10.80	10.10	45.06	26180.73	10.05	18.55	7.56
Slovakia	SK	11.63	19.51	41.58	8970.30	9.01	12.60	7.71
Mean		13.47	15.10	44.26	19627.87	9.54	16.34	7.45
SD		7.77	4.45	3.67	12280.17	0.67	5.02	0.42

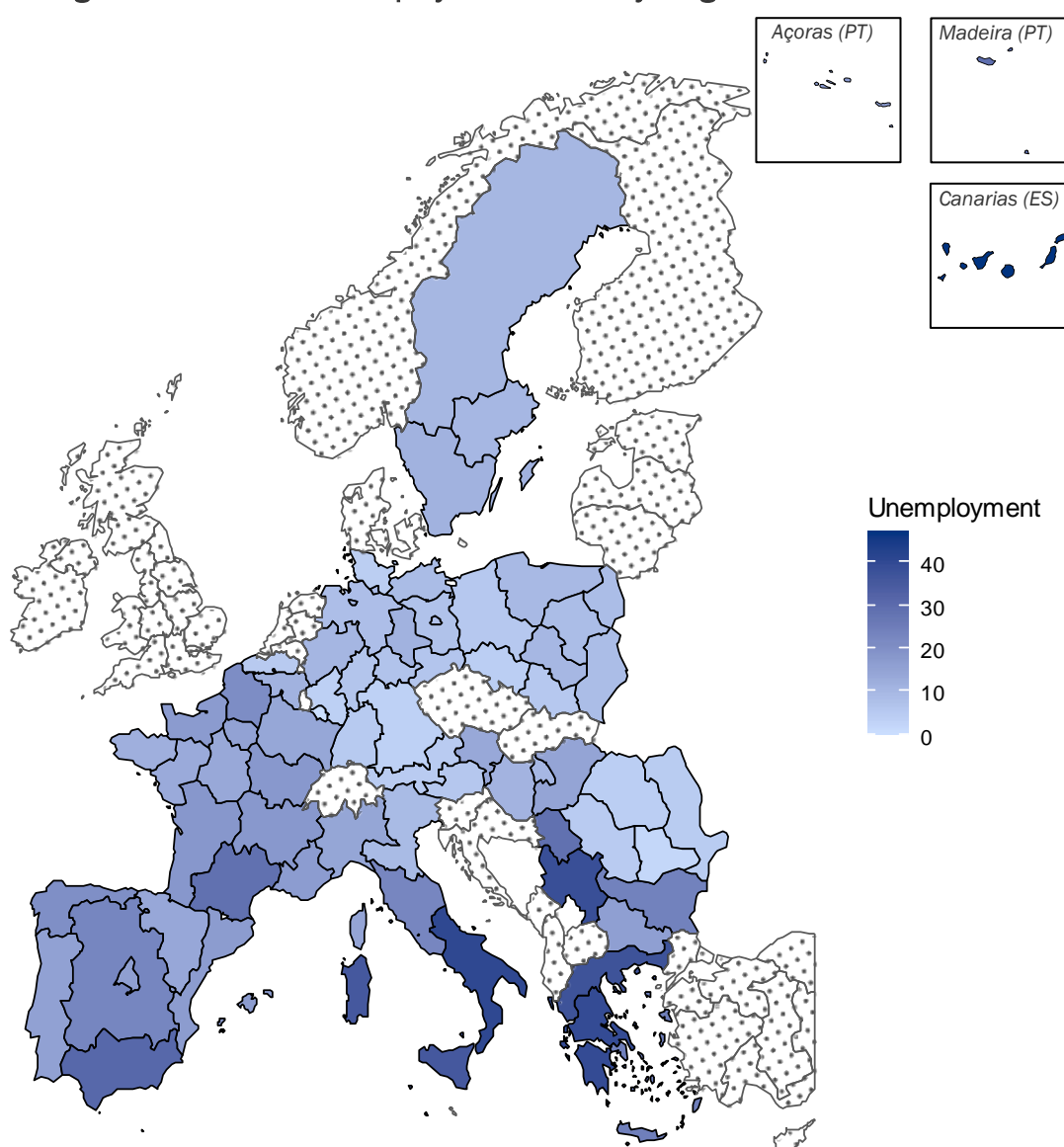
Notes: Highest and small values are in bold. SD standard deviation. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

### 5.1.2. Regional differences within countries

Next, we look at the within-country variation between NUTS 1 regions for the six STWT outcomes. The aim is to provide a broad understanding of how outcomes vary not only between countries, but also within countries. We focus on graphical visualisations for selected outcomes (for the full table see Appendix, Table A 1).

Figure 1 shows regional differences in unemployment rates as an indicator of **labour market integration**. It highlights marked differences between regions across countries, with rates ranging from 0 per cent to 41 per cent. Furthermore, there is a strong correlation between unemployment rates at national and regional level (Pearson's  $r = 0.82$ ), underlining the influence of national economic conditions on regional employment.

Figure 1: Regional variation in unemployment rates of young adults

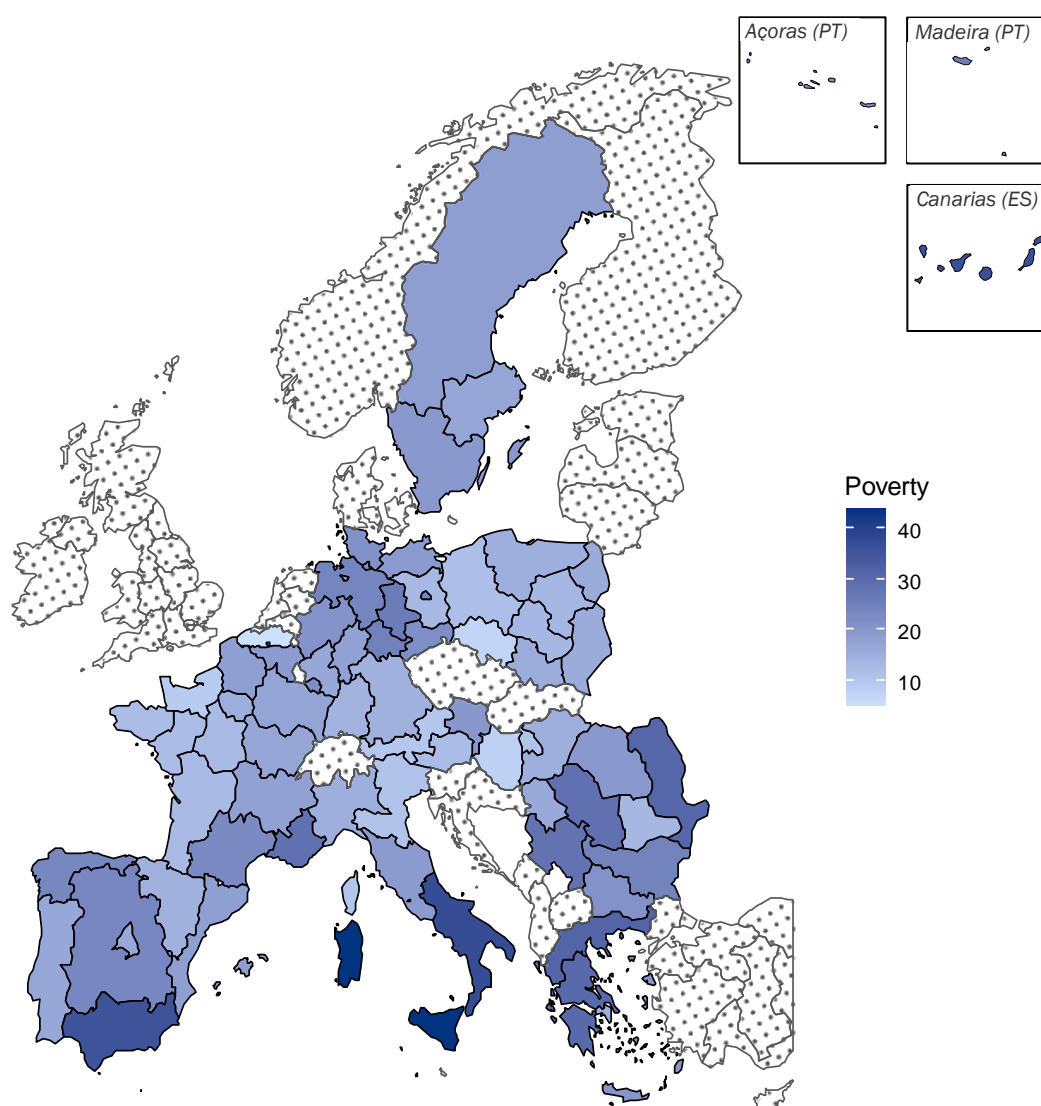


Notes: Focus on 14 countries with NUTS 1 regions. For full country sample, see Table 4 (Section 5.1.1). Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

The figure also reveals considerable regional variations within many countries, particularly in southern European countries such as Italy, Spain and Portugal. In Italy, for example, unemployment rates range from 9 per cent to 41 per cent. This variation represents deviations from the national average of as much as -14 to +17 percentage points. Such pronounced regional disparities within a single country illustrate the substantial regional differences that can exist within a uniform national framework and highlight the complex dynamics of labour market integration within countries.

Figure 2 shows similar patterns for **income in/security**, with significant regional variations both between and within countries. Again, this variation is particularly pronounced in Italy and Spain. There are also significant regional disparities in several continental European countries, including Belgium, France and Germany, and in Eastern Europe, particularly Croatia and Serbia.

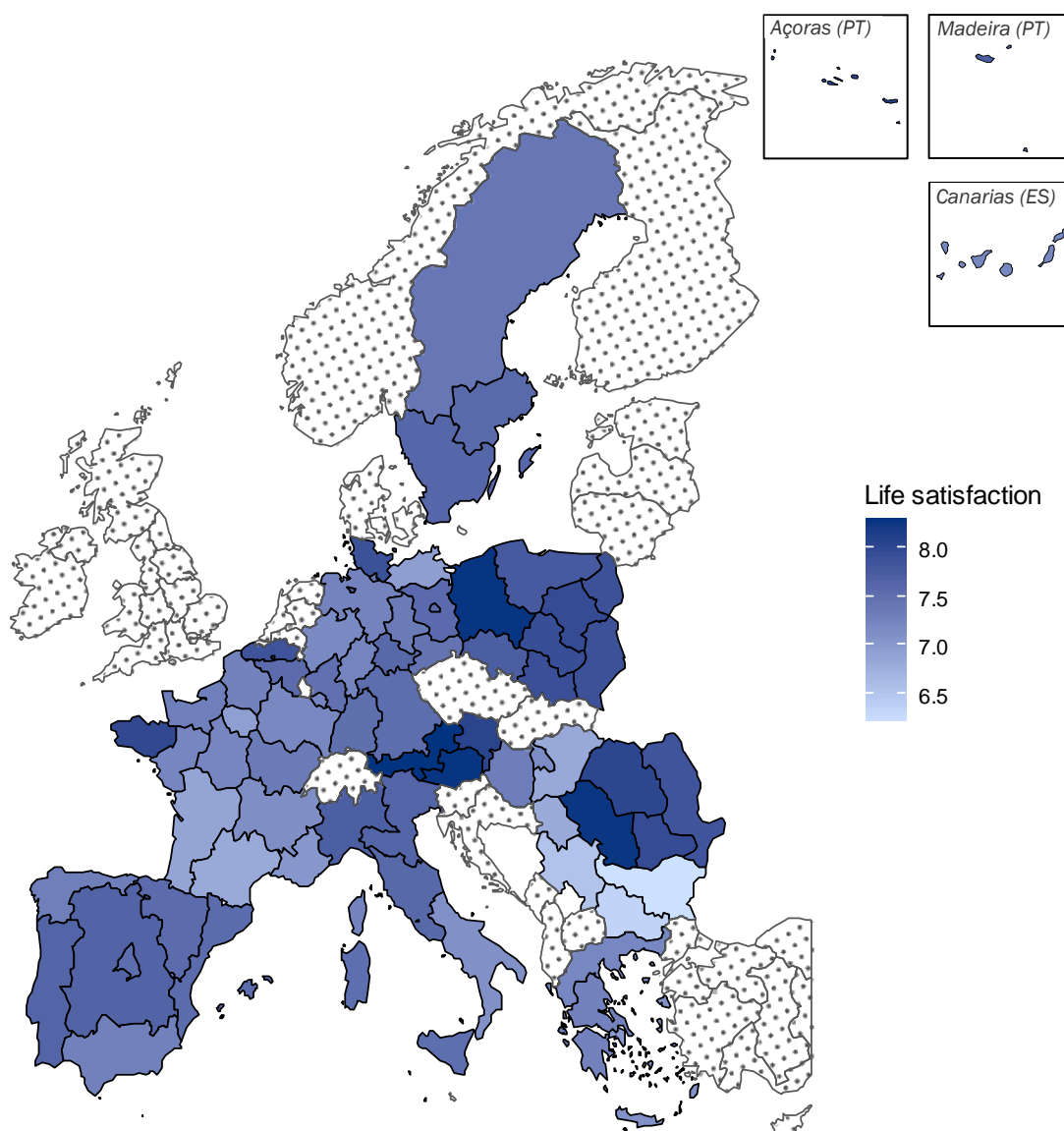
Figure 2. Regional variation in poverty rates of young adults



Notes: Focus on 14 countries with NUTS 1 regions. For full country sample, see Table 4 (Section 5.1.1) Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

Figure 3 illustrates the regional variations in average **life satisfaction**. Variations within countries are generally more moderate than those between countries. Nevertheless, there are some notable differences within certain countries. In France or Germany, for example, single regions exhibit an average life satisfaction of young adults that is almost 1 point higher than the national average. Notably, the results again highlight only a moderate correlation between regional variations in life satisfaction and variations in labour market integration and economic in/security.

**Figure 3. Regional variation in life satisfaction of young adults**



Notes: Focus on 14 countries with NUTS 1 regions. For full country sample, see Table 4 (Section 5.1.1). Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

Overall, the results highlight considerable regional variation, both between and within countries. The following sections explore possible explanations for these variations, focusing on the contributions of compositional differences and contextual factors.

## 5.2. The role of socio-demographic and socio-economic characteristics for young adults' STWT outcomes

The focus of this section is research question 1. Table 5 and Table 6 show the results of the multilevel regressions of the six STWT outcome variables on the socio-demographic and socio-economic profile variables. Table 5 focuses on labour market integration and Table 6 on income in/security and life satisfaction. These estimates are to be interpreted as average associations across our pooled sample of 27 countries in the two-level models (depicted in Table 5 and Table 6) and of 75 regions across 14 countries in the three-level models (presented in the Appendix B, Table B 1 and Table B 2). Notably, the coefficient estimates are largely similar across both regional level specification, highlighting the general relevance of the factors considered across different regions. We also conducted country-specific regressions of all six STWT outcomes, which broadly confirm this conclusion (see Appendix D).<sup>15</sup>

Starting with the **labour market attainment** of young adults, the results presented in Table 5 closely align with the findings of previous research as outlined in Section 3: *Educational attainment* emerges as a crucial predictor of successful labour market integration: higher levels of educational attainment are associated with a reduced risk of being NEET and unemployed, and are correlated with higher occupational status. It should be emphasised that this is the “*remaining*” effect of education, over and above its influence on health, family formation and its associations with migration background, gender, and degree of urbanisation. *Poor health* – often missing in STWT analyses – is a significant barrier to labour market integration, particularly affecting NEET and unemployment risks, where it is the most influential factor.

*Family composition* is also significantly associated with all three labour market integration outcomes. Single parenthood emerges as a key risk factor for NEET status, unemployment and low occupational status. The presence of children in couple households also correlates with a risk of being NEET, probably due to childcare responsibilities. Moreover, higher unemployment and NEET risks and lower occupational status attained are associated with still living in the parental home (i.e., economic dependence).

Regarding the influence of socio-demographic characteristics, we observe also *gender* differences: young men are less likely to be NEET or unemployed than young women. However, controlled for other factors such as family composition, young women generally achieve higher occupational status. The impact of age varies: the unemployment risk tends to decrease with age, while the NEET risk tends to increase (possibly because younger people are more likely to be in education).

Age trends in occupational status are less observable, probably because the vast majority of 16-19 year olds are still at school, making the employed population more selective than that of 20-24 year olds. Taking this into account, occupational status also tends to increase with age (or labour market experience).

<sup>15</sup> There are some differences in the importance of individual factors between countries. Investigating these is beyond the scope of the current report, which focuses primarily on compositional differences, but is interesting for future research.



Table 5. Two-level regressions of labour market integration on socio-demographic and socio-economic profile characteristics

	Unemployment (AME)	NEET (AME)	ISEI (score points)	
			(1)	(2)
<b>Educational attainment</b> (ref: less-educated)				
Intermediate-educated	-0.101*** (0.009)	-0.119*** (0.006)	6.726*** (0.238)	6.512*** (0.238)
Tertiary-educated	-0.155*** (0.013)	-0.161*** (0.008)	29.216*** (0.253)	28.773*** (0.253)
<b>Health status</b> (ref.: very good)				
Good	0.023*** (0.004)	0.028*** (0.003)	-1.293*** (0.157)	-1.246*** (0.157)
Fair	0.094*** (0.010)	0.116*** (0.008)	-2.841*** (0.283)	-2.493*** (0.282)
(Very) poor	0.234*** (0.022)	0.357*** (0.016)	-3.544*** (0.623)	-2.445*** (0.624)
<b>Family composition</b> (ref.: couples without children)				
Couples with children	0.042*** (0.006)	0.134*** (0.008)	-3.212*** (0.231)	-2.775*** (0.233)
Living with parents	0.094*** (0.009)	0.063*** (0.005)	-2.904*** (0.226)	-2.584*** (0.226)
Living alone	0.038*** (0.006)	0.021*** (0.004)	-1.911*** (0.241)	-1.719*** (0.241)
Other forms with children (incl. single parenthood)	0.104*** (0.014)	0.165*** (0.012)	-5.838*** (0.475)	-5.236*** (0.475)
<b>Gender</b> (ref.: Women): Men	-0.044*** (0.005)	-0.057*** (0.004)	-1.344*** (0.150)	-1.678*** (0.151)
<b>Age</b> (ref.: 16-19)				
20-24	-0.031** (0.010)	0.125*** (0.008)	-1.732*** (0.458)	-1.634*** (0.457)
25-29	-0.072*** (0.011)	0.171*** (0.010)	0.212 (0.458)	0.018 (0.460)
30-34	-0.089*** (0.012)	0.147*** (0.009)	0.820+ (0.467)	0.569 (0.470)
<b>Migration background</b> (ref.: no): Yes	0.025*** (0.005)	0.031*** (0.004)	-4.167*** (0.230)	-4.083*** (0.229)
<b>Residential area</b> (ref.: cities)				
Towns and suburbs	0.001 (0.004)	0.009** (0.003)	-2.682*** (0.183)	-2.725*** (0.182)
Rural areas	-0.015*** (0.004)	0.013*** (0.003)	-5.233*** (0.189)	-5.362*** (0.188)
<b>Employment status</b> (ref.: employed)				
Unemployed				-4.625*** (0.282)
In education				-3.367*** (0.333)
Inactive				-3.365*** (0.343)
(Intercept)	---	---	35.887*** (0.818)	36.883*** (0.810)
SD (Intercept iso3166)	0.699	0.435	3.346	3.279
SD (Observations)	---	---	16.352	16.288
ICC	0.1	0.1	0.0	0.0
BIC	34149.8	59230.9	457688.1	457310.1
Number of observations	51,401	85,115	52,504	52,504
Number of countries	27	27	27	27

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. For binary dependent variables, AME reported. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.



Having a *migration background* increases the likelihood of being NEET and unemployed, although the associations are relatively modest. For those in employment, there is a notable negative association with lower occupational status.

Lastly, the degree of urbanisation of the *place of residence* also plays a role in labour market opportunities. Young people living in rural areas face a lower unemployment risk but a higher risk of being NEET (may be due to fewer opportunities for further education, like apprenticeships, post-secondary or tertiary education) than their urban counterparts. Moreover, employment comes at the cost of lower occupational status, which may be due to a lack of higher-skilled jobs in rural areas.

With regard to **income in/security**, Table 6 again shows that *educational attainment* is an important factor. Higher levels of educational attainment are positively associated with higher disposable income and thus with a lower risk of poverty. Part of this educational effect is mediated by employment status (see Models 2): unemployed young adults face the highest risk of low income and poverty, followed by the economically inactive and then young adults in education – and the educational effects are reduced from Models 1 to Models 2. But even beyond its role in influencing employment status and also health etc., educational attainment remains an important factor. Poor *health* is also associated with lower disposable income and higher poverty risk, partly transmitted through young adults' employment status.

*Family composition* and economic in/security are strongly related: Single-parent households have the lowest average disposable income and the highest poverty risk, closely followed by young adults living independently (i.e., without a partner and/or parents). Couples with children tend to have less disposable income than couples without children, which is also reflected in a higher risk of poverty. In contrast, young adults living with their parents fare similarly to couples without children in terms of income security, confirming the importance of additional earners within a household. Moreover, the reduction in the effect of living with parents from Models 1 and 2 suggests that parents are the income/poverty buffer for these young adults' lack of employment.

*Gender* does not appear to play a significant role in determining income in/security once differences in education and living arrangements are taken into account. Age, however, still shows some impact: income insecurity is highest among young adults in their early twenties and lowest among those in their early thirties, possibly due to differences in work experience (see also comparison between Models 1 and 2). Young adults with a *migration background* are found to have lower average disposable incomes and a higher risk of poverty, even after controlling for differences in educational attainment and employment status.

Finally, young people living in *rural areas* have a lower average disposable income and a higher risk of poverty than their urban counterparts. This does not seem to be due to lower employment rates (the size of the coefficient remains largely unchanged in Models 2), but rather to poor opportunities for higher status jobs (see Table 5 above, ISEI models).

Table 6. Two-level regressions of income security and life satisfaction on socio-demographic and socio-economic profile characteristics

	Log yearly equivalent disposable income (€)		Poverty (AME)		Life satisfaction (rating points)	
	(1)	(2)	(1)	(2)	(1)	(2)
<b>Educational attainment</b> (ref: less-educated)						
Intermediate-educated	0.219***	0.183***	-0.108***	-0.083***	0.335***	0.207***
	(0.006)	(0.006)	(0.006)	(0.005)	(0.018)	(0.018)
Tertiary-educated	0.440***	0.382***	-0.176***	-0.142***	0.591***	0.373***
	(0.007)	(0.007)	(0.009)	(0.007)	(0.021)	(0.021)
<b>Health status</b> (ref.: very good)						
Good	-0.064***	-0.058***	0.023***	0.020***	-0.610***	-0.570***
	(0.004)	(0.004)	(0.003)	(0.003)	(0.014)	(0.013)
Fair	-0.141***	-0.105***	0.053***	0.033***	-1.522***	-1.417***
	(0.008)	(0.008)	(0.006)	(0.005)	(0.025)	(0.025)
(Very) poor	-0.208***	-0.100***	0.109***	0.040***	-2.783***	-2.589***
	(0.015)	(0.015)	(0.012)	(0.009)	(0.047)	(0.047)
<b>Family composition</b> (ref.: couples without children)						
Couples with children	-0.271***	-0.223***	0.105***	0.076***	0.105***	0.228***
	(0.007)	(0.007)	(0.007)	(0.006)	(0.022)	(0.022)
Living with parents	-0.056***	-0.010	0.030***	0.004	-0.307***	-0.269***
	(0.007)	(0.007)	(0.005)	(0.005)	(0.021)	(0.021)
Living alone	-0.367***	-0.350***	0.189***	0.188***	-0.422***	-0.308***
	(0.008)	(0.007)	(0.009)	(0.008)	(0.023)	(0.023)
Other forms with children (incl. single parenthood)	-0.445***	-0.378***	0.237***	0.200***	-0.546***	-0.321***
	(0.015)	(0.014)	(0.014)	(0.013)	(0.044)	(0.044)
<b>Gender</b> (ref.: women): Men	0.034***	0.008*	-0.017***	0.002	-0.012	-0.036**
	(0.004)	(0.004)	(0.003)	(0.003)	(0.013)	(0.013)
<b>Age</b> (ref.: 16-19)						
20-24	-0.081***	-0.082***	0.039***	0.041***	-0.443***	-0.288***
	(0.007)	(0.007)	(0.005)	(0.005)	(0.023)	(0.023)
25-29	0.033***	-0.004	-0.026***	0.003	-0.651***	-0.476***
	(0.008)	(0.008)	(0.005)	(0.005)	(0.024)	(0.027)
30-34	0.137***	0.086***	-0.058***	-0.022***	-0.678***	-0.543***
	(0.008)	(0.009)	(0.006)	(0.005)	(0.026)	(0.029)
<b>Migration background</b> (ref.: no): Yes	-0.221***	-0.208***	0.102***	0.098***	-0.154***	-0.066***
	(0.006)	(0.006)	(0.006)	(0.005)	(0.020)	(0.019)
<b>Residential area</b> (ref.: cities)						
Towns and suburbs	-0.036***	-0.039***	-0.001	0.001	0.034*	0.054***
	(0.005)	(0.005)	(0.003)	(0.003)	(0.015)	(0.015)
Rural areas	-0.102***	-0.109***	0.024***	0.029***	0.043**	0.084***
	(0.005)	(0.005)	(0.004)	(0.004)	(0.016)	(0.016)
<b>Employment status</b> (ref.: employed)						
Unemployed		-0.411***		0.213***		-0.769***
		(0.007)		(0.009)		(0.022)
In education		-0.159***		0.106***		0.091***
		(0.006)		(0.006)		(0.020)
Inactive		-0.283***		0.168***		-0.236***
		(0.008)		(0.009)		(0.025)
<b>Log. equalised disposable income</b>						0.256***
						(0.014)
<b>Poverty</b> (ref.: no): Yes						-0.074**
						(0.023)
(Intercept)	9.503***	9.635***	---	---	8.261***	5.777***
	(0.132)	(0.130)			(0.091)	(0.162)
SD (Intercept iso3166)	0.683	0.676	0.390	0.367	0.447	0.393
SD (Observations)	0.566	0.552	---	---	1.620	1.591
ICC	0.6	0.6	0.0	0.0	0.1	0.1
BIC	170458.0	166439.5	64356.2	61608.1	290281.1	287803.9
Number of observations	84,878	84,878	85,114	85,114	70,936	70,936
Number of countries	27	27	27	27	27	27

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . For binary dependent variables, AME reported. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

As for **life satisfaction**, Table 6 shows that higher *educational attainment* is associated with higher life satisfaction, partly mediated by labour market success (see comparison of education effects in Models 1 and 2). However, by far the most important factor is *health*, which has a significant direct relationship, that is, independent of any indirect effects, such as through labour market integration and income in/security: young adults in poor health report on average almost two points lower levels of satisfaction than their very healthy counterparts.

*Family arrangements* are also associated with young adults' life satisfaction – with lone parents, those living alone and those still living with parents showing lower average satisfaction.

Age is significantly negatively associated with life satisfaction – even after controlling for differences in family composition, employment, disposable income, and poverty risk – confirming the overall age U-shaped distribution of life satisfaction found in research (Galambos et al., 2020). Satisfaction is also lower for young adults with *migration backgrounds*, partly due to differences in employment status and poverty risk (see comparison of migration coefficients in Models 1 and 2). The *gender* effect is very small – when controlled for family arrangements – and only appears once employment status, disposable income, and poverty risk are accounted for (see Model 2): Men are, on average, slightly less satisfied with their lives (perhaps they are not always satisfied with the occupational status they have achieved; see Table 5 above, ISEI models).

Furthermore, young adults *living in rural or suburban areas* are slightly more satisfied than those living in urban areas – although it should be noted that this is under control of rural/urban differences in dissatisfying factors (such as education, family arrangements).

Finally, and importantly, we find substantial negative associations with *unemployment and poverty risks*, and positively with young adults' *disposable income* (see Model 2). Unemployed and inactive young adults are less satisfied with their life than those who are employed, and poor are less satisfied than those with more income resources.

These findings point to the importance of addressing educational and health inequalities among young adults, as well as successful labour market integration and reducing income insecurity, to reduce inequalities in their life satisfaction.

We also conducted these **analyses for 2018** to rule out the possibility that these results were driven by the COVID-19 pandemic. The results are presented in the Appendix C (Table C 5 and Table C 6). The results for 2018 are very similar to those for 2021.

**In summary**, the results of the analyses presented in this section highlight the importance of educational attainment, health, and spillovers with family formation processes and transition to economic independence for young adults' labour market integration, income in/security, and life satisfaction. Thus, in answer to **research question 1** of this report, we clearly find that differences in early labour market outcomes and well-being (life satisfaction) are related not only to standard demographic characteristics of young adults (such as gender, age, migration background) and their educational attainment, but also to



their health status and other transitions into adulthood (such as partnership, parenthood and leaving parental home).

### 5.3. Explanations for regional differences

The aim of this section is to explain regional differences in young adults' labour market integration and related outcomes. Descriptive statistics indicate the prevalence of compositional differences in individual-level predictors, both between and within countries (see Appendix, Table A 2 and Table A 3). Section 5.3.1 therefore examines whether these compositional differences partly explain regional variations in the six STWT outcomes (**research question 2**). Section 5.3.2 looks at the role of additional contextual factors (beyond compositional differences) for regional variations (**research question 3**).

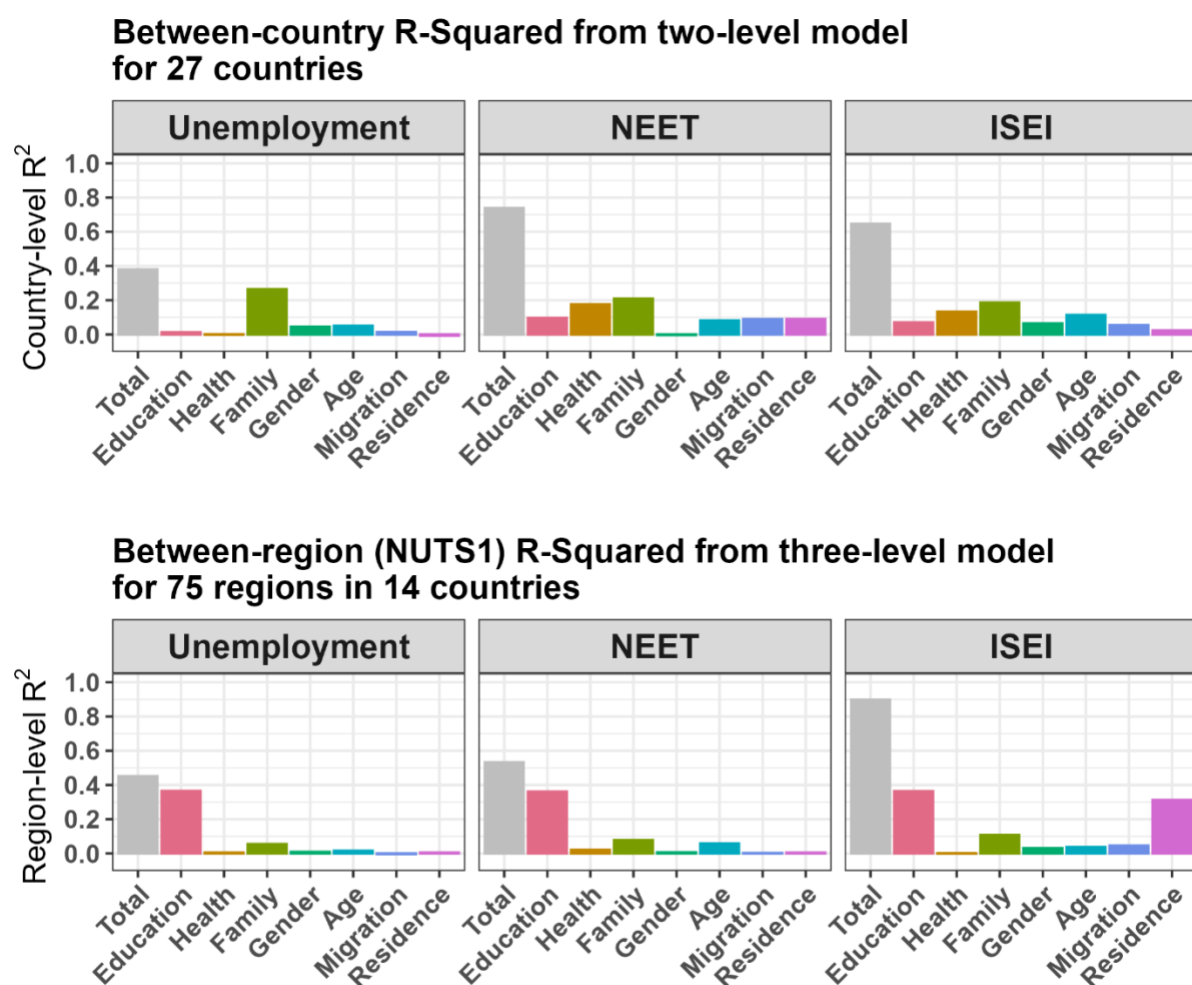
#### 5.3.1. The role of compositional differences

Figure 4 (labour market outcomes) and Figure 5 (income in/security and life satisfaction) show decomposition results for the between-country and between-region (NUTS1)  $R^2$ . It is important to recall from Section 4 that these decomposition results are based on different country samples and models: country-level results (shown in the upper halves of the figures) are based on two-level models for the full sample of 27 countries, whereas regional-level results (shown in the lower halves of the figures) are based on 75 regions in the 14 countries that provide information on respondent's region of residence. While our approach to estimating explained variance at the country level could, in principle, be applied also to this latter sample of only 14 countries, this is not possible in the present case where we are interested in 16 variables capturing compositional differences (i.e., the country means of young adults' socio-demographic and socio-economic profiles capturing educational attainment, health, family composition, gender, age, migration background, and urban residence). Obviously, 16 country means are a large number of predictors even for the 27-country sample, so while these models are estimable, they likely suffer from some overfitting, and the absolute levels of the  $R^2$  estimates should be taken with a grain of salt.

That said, the decompositions reveal some interesting patterns. For young adults' labour market outcomes in Figure 4, a first general result is that a substantial portion of both between-country and between-region variation can be attributed to compositional differences even if one allows for substantial overfitting in the country-level analysis. The overall  $R^2$  values range from around 40% for unemployment (both at the country and region level) to over 80% for the ISEI at the regional level. Interestingly, family composition (incl. whether young adults still live with their parents) and, to a lesser extent, (self-rated) health seem to be the most important factors shaping cross-national variation in labour market attainment, whereas variation across regions within countries is primarily attributable to educational composition, and in the case of the ISEI, also to urbanisation/place of residence (i.e., the share of respondents living in cities), reflecting the fact that high-status occupations tend to be concentrated in urban centres.



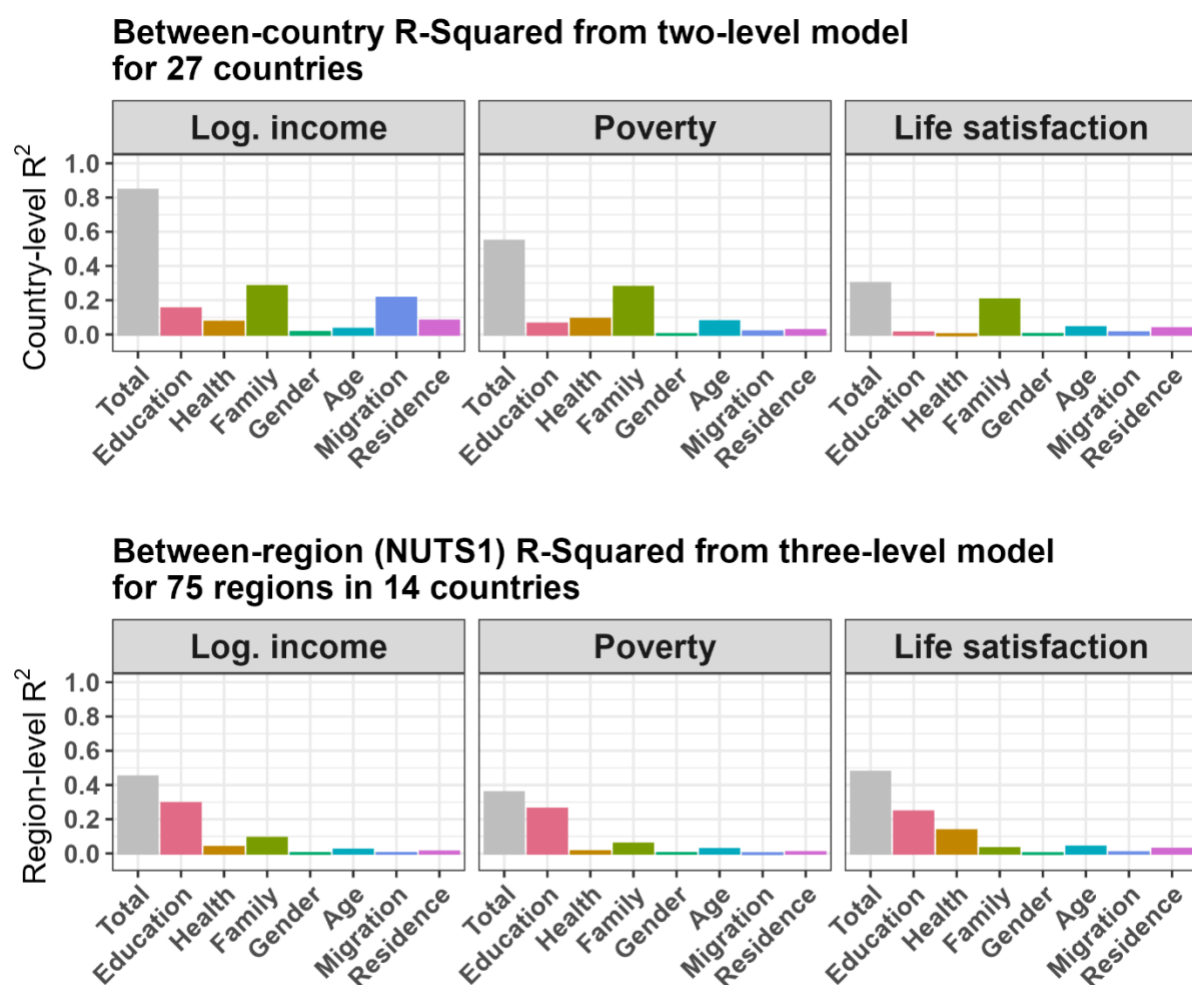
Figure 4. Decompositions of regional variations in labour market outcomes



Note: Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

Turning to economic in/security and life satisfaction in Figure 5, there are some parallels to Figure 4 in that total explained variation tends to be quite substantial and, in some cases, even very high, now ranging between just over 30% for between-country variation in life satisfaction to over 80% for (logged) disposable income. There are also some similarities when it comes to the importance of different profile characteristics. At the country level, family composition again emerges as the most one, while health matters less than for labour market outcomes. For the level of disposable income, we also find important roles of country-average education and the share of residents with a migration background, two variables that did not stand out in the labour market integration results. Turning to regional differences, educational composition again emerges as the most important factors, with family composition (income, poverty) and health (life satisfaction) being the only additional variables that account for more than a small portion of regional variation in at least one case.

Figure 5. Decompositions of regional variations in income security and life satisfaction



Note: Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

Taken together, these results provide interesting and novel insights into the compositional factors associated with cross-country and cross-regional variation in the labour market and well-being outcomes of young adults – with family composition (incl. still living in the parental home) being the most important factor “explaining” cross-country variation in both types of outcomes and educational composition playing the biggest role for within-country variation across regions. However, these findings clearly need to be interpreted carefully: First, because they are the “remaining” contributions controlled for all these other variables. For example, educational attainment and gender are important, but part of their total contribution is mediated by differences in health or family composition, respectively. Second, in part because the decompositions are of a purely associational, non-causal nature. For example, living in the parental home may in (large) part be a consequence of young adults’ labour market attainment – rather than a factor shaping the latter. Similarly, the higher levels of education in regions with better labour market outcomes will partly be a consequence of higher-educated young adults migrating to these regions (where their skills are in demand) – and not of higher-educated workers moving to or trained in these



regions generating this kind of demand as well as associated changes in the occupational structure and levels of pay.

We find similar decomposition results for 2018 (instead of 2021) (see Appendix C, Figure C 1 and Figure C 2). Germany and its 16 regions had to be removed from the analysis due to the non-availability of key measures in this wave of EU-SILC. Despite this difference in the underlying sample and the marked change in contextual conditions between (pre-pandemic) 2018 and (pandemic) 2021, results are relatively similar across the two time points. In particular, the same factors consistently emerge as the main compositional correlates of labour market and well-being outcomes at both the national and subnational levels.

### 5.3.2. The role of contextual factors

We now explore the role of additional contextual factors (beyond compositional differences) in shaping both between-country and within-country regional variations in young adults' labour market integration, income in/security, and ultimately, life satisfaction to address **research question 3**. We begin with results from two-level models regarding between-country variation (Section 5.3.2.1), and then present results from three-level models to examine within-country regional variation (Section 5.3.2.2).

#### 5.3.2.1. Differences between countries

##### *Labour market integration*

The results for cross-national variation in young adults' labour market integration are presented in Table 7. We find some influence of the **education system**. Accounting for individual-level characteristics (including differences in educational attainment), tracking in secondary education is positively associated with labour market integration – with lower unemployment risks and higher average occupational status attainment. Moreover, NEET risks for young adults are lower and ISEI scores are higher in better educated countries (with higher proportions of tertiary-educated adults).<sup>16</sup> All other education system indicators do not seem to influence young adults' labour market integration beyond their individual educational attainment.<sup>17</sup>

Concerning **labour market conditions**, the share of employment in large enterprises emerges as an important contextual factor: unemployment risks are lower and occupational attainment (ISEI) is higher, as expected. However, a higher employment share in the large engineering sector is associated with higher NEET risks. One possible explanation is that a large engineering sector may indicate innovation and technological progress, which may require more specific skills and higher qualifications that young adults, especially the less educated, may lack. Finally, high overall employment rates are also associated with higher levels of young adults' labour market integration (i.e., lower

<sup>16</sup> Higher proportions of less-educated adults seem to be also associated with lower NEET risks among the youth (at the 10 per cent level). This finding should be interpreted cautiously, however, as the models control for the strong negative associations between low levels of educational attainment and labour market integration at the individual level.

<sup>17</sup> However, vocational orientation is correlated with tracking and % ISCED 5+. This could mean that due to multicollinearity, only the impact of these two indicators is significantly observed (see also Heisig and Solga, 2015).



unemployment and NEET risks). As high employment rates reflect, at least in part, good employment conditions, these associations may also reflect successful efforts by trade unions and ALMPs to facilitate young adults' integration into the labour market.

**Economic conditions** are also important contextual factors. Young adults in countries with higher GDP per capita have lower unemployment and NEET risks. Moreover, young adults in countries with a lower overall unemployment rate have lower unemployment and NEET risks (as would be expected), but at the cost of lower occupational attainment (ISEI scores). Interestingly, higher income inequality seems to be associated with better labour market integration of young adults (i.e. lower unemployment and NEET risks) – but one has to keep in mind that social inequality strongly affects educational attainment at the individual level, which is controlled for (Heisig et al., 2020). Similarly, higher shares of young adults relative to those aged 35–64 do not seem to increase labour market competition between labour market entrants; on the contrary, young adults in countries with higher shares of young people have lower NEET risks, so higher shares seem to be more indicative of overall good economic conditions.

Finally, as regards family and health **care factors**, only countries' health expenditure tends to influence young adults' labour market integration, apart from its impact on the individual-level characteristics included: In countries with higher expenditure, young adults have a lower risk of unemployment and a higher occupational attainment (ISEI).



Table 7. Two-level regressions of labour market integration on national contextual factors

	Unemployment (AME)				NEET (AME)				ISEI scores			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
Socio-demographic and socio-economic profile characteristics included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tracking in secondary education	-0.037* (0.016)				-0.010 (0.010)				1.280+ (0.723)			
Vocational orientation in upper secondary education	-0.002 (0.018)				-0.007 (0.011)				0.746 (0.827)			
% ISCED 5+	-0.021 (0.018)				-0.028** (0.011)				1.051 (0.795)			
% ISCED 0–2	-0.010 (0.016)				-0.017+ (0.009)				0.620 (0.725)			
Public spending on tertiary education	0.008 (0.015)				0.006 (0.009)				0.015 (0.678)			
Employment rate		-0.034+ (0.018)				-0.029** (0.010)				0.267 (0.749)		
% employment in primary sector		-0.014 (0.017)				-0.004 (0.010)				-1.436* (0.724)		
% employment in large-scale engineering sector		0.016 (0.014)				0.023** (0.008)				0.276 (0.599)		
% employment in large firms (>50 employees)		-0.031* (0.014)				-0.010 (0.008)				1.408* (0.588)		
EPL		-0.009 (0.015)				-0.014+ (0.008)				-0.577 (0.629)		
GDP per capita			-0.025* (0.012)				-0.021** (0.008)				1.022 (0.668)	
Income inequality (P80/P20)			-0.022+ (0.012)				-0.014+ (0.008)				-0.006 (0.710)	
Unemployment rate			0.054*** (0.011)				0.022** (0.007)				-1.466* (0.623)	
Age ratio: 15–34/35–64			-0.013 (0.012)				-0.015+ (0.008)				-0.303 (0.702)	
% 0–2 childcare				0.018 (0.016)				-0.013 (0.009)				-0.310 (0.731)
Public spending on healthcare				-0.033+ (0.018)				-0.013 (0.010)				1.974* (0.792)
Num. of physicians per 100 000 inhabitants				0.016 (0.015)				0.005 (0.009)				-0.834 (0.668)
Median age				0.017 (0.016)				0.014 (0.009)				0.878 (0.707)
(Intercept)	---	---	---	---	---	---	---	---	36.877** *	37.289** *	36.873** *	36.864** *

# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

									(0.802)	(0.710)	(0.762)	(0.777)
SD (Intercept iso3166)	0.627	0.506	0.433	0.594	0.627	0.506	0.433	0.594	3.225	2.338	2.954	3.054
SD (Observations)	---	---	---	---	---	---	---	---	16.288	16.205	16.288	16.288
ICC	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
BIC	34198.6	30349.9	34168.4	34184.8	34198.6	30349.9	34168.4	34184.8	457353.2	417285.8	457340.6	457342.0
Num. of observations	51,401	46,621	51,401	51,401	51,401	46,621	51,401	51,401	52,504	47,928	52,504	52,504
Num. of countries	27	25 (w/o EE, RS)	27	27	27	25 (w/o EE, RS)	27	27	27	25 (w/o EE, RS)	27	27

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.



*Income in/security*

Table 8 the results for differences between countries in young adults' income in/security. Several aspects of the **education system** are important. Vocational orientation in upper secondary education, higher levels of educational attainment in countries (higher shares of tertiary educated)<sup>18</sup> and public expenditure on tertiary education are associated with higher disposable income and lower poverty risks. Tracking is also associated with higher poverty risk.<sup>19</sup>

Regarding **labour market conditions**, both higher employment shares in the traditional primary and large-scale engineering sectors are associated with lower levels of disposable income among young adults.<sup>20</sup> As for poverty, higher overall employment (and thus less competition) also reduces the poverty risks of young adults.

National **economic conditions** also influence young adults' income in/security. As expected, higher GDP per capita is associated with higher levels of disposable income. Moreover, young adults face higher poverty risks in countries with higher income inequality and higher unemployment rates.

Regarding (family and health) **care conditions**, there is a positive association of health expenditure with disposable income and a corresponding negative association with poverty (which remain stable even after adjusting for GDP per capita). It is also worth noting that the share of very young children in external childcare is positively associated with disposable income – and thus with better opportunities for young parents to be employed – but also with a higher risk of poverty. These may not be the same countries: The latter may indicate countries where young parents “have to” work.

*Life satisfaction*

Looking at the variation in life satisfaction between countries, Table 8 shows that none of the contextual indicators considered are associated with levels of life satisfaction beyond their impact on individual-level characteristics of young adults (such as educational attainment, health or family composition).

<sup>18</sup> Higher proportions of less-educated adults seem to be also associated with higher income. Again, this finding should be interpreted with caution as the models control for the strong negative associations between low levels of educational attainment and labour market integration at the individual level.

<sup>19</sup> To verify that these associations do not simply reflect broader national differences in wealth, we fitted models including GDP per capita as a robustness check. The stability of the results indicates that these characteristics of the education system influence income independently of overall national economic performance.

<sup>20</sup> This relationship persists even after controlling for differences in GDP per capita.

Table 8. Two-level regressions of income security and life satisfaction on national contextual factors

	Equivalised disposable income				Poverty (AME)				Life satisfaction			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
Socio-demographic and socio-economic profile characteristics included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tracking in secondary education	0.134 (0.082)				-0.015+ (0.008)				-0.014 (0.092)			
Vocational orientation in upper secondary education	0.213* (0.094)				0.000 (0.009)				0.103 (0.105)			
% ISCED 5+	0.667*** (0.090)				-0.018* (0.009)				-0.060 (0.101)			
% ISCED 0–2	0.225** (0.083)				0.015+ (0.008)				-0.006 (0.092)			
Public spending on tertiary education	0.175* (0.077)				0.007 (0.008)				0.005 (0.086)			
Employment rate		0.113 (0.109)				-0.017+ (0.009)				0.063 (0.114)		
% employment in primary sector		-0.287** (0.106)				0.017* (0.008)				0.103 (0.110)		
% employment in large-scale engineering sector		-0.335*** (0.087)				-0.011 (0.007)				0.068 (0.091)		
% employment in large firms (>50 employees)		0.019 (0.085)				-0.008 (0.007)				0.096 (0.089)		
EPL		0.050 (0.092)				0.004 (0.007)				0.107 (0.096)		
GDP per capita			0.511*** (0.078)				-0.003 (0.006)				-0.009 (0.107)	
Income inequality (P80/P20)			-0.115 (0.083)				0.027*** (0.007)				-0.015 (0.090)	
Unemployment rate			0.038 (0.073)				0.015** (0.006)				-0.011 (0.099)	
Age ratio: 15–34/35–64			0.068 (0.082)				-0.001 (0.007)				0.096 (0.095)	
% 0–2 childcare				0.102+ (0.058)				0.021** (0.008)				-0.011 (0.099)
Public spending on healthcare				0.544*** (0.063)				-0.024** (0.009)				-0.009 (0.107)
Num. of physicians per 100 000 inhabitants				0.022 (0.053)				0.008 (0.007)				-0.015 (0.090)
Median age				-0.086 (0.056)				0.016* (0.008)				0.096 (0.095)
(Intercept)	9.635*** (0.072)	9.668*** (0.071)	9.635*** (0.068)	9.635*** (0.048)	---	---	---	---	5.764*** (0.164)	5.783*** (0.168)	5.762*** (0.162)	5.766*** (0.164)

	Equivalised disposable income				Poverty (AME)				Life satisfaction			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
Socio-demographic and socio-economic profile characteristics included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SD (Intercept iso3166)	0.370	0.345	0.350	0.244	0.286	0.216	0.217	0.265	0.410	0.358	0.391	0.415
SD (Observations)	0.552	0.550	0.552	0.552	---	---	---	---	1.591	1.573	1.591	1.591
ICC	0.3	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
BIC	166476.2	150509.3	166460.1	166444.4	61652.6	56156.9	61627.1	61636.8	287872.1	255841.1	287856.8	287859.3
Number of observations	84,878	76,759	84,878	84,878	85,114	76,985	85,114	85,114	70,936	63,288	70,936	70,936
Number of countries	27	25 (w/o EE, RS)	27	27	27	25 (w/o EE, RS)	27	27	27	25 (w/o EE, RS)	27	27

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.



### 5.3.2.1. *Regional differences within countries*

This section looks at regional variations within countries and asks whether regional differences in contextual factors are related to variations in young adults' labour market attainment within countries. Table 9 and Table 10 present results from three-level regression models, focusing on coefficient estimates for NUTS 1 level deviations from national averages. These estimates provide insights into how regional contextual conditions, relative to the national average, are correlated with our six STWT outcome variables. It should be noted that, due to data availability, the analyses now only cover 14 countries.

#### *Labour market integration*

Table 9 reveals significant associations between regional variations in the **education system** and the labour market integration of young adults within countries. Regions with less vocational orientation in upper secondary education and lower educational attainment (i.e. higher shares of less-educated adults and lower shares of tertiary-educated adults) compared to the national level tend to have higher average unemployment and NEET risks and lower average occupational status.

Regional differences in the **labour market** are notably linked to labour market outcomes. Higher employment shares in the primary sector are associated with slightly higher unemployment risks and lower occupational status, suggesting limited opportunities for upward mobility in these regions. Conversely, young adults have lower unemployment and NEET risks in regions with above-average employment in large-scale engineering sectors. However, there remains a negative association with ISEI scores, suggesting that young adults in these regions are less likely to enter into higher-skilled jobs within this sector. Among the most influential factors are regional employment rates, which benefit young adults by significantly reducing their NEET and unemployment risks and increasing their occupational attainment (ISEI scores), possibly through the acquisition of more work experience than young adults in other regions.

As regards **economic conditions**, our analysis suggests that unemployment and NEET risks are higher in regions with above average unemployment rates for the total adult population. Differences in occupational attainment are associated with regional GDP differences within countries.

Regional variations in **care-related factors** do not seem to play a key role in the labour market integration of young adults. Most notably, there is a positive association between the number of physicians per 100,000 inhabitants and occupational attainment (ISEI scores). A possible explanation for this relationship could be that regions with larger hospitals (and thus more physicians) offer more employment opportunities for higher status health occupations.



Table 9. Three-level regressions of labour market integration on regional contextual factors

	Unemployment (AME)				NEET (AME)				ISEI scores			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
Socio-demographic and socio-economic profile characteristics included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Respective national-level indicators included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vocational orientation in upper secondary education	-0.009+ (0.005)				-0.027*** (0.008)				-0.114 (0.215)			
% ISCED 5+	-0.006 (0.006)				-0.017+ (0.009)				0.833** (0.267)			
% ISCED 0–2	0.019*** (0.005)				0.014+ (0.008)				-0.015 (0.221)			
Employment rate		-0.019*** (0.003)				-0.025*** (0.005)				0.493** (0.179)		
% employment in primary sector		0.005+ (0.003)				0.002 (0.004)				-0.644*** (0.159)		
% employment in large- scale engineering sector		-0.006+ (0.004)				-0.015** (0.005)				-0.737*** (0.191)		
GDP per capita			0.000 (0.004)				-0.005 (0.049)				0.775** (0.251)	
Unemployment rate			0.025*** (0.004)				0.310*** (0.041)				-0.112 (0.223)	
Age ratio: 15–34/35–64			-0.001 (0.005)				-0.078 (0.059)				-0.129 (0.298)	
Conservative gender role attitudes				0.002 (0.005)				0.001 (0.008)				-0.094 (0.216)
Num. of physicians per 100 000 inhabitants				-0.006 (0.006)				0.000 (0.009)				0.592* (0.240)
Median age				-0.005 (0.007)				-0.005 (0.011)				-0.465 (0.285)
(Intercept)	---	---	---	---	---	---	---	---	36.316*** (1.194)	37.085*** (0.871)	37.357*** (0.840)	36.503*** (1.103)
SD (Intercept iso3166:nuts1)	0.213	0.152	0.168	0.303	0.310	0.216	0.213	0.430	0.982	0.891	1.176	1.307
SD (Intercept iso3166)	0.350	0.254	0.253	0.212	0.648	0.424	0.375	0.530	3.397	1.956	1.742	2.561
SD (Observations)	---	---	---	---	---	---	---	---	16.090	16.122	16.089	16.049
ICC	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
BIC	41607.2	38472.6	41576.9	34894.7	24500.5	22184.6	24456.2	20978.7	292530.3	279068.4	292528.0	237841.3
Number of observations	56,816	53,536	56,816	47,300	34,157	31,982	34,157	28,328	33,759	32,186	33,759	27,362
Number of NUTS1 regions	75	73	75	55	75	73	75	55	75	73	75	55
Number of countries	14	13 (w/o RS)	14	12 (w/o DE, PT)	14	13 (w/o RS)	14	12 (w/o DE, PT)	14	13 (w/o RS)	14	12 (w/o DE, PT)

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2 and for national-level contextual predictors see Table 3. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

*Income in/security*

Table 10 presents the results for regional variation in income in/security for young adults. Regarding the **education system**, young adults have higher disposable incomes and lower poverty risks in regions with more vocational orientation in upper secondary education and higher educational attainment than the national average. This highlights the importance of educational opportunities for young adults also at the regional level.

Concerning the **labour market conditions**, variations in overall employment rates again emerge as an influential contextual factor for young adults' disposable income and poverty risks: Young adults experience higher economic security and lower poverty risks in regions with above-average overall employment rates. In addition, regional disparities in employment shares within different economic sectors are significantly associated with income levels: higher employment shares in the traditional primary sector are associated with lower average disposable incomes; conversely, above-average employment in large-scale engineering sectors is positively correlated with income stability. This latter finding contrasts with the association at the national level (see Section 5.3.2.1). This may be due to specific regional industrial policies or labour market conditions, or to differences in the (number of) countries included in the analyses, which warrant further investigation.

Regional **economic performance** is also significantly related to income security. Young adults have higher disposable incomes and lower poverty risks in regions with higher GDP per capita, while they have higher poverty risks and lower incomes in regions with higher overall unemployment. These findings highlight how macroeconomic conditions at the regional level directly influence the financial well-being of young adults. For the **care** domain, we find no significant associations beyond the national level.

*Life satisfaction*

The results presented in Table 10 show only two significant associations across all four domains, suggesting that the contextual factors included do not contribute much to explaining differences in life satisfaction within countries – but, interestingly, more than between countries (see Section 5.3.2.1). Life satisfaction among young adults is higher in less affluent regions (as indicated by lower GDP per capita and higher shares of employment in the traditional primary sector than at national level). It should be noted, however, that these coefficients apply to young adults all things being equal, that is, controlled for individual characteristics of young adults and early employment outcomes (see Table 2). This finding underlines that certain aspects of life satisfaction appear to go beyond traditional economic reasons.

In **concluding** Section 5.3.2, countries with high(er) educational attainment, an economic structure with larger firms and innovative industries, good overall employment levels, good childcare provision and higher health expenditure provide favourable contextual factors for young adults' STWT outcomes, over and above their impact at the individual level. Characteristics of favourable regions within countries are again high(er) educational attainment and good overall employment levels. The within-country analyses underline that variations in young adults' labour market outcomes and life satisfaction are generated at both levels, the national and the regional context. Importantly, the **analyses for 2018** presented in Appendix C (Table C 7 and Table C 8) show very similar results.



Table 10. Three-level regressions of income security and life satisfaction on regional contextual factors

	Equivalised disposable income				Poverty (AME)				Life satisfaction			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
Socio-demographic and socio-economic profile characteristics included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Respective national-level indicators included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vocational orientation in upper secondary education	0.036* (0.015)				-0.016* (0.008)				0.019 (0.026)			
% ISCED 5+	0.052** (0.018)				-0.013 (0.009)				-0.021 (0.032)			
% ISCED 0–2	-0.028+ (0.015)				0.017* (0.008)				-0.003 (0.027)			
Employment rate		0.065*** (0.009)				-0.028*** (0.005)				0.011 (0.022)		
% employment in primary sector		-0.020* (0.008)				0.005 (0.004)				0.042* (0.020)		
% employment in large-scale engineering sector		0.065*** (0.009)				-0.014** (0.005)				0.030 (0.024)		
GDP per capita			0.030** (0.012)				-0.012+ (0.007)				-0.046+ (0.028)	
Unemployment rate			-0.077*** (0.010)				0.032*** (0.006)				-0.034 (0.024)	
Age ratio: 15–34/35–64			0.007 (0.013)				0.001 (0.007)				0.028 (0.033)	
Conservative gender role attitudes				-0.005 (0.017)				0.010 (0.008)				0.014 (0.021)
Num. of physicians per 100 000 inhabitants				0.020 (0.020)				0.001 (0.009)				-0.023 (0.024)
Median age				0.004 (0.024)				-0.004 (0.011)				0.051+ (0.029)
(Intercept)	9.549*** (0.175)	9.643*** (0.111)	9.731*** (0.053)	9.323*** (0.124)	---	---	---	---	6.147*** (0.233)	6.252*** (0.241)	6.270*** (0.235)	6.221*** (0.244)
SD (Intercept iso3166:nuts1)	0.093	0.059	0.063	0.126	0.339	0.221	0.256	0.428	0.136	0.131	0.136	0.135
SD (Intercept iso3166)	0.587	0.365	0.164	0.389	0.167	0.168	0.124	0.122	0.506	0.516	0.483	0.521
SD (Observations)	0.568	0.563	0.568	0.574	---	---	---	---	1.596	1.568	1.596	1.583
ICC	0.5	0.3	0.1	0.3	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
BIC	112817.4	105520.5	112750.7	95926.4	44455.3	41765.3	44421.2	36695.3	178997.0	164772.0	178995.6	159336.1
Number of observations	56,613	53,336	56,613	47,105	56,816	53,536	56,816	47,300	44,156	40,953	44,156	39,216
Number of NUTS1 regions	75	73	75	55	75	73	75	55	75	73	75	55
Number of countries	14	13 (w/o RS)	14	12 (w/o DE, PT)	14	13 (w/o RS)	14	12 (w/o DE, PT)	14	13 (w/o RS)	14	12 (w/o DE, PT)

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . For binary dependent variables, AME reported. For individual-level predictors included see Table 2 and for national-level contextual predictors see Table 3. Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

## 6. Summary and conclusions

This report explored inequalities in young adults' labour market attainment by analysing both individual factors (such as educational attainment, health, and family constellations) and contextual factors (i.e., regional resources in four different policy areas) across 27 European countries, and for 14 countries also across regions within countries. We examined whether and how these individual and regional characteristics influence young adults' labour market integration (unemployment and NEET risks, and occupational attainment as measured by ISEI scores), economic security, and life satisfaction. By looking at these six different outcomes and examining multifaceted and multi-layered influences, we have developed a more comprehensive understanding of the factors that shape young adults' outcomes during their critical early career and life stages.

Our analyses revealed **significant differences between and within countries in the labour market integration, income security and life satisfaction of young adults**. Countries such as Luxembourg and Switzerland show high employment rates and income security, while others such as Serbia and Greece struggle with higher NEET and unemployment rates. Interestingly, life satisfaction does not always correlate with young adults' labour market outcomes. For example, despite its excellent employment opportunities and high disposable income, life satisfaction in Luxembourg is only average – the same as in Italy, where labour market integration is rather poor and economic insecurity is high. In contrast, young Romanians have the highest average life satisfaction, despite having one of the highest poverty risks and low average occupational attainment. These findings suggest that young adults' life satisfaction is influenced by more than just regional economic conditions. We also found that unemployment and poverty rates vary widely between regions within countries, while life satisfaction varies less.

What are the **characteristics of young adults that influence the six outcomes** (research question 1)? Young adults' educational attainment emerges as a key predictor, with higher levels of qualification are linked to better employment outcomes, higher income, and greater life satisfaction. Health is another crucial factor, with poor health significantly hindering labour market integration and reducing life satisfaction. Family composition, such as single parenthood, also plays an important role, particularly in increasing the risk of being NEET or unemployed. Living in rural areas is associated with lower income and occupational status, but slightly higher life satisfaction (all things being equal, i.e. controlling for all other individual-level factors). Notably, gender does not appear to play an important role in determining labour market integration and related outcomes once differences in educational attainment and family arrangements are accounted for. Overall, the findings emphasize the importance of **educational attainment, health, and spillovers with family formation processes and transition to economic independence** for young adults' labour market integration and well-being outcomes.

Given that countries and regions differ widely on these individual characteristics (see Appendix, Table A 2 and Table A 3), **do (regional) compositional differences** in these characteristics of young adults **explain**, at least in part, **between- and within-country differences in early labour market inequalities and life satisfaction** (research question 2)?



Our decompositions indicate that this is indeed the case, although results have to be interpreted cautiously due to the associational nature of the analysis and the large number of predictors that likely results in some overfitting. With these caveats in mind, some interesting patterns are worth repeating. In particular, we find that **country differences in family composition**, including living in the parental home, account for a substantial part of cross-national variation in young adults' labour market and well-being outcomes. Even though causality likely runs partly (and perhaps even primarily) from labour market outcomes to family composition, these findings do underline how important economic opportunities are in shaping the family-related decisions of young adults, their ability to form an independent household, and thereby, eventually, also their psychological well-being. Beyond family composition, **health and education** are further factors that account for a significant portion of cross-national variation in at least some of the outcomes (and that appear more likely to causally affect the latter than vice versa).

The picture looks quite different for **regional differences within countries**, where **educational attainment** consistently emerges as the most important factor, accounting for 20% to 40% of regional variation in all outcomes, whereas all other compositional factors play relatively minor roles – with the exception of **degree of urbanisation** for occupational status (ISEI) and **health** for life satisfaction. While the importance of education, too, needs to be interpreted with caution, it indicates a high degree covariation between economic opportunities and the educational composition of a region's young population. Even if a good portion of this is likely due to the migration and relocation decisions of young adults (especially highly educated adults who tend to be more geographically mobile), it also suggests that regional investments in the education of young people can have meaningful positive impacts on labour market and well-being outcomes at the individual and aggregate level.

Countries differ not only in the characteristics of young adults, but also in macro-level factors that may influence their early careers beyond their direct impact on young adults' education, health and family composition. The question is therefore **whether contextual factors in different policy areas influence young adults' early labour market attainment and life satisfaction** (beyond compositional differences) (**research question 3**). We found that some contextual influences on young adults' labour market integration, income security, and life satisfaction. At the national level, **strict and early tracking in secondary education and overall high educational attainment, large firms, favourable economic conditions, good childcare provision and higher health expenditure** are associated with better labour market outcomes and income security for young adults. For instance, higher levels of tracking and lower unemployment rates correlate with reduced NEET risks and higher occupational status. At the regional level, similar patterns emerge, with regions having higher educational attainment and employment rates offering better economic security and job prospects. However, contextual factors appear less important in explaining variations in life satisfaction, suggesting that non-economic factors might play a more critical role. Overall, young adults' labour market outcomes are influenced by contextual factors at both levels, but more so at national than regional level.

The fact that **several policy areas – the education system, labour market and economic conditions, and family and health factors – are influential** highlights the importance of



considering multifaceted and multi-layered influences in policy development, including the potential for policy spillovers. This conclusion is strongly supported by our finding that **young adults who live in rural areas are at a severe disadvantage**: They experience higher NEET risks, lower occupational status attainment and higher income insecurity (both in terms of disposable income and poverty risks) – despite facing lower unemployment risks than their counterparts living in cities (and partly also in towns and suburbs) (see Section 5.2). This suggests that they are more likely to take “any” job available in the countryside (as indicated by lower unemployment) or to be inactive (as indicated by higher NEET rates), but lack both “good jobs” (with higher income and status) and childcare facilities to reconcile work and children.

These findings have important **policy implications**. These challenges to young adults’ labour market attainment are shared by many countries and regions, with some countries/regions performing better than others. The regional variations and their explanations identified in this report therefore offer opportunities for mutual learning. It is clear from the analyses that investment in quality jobs and career guidance is crucial to tackling unemployment and underemployment. Equally important is investment in the education and health of young adults, both before and during their entry into the labour market. Taken together, these implications highlight the need not only for labour market policies, but also for education and health policies and support systems. In addition, it is crucial to address regional disparities in labour market outcomes, with a particular focus on young adults in rural areas. This may involve targeted interventions in education, job opportunities and childcare. Furthermore, policies that promote lifelong learning and continuous skills development, where necessary together with childcare support, are important to provide a better future for young adults facing challenges in entering the labour market. Finally, and importantly, direct poverty reduction strategies should also be prioritised, given that young adults with children (especially single parents) face higher poverty risks and the spillover effects of poverty on their children with detrimental effects on their cognitive development and educational attainment, as well documented by previous research (e.g., Bradshaw, 2002; Hai et al., 2015; Hill and Sandfort, 1995).





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## Section A: Descriptive Statistics

Table A 1. Descriptive statistics of STWT outcome variables at NUTS 1 level

Country, NUTS 1	Unemployment (%)	NEET (%)	Average ISEI scores	Equivalised disposable income per year (€)	Log. equiv. disp. income	Poverty (%)	Life satisfaction (rating points)
Austria							
AT1	15.99	13.96	46.65	27596.24	10.06	20.04	8.05
AT2	13.99	6.15	44.18	29440.78	10.20	12.49	8.27
AT3	12.79	5.08	45.00	30257.13	10.20	10.14	8.29
Belgium							
BE1	17.42	11.10	50.03	24403.78	9.99	22.41	7.45
BE2	7.05	5.44	50.48	30470.33	10.25	5.19	7.87
BE3	16.85	11.42	47.07	24985.14	10.04	19.17	7.55
Bulgaria							
BG3	23.41	24.10	35.18	5644.25	8.43	24.63	6.22
BG4	18.67	16.37	38.49	7418.96	8.58	21.19	6.35
Germany							
DE1	12.29	5.51	47.05	30168.74	10.17	14.41	7.50
DE2	15.15	3.75	48.04	33626.07	10.23	14.79	7.53
DE3	11.03	7.31	54.51	27986.64	10.02	24.24	7.56
DE4	8.08	7.44	43.34	26787.17	10.11	13.08	7.56
DE5	18.11	9.93	51.65	28747.41	10.10	16.60	7.70
DE6	20.53	9.44	53.47	27345.43	10.03	21.42	7.39
DE7	18.90	6.78	46.66	27669.21	10.09	18.19	7.26
DE8	12.84	9.02	46.12	25413.22	10.02	19.35	6.95
DE9	16.05	8.43	44.81	28462.76	10.02	24.28	7.26
DEA	18.80	10.58	47.21	28775.52	10.07	20.90	7.19
DEB	16.65	3.90	45.83	31527.73	10.18	16.75	7.49
DEC	13.35	0.00	51.34	28115.96	10.06	22.33	7.23
DED	10.44	6.57	47.21	23929.85	9.96	22.23	7.44
DEE	19.41	11.46	43.39	22872.51	9.88	26.24	7.36
DEF	9.84	4.50	48.80	25944.05	10.04	21.39	7.89
DEG	9.96	7.30	46.89	25706.67	10.01	25.17	7.58
Greece							
EL3	16.86	24.60	45.07	11121.89	9.14	15.08	7.00
EL4	21.65	24.95	35.77	9518.40	8.99	20.63	7.09
EL5	26.97	37.46	38.23	8162.26	8.83	31.51	7.22
EL6	33.22	39.63	35.62	8487.51	8.86	30.28	7.28



Country, NUTS 1	Unemployment (%)	NEET (%)	Average ISEI scores	Equivalised disposable income per year (€)	Log. equiv. disp. income	Poverty (%)	Life satisfaction (rating points)
Spain							
ES1	15.70	20.62	41.20	15519.42	9.46	23.86	7.32
ES2	10.07	14.28	45.44	20830.57	9.77	14.88	7.55
ES3	12.48	16.49	46.66	20357.24	9.74	16.57	7.52
ES4	18.80	23.11	37.57	16211.02	9.52	23.73	7.65
ES5	14.89	17.23	44.04	18402.21	9.64	18.55	7.54
ES6	23.02	31.17	37.53	13767.54	9.32	35.77	7.29
ES7	33.45	47.15	37.46	13259.67	9.08	36.68	7.22
France							
FR1	12.38	15.51	51.62	30892.39	10.09	15.39	6.94
FRB	12.73	13.95	45.06	25814.43	10.04	12.76	7.23
FRC	18.72	18.14	38.88	24128.30	9.96	17.15	7.36
FRD	14.46	17.55	38.35	27530.27	10.08	9.47	7.31
FRE	16.42	21.15	38.72	22410.75	9.91	18.53	7.28
FRF	14.16	14.40	40.12	24707.63	9.98	17.60	7.21
FRG	9.61	13.48	43.53	25239.91	10.02	12.31	7.23
FRH	11.57	12.17	40.39	23453.58	9.97	12.49	7.98
FRI	14.60	18.54	41.51	24662.40	9.98	12.77	6.89
FRJ	21.46	28.76	40.36	21063.56	9.84	23.02	6.82
FRK	13.77	18.26	43.22	23411.90	9.92	18.22	7.13
FRL	15.84	17.21	46.46	22657.16	9.88	28.87	7.03
FRM	18.87	15.04	38.44	25225.06	10.07	10.69	7.27
Hungary							
HU1	14.06	10.14	50.21	8438.57	8.88	11.02	7.17
HU2	15.77	11.10	39.92	7568.07	8.81	8.29	7.33
HU3	22.18	15.13	37.04	6376.26	8.62	15.13	6.83
Italy							
ITC	14.67	14.67	42.64	21853.20	9.83	15.12	7.71
ITF	29.68	40.72	40.02	14815.87	9.37	37.21	7.11
ITG	30.09	35.72	38.26	14254.62	9.33	43.70	7.51
ITH	12.06	9.26	40.30	21982.53	9.86	11.17	7.64
ITI	19.30	22.90	43.19	19262.65	9.70	19.41	7.58
Poland							
PL2	10.12	5.81	45.03	9609.44	9.02	15.82	7.90
PL4	11.86	5.93	40.28	9295.50	9.02	11.95	8.26
PL5	9.75	4.45	45.10	10610.01	9.16	7.40	7.72
PL6	13.81	9.61	42.86	9075.31	8.99	15.26	7.76



Country, NUTS 1	Unemployment (%)	NEET (%)	Average ISEI scores	Equivalised disposable income per year (€)	Log. equiv. disp. income	Poverty (%)	Life satisfaction (rating points)
PL7	13.23	10.26	40.38	9244.41	8.98	13.54	7.93
PL8	12.25	8.76	40.01	8441.51	8.93	15.99	7.89
PL9	11.93	8.72	45.71	10199.26	9.08	13.52	7.96
Portugal							
PT1	11.87	15.81	43.93	12498.05	9.27	16.85	7.64
PT2	15.16	17.78	40.00	10796.76	9.13	22.41	8.08
PT3	21.80	29.46	43.64	10307.76	9.11	25.73	7.71
Romania							
RO1	18.75	4.48	36.31	5489.39	8.37	19.99	8.02
RO2	18.99	5.02	36.73	4813.39	8.18	30.88	7.85
RO3	12.07	2.21	42.57	6995.43	8.65	13.60	7.95
RO4	17.68	5.07	34.09	4909.86	8.26	28.80	8.25
Serbia							
RS1	21.61	28.72	42.97	5267.12	8.36	16.44	6.81
RS2	28.10	38.47	35.92	3948.52	8.09	28.13	6.54
Sweden							
SE1	9.46	10.16	48.21	28208.16	10.09	16.96	7.57
SE2	10.45	11.59	43.73	25359.30	10.03	19.94	7.60
SE3	10.76	10.31	40.99	23988.18	9.99	18.78	7.41

Note: Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table A 2. Descriptive statistics of individual-level socio-demographic and socio-economic profile variables at national level

Country code	Educational degree (%)			Mean age	% Men	% migration background	Family composition (%)				
	ISCED 0–2	ISCED 3–4	ISCED 5+				Couples w/o children	Couples with children	Living with parents	Living alone	Other forms with children
AT	23.8	40.0	36.1	25.9	51.0	23.9	19.9	18.9	41.8	18.4	1.0
BE	18.9	41.7	39.4	25.8	50.3	17.5	18.3	19.9	47.9	11.8	2.2
BG	33.4	45.3	21.3	26.0	51.4	0.4	3.3	30.1	53.7	7.9	5.1
CH	20.5	42.3	37.2	26.0	47.6	33.7	21.5	13.8	43.0	20.7	1.0
CY	14.6	45.8	39.6	25.8	49.0	18.8	12.6	18.6	54.6	12.6	1.7
CZ	24.9	51.2	23.9	25.9	51.8	4.3	13.7	26.2	49.2	8.8	2.1
DE	24.9	48.2	26.9	26.3	51.7	20.3	20.0	15.4	29.6	32.8	2.2
DK	19.8	38.6	41.7	25.5	50.7	14.4	25.5	17.0	19.8	35.8	1.9
EE	25.1	42.6	32.3	26.1	52.0	6.7	18.6	23.5	36.5	19.2	2.2
EL	17.4	56.3	26.3	25.2	51.0	6.7	5.5	11.0	74.2	8.9	0.4
ES	29.3	33.5	37.2	25.6	51.1	19.8	11.7	10.9	64.0	11.4	1.9
FI	15.0	52.2	32.8	26.1	51.2	6.3	33.2	17.5	16.1	31.4	1.7
FR	22.2	45.1	32.6	24.6	49.2	10.3	15.4	16.9	50.4	15.4	2.0
HR	15.1	60.0	24.9	25.6	51.5	4.5	4.8	16.0	74.0	3.9	1.4
HU	26.9	52.4	20.7	25.0	51.0	1.6	13.6	21.4	54.0	8.3	2.6
IE	20.4	41.6	38.0	24.9	50.2	15.9	12.0	10.6	63.9	9.7	3.8
IT	31.0	48.6	20.4	25.5	51.4	14.1	6.0	11.8	70.7	10.1	1.4
LT	11.8	40.5	47.7	27.2	45.4	0.8	12.8	30.6	31.2	19.1	6.3
LU	18.3	36.9	44.8	26.5	52.0	47.4	21.5	13.0	45.5	17.6	2.4
LV	27.6	42.7	29.7	25.6	52.0	3.8	8.7	25.1	50.6	11.2	4.4
MT	26.1	44.0	29.9	24.9	53.6	7.6	14.6	14.2	58.7	7.5	5.1
PL	19.4	49.6	31.0	26.5	49.7	1.1	11.9	26.2	53.6	6.1	2.3
PT	26.8	44.5	28.6	25.3	50.5	7.1	10.6	11.0	71.1	4.9	2.4
RO	29.7	54.6	15.8	25.8	51.1	0.0	11.0	25.1	53.3	9.0	1.6
RS	19.8	58.9	21.3	25.7	51.4	3.5	5.7	22.4	66.0	4.5	1.5
SE	26.9	44.0	29.0	26.4	51.0	23.4	19.7	21.9	11.3	44.1	2.9
SK	20.3	54.6	25.1	26.1	51.6	1.1	7.0	25.4	62.2	3.3	2.0
Mean	22.6	46.5	30.9	25.8	50.8	11.7	14.0	19.1	49.9	14.6	2.4
SD	5.5	6.8	8.1	0.6	1.6	11.4	7.0	6.1	17.1	10.5	1.4

Note: Weighted. Note: Weighted. Copyright 2024 by Hornberg/Heisig/Solga.



Table A 2. Descriptive statistics of individual-level socio-demographic and socio-economic profile variables at national level (continued)

Country code	Health status (%)				Residential area (%)			N (max)
	Very good	Good	Fair	(very) poor	Cities	Towns & suburbs	Rural	
AT	55.8	34.0	9.0	1.2	39.0	28.6	32.4	2259
BE	53.0	39.1	5.6	2.3	33.5	51.1	15.4	3476
BG	46.7	49.3	3.1	0.9	46.4	25.0	28.6	2427
CH	55.3	37.1	6.5	1.1	34.0	50.6	15.3	2629
CY	75.3	18.4	5.0	1.3	59.8	23.8	16.5	2190
CZ	61.0	32.0	5.0	2.1	31.4	33.0	35.7	2892
DE	42.2	45.8	9.1	2.9	85.0	0.0	15.0	5349
DK	31.5	49.2	15.2	4.1	54.7	22.5	22.9	1579
EE	28.5	56.7	12.1	2.7	65.3	0.0	34.7	2847
EL	84.8	12.2	1.9	1.1	41.6	32.2	26.2	3785
ES	34.7	56.2	7.7	1.4	57.0	32.0	11.0	8699
FI	34.7	51.3	12.3	1.7	53.7	29.6	16.7	1548
FR	52.4	36.2	9.0	2.3	43.5	26.7	29.8	5747
HR	69.1	24.7	4.2	2.1	30.7	32.2	37.1	3129
HU	44.6	47.8	6.5	1.1	32.6	36.5	30.9	2805
IE	66.3	24.5	6.8	2.4	38.7	27.2	34.0	2004
IT	36.7	58.3	3.6	1.4	37.4	44.5	18.1	5006
LT	27.1	58.9	12.5	1.5	45.3	10.8	43.9	988
LU	39.8	48.9	9.9	1.4	18.9	47.5	33.6	2044
LV	14.9	69.4	13.7	2.0	63.5	0.0	36.5	2079
MT	36.8	55.4	7.1	0.7	44.8	55.2	0.0	1955
PL	38.8	53.1	5.9	2.3	34.0	25.5	40.4	5224
PT	27.5	52.5	17.7	2.3	45.3	31.9	22.8	4131
RO	67.0	30.0	1.6	1.3	29.7	28.0	42.3	2789
RS	58.3	37.9	2.5	1.3	35.9	25.6	38.5	3280
SE	28.7	50.5	17.4	3.4	46.7	38.2	15.1	1839
SK	47.0	45.9	4.5	2.5	20.0	32.7	47.2	2416
Mean	46.6	43.5	8.0	1.9	43.3	29.3	27.4	
SD	16.9	13.7	4.6	0.8	14.5	14.4	11.7	

Note: Weighted. Copyright 2024 by Hornberg/Heisig/Solga.



Table A 3. Descriptive statistics of individual-level socio-demographic and socio-economic profile variables at NUTS 1 level

NUTS 1	Educational degree (%)			Mean age	% Men	% migration background	Family composition (%)				
	ISCED 0-2	ISCED 3-4	ISCED 5+				Couples w/o children	Couples with children	Living with parents	Living alone	Other forms with children
AT1	24.0	37.2	38.8	26.1	53.3	28.5	19.4	17.9	38.6	23.1	1.1
AT2	23.3	45.7	31.0	25.7	49.3	15.3	21.4	19.0	44.3	13.9	1.5
AT3	23.8	40.7	35.4	25.7	49.1	22.5	19.9	20.2	44.5	14.8	0.6
BE1	24.2	35.7	40.1	26.4	49.5	49.7	22.5	16.1	38.9	20.0	2.4
BE2	13.6	41.5	44.8	25.8	50.7	12.0	19.6	20.2	48.2	10.0	1.9
BE3	25.8	44.3	29.8	25.6	49.9	14.0	14.2	20.9	50.8	11.5	2.5
BG3	35.8	45.8	18.4	26.0	51.0	0.4	3.6	32.4	51.1	8.7	4.3
BG4	31.0	44.8	24.2	26.1	51.7	0.4	3.1	27.8	56.2	7.1	5.9
DE1	25.4	48.2	26.4	26.1	50.3	25.0	20.7	14.7	33.3	29.0	2.3
DE2	21.3	47.1	31.6	26.2	52.5	18.3	23.7	12.2	31.6	31.1	1.4
DE3	15.0	41.2	43.8	27.0	50.4	33.0	22.1	11.1	21.8	42.8	2.2
DE4	26.4	63.5	10.1	24.4	55.4	5.7	11.5	13.3	44.7	29.8	0.7
DE5	21.3	45.5	33.2	27.8	46.1	24.6	21.6	15.1	20.6	36.8	6.0
DE6	20.6	40.0	39.4	26.9	49.1	22.3	18.9	11.1	17.9	49.5	2.6
DE7	26.1	43.8	30.1	26.7	51.3	30.3	23.4	15.8	27.8	31.3	1.6
DE8	26.7	56.3	17.1	26.3	57.6	8.7	24.1	19.8	24.4	30.9	0.8
DE9	27.9	47.8	24.3	26.1	51.2	18.7	16.8	14.3	28.0	38.2	2.7
DEA	29.6	46.3	24.1	26.2	53.3	21.8	20.0	14.5	31.7	31.7	2.1
DEB	23.8	46.3	29.9	26.2	50.7	16.9	16.6	22.5	32.2	25.5	3.2
DEC	15.4	49.9	34.7	26.2	51.1	13.3	0.0	16.5	55.3	24.1	4.2
DED	23.5	52.1	24.4	26.3	49.9	10.4	20.1	21.0	24.0	33.0	1.8
DEE	28.8	54.4	16.9	26.3	50.9	16.5	14.2	18.2	25.0	36.2	6.5
DEF	17.7	63.7	18.6	26.4	52.1	7.8	20.1	19.5	24.2	35.2	0.9
DEG	27.4	48.0	24.6	26.2	54.3	12.6	21.7	25.6	30.1	20.8	1.7
EL3	15.2	53.9	30.9	25.2	51.2	8.4	6.0	8.9	74.0	10.9	0.3
EL4	21.4	59.5	19.1	25.0	48.0	9.0	4.5	14.1	74.0	7.1	0.3
EL5	17.3	57.8	25.0	25.3	49.3	5.1	7.3	12.2	71.5	8.5	0.5
EL6	19.3	57.0	23.8	25.2	54.5	4.4	3.0	11.8	78.2	6.6	0.5
ES1	26.1	36.5	37.4	25.7	51.3	11.0	10.4	7.3	68.0	12.4	1.9
ES2	19.6	36.1	44.2	25.5	51.1	17.0	12.6	9.9	63.9	12.3	1.3
ES3	24.8	34.8	40.4	25.6	50.0	24.6	12.5	9.6	63.0	13.1	1.8
ES4	31.2	34.1	34.7	25.8	51.5	11.7	10.6	13.3	66.4	8.1	1.6
ES5	28.0	31.0	41.0	25.7	51.7	26.0	14.8	10.0	61.7	12.0	1.4
ES6	37.4	32.6	29.9	25.6	50.9	14.5	8.3	12.3	66.0	11.1	2.2
ES7	30.6	37.3	32.1	25.7	49.6	28.1	10.1	15.7	60.8	8.3	5.3
FR1	18.8	40.9	40.3	24.8	46.1	18.6	13.7	10.8	56.4	17.2	1.9
FRB	21.2	47.3	31.5	25.0	43.1	11.2	19.6	17.8	46.5	14.0	2.2



# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

NUTS 1	Educational degree (%)			Mean age	% Men	% migration background	Family composition (%)				
	ISCED 0-2	ISCED 3-4	ISCED 5+				Couples w/o children	Couples with children	Living with parents	Living alone	Other forms with children
FRC	20.7	51.4	27.9	25.3	50.8	4.2	19.4	21.4	44.3	12.4	2.5
FRD	25.0	48.8	26.2	24.1	53.8	7.4	11.7	24.4	54.6	7.2	2.0
FRE	25.4	48.1	26.5	24.5	51.2	5.5	15.0	17.7	53.5	10.9	2.9
FRF	21.1	47.0	31.8	24.9	47.3	9.4	15.8	22.5	44.4	15.0	2.3
FRG	18.4	49.4	32.3	24.6	52.6	3.6	16.5	22.3	47.2	13.1	0.9
FRH	20.3	44.9	34.8	25.0	50.9	4.5	13.6	20.9	44.0	19.4	2.1
FRI	22.1	46.4	31.4	25.0	48.8	9.6	17.8	18.3	43.2	18.0	2.6
FRJ	24.0	44.7	31.3	24.9	49.4	5.2	16.1	17.4	46.3	18.8	1.4
FRK	25.0	40.7	34.3	24.0	49.2	12.1	15.3	14.9	49.2	19.9	0.7
FRL	25.1	49.5	25.4	24.4	54.7	12.0	16.1	12.6	58.7	8.9	3.7
FRM	17.7	37.6	44.6	23.6	22.5	15.4	12.1	5.1	82.9	0.0	0.0
HU1	18.6	47.6	33.8	25.5	50.8	2.6	18.6	16.0	51.2	12.8	1.4
HU2	27.4	55.0	17.6	24.7	50.6	0.5	11.2	21.1	58.3	6.9	2.5
HU3	32.6	54.3	13.1	24.9	51.6	1.6	11.6	25.7	53.0	6.0	3.7
ITC	26.9	50.2	22.9	25.4	52.5	17.5	8.6	10.2	68.2	11.4	1.5
ITF	39.1	43.4	17.5	25.3	51.2	7.3	3.1	11.8	76.0	7.9	1.2
ITG	36.6	48.7	14.7	25.5	50.5	9.4	2.6	13.3	72.9	8.9	2.3
ITH	26.7	51.6	21.7	25.6	51.4	20.0	8.9	13.2	66.7	10.2	0.9
ITI	26.2	50.6	23.2	25.6	50.9	15.8	5.4	11.7	69.2	12.1	1.5
PL2	17.7	48.0	34.3	26.7	48.8	0.7	15.2	24.8	50.6	7.7	1.6
PL4	20.7	50.8	28.5	26.6	50.9	1.0	10.9	27.9	53.3	5.2	2.7
PL5	19.5	49.7	30.7	26.3	48.1	2.5	13.3	21.8	55.0	7.4	2.4
PL6	22.1	49.2	28.6	26.5	49.2	0.4	10.6	28.3	52.4	6.5	2.2
PL7	19.1	53.0	27.9	26.3	51.4	0.2	9.7	27.2	57.1	4.0	2.0
PL8	16.9	52.2	30.9	26.4	49.7	0.3	8.2	26.3	57.7	3.9	3.9
PL9	19.6	45.3	35.1	26.5	49.9	3.3	14.6	25.5	51.2	7.4	1.3
PT1	26.5	44.6	28.8	25.2	50.5	7.2	10.7	10.9	71.1	4.9	2.3
PT2	35.6	41.2	23.2	25.7	48.4	1.8	10.6	12.5	69.1	3.5	4.2
PT3	29.5	43.2	27.3	25.8	52.0	8.0	8.7	11.5	70.5	5.0	4.2
RO1	33.1	55.0	12.0	26.0	52.1	0.0	7.8	26.6	56.1	8.6	1.0
RO2	33.4	53.9	12.7	25.2	51.7	0.0	11.1	23.4	56.8	7.9	0.7
RO3	27.0	46.1	26.9	26.4	49.5	0.0	15.4	24.2	46.5	10.8	3.2
RO4	22.6	67.3	10.1	25.8	51.1	0.0	9.0	27.2	53.6	8.8	1.4
RS1	20.1	55.5	24.4	25.7	51.3	5.9	5.5	22.1	64.5	6.3	1.5
RS2	19.4	62.5	18.1	25.7	51.6	1.0	5.9	22.6	67.5	2.5	1.5
SE1	27.8	38.9	33.3	26.7	48.6	27.8	20.8	21.5	11.2	43.5	3.1
SE2	27.3	44.1	28.6	26.2	52.4	23.0	19.1	22.5	13.1	43.1	2.2
SE3	24.0	56.9	19.2	26.4	53.4	12.8	18.9	21.6	6.5	48.8	4.2

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Table A. 3. Descriptive statistics of individual-level socio-demographic and socio-economic profile variables at NUTS 1 level (continued)

NUTS 1	Health status (%)				Residential area (%)			N (max)
	Very good	Good	Fair	(Very) poor	Good	Suburb	Very good	
AT1	51.7	37.4	9.5	1.4	58.9	17.7	23.4	1042
AT2	61.5	29.3	8.3	0.8	32.3	29.0	38.7	469
AT3	58.1	32.2	8.6	1.2	17.7	42.0	40.4	748
BE1	61.9	32.1	3.8	2.2	100.0	0.0	0.0	754
BE2	48.8	43.8	5.3	2.0	22.4	68.2	9.4	1501
BE3	56.7	33.6	6.8	3.0	26.2	41.9	31.8	1221
BG3	44.1	50.8	4.3	0.8	36.4	28.6	34.9	1239
BG4	49.2	47.8	2.0	0.9	56.0	21.5	22.6	1188
DE1	42.6	47.0	7.7	2.7	87.9	0.0	12.1	901
DE2	48.8	38.9	9.3	3.0	71.6	0.0	28.4	612
DE3	42.2	48.4	8.3	1.0	100.0	0.0	0.0	241
DE4	39.0	49.4	8.8	2.8	71.6	0.0	28.4	122
DE5	43.2	38.7	12.0	6.2	100.0	0.0	0.0	68
DE6	51.5	35.8	7.9	4.9	100.0	0.0	0.0	121
DE7	42.2	48.5	6.7	2.6	87.4	0.0	12.6	477
DE8	36.9	50.6	9.4	3.1	68.5	0.0	31.5	125
DE9	38.5	45.3	12.4	3.8	78.2	0.0	21.8	605
DEA	39.4	45.2	11.4	3.9	95.1	0.0	4.9	935
DEB	37.9	49.4	9.3	3.3	73.7	0.0	26.3	226
DEC	26.6	57.2	11.4	4.8	92.4	0.0	7.6	50
DED	43.0	47.6	7.8	1.5	84.0	0.0	16.0	469
DEE	36.8	53.3	6.4	3.4	71.4	0.0	28.6	142
DEF	52.6	42.5	5.0	0.0	78.6	0.0	21.4	130
DEG	40.0	52.6	7.5	0.0	71.5	0.0	28.5	125
EL3	77.8	18.0	3.4	0.8	65.4	31.6	3.0	1017
EL4	90.6	6.9	1.3	1.2	23.4	32.9	43.7	718
EL5	87.7	10.0	1.0	1.4	28.2	38.4	33.4	1105
EL6	90.2	7.7	1.0	1.2	26.3	25.2	48.5	945
ES1	24.0	64.8	9.8	1.4	41.5	36.7	21.8	811
ES2	30.5	60.3	8.0	1.2	57.3	27.9	14.7	1098
ES3	37.1	53.0	9.3	0.6	83.3	14.9	1.8	926
ES4	36.3	54.5	7.8	1.5	38.3	31.8	30.0	1207
ES5	40.5	50.3	7.4	1.8	60.9	30.8	8.4	2527
ES6	32.2	59.3	7.5	1.0	48.7	44.3	7.0	1832
ES7	24.6	69.1	3.3	3.0	59.8	33.0	7.2	298
FR1	54.9	35.8	7.4	2.0	89.1	8.1	2.8	980
FRB	49.0	43.6	3.7	3.6	33.0	20.4	46.6	219
FRC	45.6	39.7	13.6	1.1	16.6	29.8	53.6	269



# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

NUTS 1	Health status (%)				Residential area (%)			N (max)
	Very good	Good	Fair	(Very) poor	Good	Suburb	Very good	
FRD	53.1	36.6	7.9	2.3	20.5	20.5	59.0	344
FRE	49.1	36.4	13.3	1.2	36.0	40.4	23.6	626
FRF	48.4	36.3	10.5	4.8	29.8	34.2	36.0	534
FRG	52.4	38.1	8.6	0.9	22.5	24.2	53.4	320
FRH	60.1	33.2	4.5	2.2	25.2	26.8	48.1	347
FRI	51.3	35.8	10.7	2.1	26.2	29.3	44.5	478
FRJ	54.9	33.7	9.6	1.9	26.9	39.5	33.6	474
FRK	52.8	36.1	8.2	2.9	40.8	29.8	29.4	763
FRL	51.0	36.5	9.5	2.9	54.9	33.0	12.1	357
FRM	54.7	24.6	15.1	5.7	0.0	96.4	3.6	36
HU1	42.9	49.0	6.9	1.2	58.2	36.0	5.7	674
HU2	51.4	41.6	6.2	0.7	26.2	28.8	45.0	859
HU3	41.0	51.4	6.3	1.3	18.0	42.4	39.6	1272
ITC	36.7	59.9	2.0	1.4	41.5	41.5	16.9	1097
ITF	37.7	57.7	3.4	1.1	43.7	39.7	16.6	1201
ITG	34.9	59.4	3.9	1.8	28.8	50.7	20.5	530
ITH	35.5	59.3	3.2	1.9	26.7	53.5	19.9	1044
ITI	37.5	55.2	6.2	1.1	39.3	42.2	18.5	1134
PL2	37.4	53.1	7.6	1.9	46.0	24.1	29.8	723
PL4	39.3	53.9	5.3	1.5	30.0	31.5	38.5	809
PL5	39.8	51.0	6.1	3.1	39.6	27.1	33.3	530
PL6	37.5	53.3	5.6	3.6	31.3	26.8	41.9	968
PL7	35.6	56.9	5.6	2.0	32.5	18.8	48.6	599
PL8	36.8	55.5	5.5	2.2	22.4	23.3	54.3	905
PL9	44.8	48.1	5.1	1.9	36.2	24.6	39.2	690
PT1	27.9	52.3	17.5	2.3	45.6	32.3	22.1	2632
PT2	22.3	58.1	17.0	2.6	31.6	14.6	53.7	591
PT3	17.8	54.8	23.6	3.8	47.4	36.5	16.1	908
RO1	65.9	32.8	0.6	0.6	25.9	27.3	46.8	798
RO2	60.1	34.3	2.8	2.8	25.1	27.9	47.1	767
RO3	74.4	22.9	1.9	0.8	44.0	24.2	31.8	609
RO4	69.2	29.3	0.8	0.7	22.1	34.8	43.1	615
RS1	58.4	36.8	3.4	1.4	44.6	31.0	24.5	1334
RS2	58.2	39.0	1.6	1.2	27.0	20.0	53.0	1946
SE1	29.4	50.1	17.3	3.2	66.0	26.3	7.7	691
SE2	29.4	49.5	17.5	3.6	40.9	43.4	15.8	758
SE3	24.6	54.4	17.7	3.3	13.5	54.3	32.2	390

Note: Weighted. Copyright 2024 by Hornberg/Heisig/Solga.



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Table A 4. Descriptive statistics of contextual factors at national level

Country codes	Education system					Labour market institutions				
	Tracking	% vocational oriented upper secondary education	% ISCED 0–2	% ISCED 5+	Public spending in tertiary education (k€)	% employment in traditional primary sector	% employment in large-scale engineering sector	% employment in larger enterprises	EPL	Employment rate (%)
AT	2.38	68.9	14.1	34.6	6197.40	3.41	26.54	43.79	0.51	73.35
BE	0.15	53.6	18.5	44.9	6664.10	0.99	22.97	47.40	0.66	66.34
BG	0.13	52.0	16.6	29.6	945.20	6.43	31.96	21.27	0.54	69.12
CH	0.12	61.9	12.6	45.0	5745.80	1.58	18.88	34.81	0.32	80.24
CY	-0.46	17.6	15.4	47.0	229.90	2.12	15.78	24.31	0.48	72.25
CZ	1.81	69.1	5.6	26.4	2953.60	2.63	38.99	36.47	0.66	74.46
DE	2.40	47.2	16.3	32.1	42720.00	1.13	30.37	51.16	0.66	76.86
DK	-1.01	39.1	17.9	41.9	5687.90	1.78	21.19	11.65	0.37	76.47
EE	-1.01	40.3	10.5	41.2	387.50	N/A	N/A	N/A	0.58	N/A
EL	0.11	33.8	20.2	34.6	1588.70	10.58	20.88	15.52	0.38	58.38
ES	-0.44	38.7	36.6	40.4	12835.30	4.00	22.42	29.63	0.79	63.54
FI	-0.98	67.3	11.1	42.3	2986.60	3.25	24.81	28.80	0.51	73.61
FR	-0.42	40.1	17.8	40.7	27264.20	2.33	21.10	43.68	0.64	68.41
HR	-0.45	70.0	12.8	24.9	743.40	6.46	30.38	31.05	0.61	64.47
HU	0.13	49.7	13.7	29.3	1646.00	4.29	33.39	39.98	0.40	74.24
IE	-0.45	23.9	12.5	52.9	2625.30	3.71	23.99	39.85	NA	69.94
IT	0.13	51.9	37.3	20.0	14654.50	3.83	28.67	28.06	0.74	59.12
LT	0.13	25.8	5.1	45.4	680.40	5.15	30.67	48.73	0.49	73.40
LU	1.26	60.8	19.7	50.5	228.60	1.04	11.52	33.44	0.54	70.12
LV	-1.01	40.1	7.8	39.0	346.50	5.57	28.68	25.59	0.55	71.09
MT	0.68	27.0	37.1	32.1	224.50	0.84	21.20	55.86	0.55	75.49
PL	-0.46	53.8	6.7	33.7	9981.90	8.29	32.84	37.44	0.82	71.29
PT	-0.41	38.8	43.8	28.5	2056.00	2.44	26.84	32.02	0.55	71.26
RO	-0.43	56.9	19.0	18.8	3367.60	11.24	32.88	34.00	0.58	62.83
RS	-0.46	73.2	17.1	24.9	902.40	N/A	N/A	N/A	0.53	N/A
SE	-1.01	35.4	12.5	46.6	7253.70	1.34	21.29	42.05	0.65	76.71
SK	1.82	67.6	6.7	27.9	1050.20	2.45	37.62	27.91	0.62	69.44
Mean	0.08	48.31	17.22	36.12	5998.79	3.87	26.23	34.58	0.57	70.50
SD	1.02	15.84	10.17	9.34	9458.93	2.87	6.69	10.81	0.12	5.55

Note: N/A not available. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table A 4. Descriptive statistics of contextual factors at national level (continued)

Country code	(Family & health) Care system				Economy				
	% 0-2 in childcare	Gender role attitudes	Public spending in healthcare (k€)	Physicians per 100 000 inhabitants	GDP per capita (k€)	Income inequality (P80/P20)	Unemployment (%)	Ratio 15-34/35-64	Median age
AT	39.7	2.08	5485.57	540.91	45300	4.00	6.2	56.90	43.6
BE	63.2	1.77	4789.57	324.78	43800	3.42	6.3	61.38	41.8
BG	24.7	2.82	884.18	429.55	10300	7.45	5.3	49.43	45.0
CH	37.0	1.99	9175.30	443.60	75200	4.87	5.1	56.86	42.70
CY	36.5	3.03	2515.24	427.23	27700	4.23	7.5	75.85	38.0
CZ	6.7	2.61	2151.86	425.59	22300	3.43	2.8	50.80	43.6
DE	43.9	1.87	5599.48	452.97	43500	4.98	3.7	54.87	45.9
DK	90.7	1.48	6223.01	437.66	58600	3.93	5.1	66.87	42.2
EE	44.3	2.04	1769.74	346.90	23400	5.03	6.2	56.67	42.5
EL	32.7	2.94	1576.75	629.22	17100	5.79	14.7	50.06	45.5
ES	67.1	1.95	2733.59	448.66	25800	6.19	14.9	47.77	44.7
FI	54.8	1.60	4590.30	361.15	45200	3.58	7.7	62.54	43.3
FR	67.2	1.76	4542.27	318.34	36700	4.41	7.9	61.44	42.0
HR	49.6	2.36	1195.09	371.10	14800	4.77	7.6	54.64	45.3
HU	21.0	2.46	1170.72	329.83	15900	4.15	4.1	55.21	43.6
IE	19.6	1.74	5688.64	402.45	86500	3.75	6.2	61.37	38.5
IT	44.0	2.64	2837.00	410.47	30800	5.86	9.5	47.26	47.6
LT	29.8	2.60	1568.36	447.47	20100	6.14	7.1	56.42	44.1
LU	78.4	N/A	6402.14	298.49	1.1e+05	4.59	5.3	63.09	39.6
LV	39.1	2.50	1612.14	326.73	17700	6.63	7.6	53.33	43.9
MT	31.6	N/A	3064.16	397.21	29600	5.03	3.8	70.58	40.1
PL	25.1	2.48	983.14	344.11	15100	4.03	3.4	54.94	41.9
PT	53.0	2.36	2308.06	562.04	21000	5.66	6.7	50.41	45.8
RO	13.6	3.11	817.47	350.88	12600	7.10	5.6	54.03	43.0
RS	23.7	2.56	781.29	302.93	7800	5.95	11.1	54.99	44.0
SE	79.2	1.41	5812.60	431.92	51900	4.04	8.9	68.07	40.6
SK	3.1	3.06	1427.52	368.02	18400	3.20	6.8	55.23	41.4
Mean	41.46	2.29	3248.34	404.82	34451.85	4.90	6.93	57.45	42.97
SD	22.35	0.51	2244.42	79.96	25099.39	1.17	2.96	7.06	2.31

Note: N/A not available. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.



Table A 5. Descriptive statistics of contextual factors at NUTS 1 level

NUTS 1	Education system			Labour market institutions			
	% vocational oriented upper secondary education	% ISCED 0–2	% ISCED 5+	% employment in traditional primary sector	% employment in large-scale engineering sector	% employment in larger enterprises	Employment rate (%)
AT1	64.2	14.8	39.0	2.58	23.79	44.93	70.85
AT2	69.4	12.2	31.3	4.78	26.84	40.62	73.18
AT3	73.7	14.2	31.0	3.62	29.50	44.19	76.52
BE1	42.1	24.1	52.2	0.05	17.01	47.48	57.80
BE2	56.1	15.9	45.4	1.07	24.90	48.54	71.15
BE3	54.1	21.2	41.3	1.13	20.92	44.95	60.70
BG3	55.7	20.2	23.9	8.34	32.47	21.76	66.51
BG4	48.3	13.2	35.1	4.76	31.52	20.85	71.57
DE1	48.6	17.3	34.2	0.67	37.82	54.65	79.07
DE2	57.2	13.2	34.9	1.32	33.93	53.27	80.40
DE3	34.4	15.0	46.7	0.08	23.60	49.34	74.67
DE4	32.4	9.3	31.3	1.71	23.03	46.60	79.35
DE5	55.3	23.9	33.4	0.06	29.20	52.21	71.16
DE6	43.2	14.3	41.3	0.11	25.13	48.72	75.32
DE7	48.4	19.5	32.1	0.71	29.69	50.89	74.48
DE8	46.6	9.8	27.4	2.54	20.28	46.34	77.16
DE9	49.5	19.8	28.5	2.31	28.78	50.40	76.54
DEA	40.8	20.9	29.4	0.83	29.22	52.35	73.50
DEB	48.7	18.9	29.7	1.03	30.77	50.80	76.78
DEC	47.4	18.8	27.3	0.57	25.51	49.72	75.51
DED	47.2	5.8	31.7	1.37	29.24	46.14	79.09
DEE	50.6	7.5	25.1	1.64	28.13	43.83	77.07
DEF	49.8	14.5	28.2	1.77	24.43	47.82	78.60
DEG	48.2	7.4	28.4	1.85	29.96	47.98	78.19
EL3	26.6	11.2	45.0	0.77	24.23	22.74	61.88
EL4	40.9	26.2	26.6	11.74	15.46	8.73	56.84
EL5	40.0	23.1	30.8	14.12	21.68	9.98	55.47
EL6	32.7	27.7	26.7	22.45	16.77	12.12	56.80
ES1	41.6	34.7	42.4	4.91	22.76	28.29	63.98
ES2	42.3	27.5	48.7	2.81	29.30	33.71	68.14
ES3	34.4	25.6	49.7	0.12	21.05	39.78	69.88
ES4	42.4	42.8	34.3	7.27	23.28	26.86	63.19
ES5	40.9	36.3	40.4	1.45	25.49	27.92	66.00
ES6	33.7	45.1	33.9	9.49	16.44	24.81	56.64
ES7	39.7	39.1	35.6	3.95	14.23	26.88	52.99



NUTS 1	Education system			Labour market institutions			
	% vocational oriented upper secondary education	% ISCED 0–2	% ISCED 5+	% employment in traditional primary sector	% employment in large-scale engineering sector	% employment in larger enterprises	Employment rate (%)
FR1	31.3	17.1	54.4	0.08	19.76	52.20	71.55
FRB	42.2	19.1	32.7	2.98	24.08	46.09	68.61
FRC	43.9	18.2	34.5	3.34	23.84	40.58	69.75
FRD	43.8	18.7	34.1	5.41	23.85	41.92	67.43
FRE	43.4	20.7	34.5	2.08	24.47	48.73	64.66
FRF	42.5	19.6	33.5	2.56	26.11	43.97	65.44
FRG	43.7	14.1	38.6	4.11	24.39	46.22	72.38
FRH	41.5	12.9	40.4	3.01	20.78	42.02	70.65
FRI	42.5	15.1	37.7	4.67	17.70	33.68	70.14
FRJ	41.0	16.4	41.5	2.77	16.41	40.19	66.36
FRK	40.3	15.0	42.3	1.94	23.61	41.66	69.51
FRL	39.0	19.2	40.8	0.79	16.73	38.48	67.92
FRM	38.3	27.5	27.8	2.20	14.31	28.00	70.71
HU1	38.6	7.0	45.9	1.25	28.66	39.33	78.32
HU2	56.1	14.3	23.1	4.77	37.85	42.16	74.61
HU3	53.6	18.8	20.3	6.63	33.95	38.75	70.65
ITC	55.0	34.9	20.9	2.05	33.61	32.24	66.86
ITF	49.7	44.8	16.8	6.82	22.23	22.06	45.87
ITG	50.6	47.2	15.5	7.96	15.56	19.88	44.84
ITH	59.0	32.3	21.2	3.15	34.12	29.69	68.26
ITI	44.2	31.2	23.7	2.86	26.58	28.78	63.42
PL2	55.9	5.6	33.8	2.93	36.59	40.65	69.48
PL4	58.1	6.3	28.6	8.06	35.65	35.14	72.44
PL5	54.9	6.0	34.5	6.00	34.69	42.34	72.57
PL6	56.9	8.7	30.3	9.55	32.07	35.54	70.75
PL7	52.6	8.6	30.3	11.63	33.86	35.41	71.16
PL8	54.2	7.5	31.2	14.72	28.24	32.41	67.57
PL9	42.3	5.3	46.1	8.24	27.78	40.02	75.86
PT1	39.0	43.0	29.0	2.29	27.51	32.21	71.53
PT2	41.0	62.1	15.7	7.42	15.87	25.23	65.55
PT3	31.8	51.7	23.5	3.54	11.94	31.04	66.99
RO1	58.5	18.4	18.0	8.69	36.48	37.51	64.29
RO2	59.4	25.8	12.6	20.09	26.68	27.31	60.83
RO3	50.3	14.9	26.9	5.14	31.44	33.43	66.81
RO4	59.7	16.1	16.9	11.40	39.48	40.03	58.18
RS1	71.0	13.9	29.9	NA	NA	NA	NA
RS2	75.3	20.6	19.4	NA	NA	NA	NA

NUTS 1	Education system			Labour market institutions			
	% vocational oriented upper secondary education	% ISCED 0–2	% ISCED 5+	% employment in traditional primary sector	% employment in large-scale engineering sector	% employment in larger enterprises	Employment rate (%)
SE1	32.6	11.6	51.6	0.67	21.22	45.96	77.68
SE2	35.6	13.6	44.8	1.52	21.81	40.82	76.08
SE3	41.3	12.0	38.7	2.57	20.08	35.19	75.94

Notes: Tracking and public spending in tertiary education not available at NUTS 1. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.



Table A 5. Descriptive statistics of contextual factors at NUTS 1 level (continued)

NUTS 1	(Family & health) Care system		Economy			
	Gender role attitudes	Physicians per 100 000 inhabitants	GDP per capita (k€)	Unemployment (%)	Ratio 15-34/35-64	Median age
AT1	1.89	587.95	45000	8.6	58.36	42.9
AT2	2.28	516.02	40800	4.7	52.80	46.0
AT3	2.19	497.77	48000	4.2	57.48	43.1
BE1	1.70	399.84	73400	12.4	75.57	36.0
BE2	1.78	303.75	45200	3.9	58.16	43.3
BE3	1.77	337.93	31500	8.8	62.66	41.6
BG3	2.85	382.39	7500	7.0	47.67	46.1
BG4	2.77	441.43	13100	3.7	51.13	43.9
DE1	1.92	N/A	48700	3.2	58.37	44.4
DE2	1.92	N/A	50800	2.8	56.46	44.8
DE3	1.65	N/A	45200	5.8	63.82	41.2
DE4	1.97	N/A	31900	3.1	39.03	50.6
DE5	1.80	N/A	52100	6.5	64.46	43.5
DE6	1.61	N/A	71000	4.6	65.24	40.9
DE7	1.92	N/A	48600	3.9	56.23	45.0
DE8	1.82	N/A	30900	3.8	42.77	50.7
DE9	2.00	N/A	39500	3.4	55.12	46.7
DEA	1.86	N/A	41700	4.2	56.62	45.6
DEB	1.84	N/A	39600	3.6	53.77	46.9
DEC	2.09	N/A	37000	3.2	51.55	49.4
DED	1.70	N/A	33400	3.4	47.85	49.0
DEE	1.86	N/A	31400	4.3	42.80	51.4
DEF	1.67	N/A	36100	3.2	51.95	48.0
DEG	1.89	N/A	31400	3.5	43.29	50.6
EL3	2.65	804.26	23300	11.9	48.48	44.9
EL4	2.70	502.68	14100	16.6	57.87	42.3
EL5	3.24	609.65	13100	16.8	50.40	46.4
EL6	3.09	455.06	14200	15.9	48.54	46.8
ES1	1.85	473.86	23700	11.7	38.57	48.9
ES2	1.66	540.00	30900	10.5	44.49	46.4
ES3	2.28	555.66	35400	11.70	49.76	43.4
ES4	2.34	353.42	22400	14.8	45.38	46.7
ES5	1.93	438.94	26900	13.5	49.18	44.1
ES6	1.89	382.86	19700	20.9	51.02	43.0
ES7	1.05	502.29	19700	23.5	48.64	44.2
FR1	1.51	358.89	61100	8.0	69.39	37.8
FRB	1.92	241.50	30000	7.2	56.85	44.6
FRC	1.93	285.88	28900	7.1	56.98	45.3



NUTS 1	(Family & health) Care system		Economy			
	Gender role attitudes	Physicians per 100 000 inhabitants	GDP per capita (k€)	Unemployment (%)	Ratio 15-34/35-64	Median age
FRD	1.60	275.55	30100	7.1	59.64	43.6
FRE	2.28	282.74	28900	9.1	64.85	40.3
FRF	1.87	304.61	29800	8.1	59.95	43.0
FRG	1.73	277.85	32500	6.0	60.72	42.4
FRH	1.69	315.71	31000	5.8	57.38	44.6
FRI	1.67	326.05	30900	7.6	55.50	46.2
FRJ	1.78	331.73	30100	8.5	58.96	44.5
FRK	1.62	322.38	35300	7.2	61.70	41.7
FRL	1.76	383.52	37000	8.1	56.70	44.9
FRM	NA	296.22	28900	9.1	50.99	46.1
HU1	2.12	417.74	24300	2.9	55.75	42.6
HU2	2.68	277.41	13400	2.9	52.05	44.5
HU3	2.56	291.72	10900	6.0	57.32	43.8
ITC	2.51	386.97	38300	6.5	45.47	48.2
ITF	3.05	391.70	20600	16.0	52.39	46.0
ITG	2.97	453.09	19900	17.2	49.66	47.0
ITH	2.37	391.14	36600	5.3	45.53	48.1
ITI	2.42	459.47	32600	8.6	44.37	48.2
PL2	2.58	351.07	14700	3.1	54.45	42.0
PL4	2.57	288.63	14600	2.6	55.01	41.5
PL5	2.32	340.74	15700	3.7	52.95	42.6
PL6	2.40	305.16	12800	3.4	55.73	41.4
PL7	2.50	367.34	13200	4.5	51.52	43.8
PL8	2.59	327.90	10500	4.6	56.02	42.2
PL9	2.30	449.58	24000	2.8	57.41	40.6
PT1	NA	568.23	21100	6.7	50.01	46.0
PT2	NA	383.13	18800	7.3	61.49	40.6
PT3	NA	501.28	19800	8.1	55.12	43.6
RO1	3.32	359.74	11800	4.0	56.27	42.1
RO2	3.00	255.91	8900	6.5	57.17	42.7
RO3	3.12	409.95	18400	5.6	50.45	43.2
RO4	2.97	403.50	11100	6.4	51.86	44.5
RS1	2.47	310.26	10000	9.2	54.23	43.1
RS2	2.69	295.14	5500	13.1	55.81	45.1
SE1	1.32	457.65	59900	8.9	69.31	39.2
SE2	1.47	422.23	46800	9.3	67.98	40.8
SE3	1.44	396.30	46300	8.0	65.29	44.0

Notes: N/A not available. % 0-2 childcare, Public spending in healthcare, and income inequality (P80/P20) are not available. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table A 6. Correlation matrix of contextual factors at national level

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1: % vocational orientation in upper secondary education	1																		
2: Tracking	0,36	1																	
3: % ISCED 0-2	-0,24	-0,06	1																
4: % ISCED 5+	-0,47*	-0,23	-0,24	1															
5: Public spending in tertiary education	-0,03	0,29	0,13	-0,05	1														
6: Employment (%)	-0,03	0,16	-0,34	0,37	0,05	1													
7: % employment in traditional primary sector	0,06	-0,26	-0,15	-0,43*	-0,22	-0,59*	1												
8: % employment in large-scale engineering sector	0,40*	0,27	-0,32	-0,70*	0,02	-0,06	0,37	1											
9: % employment in larger enterprises	-0,06	0,37	-0,02	0,09	0,34	0,34	-0,35	0,07	1										
10: EPL	0,10	0,07	0,17	-0,24	0,40*	-0,33	0,01	0,31	0,29	1									
11: GDP per capita (k€)	-0,05	0,14	-0,01	0,68*	0,10	0,32	-0,53*	-0,65*	0,12	-0,22	1								
12: Income inequality (P80/P20)	-0,16	-0,23	0,34	-0,34	-0,05	-0,39	0,53*	0,07	-0,21	-0,03	-0,40*	1							
13: Unemployment (%)	-0,15	-0,33	0,31	0,04	-0,04	-0,63*	0,28	-0,31	-0,39	0,06	-0,19	0,33	1						
14: Ratio 15-34/35-64	-0,38*	-0,16	-0,13	0,58*	-0,11	0,48*	-0,49*	-0,58*	0,20	-0,26	0,42*	-0,49*	-0,25	1					
15: % 0-2 childcare	-0,18	-0,32	0,30	0,48*	0,25	0,07	-0,42*	-0,67*	-0,10	0,02	0,47*	-0,12	0,22	0,34	1				
16: Gender role attitudes	0,09	0,22	-0,02	-0,58*	-0,36	-0,43*	0,58*	0,46*	-0,31	-0,04	-0,71*	0,43*	0,06	-0,38	-0,74*	1			
17: Public spending healthcare	-0,02	0,15	0,02	0,61*	0,32	0,49*	-0,64*	-0,62*	0,19	-0,25	0,87*	-0,42*	-0,17	0,42*	0,54*	-0,74*	1		
18: Number of physicians per 100 000 inhabitants	-0,28	0,22	0,30	-0,04	0,04	-0,06	0,14	-0,07	-0,22	-0,26	-0,07	0,14	0,29	-0,21	0,01	0,08	0,10	1	
19: Median age	0,32	0,10	0,27	-0,63*	0,27	-0,36	0,34	0,45*	-0,18	0,12	-0,49*	0,51*	0,28	-0,81*	-0,06	0,19	-0,32	0,34	1

Notes: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Copyright 2024 by Hornberg/Heisig/Solga.

Table A 7. Correlation matrix of contextual factors at NUTS 1 level

	1	2	3	4	5	6	7	8	9	10	11	12	13
1: % vocational orientation in upper secondary education	1												
2: % ISCED 0-2	-0,23*	1											
3: % ISCED 5+	-0,46*	-0,32*	1										
4: Employment (%)	0,10	-0,61*	0,27*	1									
5: % employment in traditional primary sector	0,17	0,14	-0,48*	-0,49*	1								
6: % employment in large-scale engineering sector	0,62*	-0,44*	-0,26*	0,38*	0,02	1							
7: % employment in larger enterprises	0,16	-0,50*	0,33*	0,69*	-0,64*	0,29*	1						
8: GDP per capita (k€)	0,37*	0,14	-0,65*	-0,45*	0,67*	0,37*	-0,59*	1					
9: Unemployment (%)	-0,28*	0,19	0,21	-0,17	-0,08	-0,18	-0,40*	0,09	1				
10: Ratio 15-34/35-64	0,06	0,07	-0,42*	0,11	-0,03	0,08	-0,11	0,08	0,20	1			
11: Gender role attitudes	-0,21*	-0,14	0,55*	0,41*	-0,68*	-0,16	0,64*	-0,68*	0,12	-0,17	1		
12: Number of physicians per 100 000 inhabitants	-0,32*	0,62*	0,04	-0,80*	0,27*	-0,63*	-0,63*	0,07	0,35*	-0,07	-0,18	1	
13: Median age	-0,06	-0,15	0,39*	0,08	-0,18	-0,18	0,38*	-0,33*	-0,31*	-0,83*	0,47*	-0,07	1

Notes: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Copyright 2024 by Hornberg/Heisig/Solga.

## Section B: Three-level regressions 2021

Table B 1. Three-level regressions of labour market integration on socio-demographic and socio-economic profile characteristics, 2021

	Unemployment (AME)	NEET (AME)	ISEI scores	
			1	2
<b>Educational attainment</b> (ref.: less-educated)				
Intermediate-educated	-0.100*** (0.010)	-0.133*** (0.008)	6.473*** (0.278)	6.232*** (0.278)
Tertiary-educated	-0.155*** (0.016)	-0.176*** (0.010)	28.499*** (0.298)	28.053*** (0.299)
<b>Health status</b> (ref.: very good)				
Good	0.026*** (0.005)	0.030*** (0.004)	-1.150*** (0.193)	-1.086*** (0.192)
Fair	0.104*** (0.013)	0.121*** (0.009)	-3.183*** (0.354)	-2.835*** (0.354)
(Very) poor	0.265*** (0.027)	0.348*** (0.019)	-4.051*** (0.762)	-2.953*** (0.765)
<b>Family composition</b> (ref.: couples without children)				
Couples with children	0.054*** (0.009)	0.125*** (0.009)	-3.469*** (0.289)	-3.097*** (0.291)
Living with parents	0.104*** (0.013)	0.063*** (0.006)	-2.864*** (0.278)	-2.573*** (0.278)
Living alone	0.044*** (0.008)	0.018*** (0.005)	-1.314*** (0.303)	-1.163*** (0.302)
Other forms with children (including single parenthood)	0.107*** (0.018)	0.158*** (0.015)	-5.153*** (0.602)	-4.622*** (0.601)
<b>Gender</b> (ref.: women): Men	-0.052*** (0.006)	-0.056*** (0.004)	-1.747*** (0.185)	-2.023*** (0.185)
<b>Age</b> (ref.: 16-19)				
20-24	-0.045*** (0.013)	0.138*** (0.010)	-1.659*** (0.564)	-1.445*** (0.563)
25-29	-0.098*** (0.015)	0.183*** (0.012)	-0.127 (0.563)	-0.098 (0.565)
30-34	-0.123*** (0.016)	0.155*** (0.011)	0.340 (0.572)	0.314 (0.575)
<b>Migration background</b> (ref.: no): Yes	0.025*** (0.007)	0.038*** (0.005)	-4.859*** (0.288)	-4.777*** (0.287)
<b>Residential area</b> (ref.: cities)				
Towns and suburbs	0.003 (0.005)	0.008* (0.004)	-2.091*** (0.231)	-2.115*** (0.231)
Rural areas	-0.020*** (0.006)	0.008* (0.004)	-4.852*** (0.240)	-4.968*** (0.239)
<b>Employment status</b> (ref.: employed)				
Unemployed				-4.229*** (0.335)
In education				-2.535*** (0.425)
Inactive				-3.330*** (0.446)
(Intercept)	---	---	35.542*** (1.038)	36.240*** (1.041)
SD (Intercept iso3166:nuts1)	0.408	0.297	1.425	1.392
SD (Intercept iso3166)	0.667	0.341	3.019	3.031
SD (Observations)	---	---	16.141	16.089
ICC	0.2	0.1	0.0	0.0
BIC	24459.5	41569.3	292688.5	292496.7
Number of observations	34,157	56,816	33,759	33,759
Number of NUTS1 regions	75	75	75	75
Number of countries	14	14	14	14

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. For binary dependent variables, AME reported. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.



Table B 2. Three-level regressions of income security and life satisfaction on socio-demographic and socio-economic profile characteristics, 2021

	Log. equivalised disposable income		Poverty (AME)		Life satisfaction	
	1	2	1	2	1	2
<b>Educational attainment</b> (ref.: less-educated)						
Intermediate-educated	0.222*** (0.007)	0.183*** (0.007)	-0.113*** (0.007)	-0.086*** (0.006)	0.406*** (0.022)	0.267*** (0.022)
Tertiary-educated	0.436*** (0.008)	0.374*** (0.008)	-0.184*** (0.011)	-0.147*** (0.008)	0.620*** (0.026)	0.398*** (0.026)
<b>Health status</b> (ref.: very good)						
Good	-0.063*** (0.005)	-0.056*** (0.005)	0.025*** (0.004)	0.021*** (0.004)	-0.641*** (0.017)	-0.601*** (0.017)
Fair	-0.157*** (0.010)	-0.119*** (0.010)	0.069*** (0.008)	0.046*** (0.007)	-1.604*** (0.033)	-1.496*** (0.033)
(Very) poor	-0.220*** (0.018)	-0.106*** (0.018)	0.122*** (0.014)	0.047*** (0.012)	-2.663*** (0.062)	-2.465*** (0.062)
<b>Family composition</b> (ref.: couples without children)						
Couples with children	-0.256*** (0.009)	-0.208*** (0.009)	0.114*** (0.009)	0.084*** (0.008)	0.055+ (0.029)	0.167*** (0.029)
Living with parents	-0.054*** (0.009)	-0.012 (0.009)	0.044*** (0.006)	0.019** (0.006)	-0.277*** (0.028)	-0.245*** (0.028)
Living alone	-0.363*** (0.010)	-0.347*** (0.010)	0.199*** (0.011)	0.196*** (0.010)	-0.445*** (0.030)	-0.344*** (0.029)
Other forms with children (including single parenthood)	-0.418*** (0.019)	-0.353*** (0.018)	0.236*** (0.018)	0.200*** (0.016)	-0.560*** (0.058)	-0.353*** (0.057)
<b>Gender</b> (ref.: women): Men	0.032*** (0.005)	0.006 (0.005)	-0.017*** (0.004)	0.002 (0.003)	-0.025 (0.016)	-0.050** (0.016)
<b>Age</b> (ref.: 16-19)						
20-24	-0.083*** (0.009)	-0.071*** (0.009)	0.040*** (0.006)	0.039*** (0.006)	-0.479*** (0.028)	-0.313*** (0.029)
25-29	0.027** (0.009)	0.012 (0.010)	-0.026*** (0.006)	-0.002 (0.007)	-0.660*** (0.030)	-0.471*** (0.034)
30-34	0.136*** (0.010)	0.106*** (0.011)	-0.063*** (0.007)	-0.031*** (0.007)	-0.684*** (0.032)	-0.541*** (0.036)
<b>Migration background</b> (ref.: no): Yes	-0.268*** (0.008)	-0.252*** (0.008)	0.125*** (0.008)	0.119*** (0.007)	-0.151*** (0.025)	-0.053* (0.025)
<b>Residential area</b> (ref.: cities)						
Towns and suburbs	-0.020** (0.006)	-0.022*** (0.006)	-0.005 (0.004)	-0.003 (0.004)	-0.027 (0.020)	-0.009 (0.019)
Rural areas	-0.092*** (0.007)	-0.099*** (0.007)	0.022*** (0.005)	0.027*** (0.005)	-0.012 (0.021)	0.025 (0.021)
<b>Employment status</b> (ref.: employed)						
Unemployed		-0.382*** (0.008)		0.209*** (0.011)		-0.738*** (0.027)
In education		-0.132*** (0.008)		0.101*** (0.007)		0.092*** (0.025)
Inactive		-0.298*** (0.010)		0.183*** (0.011)		-0.247*** (0.032)
<b>Log equiv. disposable income</b>						0.220*** (0.018)
<b>Poverty</b> (ref.: no): Yes						-0.108*** (0.028)
(Intercept)	9.290*** (0.192)	9.406*** (0.190)	---	---	8.253*** (0.154)	6.184*** (0.213)
SD (Intercept iso3166:nuts1)	0.124	0.112	0.431	0.402	0.150	0.137
SD (Intercept iso3166)	0.715	0.708	0.282	0.252	0.553	0.454
SD (Observations)	0.580	0.568	---	---	1.624	1.596
ICC	0.6	0.6	0.1	0.1	0.1	0.1
BIC	115145.6	112757.4	46187.5	44414.0	180422.8	178914.4
Number of observations	56613	56613	56816	56816	44156	44156
Number of NUTS1 regions	75	75	75	75	75	75
Number of countries	14	14	14	14	14	14

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. For binary dependent variables, AME reported. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

## Section C: Results for 2018

Table C 1. Two-level regressions of labour market integration on socio-demographic and socio-economic profile characteristics, 2018

	Unemployment (AME)	NEET (AME)	ISEI scores	
			1	2
<b>Educational attainment</b> (ref.: less-educated)				
Intermediate-educated	-0.115*** (0.009)	-0.104*** (0.006)	6.313*** (0.217)	6.113*** (0.217)
Tertiary-educated	-0.165*** (0.012)	-0.144*** (0.008)	28.354*** (0.236)	27.982*** (0.237)
<b>Health</b> (ref.: very good)				
Good	0.026*** (0.004)	0.029*** (0.003)	-1.142*** (0.157)	-1.090*** (0.157)
Fair	0.099*** (0.010)	0.114*** (0.008)	-2.169*** (0.283)	-1.944*** (0.283)
(Very) poor	0.316*** (0.022)	0.396*** (0.016)	-4.300*** (0.622)	-3.326*** (0.624)
<b>Family composition</b> (ref.: couples w/o children)				
Couples with children	0.034*** (0.006)	0.131*** (0.008)	-2.374*** (0.231)	-2.079*** (0.233)
Living with parents	0.095*** (0.009)	0.060*** (0.005)	-2.425*** (0.227)	-2.184*** (0.227)
Living alone	0.011+ (0.006)	-0.003 (0.004)	-0.725** (0.256)	-0.691** (0.255)
Other forms with children (including single parenthood)	0.068*** (0.012)	0.133*** (0.012)	-5.255*** (0.470)	-4.954*** (0.469)
<b>Gender</b> (ref.: Women): Men	-0.047*** (0.005)	-0.063*** (0.004)	-1.098*** (0.148)	-1.363*** (0.149)
<b>Age</b> (ref.: 16-19)				
20-24	-0.046*** (0.011)	0.143*** (0.009)	-1.397** (0.450)	-1.463** (0.450)
25-29	-0.097*** (0.012)	0.183*** (0.011)	-0.205 (0.448)	-0.434 (0.451)
30-34	-0.134*** (0.014)	0.141*** (0.009)	1.201** (0.457)	0.864+ (0.461)
<b>Migration background</b> (ref.: no): Yes	-0.006 (0.006)	0.033*** (0.004)	-5.061*** (0.232)	-5.036*** (0.231)
<b>Residential area</b> (ref.: cities)				
Towns and suburbs	-0.011** (0.004)	0.007* (0.003)	-2.694*** (0.178)	-2.795*** (0.178)
Rural areas	-0.003 (0.004)	0.023*** (0.003)	-4.972*** (0.181)	-5.069*** (0.181)
<b>Employment status</b> (ref.: employed)				
Unemployed				-3.041*** (0.242)
In education				-2.669*** (0.332)
Inactive				-2.694*** (0.345)
(Intercept)	---	---	34.771*** (0.859)	35.723*** (0.856)
SD (Intercept iso3166)	0.712	0.470	3.500	3.461
SD (Observations)	---	---	15.873	15.836
ICC	0.1	0.1	0.0	0.0
BIC	38667.6	62580.9	443264.2	443052.5
Number of observations	53066	84542	51227	51227
Number of countries	26 (w/o DE)	26 (w/o DE)	25 (w/o DE, SK)	25 (w/o DE, SK)

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001; w/o without. For binary dependent variables, AME reported. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 2. Two-level regressions of income security and life satisfaction on socio-demographic and socio-economic profile characteristics, 2018

	Log equivalised disposable income		Poverty (AME)		Life satisfaction	
	1	2	1	2	1	2
<b>Educational attainment</b> (ref.: less-educated)						
Intermediate-educated	0.232*** (0.006)	0.196*** (0.006)	-0.127*** (0.006)	-0.101*** (0.005)	0.421*** (0.020)	0.274*** (0.019)
Tertiary-educated	0.466*** (0.007)	0.409*** (0.007)	-0.203*** (0.009)	-0.167*** (0.007)	0.706*** (0.023)	0.468*** (0.023)
<b>Health</b> (ref.: very good)						
Good	-0.065*** (0.005)	-0.057*** (0.004)	0.020*** (0.003)	0.016*** (0.003)	-0.627*** (0.015)	-0.586*** (0.015)
Fair	-0.139*** (0.008)	-0.104*** (0.008)	0.059*** (0.006)	0.037*** (0.006)	-1.333*** (0.028)	-1.223*** (0.027)
(Very) poor	-0.233*** (0.016)	-0.109*** (0.016)	0.107*** (0.012)	0.033*** (0.010)	-2.790*** (0.056)	-2.542*** (0.055)
<b>Family composition</b> (ref.: couples w/o children)						
Couples with children	-0.239*** (0.008)	-0.193*** (0.008)	0.099*** (0.007)	0.074*** (0.007)	0.036 (0.024)	0.157*** (0.024)
Living with parents	-0.031*** (0.007)	0.012+ (0.007)	0.021*** (0.005)	-0.005 (0.005)	-0.343*** (0.024)	-0.320*** (0.023)
Living alone	-0.312*** (0.009)	-0.304*** (0.008)	0.170*** (0.009)	0.172*** (0.008)	-0.346*** (0.026)	-0.258*** (0.025)
Other forms w children (incl. single parents)	-0.416*** (0.015)	-0.360*** (0.015)	0.208*** (0.014)	0.182*** (0.013)	-0.787*** (0.046)	-0.568*** (0.045)
<b>Gender</b> (ref.: Women):	0.026*** (0.004)	-0.001 (0.004)	-0.013*** (0.003)	0.006* (0.003)	-0.079*** (0.014)	-0.101*** (0.014)
Men						
<b>Age</b> (ref.: 16-19)						
20-24	-0.082*** (0.007)	-0.073*** (0.008)	0.040*** (0.005)	0.041*** (0.005)	-0.617*** (0.026)	-0.383*** (0.027)
25-29	0.036*** (0.008)	0.017* (0.009)	-0.021*** (0.005)	0.003 (0.005)	-0.853*** (0.027)	-0.581*** (0.030)
30-34	0.142*** (0.008)	0.101*** (0.009)	-0.061*** (0.006)	-0.025*** (0.006)	-0.889*** (0.028)	-0.667*** (0.032)
<b>Migration background</b> (ref.: no): Yes						
(ref.: no): Yes	-0.207*** (0.007)	-0.197*** (0.007)	0.097*** (0.005)	0.095*** (0.005)	-0.227*** (0.023)	-0.134*** (0.022)
<b>Residential area</b> (ref.: cities)						
Towns and suburbs	-0.046*** (0.005)	-0.050*** (0.005)	-0.004 (0.003)	0.000 (0.003)	0.028+ (0.017)	0.051** (0.017)
Rural areas	-0.134*** (0.005)	-0.135*** (0.005)	0.038*** (0.004)	0.040*** (0.004)	0.000 (0.017)	0.073*** (0.017)
<b>Employment status</b> (ref.: employed)						
Unemployed		-0.436*** (0.007)		0.249*** (0.009)		-0.772*** (0.023)
In education		-0.145*** (0.006)		0.110*** (0.006)		0.215*** (0.022)
Inactive		-0.293*** (0.008)		0.168*** (0.008)		-0.234*** (0.027)
<b>Log equalised Disposable income</b>						
						0.268*** (0.015)
<b>Poverty</b> (ref.: no): Yes						
						-0.156*** (0.024)
(Intercept)	9.296*** (0.149)	9.417*** (0.148)	---	---	8.588*** (0.105)	5.962*** (0.166)
SD (Intercept iso3166)	0.758	0.750	0.359	0.304	0.509	0.385
SD (Observations)	0.585	0.570	---	---	1.628	1.588
ICC	0.6	0.6	0.0	0.0	0.1	0.1
BIC	173687.0	169159.2	66212.9	62942.8	244833.4	241964.3
Number of observations	84208	84208	84540	84540	59748	59748
Number of countries	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001; w/o without. For binary dependent variables, AME reported. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 3. Three-level regressions of labour market integration on socio-demographic and socio-economic profile characteristics, 2018

	Unemployment	NEET	ISEI scores	
	(AME)	(AME)	1	2
<b>Educational attainment</b> (ref.: less-educated)				
Intermediate-educated	-0.102***	-0.103***	5.833***	5.695***
	(0.010)	(0.008)	(0.247)	(0.247)
Tertiary-educated	-0.149***	-0.139***	27.697***	27.388***
	(0.014)	(0.010)	(0.273)	(0.275)
<b>Health status</b> (ref.: very good)				
Good	0.023***	0.031***	-0.908***	-0.876***
	(0.005)	(0.004)	(0.187)	(0.187)
Fair	0.098***	0.125***	-2.350***	-2.139***
	(0.012)	(0.011)	(0.346)	(0.346)
(Very) poor	0.339***	0.407***	-4.193***	-3.196***
	(0.027)	(0.020)	(0.771)	(0.774)
<b>Family composition</b> (ref.: couples w/o children)				
Couples with children	0.027***	0.111***	-2.007***	-1.739***
	(0.008)	(0.010)	(0.282)	(0.283)
Living with parents	0.095***	0.052***	-2.343***	-2.096***
	(0.011)	(0.007)	(0.271)	(0.271)
Living alone	-0.004	-0.021**	-0.228	-0.187
	(0.008)	(0.006)	(0.321)	(0.320)
Other forms with children	0.055***	0.111***	-5.012***	-4.775***
(including single parenthood)	(0.016)	(0.015)	(0.590)	(0.589)
<b>Gender</b> (ref.: women): Men				
	-0.060***	-0.067***	-1.094***	-1.394***
	(0.007)	(0.006)	(0.175)	(0.176)
<b>Age</b> (ref.: 16-19)				
20-24	-0.067***	0.158***	-1.549**	-1.841***
	(0.014)	(0.015)	(0.537)	(0.539)
25-29	-0.135***	0.205***	-0.495	-1.044+
	(0.016)	(0.018)	(0.534)	(0.540)
30-34	-0.178***	0.158***	0.826	0.150
	(0.019)	(0.015)	(0.543)	(0.551)
<b>Migration background</b>				
(ref.: no): Yes	0.002	0.048***	-4.916***	-4.894***
	(0.007)	(0.006)	(0.293)	(0.292)
<b>Residential area</b> (ref.: cities)				
Towns and suburbs	-0.020***	0.003	-2.163***	-2.306***
	(0.006)	(0.004)	(0.211)	(0.211)
Rural areas	-0.020***	0.019***	-4.608***	-4.758***
	(0.006)	(0.004)	(0.216)	(0.216)
<b>Employment status</b> (ref.: employed)				
Unemployed				-2.783***
				(0.269)
In education				-3.440***
				(0.394)
Inactive				-2.790***
				(0.426)
(Intercept)			33.746***	35.074***
			(0.941)	(0.947)
SD (Intercept iso3166:nuts1)	0.434	0.324	1.397	1.377
SD (Intercept iso3166)	0.683	0.483	2.514	2.519
SD (Observations)			15.545	15.503
ICC	0.2	0.1	0.0	0.0
BIC	28862.3	44870.5	299714.1	299553.1
Number of observations	35442	56885	35014	35014
Number of NUTS 1 regions	59	59	59	59
Number of countries	13 (w/o DE)	13 (w/o DE)	13 (w/o DE)	13 (w/o DE)

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001; w/o without. For binary dependent variables, AME reported. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 4. Three-level regressions of income security and life satisfaction on socio-demographic and socio-economic profile characteristics, 2018

	Log equivalised disposable income		Poverty (AME)		Life satisfaction	
	1	2	1	2	1	2
<b>Educational attainment</b> (ref.: less-educated)						
Intermediate-educated	0.231***	0.197***	-0.126***	-0.104***	0.428***	0.289***
	(0.007)	(0.007)	(0.007)	(0.006)	(0.024)	(0.023)
Tertiary-educated	0.451***	0.399***	-0.203***	-0.172***	0.692***	0.478***
	(0.009)	(0.008)	(0.012)	(0.009)	(0.028)	(0.028)
<b>Health status</b> (ref.: very good)						
Good	-0.063***	-0.056***	0.020***	0.016***	-0.672***	-0.635***
	(0.006)	(0.006)	(0.004)	(0.004)	(0.019)	(0.018)
Fair	-0.142***	-0.106***	0.058***	0.036***	-1.305***	-1.186***
	(0.011)	(0.011)	(0.008)	(0.007)	(0.036)	(0.036)
(Very) poor	-0.230***	-0.105***	0.110***	0.036**	-2.651***	-2.383***
	(0.020)	(0.020)	(0.015)	(0.013)	(0.073)	(0.072)
<b>Family composition</b> (ref.: couples w/o children)						
Couples with children	-0.227***	-0.187***	0.108***	0.085***	0.036	0.144***
	(0.010)	(0.010)	(0.009)	(0.008)	(0.031)	(0.030)
Living with parents	-0.024*	0.013	0.028***	0.006	-0.377***	-0.362***
	(0.010)	(0.009)	(0.007)	(0.007)	(0.030)	(0.029)
Living alone	-0.286***	-0.284***	0.157***	0.160***	-0.318***	-0.267***
	(0.011)	(0.011)	(0.011)	(0.010)	(0.033)	(0.033)
Other forms with children (incl. single parents)	-0.378***	-0.331***	0.192***	0.168***	-0.849***	-0.658***
	(0.021)	(0.020)	(0.018)	(0.017)	(0.062)	(0.061)
<b>Gender</b>	0.025***	-0.003	-0.014***	0.004	-0.067***	-0.100***
(ref.: women): Men	(0.005)	(0.005)	(0.004)	(0.004)	(0.017)	(0.017)
<b>Age</b> (ref.: 16-19)						
20-24	-0.074***	-0.056***	0.037***	0.035***	-0.610***	-0.378***
	(0.009)	(0.009)	(0.006)	(0.006)	(0.031)	(0.032)
25-29	0.043***	0.038***	-0.026***	-0.008	-0.872***	-0.586***
	(0.009)	(0.011)	(0.006)	(0.007)	(0.032)	(0.036)
30-34	0.150***	0.124***	-0.068***	-0.038***	-0.906***	-0.673***
	(0.010)	(0.012)	(0.007)	(0.007)	(0.034)	(0.038)
<b>Migration back-ground</b> (ref.: no): Yes	-0.247***	-0.232***	0.122***	0.116***	-0.228***	-0.118***
	(0.009)	(0.009)	(0.008)	(0.007)	(0.029)	(0.028)
<b>Residential area</b> (ref.: cities)						
Towns and suburbs	-0.036***	-0.041***	-0.007	-0.004	-0.006	0.012
	(0.006)	(0.006)	(0.004)	(0.004)	(0.021)	(0.020)
Rural areas	-0.135***	-0.137***	0.040***	0.043***	-0.063**	0.009
	(0.007)	(0.006)	(0.005)	(0.005)	(0.021)	(0.021)
<b>Employment status</b> (ref.: employed)						
Unemployed		-0.399***		0.226***		-0.708***
		(0.008)		(0.010)		(0.026)
In education		-0.125***		0.097***		0.219***
		(0.008)		(0.007)		(0.027)
Inactive		-0.294***		0.168***		-0.324***
		(0.011)		(0.010)		(0.034)
<b>Log equivalised disposable income</b>						0.241***
						(0.018)
<b>Poverty</b> (ref.: no): Yes						-0.158***
						(0.029)
(Intercept)	9.034***	9.149***			8.516***	6.230***
	(0.225)	(0.223)			(0.181)	(0.224)
SD (Intercept iso3166:nuts1)	0.134	0.120	0.437	0.389	0.200	0.174
SD (Intercept iso3166)	0.807	0.799	0.269	0.217	0.628	0.495
SD (Observations)	0.602	0.588			1.625	1.586
ICC	0.6	0.7	0.1	0.1	0.1	0.1
BIC	116633.8	113990.4	47731.6	45842.1	158997.8	157160.2
Number of observations	56591	56591	56884	56884	39238	39238

	Log equivalised disposable income		Poverty (AME)		Life satisfaction	
Number of NUTS 1 regions	59	59	59	59	59	59
Number of countries	13 (w/o DE)	13 (w/o DE)	13 (w/o DE)	13 (w/o DE)	13 (w/o DE)	13 (w/o DE)

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; w/o without. For binary dependent variables, AME reported. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 5. Two-level regressions of labour market integration on national contextual factors, 2018

	Unemployment (AME)				NEET (AME)				ISEI scores			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
<i>Individual-level predictors included</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tracking in secondary education	-0.028 (0.019)				-0.007 (0.012)				1.146 (0.713)			
Vocational orientation in upper secondary education	0.011 (0.020)				0.002 (0.013)				1.586* (0.763)			
% ISCED 5+	-0.012 (0.020)				-0.026* (0.013)				1.436+ (0.768)			
% ISCED 0–2	0.008 (0.020)				-0.007 (0.013)				0.971 (0.768)			
Public spending on tertiary education	0.008 (0.018)				0.003 (0.011)				-0.240 (0.663)			
Employment rate		-0.043** (0.013)				-0.027** (0.009)				0.506 (0.805)		
% employment in primary sector		-0.015 (0.012)				0.004 (0.008)				-0.865 (0.764)		
% employment in large-scale engineering sector		-0.014 (0.012)				0.009 (0.008)				-0.384 (0.790)		
% employment in large firms (>50 employees)		-0.041*** (0.012)				-0.023** (0.009)				1.328+ (0.763)		
EPL		-0.009 (0.011)				-0.008 (0.008)				-0.092 (0.700)		
GDP per capita			-0.005 (0.010)				-0.017* (0.008)				1.749** (0.646)	
Income inequality (P80/P20)			0.015 (0.011)				0.006 (0.009)				-0.333 (0.720)	
Unemployment rate			0.070*** (0.011)				0.031*** (0.009)				-1.268* (0.619)	
Age ratio: 15–34/35–64			-0.004 (0.011)				-0.008 (0.009)				-0.621 (0.659)	
% 0–2 childcare				0.021 (0.021)				-0.019 (0.012)				0.008 (0.844)
Public spending on healthcare				-0.029 (0.022)				-0.016 (0.013)				2.251** (0.822)
Num. of physicians per 100 000 inhabitants				0.003 (0.018)				0.009 (0.010)				-0.510 (0.697)
Median age				0.033+ (0.019)				0.012 (0.011)				0.817 (0.739)
(Intercept)	---	---	---	---	---	---	---	---	35.775** *	35.956** *	35.698** *	35.624** *
									(0.815)	(0.808)	(0.754)	(0.791)



# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

SD (Intercept iso3166)	0.666	0.363	0.343	0.617	0.431	0.261	0.298	0.367	3.190	2.876	2.797	3.037
SD (Observations)	---	---	---	---	---	---	---	---	15.836	15.754	15.836	15.836
ICC	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
BIC	38718.9	34568.3	38675.3	38704.1	0.1	0.0	0.0	0.0	443092.4	404534.1	443078.3	443081.2
Num. of observations	53066	47998	53066	53066	62632.8	56393.1	62603.6	62613.9	51227	46844	51227	51227
Num. of countries	26 (w/o DE)	24 (w/o DE, EE, RS)	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)	24 (w/o DE, EE, RS)	26 (w/o DE)	26 (w/o DE)	25 (w/o DE, SK)	23 (w/o DE, EE, RS, SK)	25 (w/o DE, SK)	25 (w/o DE, SK)

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 6. Two-level regressions of income security and life satisfaction on national contextual factors, 2018

	Equivalised disposable income				Poverty (AME)				Life satisfaction			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
<i>Individual-level predictors included</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tracking in secondary education	0.200* (0.090)				-0.021** (0.007)				-0.038 (0.090)			
Vocational orientation in upper secondary education	0.202* (0.099)				-0.002 (0.008)				0.088 (0.098)			
% ISCED 5+	0.708*** (0.098)				-0.007 (0.008)				0.008 (0.098)			
% ISCED 0–2	0.287** (0.098)				0.010 (0.008)				-0.023 (0.098)			
Public spending on tertiary education	0.186* (0.086)				0.001 (0.007)				0.053 (0.086)			
Employment rate		0.148 (0.109)				-0.007 (0.008)				0.140 (0.091)		
% employment in primary sector		-0.317** (0.097)				0.021** (0.007)				0.119 (0.081)		
% employment in large-scale engineering sector		-0.369*** (0.098)				-0.020** (0.008)				0.019 (0.082)		
% employment in large firms (>50 employees)		0.050 (0.101)				-0.003 (0.008)				0.059 (0.084)		
EPL		0.046 (0.095)				0.005 (0.007)				0.198* (0.079)		
GDP per capita			0.555*** (0.070)				0.001 (0.006)				-0.012 (0.079)	
Income inequality (P80/P20)			-0.262*** (0.075)				0.022*** (0.007)				-0.149+ (0.084)	
Unemployment rate			0.098 (0.070)				0.016** (0.006)				-0.144+ (0.078)	
Age ratio: 15–34/35–64			0.036 (0.074)				0.003 (0.006)				-0.095 (0.082)	
% 0–2 childcare				0.120 (0.082)				0.023** (0.009)				-0.091 (0.101)
Public spending on healthcare				0.569*** (0.085)				-0.018* (0.009)				0.092 (0.105)
Num. of physicians per 100 000 inhabitants				0.048 (0.071)				0.001 (0.007)				-0.111 (0.088)
Median age				-0.108 (0.074)				0.012 (0.008)				-0.011 (0.091)
(Intercept)	9.417*** (0.082)	9.458*** (0.083)	9.417*** (0.063)	9.417*** (0.063)	---	---	---	---	5.967*** (0.170)	5.944*** (0.173)	5.976*** (0.164)	5.965*** (0.168)
SD (Intercept iso3166)	0.416	0.393	0.316	0.315	0.235	0.222	0.201	0.241	0.414	0.327	0.352	0.388

# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

	Equivalised disposable income				Poverty (AME)				Life satisfaction			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
<i>Individual-level predictors included</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SD (Observations)	0.570	0.565	0.570	0.570	---	---	---	---	1.588	1.586	1.588	1.588
ICC	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
BIC	169196.6	152355.3	169171.6	169171.1	62988.3	57295.1	62969.0	62977.6	242033.0	218153.3	242013.1	242016.9
Number of observations	84208	76602	84208	84208	84540	76849	84540	84540	59748	53934	59748	59748
Number of countries	26 (w/o DE)	24 (w/o DE, EE, RS)	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)	24 (w/o DE, EE, RS)	26 (w/o DE)	26 (w/o DE)	26 (w/o DE)	24 (w/o DE, EE, RS)	26 (w/o DE)	26 (w/o DE)

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 7. Three-level regressions of labour market integration on regional contextual factors, 2018

	Unemployment (AME)				NEET (AME)				ISEI scores			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
<i>Individual-level predictors included</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Resp. national-level indicators incl.</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vocational orientation in upper secondary education	-0.028** (0.009)				-0.017** (0.006)				0.306 (0.234)			
% ISCED 5+	-0.033* (0.014)				-0.012 (0.008)				1.348*** (0.351)			
% ISCED 0–2	0.017 (0.012)				0.026*** (0.007)				0.393 (0.298)			
Employment rate		-0.041*** (0.005)				-0.030*** (0.003)				0.247 (0.191)		
% employment in primary sector		0.010* (0.005)				0.005 (0.003)				-0.856*** (0.186)		
% employment in large- scale engineering sector		0.001 (0.006)				-0.003 (0.004)				-0.485* (0.229)		
GDP per capita			-0.017** (0.006)				-0.008* (0.004)				0.609** (0.233)	
Unemployment rate			0.039*** (0.006)				0.027*** (0.004)				-0.113 (0.253)	
Age ratio: 15–34/35–64			0.004 (0.007)				0.011** (0.004)				0.023 (0.275)	
Conservative gender role attitudes				0.016+ (0.009)				0.014* (0.006)				-0.068 (0.215)
Num. of physicians per 100 000 inhabitants				-0.002 (0.010)				-0.004 (0.006)				0.661** (0.218)
Median age				-0.003 (0.010)				-0.014* (0.007)				-0.259 (0.237)
(Intercept)	---	---	---	---	---	---	---	---	35.284*** (1.012)	35.975*** (0.980)	36.052*** (0.794)	35.929*** (1.073)
SD (Intercept iso3166:nuts1)	0.298	0.186	0.201	0.416	0.180	0.137	0.136	0.283	0.987	1.034	1.246	1.239
SD (Intercept iso3166)	0.659	0.354	0.263	0.496	0.458	0.228	0.261	0.267	2.538	2.374	1.417	2.508
SD (Observations)	---	---	---	---	---	---	---	---	15.503	15.542	15.503	15.655
ICC	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BIC	28898.7	25907.4	28853.6	25648.5	44895.0	41104.3	44861.8	40259.4	299588.0	285471.5	299592.4	269378.8
Number of observations	35442	32945	35442	31687	56885	53321	56885	50794	35014	33352	35014	31404
Number of NUTS1 regions	59	57	59	55	59	57	59	55	59	57	59	55
Number of countries	13 (w/o DE)	12 (w/o DE, RS)	13 (w/o DE)	12 (w/o DE, PT)	13 (w/o DE)	12 (w/o DE, RS)	13 (w/o DE)	12 (w/o DE, PT)	13 (w/o DE)	12 (w/o DE, RS)	13 (w/o DE)	12 (w/o DE, PT)

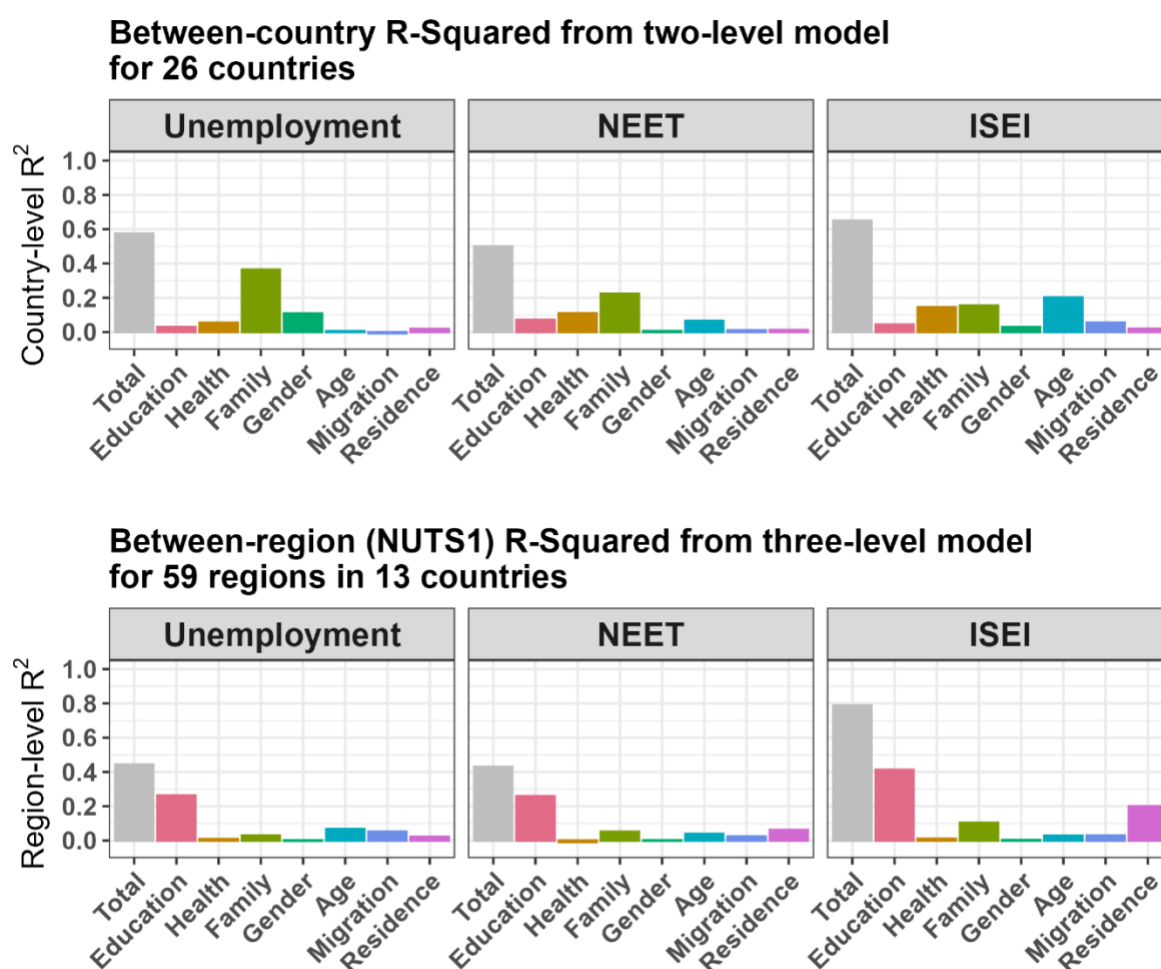
Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2 and for national-level contextual predictors see Table 3. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Table C 8. Three-level regressions of income security and life satisfaction on regional contextual factors, 2018

	Equivalised disposable income				Poverty (AME)				Life satisfaction			
	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care	Education system	Labour market	Economy	Care
<i>Individual-level predictors included</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Resp. national-level indicators incl.</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vocational orientation in upper secondary education	0.045** (0.016)				-0.020** (0.008)				0.036 (0.036)			
% ISCED 5+	0.053* (0.023)				-0.018 (0.011)				-0.040 (0.052)			
% ISCED 0–2	-0.052** (0.020)				0.027** (0.009)				-0.028 (0.045)			
Employment rate		0.067*** (0.007)				-0.034*** (0.004)				0.024 (0.030)		
% employment in primary sector		-0.041*** (0.007)				0.010* (0.004)				0.017 (0.028)		
% employment in large- scale engineering sector		0.025** (0.008)				-0.011* (0.005)				0.009 (0.034)		
GDP per capita			0.035** (0.011)				-0.013** (0.005)				-0.066* (0.029)	
Unemployment rate			-0.069*** (0.012)				0.030*** (0.005)				-0.065* (0.032)	
Age ratio: 15–34/35–64			-0.030* (0.013)				0.018** (0.006)				0.023 (0.035)	
Conservative gender role attitudes				-0.015 (0.017)				0.013+ (0.007)				-0.017 (0.026)
Num. of physicians per 100 000 inhabitants				0.029 (0.018)				-0.008 (0.008)				-0.066* (0.027)
Median age				0.026 (0.019)				-0.016* (0.008)				0.025 (0.029)
(Intercept)	9.317*** (0.193)	9.425*** (0.126)	9.494*** (0.070)	9.124*** (0.160)	—	—	—	—	6.232*** (0.254)	6.387*** (0.253)	6.359*** (0.244)	6.272*** (0.254)
SD (Intercept iso3166:nuts1)	0.079	0.041	0.064	0.117	0.256	0.154	0.179	0.353	0.167	0.176	0.163	0.161
SD (Intercept iso3166)	0.617	0.400	0.209	0.479	0.222	0.163	0.191	0.195	0.573	0.534	0.492	0.541
SD (Observations)	0.588	0.582	0.588	0.591	—	—	—	—	1.586	1.574	1.586	1.571
ICC	0.5	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
BIC	114037.6	105684.5	113995.7	102398.3	45873.4	42687.4	45843.8	40580.8	157237.5	144986.3	157233.7	147834.0
Number of observations	56591	53101	56591	50500	56884	53320	56884	50793	39238	36334	39238	37064
Number of NUTS1 regions	59	57	59	55	59	57	59	55	59	57	59	55
Number of countries	13 (w/o DE)	12 (w/o DE, RS)	13 (w/o DE)	12 (w/o DE, PT)	13 (w/o DE)	12 (w/o DE, RS)	13 (w/o DE)	12 (w/o DE, PT)	13 (w/o DE)	12 (w/o DE, RS)	13 (w/o DE)	12 (w/o DE, PT)

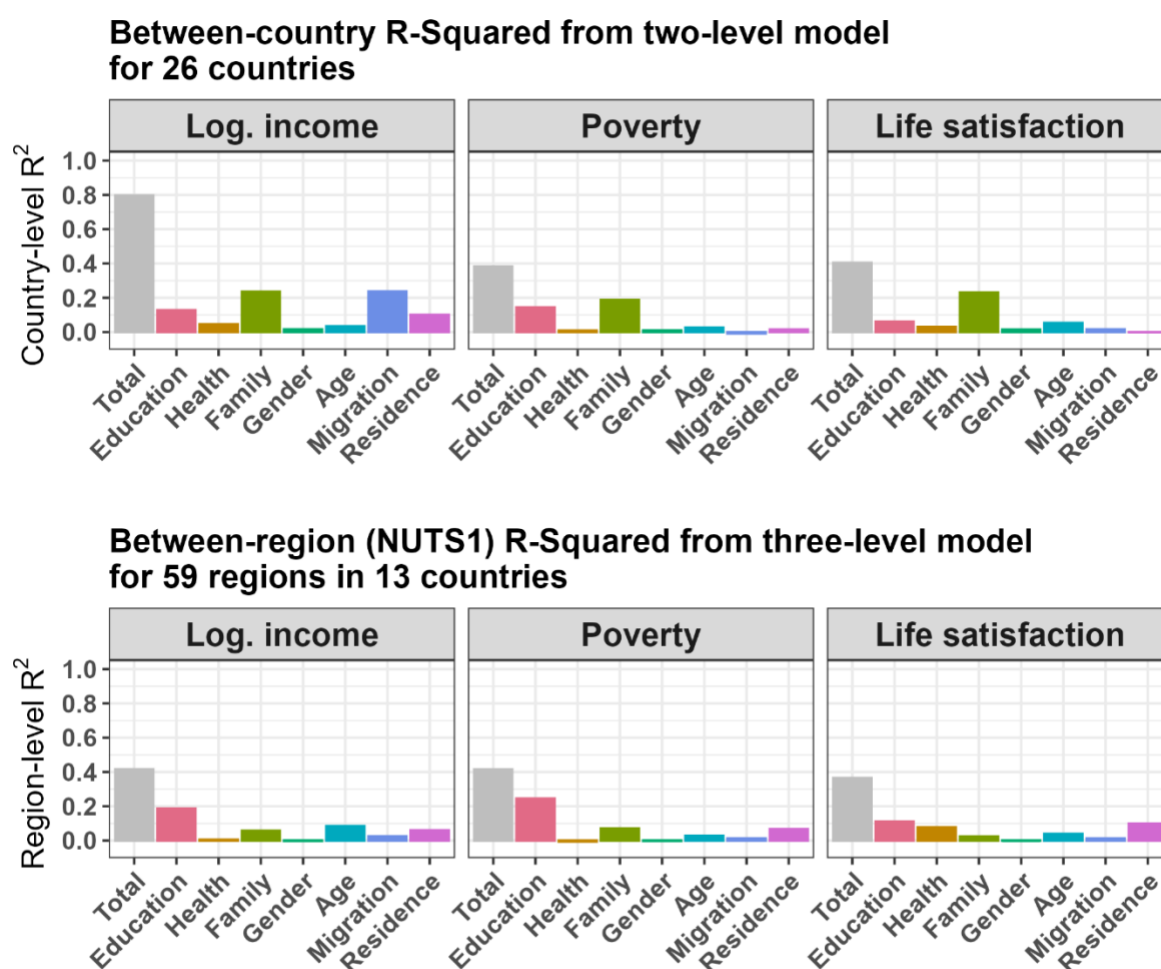
Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001; w/o without. For binary dependent variables, AME reported. For individual-level predictors included see Table 2 and for national-level contextual predictors see Table 3. Weighted. Copyright 2024 by Hornberg/Heisig/Solga.

Figure C 1. Decompositions of regional variations in labour market outcomes, 2018



Notes: Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.

Figure C 2. Decompositions of regional variations in labour market outcomes, 2018



Notes: Weighted results. Copyright 2024 by Hornberg/Heisig/Solga.



## Section D: Country-specific regressions of socio-demographic and socio-economic characteristics, 2021

Table D 1. Two-level country-specific regressions of unemployment on socio-demographic and socio-economic profile characteristics

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
Educational attainment (ref.: less-educated)																											
Intermediate-educated	-0.09 ***	-0.08 ***	-0.27 ***	-0.07 **	0.04	-0.26 ***	-0.12 ***	-0.17 ***	-0.06 **	-0.05 ***	-0.10 ***	-0.16 ***	-0.09 ***	-0.15 **	-0.16 ***	-0.19 ***	-0.14 ***	-0.11 +	0.02	-0.03	-0.03 *	-0.09 ***	-0.03 ***	0.00	-0.30 ***	-0.22 ***	-0.27 ***
Tertiary-educated	-0.16 ***	-0.17 ***	-0.32 ***	-0.10 ***	0.01	-0.29 ***	-0.12 ***	-0.15 **	-0.12 ***	-0.11 *	-0.13 ***	-0.22 ***	-0.19 ***	-0.22 ***	-0.22 ***	-0.29 ***	-0.21 ***	-0.11 +	-0.01	-0.10 **	-0.05 ***	-0.14 ***	-0.07 ***	-0.01	-0.38 ***	-0.23 ***	-0.31 ***
Health status (ref.: very good)																											
Good	-0.01	0.03 *	0.04 *	0.01	0.02	0.04 **	0.01	0.00	0.01	0.02	0.03 *	0.05 *	0.03 *	0.01	0.01	0.04	0.04 **	0.04	-0.01	-0.01	-0.01	0.03 ***	0.00	0.01	0.05 *	0.00	0.01
Fair	0.10 ***	0.08 **	0.07	0.13 ***	0.15 **	0.14 ***	0.10 ***	0.12 **	0.10 ***	0.13 +	0.10 ***	0.10 **	0.10 ***	0.09 *	0.04	0.05	0.17 ***	0.07 +	0.00	0.04	0.02	0.10 ***	0.05 *	0.04	0.23 ***	0.06 *	0.03
(Very) poor	0.43 ***	0.19 ***	0.10	0.10	0.31 **	0.12 *	0.29 ***	0.24 **	0.12 *	0.06	0.47 ***	0.33 **	0.15 ***	0.42 ***	0.44 ***	0.12	-0.01	0.58 ***	-0.03	0.14 +	0.26 ***	0.17 ***	0.15 *	0.23 +	0.51 ***	0.14 **	0.19 *
Family composition (ref.: couples without children)																											
Couples with children	0.07 **	-0.01	-0.01	0.01	0.01	0.05 **	0.02	-0.04	-0.02	0.09 *	0.13 ***	-0.05 +	0.06 ***	-0.01	-0.03	0.03	0.05	0.05	0.03	0.01	-0.02	0.02	0.04	0.00	0.08 *	0.01	0.08 *
Living with parents	0.08 ***	0.09 ***	0.03	0.04 *	0.09 ***	0.08 ***	0.03 *	0.03	0.06 **	0.19 ***	0.10 ***	0.18 ***	0.19 ***	0.09 *	0.05 *	0.07 *	0.10 ***	0.14 ***	0.06 ***	0.07 **	0.03 +	0.04 **	0.07 **	0.03 *	0.17 ***	0.04 **	0.09 **
Living alone	0.04 *	0.10 ***	0.09 +	0.01	-0.03	0.02	0.03 **	0.02	0.01	0.04	0.00	0.05 *	0.05 **	0.04	0.00	0.02	0.00	0.01	0.02	0.04	0.01	0.05 *	-0.02	-0.02	0.05	0.03	0.02
Other forms with children (incl. single p.)	0.09	0.05	-0.03	0.06	0.06	0.29 ***	0.12 ***	-0.02	0.02	0.00	0.20 ***	0.11 ***	0.18 ***	0.07	0.17 **	0.24 ***	0.01	0.17 **	0.03	0.07 +	0.01	0.04	0.22 ***	0.00	0.03	0.01	0.07
Gender (ref.: women): Men	-0.02	-0.02	-0.09 ***	0.02	-0.04 *	-0.03 *	0.01	-0.05 *	-0.05 ***	-0.12 ***	-0.06 ***	0.01	0.00	-0.11 ***	-0.07 ***	0.00	-0.09 ***	0.00	-0.01	-0.04 *	0.00	-0.06 ***	-0.04 *	0.03 **	-0.15 ***	-0.01	-0.03 +
Age (ref.: 16-19)																											
20-24	0.09 **	0.07	-0.04	0.03	-0.25 ***	-0.29 ***	0.05 *	0.12 *	-0.19 **	-0.06	-0.17 ***	0.02	0.00	-0.33 ***	-0.19 ***	0.14 *	-0.27 ***	-0.41 **	-0.06	-0.07	-0.02	-0.17 ***	-0.10 *	-0.05	-0.22 ***	0.07	-0.27 ***
25-29	0.09 **	0.04	-0.10 +	0.07 *	-0.27 ***	-0.34 ***	0.05 *	0.15 *	-0.26 ***	-0.10	-0.23 ***	-0.04	-0.03	-0.34 ***	-0.29 ***	0.09	-0.39 ***	-0.49 ***	-0.08	-0.05	-0.05	-0.22 ***	-0.20 ***	-0.09 **	-0.34 ***	0.05	-0.30 ***
30-34	0.09 **	0.06	-0.11 *	0.06 +	-0.25 ***	-0.36 ***	0.03	0.16 *	-0.20 ***	-0.15 *	-0.26 ***	-0.01	-0.04	-0.34 ***	-0.29 ***	0.01	-0.46 ***	-0.46 **	-0.08	-0.03	-0.03	-0.22 ***	-0.21 ***	-0.11 ***	-0.37 ***	0.01	-0.35 ***
Migration background (ref.: no): Yes	0.02	0.01	0.02	0.06 ***	0.05 *	-0.02	0.04 ***	0.10 **	0.09 **	-0.01	0.01	0.02	0.08 ***	-0.06	0.04	0.02	-0.08 ***	0.14	0.02	0.05	0.01	-0.05	0.00		-0.10 *	0.07 **	-0.05
Residential area (ref.: cities)																											
Towns and suburbs	-0.07 ***	-0.03 *	0.10 ***	-0.01	0.04 +	-0.02		-0.03		0.08 ***	0.00	0.02	0.01	0.02	-0.01	-0.05 +	-0.06 ***	0.09 *	-0.03 *			0.01	0.00	0.00	0.02	-0.01	0.02
Rural areas	-0.11 ***	-0.03 ***	0.16 ***	-0.03 +	0.09 ***	-0.04 *	-0.04 **	-0.01	-0.01	0.04 +	-0.01	0.02	-0.07 ***	-0.02	-0.02	-0.08 **	-0.09 ***	0.04 +	-0.04 **	-0.02	-0.01	-0.01	-0.03 +	-0.02	0.02	-0.01	-0.01
(Intercept)	0.12 **	0.12 +	0.46 ***	0.04 ***	0.30 ***	0.63 ***	0.08 ***	0.13 +	0.39 ***	0.38 ***	0.46 ***	0.24 **	0.23 ***	0.70 ***	0.55 ***	0.28 ***	0.76 ***	0.56 ***	0.11 **	0.18 **	0.09 *	0.37 ***	0.34 ***	0.11 **	0.86 ***	0.23 ***	0.63 ***
R2	.099	.100	.168	.057	.073	.197	.098	.070	.084	.062	.091	.121	.118	.092	.139	.125	.135	.135	.036	.039	.050	.067	.058	.049	.145	.134	.123

## Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
Number of observations	1564	1934	1642	1865	1295	1669	3503	945	1652	2088	4897	969	3399	1850	1657	953	2898	723	1134	1366	1404	3334	2304	1525	2175	1237	1419

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Copyright 2024 by Hornberg/Heisig/Solga.



Table D 2. Two-level country-specific regressions of NEET on socio-demographic and socio-economic profile characteristics

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
<b>Educational attainment</b> (ref.: less-educated)																											
Intermediate-educated	-0.09 ***	-0.16 ***	-0.30 ***	-0.05 **	0.10 ***	-0.18 ***	-0.17 ***	-0.16 ***	-0.09 ***	-0.02 ***	-0.16 ***	-0.03 ***	-0.09 ***	0.08 **	-0.13 ***	-0.17 ***	-0.13 ***	-0.07 *	0.03 +	-0.04 ***	-0.14 ***	-0.08 ***	-0.05 ***	-0.15 ***	-0.14 ***	-0.16 ***	-0.15 ***
Tertiary-educated	-0.15 ***	-0.29 ***	-0.37 ***	-0.09 ***	0.06 *	-0.17 ***	-0.20 ***	-0.19 ***	-0.16 ***	-0.05 *	-0.15 ***	-0.09 ***	-0.20 ***	0.00 ***	-0.17 ***	-0.31 ***	-0.23 ***	-0.10 *	0.00 ***	-0.10 ***	-0.16 ***	-0.19 ***	-0.09 ***	-0.23 ***	-0.19 ***	-0.17 ***	-0.15 ***
<b>Health status</b> (ref.: very good)																											
Good	0.00 ***	0.03 **	0.05 ***	0.01 *	0.04 *	0.04 **	0.00 ***	0.00 ***	-0.01 ***	0.00 ***	0.02 **	0.01 **	0.03 **	0.05 **	0.03 *	0.06 ***	0.04 ***	0.05 *	0.03 **	-0.03 ***	0.00 ***	0.04 ***	0.01 ***	0.04 *	0.08 ***	0.00 ***	0.02 ***
Fair	0.09 ***	0.13 ***	0.10 **	0.08 ***	0.28 ***	0.17 ***	0.10 ***	0.11 ***	0.10 ***	0.13 ***	0.12 ***	0.06 +	0.11 ***	0.12 ***	0.07 **	0.21 ***	0.19 ***	0.11 **	0.02 *	0.07 **	0.11 ***	0.18 ***	0.08 ***	0.14 **	0.38 ***	0.05 *	0.13 ***
(Very) poor	0.48 ***	0.33 ***	0.51 ***	0.27 ***	0.73 ***	0.41 ***	0.32 ***	0.26 ***	0.22 ***	0.43 ***	0.47 ***	0.28 ***	0.23 ***	0.60 ***	0.55 ***	0.30 ***	0.27 ***	0.65 ***	0.13 **	0.41 ***	0.22 **	0.47 ***	0.25 ***	0.74 ***	0.65 ***	0.18 ***	0.65 ***
<b>Family composition</b> (ref.: couples without children)																											
Couples with children	0.29 ***	0.06 ***	0.03 ***	0.12 ***	0.10 ***	0.37 ***	0.25 ***	-0.01 ***	0.14 ***	0.21 ***	0.17 ***	0.13 ***	0.11 ***	0.03 ***	0.24 ***	0.15 ***	0.20 ***	0.11 **	0.09 ***	0.16 ***	0.06 *	0.13 ***	0.03 ***	0.07 **	0.10 **	0.05 *	0.38 ***
Living with parents	0.09 ***	0.10 ***	-0.04 ***	0.02 ***	0.06 *	0.08 ***	0.02 ***	0.00 ***	0.10 ***	0.08 **	0.06 ***	0.21 ***	0.12 ***	0.04 ***	0.03 ***	0.02 ***	0.00 ***	0.07 +	0.13 ***	0.10 ***	0.03 ***	0.07 ***	0.05 **	-0.07 **	0.07 *	0.03 **	0.08 **
Living alone	0.04 +	0.11 ***	0.00 ***	0.02 ***	-0.06 *	0.06 *	0.03 *	0.00 ***	0.02 ***	-0.01 ***	-0.02 ***	0.03 ***	0.04 *	0.02 ***	0.01 ***	-0.04 ***	-0.07 **	0.02 ***	0.02 ***	0.08 *	0.04 ***	0.03 ***	-0.02 ***	-0.08 **	-0.01 **	0.03 **	0.05 **
Other forms with children (incl. single p.)	0.23 **	0.18 ***	0.09 +	0.10 +	0.13 *	0.46 ***	0.31 ***	-0.03 ***	0.08 ***	0.07 ***	0.24 ***	0.16 *	0.25 ***	0.09 ***	0.35 ***	0.28 ***	-0.01 ***	0.21 ***	0.17 ***	0.18 ***	0.24 ***	0.23 ***	0.22 ***	-0.07 ***	0.13 *	0.01 **	0.50 ***
<b>Gender</b> (ref.: women): Men	-0.06 ***	-0.01 ***	-0.11 ***	-0.01 ***	-0.02 ***	-0.13 ***	-0.05 ***	-0.04 **	-0.07 ***	-0.06 ***	-0.04 ***	-0.04 *	0.01 ***	-0.06 ***	-0.13 ***	-0.02 +	-0.09 ***	-0.05 *	-0.01 ***	-0.08 ***	-0.04 **	-0.10 ***	-0.01 ***	-0.14 ***	-0.07 ***	0.00 ***	-0.12 ***
<b>Age</b> (ref.: 16-19)																											
20-24	0.11 ***	0.22 ***	0.36 ***	0.03 ***	-0.09 ***	0.21 ***	0.15 ***	0.14 ***	0.22 ***	0.16 ***	0.13 ***	0.26 ***	0.19 ***	0.00 ***	0.20 ***	0.25 ***	0.20 ***	0.18 ***	0.03 ***	0.13 ***	0.03 ***	0.14 ***	0.14 ***	0.16 ***	0.25 ***	0.17 ***	0.18 ***
25-29	0.14 ***	0.31 ***	0.37 ***	0.08 ***	-0.07 *	0.23 ***	0.19 ***	0.24 ***	0.26 ***	0.27 ***	0.19 ***	0.27 ***	0.25 ***	0.07 *	0.16 ***	0.35 ***	0.25 ***	0.14 *	0.11 ***	0.22 ***	0.02 ***	0.21 ***	0.16 ***	0.17 ***	0.27 ***	0.19 ***	0.25 ***
30-34	0.15 ***	0.29 ***	0.32 ***	0.08 **	-0.05 +	0.16 ***	0.18 ***	0.29 ***	0.27 ***	0.23 ***	0.16 ***	0.30 ***	0.22 ***	0.08 *	0.11 ***	0.26 ***	0.21 ***	0.20 ***	0.10 ***	0.18 ***	0.02 ***	0.20 ***	0.16 ***	0.09 ***	0.23 ***	0.17 ***	0.16 ***
<b>Migration background</b> (ref.: no): Yes	0.01 ***	0.05 ***	-0.19 ***	0.06 ***	0.09 ***	0.03 ***	0.07 ***	0.09 ***	0.07 *	0.05 +	0.05 ***	0.02 ***	0.08 ***	-0.04 ***	-0.05 ***	-0.01 ***	0.01 ***	0.14 ***	0.04 ***	0.04 ***	0.02 ***	-0.06 ***	-0.02 ***		-0.09 *	-0.01 *	-0.12 +
<b>Residential area</b> (ref.: cities)																											
Towns and suburbs	-0.03 ***	-0.06 ***	0.08 ***	0.00 ***	0.04 *	0.01 ***		-0.01 ***		0.06 ***	0.01 ***	0.01 ***	0.02 +	0.02 ***	0.01 ***	-0.01 ***	-0.02 ***	0.10 **	-0.01 ***			-0.01 ***	0.00 ***	0.05 **	0.03 **	0.03 +	0.02 ***
Rural areas	-0.06 ***	-0.04 **	0.10 ***	0.00 ***	0.12 ***	0.00 ***	-0.03 *	0.03 ***	0.01 ***	0.10 ***	0.01 ***	0.06 *	-0.04 ***	0.01 ***	0.01 ***	-0.01 ***	-0.04 *	0.04 ***	-0.01 ***	0.02 ***	-0.02 +	0.01 ***	0.00 ***	0.12 ***	0.07 ***	0.01 **	0.04 *
(Intercept)	0.07 *	0.00 ***	0.12 **	0.03 ***	0.04 ***	0.02 ***	0.07 ***	0.04 ***	-0.01 ***	-0.03 ***	0.06 ***	-0.13 **	-0.03 ***	0.03 ***	0.12 ***	0.06 ***	0.15 ***	-0.07 ***	-0.12 ***	-0.02 ***	0.15 ***	-0.02 ***	-0.02 ***	0.19 ***	0.05 ***	0.01 ***	-0.01 ***
R2	.161	.189	.227	.078	.120	.299	.178	.136	.092	.097	.125	.073	.105	.088	.194	.218	.131	.123	.055	.118	.150	.163	.064	.217	.113	.062	.272
Number of observations	2259	3476	2427	2629	2190	2892	5349	1579	2847	3785	8699	1548	5747	3129	2805	2003	5006	988	2044	2079	1955	5224	4131	2789	3280	1839	2416

Notes: + p &lt; 0.1, \* p &lt; 0.05, \*\* p &lt; 0.01, \*\*\* p &lt; 0.001. Copyright 2024 by Hornberg/Heisig/Solga.



Table D 3. Two-level country-specific regressions of ISEI on socio-demographic and socio-economic profile characteristics

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
<b>Educational attainment</b> (ref.: less-educated)																											
Intermediate-educated	5.97 ***	5.51 ***	9.64 ***	4.18 **	3.92 *	9.34 ***	7.60 ***	1.58	7.52 ***	5.08 **	5.94 ***	3.94 +	4.81 ***	8.58 ***	9.55 ***	4.59 +	4.85 ***	3.99	12.8 6***	9.71 ***	13.3 8***	3.28 **	7.64 ***	9.81 ***	7.99 ***	3.30 *	7.47 ***
Tertiary-educated	21.4 ***	33.7 ***	30.4 ***	23.0 ***	24.4 ***	33.2 ***	26.7 ***	23.3 ***	28.3 ***	24.7 ***	25.4 ***	27.9 ***	25.1 ***	35.0 ***	38.6 ***	26.4 ***	22.2 ***	28.5 ***	35.1 ***	32.7 ***	32.9 ***	27.7 ***	34.7 ***	39.2 ***	27.8 ***	25.7 ***	32.0 ***
<b>Health status</b> (ref.: very good)																											
Good	-0.47	0.98	-0.33	-0.95	-3.91 ***	-1.32 +	-0.65	-0.80	-1.07	0.32	-2.53 ***	-0.27	-1.12 +	-1.78 *	-2.39 **	-2.20 +	-1.61 *	-3.58 *	-0.26	-2.61 *	-0.65	0.16	-1.58 *	-2.07 **	-2.14 **	-0.78	-1.40 +
Fair	-4.20 **	-1.71	-7.20 **	-4.64 **	-1.42	-1.19	-1.10	-3.30 *	-0.94	-3.51	-4.94 ***	1.98	-2.37 *	-1.12	-4.98 ***	-2.27	-4.29 *	-5.92 *	-3.94 *	-2.93 +	2.22	-0.42	-3.84 ***	2.14	-4.72 +	-0.60	2.02
(Very) poor	0.02	-3.42	-4.45	-5.71	0.60	-3.76	-3.07 +	2.44	-1.49	4.08	-7.19 *	-4.43	1.35	2.28	7.54	-2.08	-1.57	-0.21	-1.43	-14.1 **	2.10	-7.54 **	1.48	-2.86	-3.62	-2.79	-3.24
<b>Family composition</b> (ref.: couples without children)																											
Couples with children	-5.90 ***	-1.59	-6.15 **	-2.76 *	-3.71 *	-1.53	-2.53 **	3.90 *	-5.17 ***	-6.01 ***	-2.02 *	-1.15	-4.21 ***	-4.56 **	-4.08 ***	-2.73	-1.42	-10.0 ***	-1.86	-1.23	-2.13	-3.40 ***	-1.12	1.34	-5.49 ***	-0.99	-0.51
Living with parents	-4.74 ***	-2.35 *	-5.24 **	-0.08	-3.52 *	-3.56 **	-2.93 ***	-0.75	-7.88 ***	-2.64 *	-1.41 +	-0.56	-5.46 ***	-4.08 **	-2.96 **	-5.22 **	0.21	-7.37 **	-1.45	-4.37 **	-1.88	-4.17 ***	-2.45 *	1.42	-1.82	2.41	-1.97
Living alone	-1.50	-1.58	-1.60	0.73	-6.44 ***	-1.84	-0.32	-0.72	-3.91 ***	-2.62	-0.88	-1.38	-0.63	0.00	0.21	-2.69	-2.53 +	-10.9 ***	-2.93 *	-1.40	-4.32 *	-0.57	-0.84	1.52	-4.83 *	-2.15 +	-4.01 +
Other forms with children (incl. single p.)	-8.48 *	0.12	-6.35 *	-7.14 +	-3.04	-2.78	-4.44 *	1.81	-7.88 **	-2.04	-6.26 ***	-6.06 +	-6.14 **	-3.44	-3.08	-13.9 ***	2.17	-17.7 ***	1.21	-7.04 **	-4.65 **	-5.95 ***	-4.50 *	-4.90 +	2.34	-3.06	-7.48 **
<b>Gender</b> (ref.: women): Men	-2.72 **	0.15	-1.74 *	-3.20 ***	-0.87	-0.62	-4.14 ***	-1.05	-1.59 +	-3.28 ***	-2.07 ***	3.48 ***	-0.08	-3.38 ***	-1.25 +	-1.99 +	-1.94 **	-0.68	-2.74 **	-0.12	0.41	-0.80	1.34 +	-1.78 *	-4.54 ***	-0.92	-1.17
<b>Age</b> (ref.: 16-19)																											
20-24	-4.49 *	-2.01	-0.08	-5.65 **	-2.51	7.21	0.51	0.63	-2.27	0.19	-1.64	-2.51	-0.47	4.76 +	-2.31	0.68	-3.59	11.7	9.56 *	1.43	8.28 **	-1.45	-1.31	-0.41	7.09 +	-7.71 **	1.40
25-29	-0.48	-0.85	-0.38	-2.37	-1.09	7.92 +	0.56	2.73	-1.09	2.69	1.07	2.60	1.84	5.82 *	-0.13	5.69 *	-2.77	14.1	8.21 +	1.50	11.1 ***	-1.87	-0.07	1.35	7.87 *	-5.65 +	2.80
30-34	0.80	-3.05	-1.02	-1.38	03.0 9	8.14 +	0.74	4.26	-0.38	1.83	1.78	2.47	2.47	5.30 *	-0.16	9.85 ***	-1.71	13.1 9	10.0 3*	0.19	13.2 0***	-2.27	-0.07	0.96	9.43 *	-2.36	2.78
<b>Migration background</b> (ref.: no): Yes	-6.88 ***	-4.18 ***	-4.70	-2.22 **	-7.03 ***	-1.85	-4.78 ***	-4.30 **	-2.26	-1.78	-5.50 ***	-2.92	-0.94	0.40	0.60	-2.03	-7.85 ***	8.42	-2.07 *	-2.89	-8.29 ***	-9.55 ***	-1.86		-1.32	-5.29 ***	02.0 2
<b>Residential area</b> (ref.: cities)																											
Towns and suburbs	-2.34 *	-0.91	-2.54 **	-2.88 ***	-4.02 ***	-3.25 ***		-4.55 ***		1.21	-3.52 ***	-4.33 ***	-6.17 ***	-3.68 ***	-3.50 ***	-2.37 +	-0.95	-5.71 *	-3.48 **			-3.00 ***	-1.51 *	-3.04 **	-2.63 **	-3.21 **	-2.35 *
Rural areas	-4.72 ***	-1.60	-4.24 ***	-5.79 ***	-4.06 **	-6.41 ***	-3.13 ***	-7.72 ***	-1.85 *	-5.75 ***	-5.59 ***	-7.52 ***	-7.22 ***	-4.79 ***	-4.36 ***	-3.90 **	-3.18 ***	-3.52 *	-5.29 ***	-6.50 ***	-1.75 *	-7.14 ***	-2.37 **	-8.06 ***	-6.53 ***	-8.81 ***	-4.08 ***
<b>Employment status</b> (ref.: employed)																											
Unemployed	-2.83 +	-5.46 **	-2.33 +	-6.01 ***	-1.45	-9.57 ***	-7.68 ***	-2.24	-9.98 ***	-2.81 **	-4.51 ***	-7.66 ***	-4.13 ***	-3.80 ***	-4.75 ***	-5.94 **	-4.59 ***	-6.09 *	2.03	-4.10 *	-0.12	-5.16 ***	-4.88 ***	-4.55	-3.44 **	-6.19 **	0.14
In education	-0.19	-2.54	-6.80 **	-4.03 **	1.55	3.02	-2.05 *	-6.21 ***	-3.05	-6.51 **	-3.30 **	-5.92 ***	-5.54 ***	3.25	2.94	-6.77 ***	-2.04 +	8.88 *	3.90	-5.29	-2.05	-3.96 +	-5.87 **	6.77	4.36 *	-3.07 *	2.55
Inactive	-5.36 *	-7.39 ***	-2.87	-8.06 ***	-5.52 +	-3.09 *	-1.67 +	-10.3 ***	-3.62 *	-0.67	-3.90 *	-5.57 **	-2.19	-8.07 *	-1.43	-11.1 ***	-2.38	-0.34	-0.87	-0.96	-1.08	-4.29 ***	-13.9 *	-2.76	-4.86 **	-6.87 **	-0.27

# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
(Intercept)	44.2 ***	34.4 ***	32.2 ***	47.2 ***	36.6 ***	27.6 ***	40.6 ***	37.7 ***	41.8 ***	31.9 ***	35.0 ***	33.4 ***	36.3 ***	30.1 ***	33.6 ***	30.8 ***	40.7 ***	32.4 ***	26.2 ***	34.4 ***	24.9 ***	39.3 ***	32.9 ***	26.0 ***	27.6 ***	46.0 ***	29.9 ***
R2	.308	.482	.418	.333	.403	.418	.327	.424	.381	.376	.414	.464	.400	.507	.581	.438	.269	.413	.495	.400	.444	.462	.510	.592	.382	.384	.433
Number of observations.	1667	2032	1508	2093	1296	1883	4282	1265	1817	1773	4607	1307	3262	1650	1689	1186	2769	745	1136	1440	1468	3541	2095	1464	1573	1497	1459

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Copyright 2024 by Hornberg/Heisig/Solga.



Table D 4. Two-level country-specific regressions of log equalised disposable income on socio-demographic and socio-economic profile characteristics

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
<b>Educational attainment</b> (ref.: less-educated)																											
Intermediate-educated	0.20 ***	0.10 ***	0.42 ***	0.09 **	0.10 ***	0.11 ***	0.11 ***	0.07 +	0.12 ***	0.19 ***	0.16 ***	0.03 ***	0.07 ***	0.16 ***	0.29 ***	0.03 ***	0.20 ***	0.08 ***	0.21 ***	0.26 ***	0.22 ***	0.09 **	0.14 ***	0.44 ***	0.30 ***	0.13 ***	0.32 ***
Tertiary-educated	0.27 ***	0.24 ***	0.67 ***	0.22 ***	0.26 ***	0.28 ***	0.27 ***	0.10 *	0.38 ***	0.43 ***	0.31 ***	0.12 **	0.29 ***	0.36 ***	0.52 ***	0.28 ***	0.43 ***	0.37 ***	0.33 ***	0.61 ***	0.42 ***	0.32 ***	0.36 ***	0.82 ***	0.54 ***	0.25 ***	0.47 ***
<b>Health status</b> (ref.: very good)																											
Good	-0.02 ***	0.02 +	-0.06 *	-0.05 *	-0.10 ***	-0.06 ***	-0.05 **	-0.05 +	-0.05 *	-0.10 **	-0.11 ***	-0.02 ***	-0.03 *	-0.06 **	-0.03 +	-0.04 +	-0.02 ***	-0.03 ***	-0.10 ***	-0.06 +	0.03 ***	-0.03 *	-0.12 ***	-0.09 **	-0.08 **	-0.09 ***	-0.09 ***
Fair	-0.19 ***	-0.03 **	-0.18 *	0.00 **	-0.08 *	-0.09 *	-0.07 **	-0.10 **	-0.07 +	-0.09 ***	-0.12 ***	-0.05 ***	-0.09 ***	-0.01 **	-0.09 *	-0.11 **	0.00 ***	-0.02 **	-0.12 **	-0.16 **	0.00 ***	-0.10 ***	-0.22 ***	0.17 ***	-0.26 ***	-0.13 ***	-0.09 *
(Very) poor	-0.32 **	0.08 *	-0.06 **	-0.01 **	-0.07 **	-0.12 *	-0.15 ***	-0.18 **	-0.22 **	0.15 ***	-0.22 ***	-0.05 ***	-0.09 +	-0.19 **	-0.04 **	-0.15 *	0.05 ***	-0.50 **	-0.07 **	-0.17 **	0.05 ***	-0.14 **	-0.25 ***	0.36 **	0.04 **	-0.17 **	0.02 **
<b>Family composition</b> (ref.: couples without children)																											
Couples with children	-0.20 ***	-0.18 ***	-0.20 **	-0.32 ***	-0.22 ***	-0.43 ***	-0.39 ***	-0.12 **	-0.31 ***	-0.29 ***	-0.39 ***	-0.15 ***	-0.17 ***	-0.31 ***	-0.29 ***	-0.18 ***	-0.20 ***	-0.51 ***	-0.16 ***	-0.23 ***	-0.32 ***	-0.20 ***	-0.16 ***	-0.07 ***	-0.23 ***	-0.18 ***	-0.19 ***
Living with parents	0.15 ***	-0.02 **	0.04 **	0.11 **	0.00 **	-0.12 ***	0.01 ***	0.44 ***	-0.01 **	-0.08 +	0.02 ***	0.34 ***	0.18 ***	-0.23 ***	-0.06 **	-0.01 ***	0.00 ***	-0.30 ***	-0.12 **	-0.10 **	-0.21 ***	-0.14 ***	-0.15 ***	-0.09 +	-0.15 **	0.04 **	0.05 **
Living alone	-0.27 ***	-0.35 ***	-0.18 *	-0.31 ***	-0.25 ***	-0.37 ***	-0.50 ***	-0.26 ***	-0.51 ***	-0.36 ***	-0.30 ***	-0.30 ***	-0.30 ***	-0.44 ***	-0.38 ***	-0.15 ***	-0.36 ***	-0.65 ***	-0.19 ***	-0.35 ***	-0.45 ***	-0.26 ***	-0.24 ***	-0.44 ***	-0.31 ***	-0.26 ***	-0.23 ***
Other forms with children (incl. single p.)	-0.42 **	-0.38 ***	-0.25 **	-0.76 ***	-0.19 *	-0.69 ***	-0.54 ***	-0.43 ***	-0.65 ***	-0.31 +	-0.29 ***	-0.29 ***	-0.36 ***	-0.53 ***	-0.38 ***	-0.24 ***	-0.36 ***	-0.60 ***	-0.36 ***	-0.56 ***	-0.43 ***	-0.27 ***	-0.57 ***	-0.06 ***	-0.46 ***	-0.46 ***	-0.28 ***
<b>Gender</b> (ref.: women): Men	0.03 ***	0.03 *	-0.04 **	0.02 **	0.04 *	-0.02 **	0.00 ***	-0.03 **	0.00 ***	0.00 ***	0.01 ***	-0.01 **	0.03 *	-0.01 **	0.00 ***	0.00 ***	-0.01 **	0.11 **	0.02 ***	0.12 ***	-0.01 **	0.02 ***	0.02 ***	-0.06 *	0.02 ***	-0.01 **	0.00 ***
<b>Age</b> (ref.: 16-19)																											
20-24	-0.03 ***	-0.01 **	0.03 **	0.00 **	-0.01 **	-0.04 ***	-0.13 ***	0.02 **	-0.12 *	0.02 ***	-0.01 **	-0.08 **	-0.03 **	0.00 ***	-0.07 +	0.09 **	0.01 ***	0.00 ***	-0.05 **	-0.16 **	0.12 *	-0.12 ***	-0.02 ***	-0.21 ***	-0.19 ***	-0.31 ***	-0.17 ***
25-29	0.02 ***	0.07 *	0.26 ***	0.07 **	0.02 **	0.01 **	0.01 **	0.23 ***	0.10 +	0.05 **	0.05 +	0.18 ***	0.17 ***	0.02 **	0.02 **	0.14 ***	0.03 **	0.11 **	-0.05 **	-0.09 *	0.12 *	-0.13 ***	0.07 +	-0.08 **	-0.06 ***	-0.33 ***	-0.09 +
30-34	0.14 *	0.11 ***	0.29 ***	0.19 ***	0.10 *	0.09 *	0.15 ***	0.44 ***	0.16 **	0.18 ***	0.16 ***	0.24 ***	0.27 ***	0.06 **	0.11 *	0.14 **	0.16 ***	0.10 **	0.09 +	-0.06 **	0.21 ***	-0.08 *	0.09 *	-0.09 **	0.03 **	-0.22 ***	-0.07 **
<b>Migration background</b> (ref.: no): Yes	-0.38 ***	-0.14 ***	0.14 ***	-0.17 ***	-0.21 ***	-0.05 **	-0.15 ***	-0.17 ***	-0.18 ***	-0.03 **	-0.44 ***	-0.15 ***	-0.10 ***	0.01 **	-0.12 ***	-0.12 ***	-0.15 ***	0.29 ***	-0.15 ***	-0.17 **	-0.21 ***	-0.12 +	-0.07 *		0.04 **	-0.20 ***	-0.12 **
<b>Residential area</b> (ref.: cities)																											
Towns and suburbs	0.02 ***	0.11 ***	-0.16 ***	0.02 **	-0.19 ***	-0.07 ***		-0.04 **		-0.01 **	-0.09 ***	-0.03 **	0.05 **	-0.08 ***	-0.04 **	0.01 ***	0.02 **	-0.26 ***	-0.14 ***	-0.17 ***	0.04 +	-0.07 ***	-0.06 **	-0.24 ***	0.01 **	-0.03 **	-0.09 ***
Rural areas	-0.08 *	0.07 ***	-0.25 ***	-0.03 **	-0.20 ***	-0.07 ***	0.01 **	-0.03 **	-0.05 *	-0.17 ***	-0.04 +	-0.04 **	0.07 ***	-0.13 ***	-0.04 **	-0.12 ***	-0.01 **	-0.17 ***	-0.06 +			-0.20 ***	-0.17 ***	-0.52 ***	-0.13 ***	-0.08 *	-0.10 ***
<b>Employment status</b> (ref.: employed)																											
Unemployed	-0.19 ***	-0.27 ***	-0.36 ***	-0.21 ***	-0.22 ***	-0.43 ***	-0.40 ***	-0.28 ***	-0.36 ***	-0.44 ***	-0.47 ***	-0.32 ***	-0.32 ***	-0.50 ***	-0.41 ***	-0.22 ***	-0.44 ***	-0.27 ***	-0.18 *	-0.34 ***	-0.29 ***	-0.33 ***	-0.29 ***	-0.69 ***	-0.61 ***	-0.33 ***	-0.45 ***
In education	-0.17 ***	-0.17 ***	0.18 ***	-0.15 ***	0.03 **	-0.20 ***	-0.33 ***	-0.33 ***	-0.20 ***	-0.12 ***	-0.12 ***	-0.42 ***	-0.15 ***	-0.20 ***	-0.01 **	-0.08 **	-0.13 ***	-0.19 *	-0.05 **	-0.14 *	-0.15 ***	-0.21 ***	0.00 ***	-0.10 *	-0.22 ***	-0.27 ***	-0.19 ***

# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
Inactive	-0.03 ***	-0.47 ***	-0.33 ***	-0.22 ***	-0.18 ***	-0.14 ***	-0.18 ***	-0.26 ***	-0.19 ***	-0.39 ***	-0.29 ***	-0.24 ***	-0.37 ***	-0.23 ***	-0.07 +	-0.20 ***	-0.35 ***	-0.33 ***	-0.26 ***	-0.26 ***	-0.48 ***	-0.16 ***	-0.26 ***	-0.49 ***	-0.63 ***	-0.33 ***	-0.13 ***
(Intercept)	10.1 2***	10.0 9***	8.27 ***	10.7 4***	9.77 ***	9.60 ***	10.3 4***	10.2 2***	9.62 ***	9.02 ***	9.69 ***	10.1 7***	9.82 ***	9.31 ***	8.70 ***	10.2 9***	9.62 ***	9.56 ***	10.7 4***	9.36 ***	9.74 ***	9.31 ***	9.40 ***	8.66 ***	8.45 ***	10.5 9***	9.06 ***
R2	.181	.343	.316	.184	.247	.285	.291	.344	.222	.183	.241	.443	.183	.235	.218	.260	.164	.294	.194	.211	.264	.189	.162	.350	.254	.264	.270
Number of observations.	2258	3472	2427	2628	2190	2891	5341	1572	2839	3712	8672	1548	5727	3125	2803	2003	4987	986	2041	2074	1952	5208	4131	2764	3277	1834	2416

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Copyright 2024 by Hornberg/Heisig/Solga.





Table D 5. Two-level country-specific regressions of poverty on socio-demographic and socio-economic profile characteristics

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
<b>Educational attainment</b> (ref.: less-educated)																											
Intermediate-educated	-0.13 ***	-0.06 ***	-0.29 ***	-0.08 ***	-0.10 ***	-0.10 ***	-0.08 ***	-0.08 *	-0.02	-0.09 ***	-0.08 ***	-0.08 **	-0.04 **	-0.12 ***	-0.14 ***	0.01	-0.07 ***	-0.15 **	-0.13 ***	-0.07 *	-0.07 ***	-0.06 ***	-0.07 ***	-0.21 ***	-0.23 ***	-0.12 ***	-0.22 ***
Tertiary-educated	-0.13 ***	-0.09 ***	-0.32 ***	-0.08 ***	-0.15 ***	-0.12 ***	-0.12 ***	-0.10 **	-0.09 ***	-0.19 ***	-0.14 ***	-0.09 **	-0.11 ***	-0.16 ***	-0.20 ***	-0.05 *	-0.15 ***	-0.20 ***	-0.16 ***	-0.17 ***	-0.09 ***	-0.12 ***	-0.08 ***	-0.27 ***	-0.29 ***	-0.16 ***	-0.27 ***
<b>Health status</b> (ref.: very good)																											
Good	-0.01	-0.02 *	0.03 *	0.02	0.04 *	0.01	0.01	0.00	0.00	0.03	0.04 ***	-0.01	-0.01	0.00	0.01	0.00	0.01	-0.03	0.02	0.06 **	0.02	0.01	0.04 **	0.05 **	0.03 *	0.03 +	0.05 **
Fair	0.07 **	0.00	0.05	-0.02	-0.04	0.04	0.02	0.02	0.03	0.03	0.04 *	-0.02	0.00	0.03	0.06 *	0.07 *	-0.02	-0.05	-0.04	0.10 ***	0.03	0.04 *	0.09 ***	0.03	0.15 ***	0.04 +	0.02
(Very) poor	0.23 ***	-0.06 +	-0.03	-0.08	-0.18 **	0.00	0.04	0.18 ***	0.05	-0.04	0.13 ***	-0.13 *	-0.04	0.10 *	0.07	0.06	-0.09 +	0.35 ***	0.08	0.15 **	0.13 +	0.10 **	0.16 ***	-0.12 +	0.03	0.03	-0.04
<b>Family composition</b> (ref.: couples without children)																											
Couples with children	0.10 ***	0.03 +	0.04 **	0.06 **	0.05 *	0.05 **	0.09 ***	0.02 *	0.05 *	0.08 **	0.16 ***	0.02	0.03	0.02	0.02	0.06 *	0.14 ***	0.09 *	0.03	0.02	0.05 *	0.02	0.10 ***	0.01	0.05 +	0.00	-0.02
Living with parents	-0.11 ***	0.01	-0.04	-0.05 *	-0.02	-0.02	-0.12 ***	-0.25 ***	-0.10 ***	0.01	0.00	-0.18 ***	-0.08 ***	0.01	-0.03 +	-0.03	0.08 **	0.01	0.07 *	-0.01	0.01	0.01	0.08 ***	0.00	0.07 *	-0.07 +	-0.08 **
Living alone	0.08 ***	0.16 ***	0.04 **	0.10 ***	0.12 ***	0.07 **	0.18 ***	0.19 ***	0.15 ***	0.13 ***	0.13 ***	0.20 ***	0.12 ***	0.11 **	0.13 ***	0.06 *	0.24 ***	0.22 ***	0.04	0.12 ***	0.14 ***	0.09 ***	0.04	0.24 ***	0.13 **	0.11 ***	0.06
Other forms with children (incl. single p.)	0.21 **	0.21 ***	0.12 *	0.25 ***	0.03	0.37 ***	0.20 ***	0.20 **	0.31 ***	0.12	0.14 ***	-0.06	0.20 ***	0.17 **	0.14 ***	0.02	0.24 ***	0.24 ***	0.26 ***	0.21 ***	0.05	0.03	0.38 **	0.14 *	0.19 **	0.25 ***	0.13 *
<b>Gender</b> (ref.: women): Men	0.01	-0.01	0.05 **	-0.02	-0.02	0.02	0.00	0.01	0.02	0.02	-0.01	0.01	-0.01	0.01	-0.01	0.00	0.01	0.00	-0.02	-0.04 *	0.00	0.01	0.00	0.03 *	-0.01	0.01	0.00
<b>Age</b> (ref.: 16-19)																											
20-24	0.04	0.01	0.08 *	0.06 *	0.06 *	0.06 **	0.14 ***	0.05	0.01	0.00	-0.01	0.17 ***	0.02	0.01	0.06 **	-0.03	0.01	0.06	0.00	0.01	-0.07 **	0.07 ***	-0.03	0.09 ***	0.14 ***	0.20 ***	0.14 ***
25-29	-0.03	0.01	-0.05	0.05 +	0.04	0.05 +	0.03	-0.08 +	-0.14 ***	-0.03	-0.04 *	-0.03	-0.07 ***	0.01	0.06 *	-0.03	-0.02	-0.03	0.02	0.02	-0.06 *	0.08 **	-0.08 ***	0.01	0.09 **	0.23 ***	0.10 **
30-34	-0.07 *	0.01	-0.05	0.01	0.03	0.02	-0.03	-0.15 **	-0.14 ***	-0.06 *	-0.09 ***	0.02	-0.09 ***	-0.01	0.01	-0.04	-0.05 +	-0.03	-0.03	0.04	-0.08 **	0.05 +	-0.11 ***	0.05	0.05 ***	0.19 ***	0.08 *
<b>Migration background</b> (ref.: no): Yes	0.16 ***	0.06 ***	-0.09	0.06 ***	0.16 ***	0.06 *	0.08 ***	0.05 +	0.07 **	0.03	0.21 ***	0.09 **	0.08 ***	0.05 +	0.13 **	0.02	0.12 ***	-0.17	0.16 ***	0.04	0.09 ***	0.05	0.03		0.01	0.15 ***	0.01
<b>Residential area</b> (ref.: cities)																											
Towns and suburbs	-0.03 +	-0.08 ***	0.03 **	-0.05 ***	0.05 **	-0.03 **		0.01		0.06 ***	0.04 ***	0.03 +	-0.07 ***	0.02	-0.04 *	0.01	0.01	0.03	0.07 **			0.03 *	-0.02 +	0.07 ***	-0.03	0.01	0.02
Rural areas	-0.04 *	-0.04 *	0.09 ***	-0.05 **	0.11 ***	-0.03 *	-0.03 +	-0.01	0.01	0.12 ***	-0.02	0.01	-0.08 ***	0.03 *	-0.03 +	0.05 **	0.01	0.05 *	0.01	0.07 ***	-0.01	0.07 ***	0.08 ***	0.21 ***	0.07 ***	0.03	0.03 +
<b>Employment status</b> (ref.: employed)																											
Unemployed	0.21 ***	0.19 ***	0.22 ***	0.08 **	0.20 ***	0.23 ***	0.30 ***	0.19 ***	0.16 ***	0.21 ***	0.21 ***	0.22 ***	0.20 ***	0.24 ***	0.24 ***	0.12 ***	0.25 ***	0.15 ***	0.11 *	0.16 ***	0.19 ***	0.20 ***	0.19 ***	0.28 ***	0.30 ***	0.20 ***	0.27 ***
In education	0.06 **	0.11 ***	-0.06 *	0.10 ***	0.03	0.07 ***	0.24 ***	0.22 ***	0.07 **	0.06 **	0.07 ***	0.29 ***	0.13 ***	0.08 ***	0.02	0.09 ***	0.07 ***	0.05	0.04	0.11 ***	0.12 ***	0.12 ***	0.01	0.04	0.10 ***	0.19 ***	0.01
Inactive	0.04	0.40 ***	0.17 ***	0.22 ***	0.19 ***	0.08 ***	0.12 ***	0.14 **	0.10 ***	0.21 ***	0.24 ***	0.24 ***	0.29 ***	0.11 *	0.03	0.05 +	0.24 ***	0.26 ***	0.17 ***	0.13 ***	0.39 ***	0.08 ***	0.11 *	0.26 ***	0.39 ***	0.26 ***	0.08 ***

# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
(Intercept)	0.22 ***	0.11 ***	0.34 ***	0.12 ***	0.09 *	0.07 **	0.09 ***	0.20 ***	0.19 ***	0.20 ***	0.18 ***	0.02	0.24 ***	0.13 ***	0.18 ***	0.07 *	0.11 **	0.19 **	0.12 *	0.06	0.13 ***	0.03	0.13 ***	0.13 **	0.14 ***	-0.09 *	0.20 ***
R2	.163	.221	.244	.095	.165	.134	.201	.256	.116	.098	.159	.327	.125	.104	.123	.072	.111	.178	.133	.115	.189	.076	.098	.230	.205	.193	.36
Number of observations.	2259	3476	2427	2629	2190	2892	5349	1579	2846	3785	8699	1548	5747	3129	2805	2003	5006	988	2044	2079	1955	5224	4131	2789	3280	1839	2416

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Copyright 2024 by Hornberg/Heisig/Solga.



Table D 6. Two-level country-specific regressions of life satisfaction on socio-demographic and socio-economic profile characteristics

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
<b>Educational attainment</b> (ref.: less-educated)																											
Intermediate-educated	-0.21 *	0.15 *	0.48 ***	0.00	0.06	0.19 +	0.38 ***	-0.44 **	0.07	0.57 ***	0.17 ***	-0.07	-0.01	-0.04	0.78 ***	-0.03	0.25 ***	0.90 ***	-0.03	0.14	0.01	0.08	-0.41 *	0.55 ***	0.35 **	-0.03	0.42 **
Tertiary-educated	-0.12 ***	0.34 ***	0.78 ***	0.17	0.27 +	0.52 ***	0.59 ***	-0.38 *	0.27 *	0.87 ***	0.24 ***	0.03	0.14	0.18	0.92 ***	0.08	0.54 ***	1.00 ***	0.00	0.36 **	0.13	0.09	-0.35 *	0.66 ***	0.66 ***	-0.05	0.80 ***
<b>Health status</b> (ref.: very good)																											
Good	-0.65 ***	-0.28 ***	-0.77 ***	-0.49 ***	-0.36 ***	-0.47 ***	-0.78 ***	-0.82 ***	-0.46 ***	-0.38 ***	-0.87 ***	-0.42 ***	-0.53 ***	-0.75 ***	-0.58 ***	-0.52 ***	-0.40 ***	-0.33 *	-0.54 ***	-0.47 ***	-0.32 ***	-0.62 ***	-0.53 ***	-0.43 ***	-0.39 ***	-0.66 ***	-0.34 ***
Fair	-1.41 ***	-1.17 ***	-1.12 ***	-1.29 ***	-0.66 ***	-0.81 ***	-1.86 ***	-2.02 ***	-1.19 ***	-1.15 ***	-1.99 ***	-1.54 ***	-1.19 ***	-1.28 ***	-1.74 ***	-1.34 ***	-0.94 ***	-1.19 ***	-1.60 ***	-1.20 ***	-1.10 ***	-1.36 ***	-1.30 ***	-0.70 **	-1.94 ***	-1.56 ***	-0.81 ***
(Very) poor	-2.95 ***	-2.12 ***	-2.80 ***	-2.58 ***	-2.34 ***	-2.24 ***	-3.56 ***	-4.07 ***	-2.35 ***	-2.08 ***	-2.84 ***	-4.01 ***	-2.48 ***	-3.24 ***	-3.30 ***	-2.27 ***	-1.50 ***	-2.55 ***	-2.07 ***	-2.17 ***	-3.21 ***	-1.33 ***	-2.58 ***	-0.46 +	-2.32 ***	-2.68 ***	-2.75 ***
<b>Family composition</b> (ref.: couples without children)																											
Couples with children	0.23 *	-0.02	0.11	0.40 ***	0.09	0.42 ***	0.30 **	0.49 **	0.18 +	0.12	0.18 *	0.36 ***	0.17 +	0.57 ***	0.39 **	0.55 **	0.30 **	0.85 ***	0.11	0.30 *	0.14	0.32 ***	0.59 ***	0.03	0.11	0.39 ***	0.53 **
Living with parents	-0.32 ***	-0.36 ***	-0.13	-0.52 ***	-0.54 ***	-0.06	-0.21 *	-0.61 **	-0.54 ***	-0.34 **	-0.30 ***	-0.46 **	-0.39 **	-0.02	-0.28 +	-0.48 **	-0.15 *	0.53 *	-0.15 ***	-0.43 ***	-0.17	-0.23 *	-0.18	-0.07	-0.13	-0.50 ***	-0.15
Living alone	-0.43 ***	-0.45 ***	-0.23	-0.46 ***	-0.45 **	0.04	-0.31 ***	-0.57 ***	-0.32 **	-0.10	-0.45 ***	-0.32 ***	-0.51 ***	0.26	-0.23	0.16	-0.10	0.53 *	-0.41 ***	-0.15	0.14	-0.08	-0.34 +	0.01	-0.51 *	-0.60 ***	-0.47 *
Other forms with children (incl. single p.)	-0.60 *	-0.12	-0.11	0.14	-0.47	-0.42 +	-0.08	0.31	-0.40 +	-0.63	-0.40 **	-0.29	-0.26	-1.05 ***	-0.52 +	-0.35 **	-0.53 **	0.27	-0.65 *	-0.18	-0.29	-0.01	-0.37	-0.65 **	-0.57 +	-0.68 **	-0.22
<b>Gender</b> (ref.: women): Men	0.04	0.01	-0.10	-0.06	0.04	-0.10	-0.16 **	-0.06	-0.06	-0.05	-0.06	0.00	0.10	-0.04	-0.25 **	0.09	-0.01	0.04	-0.09	-0.06	-0.12	-0.07	-0.14	0.07	-0.15 *	-0.06	0.09
<b>Age</b> (ref.: 16-19)																											
20-24	-0.11	-0.07	-0.63 ***	-0.47 ***	-0.11	-0.20	-0.09	0.02	-0.36 **	-0.49 ***	-0.33 ***	-0.31 *	-0.74 ***	-0.02	-0.62 **	-0.07	-0.34 ***	-1.29 ***	0.37 **	-0.32 *	-0.15	-0.17	0.32	-0.38 ***	-0.51 ***	-0.18	-0.48 **
25-29	-0.20	-0.23 *	-0.61 ***	-0.71 ***	-0.20	-0.52 **	-0.36 **	0.14	-0.65 ***	-0.71 ***	-0.59 ***	-0.59 ***	-0.91 ***	-0.38 **	-0.76 ***	-0.16	-0.45 ***	-1.64 ***	-0.13	-0.58 ***	-0.05	-0.21	0.32	-0.36 **	-0.85 ***	-0.25	-0.80 ***
30-34	-0.25 +	-0.35 **	-0.82 ***	-0.80 ***	-0.41 *	-0.49 **	-0.35 **	-0.21	-0.60 ***	-0.70 ***	-0.70 ***	-0.74 ***	-0.91 ***	-0.65 ***	-0.84 ***	-0.09	-0.54 ***	-1.49 ***	-0.07	-0.43 *	-0.29	-0.18	-0.04	-0.34 **	-0.98 ***	-0.45 *	-0.96 ***
<b>Migration background</b> (ref.: no): Yes	-0.07	-0.18 **	0.27	-0.09	-0.11	0.00	-0.25 ***	-0.06	-0.15	-0.03	-0.08	-0.67 ***	0.01	0.03	-0.74 *	0.10	0.01	-1.25 +	-0.20 *	-0.04	0.02	0.10	0.34 +		0.12	0.00	0.17
<b>Residential area</b> (ref.: cities)																											
Towns and suburbs	0.04	0.10 *	-0.09	0.02	0.09	0.20 **		0.10		-0.14 *	-0.07 +	0.01	0.12	0.25 ***	-0.16	-0.05	0.09 +	0.18	0.16			-0.04	0.15	0.27 ***	0.16 +	0.23 **	0.24 *
Rural areas	0.25 ***	0.27 ***	-0.29 ***	-0.02	0.26 *	0.29 ***	0.04	0.09	0.03	0.12 +	0.14 *	0.07	0.17 *	0.33 ***	-0.22 +	0.10	0.14 *	0.03	0.38 ***	0.10	0.24 **	0.07	0.04	0.10	0.07	0.31 **	0.02
<b>Employment status</b> (ref.: employed)																											
Unemployed	-0.74 ***	-0.30 **	-0.79 ***	-0.50 ***	-0.99 ***	-0.95 ***	-1.08 ***	-1.24 ***	-0.80 ***	-0.51 ***	-0.70 ***	-0.53 ***	-0.57 ***	-0.76 ***	-0.98 ***	-0.51 **	-0.78 ***	-1.22 ***	-1.55 ***	-0.20	-1.26 ***	-0.07	-1.27 ***	-0.15	-0.80 ***	-0.74 ***	-1.24 ***
In education	-0.25 **	-0.11	0.18	-0.02	0.37 **	0.20 +	-0.03	-0.24 *	-0.04	0.51 ***	-0.07	-0.25 **	-0.35 **	-0.01	0.39 *	0.06	0.03	-0.63 *	-0.12	0.37 **	-0.04	0.36 *	0.35	0.28 **	0.42 ***	0.12	0.76 ***
Inactive	0.11	-0.38 ***	-0.56 ***	0.02	-0.38 *	-0.03	-0.34 ***	-0.87 ***	-0.24 *	0.05	-0.14	0.18	-0.07	-0.63 **	-0.17	-0.41 *	-0.59 ***	0.22	-0.65 ***	-0.22 +	-0.32 +	-0.32 **	-1.09 *	-0.21 *	-0.06	0.03	-0.20

# Decomposition of between and within-country (regional) differences in the labour market attainment of young adults

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	PL	PT	RO	RS	SE	SK
Log. equalised disposable income	0.08	0.12 +	0.22 **	0.29 ***	0.35 ***	0.54 ***	0.22 **	0.28 *	0.29 ***	0.19 **	0.23 ***	0.12	0.03	0.51 ***	0.31 **	0.25 *	0.22 ***	0.30 *	0.45 ***	0.45 ***	0.12	0.12 +	0.36 *	0.18 **	0.23 **	0.28 **	0.47 ***
Poverty (ref.: no): Yes	-0.07	-0.08	-0.10	0.10	0.14	-0.07	-0.12	0.03	0.24 *	-0.08	-0.02	0.08	0.01	0.22 +	-0.30	-0.19	0.14 +	-0.20	-0.20	0.32 **	-0.19	-0.15	0.49 *	-0.48 ***	-0.64 ***	0.04	-0.02
(Intercept)	8.26 ***	6.95 ***	5.41 ***	5.82 ***	4.20 ***	2.88 ***	6.07 ***	5.87 ***	5.96 ***	5.65 ***	6.70 ***	8.03 ***	8.16 ***	3.41 ***	5.17 ***	5.07 ***	5.91 ***	5.43 ***	3.37 **	3.76 ***	6.66 ***	7.35 ***	4.98 ***	6.48 ***	5.63 ***	5.91 ***	3.65 **
R2	.205	.190	.208	.144	.113	.169	.244	.300	.174	.122	.187	.320	.160	.235	.245	.154	.118	.171	.217	.192	.101	.130	.267	.162	.209	.267	.214
Number of observations	2227	3380	2426	2627	2187	2687	4226	1547	2705	3712	8499	1545	2589	2876	1416	1740	4987	960	1894	1895	1931	2197	700	2764	3203	1830	2186

Notes: + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Copyright 2024 by Hornberg/Heisig/Solga.

