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GENDER INCOME GAP OVER LIFE-CYCLE: CROSS-COUNTRY ANALYSIS

Master's Thesis

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Name and signature of supervisor…………………………………………………….

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 I have written this master's thesis independently. All viewpoints of other authors, literary sources and data from elsewhere used for writing this paper have been referenced.
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Abstract

Gender Income Gap Over Life-Cycle: Cross-Country Analysis

by Papuna Gogoladze

Despite the vast literature on the gender disparities in the labor market participation and outcomes, there is a scarce literature on the gender gap in total income. This paper tries to fill the research gap and has threefold contribution to the existing literature. First, the paper studies the gender gap in aggregate income instead of focusing only one component – wages. Second, the analysis of the gap in four age categories reveals how the income gap behaves throughout the "life-cycle". And three, the gap is analysed in 25 countries that allows observing the institutional differences that are not apparent in case of single-country study. In most countries the unexplained median total income gap is the lowest among the youngest and increases throughout the life-cycle. However, there are countries, where the gap peaks in the youngest age group, for example, in Bulgaria. There is a large heterogeneity among countries in the unexplained gap size. Among the working age people, the unexplained median income gap is above 70% in Greece, while the lowest gap, approximately 4%, is reported in Slovenia. The paper suggests that trade union membership reduces and minimum wages increase the unexplained income gap of low-income individuals below age 45. More generous maternity leave increases it for low-income individuals between age 25-44, while formal child-care has negative impact throughout the distribution for the oldest. The analysis shows that "one-size-fits-all" policies are unable to respond adequately the gender gap issue in different income sources.

1 Introduction

A gender discrimination in numerous fields has laid a solid foundation for development of advanced econometric tools, which has enabled researchers to extensively study differences in the labor market outcomes and participation by gender. Most studies on gender inequality in labor market participation show strong convergence of economic status of males and females over time (e.g. see Balleer et al. (2009), Altoji and Blank (1999)), However, there still exists substantial gap between earnings of men and women (e.g. see Boll and Lagemann (2018)). Since wages constitute the largest component of total earnings, the gender wage gap has become the most widely studied topic in terms of gender inequality. This process has been accelerated by the availability of the data on employment income. However, the absence of appropriate statistical data impeded the further examination of gender disparities in other fields, such as wealth and pensions. For example, until recently, little to no studies have been done on wealth inequality (see, *inter alia*, Siemerminska et al. (2010), Bonnet et al. (2013), D'Alessio (2018), Meriküll et al. (2018)). Most datasets collected information on wealth components at household level, which made is impossible to differentiate the individual possessions.

Due to very similar reasons as for the gender wealth inequality, there is a very scarce literature on the gender income gap. The study of wage differentials captures the gap only among wage-earners, which accounts for less than a half of the total population. Moreover, employment income is only one part of the total income. Employment income itself may include wage and self-employment income, while the total income, in addition, includes property and capital income, and transfers. Also, the role of employment income is different for people from different age groups (less important for young and old individuals). The aim of the study is to investigate the gender income gap over age groups in Europe. The contribution of this paper to the existing literature is threefold. First, instead of focusing on discrepancies solely in employment income, the study aggregates 17 different income sources and studies the gender gap in the total income. Furthermore, the gender gaps in three different income categories are separately investigated. Second, the gap is analysed for different age groups that reveals how the income gap behaves throughout the "life-cycle". And finally, the paper studies the gap in 25 countries and tries to observe institutional differences that are not apparent in case of single-country study.

In the study the survey data of European Union Statistics on Income and Living Conditions (2016) is used. The dataset collects information about income at both personal and household levels along with other demographic and socio-economic data. The study spans the 23 EU and 2 non-EU countries, including individuals aged 16 and above. In order to study the impact of the observed characteristics on the total income throughout the whole distribution, the unconditional quantile regression is used, proposed by Firpo et al. (2009). The key advantage of this method is its ability to estimate the effects of marginal changes in the explanatory variables on the unconditional quantiles of the dependent variable. Next, the Oaxaca-Blinder (1973) decomposition method is applied to investigate the gender income gap and see what portion of the total gap can be explained by the differences in the observed characteristics.

It is found that there is a high degree of heterogeneity among the countries. In 14 out of 25 countries, the unexplained median total income gap is the lowest for

the youngest age-group and gradually increases over the life-cycle. However, there are countries in which the gap peaks among the youngest individuals, for example, in Bulgaria. The study also revealed significant variation within the age groups. Among the individuals below age 25, in Bulgaria the unexplained median income gap is the largest and in favour of men (0.726 log points), while in Greece there is the evidence of the largest unexplained median income favouring women. In the following age group of 25-44, the largest unexplained median gap is observed in Greece (0.557 log points), while the lowest gap is reported for Denmark (0.115 log points). Similar results are reported for the individuals between 45-65: there is the evidence of the largest and the lowest unexplained median income gaps favouring men in Greece and Slovenia, respectively. The fact that in Greece there are the largest gap in these two age groups could be attributed to the shift from public to private sector. Earlier literature found that in Greece there is a negative relationship between public sector employment and wage gap (e.g. see Christofides et al. (2013)). Since the crisis in 2008, the public sector employment has been decreasing at high rates. Therefore, moving towards private sector could have contributed to the enlargement of the wage gap and, subsequently, total income gap. In the oldest age group, the largest unconditional median income gap in favour of men is reported for Austria, while it is the lowest in Estonia, though statistically insignificant. Since the public transfers have the lion's share in the total income for the oldest individuals, these findings are further strengthened by the gaps in public transfers: in Estonia the unexplained median gap in public transfers is the lowest, while in Austria it is one of the largest.

In addition, the paper analyzed the gender gaps in employment income, private transfers and capital income, and public transfers. The raw and unexplained median gaps in employment income are always in favour of men. Among the individuals between age 25-44, the largest unexplained median employment income gaps are reported in Latvia and Estonia (0.463 and 0.456 log points, respectively), while it is the lowest in Romania (0.078 log points). In the following age group of 45-65, there is the evidence of the largest and the lowest unexplained median employment income gaps in the Netherlands and Slovenia (0.425 and 0.091 log points, respectively). Also, glass ceiling and sticky floor effects are found in Belgium, Czechia, France, Greece, and Norway for both age groups, indicating a presence of positive selection (Olivetti and Petrongolo (2008)). The analysis for private transfers and capital income provides evidence that the largest total and unexplained median gaps are present in France, while they are the lowest in Hungary, among the youngest. In the age groups of 25-44 and 45-65, the explained part of the total gap systematically favours women over men. Among the oldest, the largest unexplained median gap is reported for Serbia, which is also in favour of women. The analysis of the public transfers showed that the differences in the observed characteristics predominantly favour women for the individuals below age 65. This could be attributed to the women's increased participation in the education and higher education-related allowances compared to men. On the contrary, both explained and unexplained median gaps in public transfers favour men over age 65.

Finally, the paper studied impact of eight institutional factors on the unexplained total income gap: union density, employment protection legislation, Kaitz index (ratio of minimum wage to average wage), maternity pay entitlement, formal child care for children under 3, pensions system design, minimum wage setting, and national minimum wage. Union density and minimum wage setting are found to have

significant negative and positive impact, respectively, on the unexplained gap for low-income individuals. The negative impact of union density on the gap is also highlighted by other studies (e.g. see Blau and Kahn (1992, 1996)). Moreover, the analysis showed that minimum wages have negative impact on the unexplained gap in employment income (e.g. see Bargain et al. (2018)). However, as mentioned above, it enlarges the unexplained total income gap. Since many low-income individuals receive public transfers, once minimum wages are set, they may not qualify for those social benefits anymore, which might be larger than the marginal increase in employment income. It is found that the maternity pay entitlement (product of maternity leave length and payment rate) has positive impact on the unexplained gap for individuals between 25-44: increased burden encourages employers to offer lower wages to women compared to their male counterparts. Among the oldest individuals, there is the evidence of the negative relationship between formal child-care and unexplained total income gap. This could easily be explained by widespread culture of informal care (for example, grandmothers), especially in Eastern and Central European cultures.

The structure of the paper is as follows: Section 2 overviews the literature related, Section 3 explains the application of the unconditional quantile regression and Oaxaca-Blinder decomposition, Section 4 describes the data and its transformations, Section 5 presents the findings of the paper, and Section 6 concludes.

2 Related Literature

A study of the economics of discrimination is thought to be pioneered by Becker (1957) in his seminal study. As Weichselbaumer and Winter-Ebmer (2005) describe, availability of microdata allowed labour economists to conduct numerous studies on gender inequality in the last decades. Most studies on gender inequality depict strong convergence of economic status of males and females over time. Lion's share of this reduction can be attributed to increasing trends in women's participation in the labour market and their educational levels. Altoji and Blank (1999) summarized the literature of gender and race inequality and showed dramatic changes in the labour force participation in the United States – there had been a steady decline in men's involvement in the labour force, especially for black men, while, women showed increased labour force participation. Despite this convergence, there exists a gap between men's and women's earnings. They distinguished two main factors contributing to the gender earnings gap: human capital accumulation and discrimination. The largest part of the differential was due to the discrimination even after controlling for individual and job characteristics. Goldin (2006) introduced the term "quiet revolution" to describe how women changed their views about career perspectives and their role in the family. On the other side of the labour market, computerization has had a great impact on relative labour demand for females as compared to males. Weinberg (2000) estimates that more than half of the increase in demand for female workers in the United States can be accounted for computerization.

Until the second half of the 20th century, it was legal to differentiate employees by gender and offer them different wages for certain jobs. It was a common practice to publish job advertisements for each gender separately. However, some countries started promoting equal pay for both genders. For example, in the United States, the

Equal Pay Act was enforced that prohibited differentiating wages based on gender. Australia is also a striking example in terms of promoting equal pay. The Commonwealth Conciliation and Arbitration Tribunal took several measures to prevent discrimination on the gender basis. In 1969 the principle of equal pay was introduced, which aimed to prohibit the differentiation of pay for the same work. This principle was extended in 1972 and covered work of equal value followed but setting a single minimum wage in 1974. The law prohibiting the gender discrimination was enforced by Workplace Relations Act in 1996. (Daly et al. (2006)).

Since wages are the largest and most accessible component of income, the gender wage gap has become the most widely studied topic in terms of gender inequality. The economics of discrimination equipped labour economists with necessary tools for studying gender wage gap that has resulted in innumerable research papers trying to quantify variables that contribute to the difference. Starting from the 1970s, a myriad of studies tried to explain the factors that contribute to the wage differentials between men and women. To put it simpler, all these studies sought to divide the gap into two parts: one that could be explained by the differences in the observable characteristics of men and women, and the other one that could not be explained, so-called discrimination. The standard gender wage gap decomposition tool emerged from a seminal study of Oaxaca (1973) and Blinder (1973). The main idea of this principle is to write the gap as the sum of two parts: structure (unexplained) and composition (explained) parts. Over time several modifications and extensions of this decomposition method have been developed: Juhn et al. (1991, 1993) extended the method to study changes over time in the unexplained gap; Albrecht et al. (2003) and Machado and Mata (2005) integrated quantile analysis; Fairlie (2005) extended the model to treat dichotomous outcomes; Bauer and Sinning (2008) modified the model for censored outcomes, and Ñopo, (2008, a,b) developed the model for non-parametric setups. Throughout the time the model framework advanced by including other distributional characteristics, even more, some methods of studying the entire distribution have been developed (e.g. see Chernozhukov et al. (2013), Firpo et al. (200), Fortin and Lemieux (2000), DiNardo et al. (1996)).

Weichselbaumer and Winter-Ebmer (2005) conduct a meta-analysis of 263 published papers and they showed that the estimated size of the gap largely depends on the type of the dataset used rather than on the decomposition method. Furthermore, they found approximately 35 percentage points decline in the gender pay gap from the 1960s to 1990s. The decline was mostly due to equalization of productive characteristics, so-called explained part of wage differential if we use the language of the Oaxaca-Blinder decomposition. Convergence of gender pay gap is not surprising at all because, as noted above, the convergence of economic status between men and women is mostly due to increased trends in women's participation in the labour market and their education levels.

Blau and Kahn (2006a,b) show that in the majority of OECD countries wage gap has been narrowed down recently but the rate of convergence is very slow. Despite the prohibition of gender discrimination, women still do receive much lower wages than men. As Ponthieux and Meurs (2015) reported, at the end of 2010 the average gender wage gap in the OECD countries was approximately 16%, but significant variation had been observed across the countries (Table 1, from Ponthieux and Meurs (2015), p 1010).

One possible explanation for such variation across countries is provided by Blau and Kahn (1992, 2013). In the wage distribution, women are observed to be concentrated at the lower tail. This unfavourable ranking in the male wage distribution results in less wage differential if the distribution is more compressed. To show how this mechanism works, Blau (2012) compares hourly adjusted gender earning ratios, which are 77.3% and 65.4% in Sweden and the United States, respectively. Women's mean ranking in men's wage distribution is lower for Sweden than for the United States, resulting in lower gender pay gap in Sweden than in the United States that is due to more compressed wage distribution[1]. Important determinants of the wage distribution compression are wage-setting institutions. Low-paid workers, who are mostly women, benefit from highly centralized, unionized wage settings because it reduces wage dispersion (Ponthieux and Meurs(2015), Salverda and Checchi (2014)).

Another possible explanation but at a lesser extent is the gender gap in employment. Olivetti and Petrongolo (2008) introduce the effects of selection into employment, which implies that when the fewer women are employed, they are more likely to be selected and the higher their relative wage is. This statement could be translated into a negative correlation between the gender pay gap and the gender gap in employment. Similar effect is reported by Hunt (2002), who found that after 4 years of reunification of former East Germany the employment rate for women had fallen by 6% more than for men, which could be used for explanation the half of the relative wage gain (10% point drop in gender wage gap) of women.

In addition to differences in the gender pay gap among countries, a lot of interest has been drawn to within-country gender wage gap and its determinants. Ponthieux and Meurs (2015) summarize the key findings of Weichselbaumer and Winter-Ebmer's (2005) study and highlight the fact that basic human capital variables can explain only a very small portion of the gender pay gap. Similar results are reported by Manning and Swaffield (2008), who studied British Household Panel Survey data. Becker (1993) and Mincer (1974) proposed the human capital model, which attempts explaining the gender pay gap in three dimensions: first, since women are more likely to have interruptions in their careers, it is thought that they will accumulate less work experience than men; second, given the fact that women expect interruptions in their careers, it may affect their investment in human capital, for example, education; and third, as Becker (1985) explains after so much time spent on childcare and housework, women have less time left for job and, therefore, they choose less demanding and well-paid jobs. In contrast to the human capital model, Manning and Swaffield (2008) found that human capital hypothesis can explain a significant portion of the gap in the early stage of a career. However, more than a half of the gap that exists 10 years after entering the labour market cannot be explained by this approach. The fact that human capital hypothesis has a significant impact on early career wages is further strengthened by various studies, conducted in the United States, trying to quantify the effects of college major on wages (e.g. see Black et al. (2008), Brown and Corcoran (1997), Loury (1997)). A few women have been observed to choose science or technology as their majors, which leads to a higher degree of occupational segregation (also known as horizontal segregation).

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[1] The basic idea of this mechanism is assigning a rank to females according to their wages in the male wage distribution. Then, the average of females' rankings gives mean percentile ranking of females in the male distribution. Had men and women had the same distribution, the average of these ranking would have been 50. Hence, in the wage hierarchy the lower mean ranking of females implies their less favourable position.

This itself brings up a question why women do not choose those career paths if they promise higher wages? Polacheck (1981) claimed that women tend to choose professions that do not require high career interruption costs. However, Ponthieux and Meurs (2015) argued that this explanation does not work in the modern societies as nowadays women are more attached to their jobs and their careers are often continuous and pointed to psychological factors, which are discussed below.

The trend of occupational segregation has not been linear over time. Blau and Hendricks (1979) observed a sluggish decline in the 1960s, which was followed by a faster decline in 1970s (Bianchi and Rytina (1986)). Since the 1990s the decline slowed down significantly (Blau et al. (1998); Hegewisch et al., (2010), observed stagnation during that period). Blau et al. (2013) showed that the occupational segregation had declined among those with college degrees, however, almost no change had been observed among school dropouts. Akerlof and Kranton (2000, 2010) proposed a model that helps to understand occupational segregation. They assumed that each individual should follow the social norms, which are associated with a certain social category: either man or woman. Once an individual deviates from these prescribed behaviours, this deviation results in disutility and also negative externalities for their coworkers. The disutility is a consequence of the fact that not following the norms makes coworkers uncomfortable and they may react and not cooperate with them (Ponthieux and Meurs, 2015).

Bergmann (1974) introduced an overcrowding model, which summarizes the implications of horizontal segregation. Bergmann argued that traditional views on "roles" of men and women lead to the division of the labour market into males' and females' labour markets. When labour market experiences discrimination, demand for female workers decreases, resulting in supply surplus. Consequently, due to the laws of supply and demand, they experience depressed wages for a comparable occupation. Baker and Fortin (1999) showed that horizontal segregation does not have the same impact everywhere. They made a cross-country study between the United States and Canada and claimed that occupational segregation did not have a statistically significant effect on women's wages in Canada.

Numerous studies tried to explain how the gender pay gap differs across the sectors. It has been observed that the gender wage gap is smaller in the public sector compared to private (e.g. see Arulampalam et al. (2007), Chatterji et al. (2011)). This difference can be attributed to more regulated wages in the public sector. Based on the study of Depalo et al. (2011), Ponthieux and Meurs (2015) propose a stylized fact that "the public-private sector pay gap is positive, particularly in the lower part of the wage distribution, but may be insignificant or negative at the top" (p. 1020). They argue that since women are concentrated in the lower end of the wage distribution, they are better off in the public sector, which contributed to the decline in the pay gap. However, de Castro et al. (2013) claimed that the budget crises do have a negative impact on this effect and recedes with high rates of privatization.

An interesting approach has been introduced by Goldin (2014), who argued that the gender wage gap is mostly due to within rather than between occupation segregation. She showed that for some occupations there is a non-linearity between worked hours and remuneration, which lead to higher gender gap compared to the case when earnings are linear with worked hours. There are some occupations,

where time-adjusted earnings are largely affected by the time spent out of the labor market and number of hours worked. Goldin (2014) provides convincing evidence that such non-linearity exists when employees are not perfect substitutes, which causes transaction costs to rise. Therefore, employees, who do not have perfect substitutes, receive wage penalty form reduced working hours. The elimination of this asymmetric pay scheme may significantly reduce or even vanish the wage differential.

Throughout the time there emerged a concept of vertical segregation, which incorporates notions of "glass ceiling" and "sticky floor" effects. Vertical segregation itself describes a set of obstacles women face while climbing up a professional career. Along with horizontal segregation, it is thought to contribute to the largest part of the gender wage gap. The term "glass ceiling" was introduced by Albrecht et al. (2003) and they referred to the phenomenon when women face limited career prospects after the certain point. Using Swedish microdata from 1998, they showed that the gender pay gap was increasing throughout the wage distribution, however, the distribution was characterized by a drastic increase in the upper tail. On the other hand, Booth et al. (2003) studied British Household Panel Survey for 1991-1995 and observed that women are as likely to be promoted as men but after promotion, they may receive a smaller increase in wages compared to men. This phenomenon has been labelled as a "sticky floor" effect. Unlike from the "glass ceiling" effect, which is generally observed in the upper tail of wage distribution, the "sticky floor" effect is evident if the gender wage gap increases at the lower tail of the wage distribution.

To study how career and outside opportunities are related to each other, Lazear and Rosen (1990) developed a model, which assumed that the differences in the promotion opportunities at jobs that require specific training can be ultimately blamed for the gender pay differential. Even though women and men might have the same labour market ability, women are more likely to stay away from the labour market due to their higher ability in domestic work. Therefore, employers are not willing to train and promote women as much as they are in the case of men.

Arrow (1973) and Phelps (1972) proposed a concept of statistical discrimination, which reflects the consequences of imperfect information about productive characteristics of economic agents. The fact that employers are not willing to hire and promote women because they tend to have higher career interruption rates can be used as an example of statistical discrimination. However, it is not always that easy to distinguish statistical discrimination from the human capital model. This difficulty is easily explained by feedback effects: since women expect fewer career promotions, which is due to their employer's misconceptions about labour supply behaviour, they are less motivated to invest in careers. Goldin (2013) proposed a complementary model of statistical discrimination, taking into account the working environment and employees' preferences on gender composition. The model implies that men will be against women joining male-dominated occupation because it devaluates the occupation and makes it less prestigious. In addition to discriminatory factors that explain the gap in the promotion, Cannings and Montmarquette (1990) found that men are more likely to use informal connections for promotion, while women tend to follow formal framework and therefore they must wait longer for promotion.

Given the fact that explanatory power of human capital variables has been diminished, this paved a path for labour economists to integrate psychological and socioeconomic factors into the analysis of the gender pay gap. The recent advancements in psychology and experimental economics literature have had a significant impact on economic research (Bertrand, 2010). Among many psychological factors, risk aversion and competitiveness have been most extensively studied. Gneezy et al. (2003) observed that women are more likely to have poor performance in a competitive environment compared to men, however, non-competitive environments allow them to have equal performance. They conducted a lab experiment asking students to solve a maze under two possible compensation schemes: a piece rate and tournament schemes. The piece rate scheme paid each student on the basis of a number of mazes solved, while the tournament scheme paid only them who solved the highest number of mazes. In the former case, there was observed no gender difference in performance, however, in the case of the latter, a sharp increase was observed in men's performance.

These findings are in line with those of Niederle and Vesterlund (2007), who found that men and women tend to overestimate their performance rank in their group, but men do it by a greater extent. They studied compensation choices (the same schemes as in Gneezy et al., 2003) of men and women in a mixed-sex environment and observed that approximately three-quarters of men choose tournament compensation scheme, while only one-third of women favoured it. The gender gap in overconfidence could explain a portion of gender difference in the compensation scheme, but not all (Bertrand, 2010). On the other hand, Manning and Saidi (2010) studied British Workplace Employees Relations Survey data and, considering literature outcomes on the gender differences in risk attitudes and competitiveness, they tested a hypothesis that fewer women are employed in the establishments, which use variable pay scheme. Even though the hypothesis could not have been rejected, the difference was quantitatively very small. Likewise, Lavy (2012) did not find any significant difference in performance when the compensation was paid according to the rank in the tournament. Considering these contradictory results, it is legitimate to ask whether the findings of experimental studies can be extrapolated to on-the-job discrimination. Azmat and Petrongolo (2014) argue that to date experiments do not fully explain real-life discrimination, and how expected discrimination might affect an individual's choices. Furthermore, while one may conclude that lab experiments have direct implication for labour market outcomes, these conclusions are based on incomplete information and require further evidence from the workplace to depict the gender differences in real markets.

In addition to psychological factors, the unequal share of unpaid work and family responsibilities are supposed to contribute to the gender pay gap at larger extent than differences in risk aversion and competitiveness (Ponthieux and Meurs, 2015). A family composition results in different consequences in the labour market for men and women, even though they might possess similar productive characteristics. Family status and parenthood are found to have a significant contribution to the gender pay gap. However, these factors have strictly opposite effects for men and women. Men are found to receive marriage wage premium, while there is no positive change observed for married women. One possible explanation is that since most of the domestic chores are done by women, men tend to have higher involvement in the labour market. A concept of wage penalty has been introduced to reflect the fact that married women or mothers receive lower wages compared to their male

counterparts. This is easily explained by the inelastic supply of labour that puts their employers into monopsony and gives market power, which allows them to pay below the competitive wages. Similar results are reported by Hirsch et al. (2010) and Barth and Dale-Olsen (2009), who reported that in Germany and Norway, respectively, labour supply of women is more inelastic than of men's and linked with wage discrimination.

During the last decades an interesting trend has been observed: despite the decline in the gender wage gap, the wage dispersion increased between women with and without children. This phenomenon was called "motherhood wage gap". Cukrowska-Torzewska and Lovasz (2016) studied the effects of having children on the gender pay gap in Hungary and Poland and named five possible sources of lower wages of women with children compared to those without children: 1) working mothers are more likely to spend time out of the labour market due to childbearing, which leads to accumulated less human capital and its depreciation; 2) family responsibilities limit working mothers to seek for 'mother-friendly' jobs, which are typically less demanding and more convenient, resulting in wage differentials; 3) unobserved heterogeneity among women with and without children; 4) according to Becker's work effort theory, lower wages for mothers are consequence of their reduced productivity, which makes employers avoid their promotion; 5) discrimination-based theories. In the recent study of Viitanen (2014), it is shown that motherhood has a long lasting but small effect on compensation. On the contrary, using the same dataset as Viitanen (2014), Waldfogel (1998b) showed that motherhood results in 20% penalty for women aged between 30 and 33. Due to the "motherhood wage gap," there has recently emerged a hypothesis that women tend to postpone having children in order to accumulate human capital. Caucutt et al. (2002) showed that there is a correlation between the increase in earnings and fertility delay. These results are in line with Miller (2011), who found the positive effect of fertility delay on wages. In contrast, Smith et al. (2013) argued that those women who have children at a young age are more likely to be selected as chief executive officers.

Not only women are affected by family status and parenthood, as it was noted above. While there are no direct effects of having kids on men, they do receive marriage premium. In addition to the increased productivity argument stated above, another hypothesis contributing to the wage premium is a positive selection. Cornwell and Rupert (1997) and Nakosteen and Zimmer (1997) argued that those men, who are more productive in the labour market, are more likely to find a partner and succeed in the marriage market. However, there is no convincing evidence supporting either hypothesis. For example, Nakosteen and Zimmer (1997) and Dougherty (2006) found the selection effect. On the other hand, Chun and Lee (2001) and Mehay and Bowman (2005) observed a positive effect of specialization.

Until recently, little to no studies have been done on wealth inequality. Most likely, the explanation is a lack of appropriate statistical data. Generally, data includes household level assets that are shared among the members and almost always it is impossible to differentiate who owns what in the household. However, some approaches have been developed over time to partially overcome the data limitations, though all of them are far from being consistent. For example, one of the most widespread methodologies is to impute wealth on the individual level from the household level. This can include per capital wealth, an equal share of wealth to each partner in the couple households, etc. As it is easily noted, the assumption that all

household assets are owned jointly and shared equally has different consequences for different types of households, which depends on partners' marital status and marriage agreement. However, the emerged approaches are still better than nothing and provide some interesting insights despite the bias. Sierminska et al. (2010) and Bonnet et al. (2013) used German and French data and found a significant difference in wealth accumulation: in Germany there was observed almost 45% gap in net worth, favouring men, and in France, the gap was 16%, again in favour of men. The results differ not because there is less inequality in France but because Bonnet et al. (2013) did not include business assets in their study, whereas in Germany the biggest wealth gap was observed in business wealth. These results are in line with D'Alessio (2018), who found 18% gender wealth gap in Italy, and Meriküll et al. (2018), who estimated approximately 45% gender wealth gap in Estonia, the country with the largest gender wage gap in EU. Furthermore, Meriküll, et al. (2018) showed that the gender wealth gap is the largest in self-employment business wealth.

Furthermore, the gender gap in pensions was neglected till the second half of the 20th century, when male breadwinner model was no longer consistent with the reality. Before that time, it was considered that since pensions could be considered as an outcome of wage, the wage differential would automatically result in less pensions for women than for men. In addition, the assumption of a women being married implied that the pensions were pooled and they could share their partner's pension (Ponthieux and Meurs (2015)). Recent decreasing trends in marriage and increased rate of divorce and cohabitation changed the patterns of the gender pension gap.

3 Methodology

In the paper I analyze factors contributing to the gender income gap, apply regression analysis, and decompose the difference by Oaxaca-Blinder method. If the primary interest of the paper were to study the impact of the explanatory variables on the average income, then the simple OLS method could have been a candidate. The reason why the simple OLS method is popular in economic studies can easily be seen from the law of iterated expectations (L.I.E.). According to the L.I.E., the mean of dependent variable, conditional on explanatory variables, averages up to the unconditional mean: $\mathbb{E}\left(\mathbb{E}(Y/X)\right) = \mathbb{E}(Y)$, where Y could be the dependent variable and X could be a vector of explanatory variables. Due to this property, the OLS regression provides consistent estimates of the effect of an independent variable on the unconditional mean of the dependent variable. Since the goal of this study is to examine the whole distribution of the income, methods other than simple OLS should be employed. A computation of quantiles is considered to be a convenient way to characterize the distribution of the outcome variable. This helped conditional quantile regression models gain popularity (e.g. see Koenker and Basser (1978), Koenker (2005)). However, the estimates of the impact of the explanatory variables on the outcome variable, derived by quantile regression, cannot be used to study their impact on the corresponding unconditional quantiles. This is due to the fact that the expectation of the conditional quantiles does not equal to the expectation of the unconditional quantiles, which was the case for the conditional mean. To overcome this problem, Firpo et al. (2009) proposed the unconditional quantile regression. The rationale behind using the unconditional quantile regression is that it allows

estimation of effects of marginal changes in the explanatory variables on the unconditional quantiles of the dependent variable.

Borah and Basu (2013) studied the conditional and unconditional quantile regressions and distinguished three differences favouring the latter: (1) if the data generating process is influenced by only one covariate then both conditional and unconditional regressions would estimate the same effect of this covariate on a specific quantile; (2) if the data generating process is influenced by several covariates, then conditional quantile regression would estimate the effect of a variable on a specific quantile of the dependent variable, conditional on mean values of other covariates. On the contarary, in case of unconditional quantile regression, the estimated effect of a covariate is generalized over the distribution of other covariates and its interpretation is directed to the whole population instead of a specific quantile; (3) in case of exogenous covariates, the inclusion of different sets of explanatory variables have no impact on the estimate of a covariate in case of unconditional quantile regression as a specific quantile of the distribution is not conditioned on the mean values of other covariates.

The unconditional quantile regression is built on influence function, however, a slightly modified one. As Hampel (1974) described, the influence function of functional statistic shows how much influence each observation has on the distribution of this functional. Firpo et al. (2009) proposed a concept of recentered influence function (RIF), which is derived by adding the statistic to the influence function. For the sake of clarity, if the influence function is:

$$IF(Y; q_\tau) = \frac{\tau - \mathbb{1}\{Y \leq q_\tau\}}{f_y(q_\tau)} \tag{3.1}$$

then the recentered influence function can be written in the following way:

$$RIF(Y; q_\tau) = q_\tau + IF(Y; q_\tau) \tag{3.2}$$

where $\mathbb{1}\{Y \leq q_\tau\}$ is an indicator function, Y is a continuous random variable, q_τ is τ^{th} quantile of the unconditional distribution of the dependent variable, Y, and $f_y(q_\tau)$ is the density of the marginal distribution of Y. In general terms, instead of q_τ, there could have been any functional statistic of our interest.

Modelling the expectation of the RIF, conditional of explanatory variables, is called RIF regression model. In case of quantiles, it can be considered as unconditional quantile regression:

$$\mathbb{E}\left[RIF(Y; q_\tau)|X\right] = m_\tau(X) \tag{3.3}$$

It is easily observed that when mean is considered as a functional statistic, the OLS estimates of explanatory variables, X, on the dependent variable, Y, are equivalent to the coefficient estimates derived by regression of $RIF(Y, \mu)$ (Firpo et al. (2009)). In case of mean, the influence function is the demeaned value of the dependent variable. Therefore, recalling the fact that RIF is sum of IF and the functional statistic, RIF would equal to Y:

$$IF(Y; \mu) = Y - \mu \tag{3.4}$$

$$RIF(Y; \mu) = IF(Y, \mu) + \mu \tag{3.5}$$

By plugging equation (3.4) into equation (3.5), $RIF(Y, \mu) = Y - \mu + \mu = Y$. This property implies validity of OLS estimates of the impact of explanatory variables on the unconditional mean of the dependent variable, Y. However, Firpo et al. (2009) show that this property can be extended to any other distributional statistic.

The central idea of the unconditional quantile regression is that any functional of the distribution can be written as a mathematical expectation. The definition of the unconditional distribution of Y implies that

$$F_Y(y) = \int F_{Y|X}(y|X = x) dF_X(x) \tag{3.6}$$

Firpo et al. (2009) provide the proof for the fact that the recentered influence function integrates up to the functional:

$$\int RIF(y; \nu) dF(y) = \int \nu(F) + IF(y; \nu) dF(y) = \nu(F) \tag{3.7}$$

By substituting the equation (3.6) into the equation (3.7) and considering the fact that:

$$\mathbb{E}\left[RIF(Y; \nu)|X = x\right] = \int_y RIF(y; \nu) dF_{Y|X}(y|X = x) \tag{3.8}$$

The following equation can be shown (Firpo et al. (2009)):

$$\nu(F_Y) = \int RIF(y; \nu) dF_Y(y) = \int \mathbb{E}\left[RIF(Y; \nu)|X = x\right] dF_X(x) \tag{3.9}$$

By comparing the equation (3.6) to the equation (3.9), it is easily seen that to derive the unconditional distribution of Y, it is necessary to integrate over the whole distribution in (3.6), however, when a specific distributional statistic is of an interest, integration over $\mathbb{E}\left[RIF(Y; \nu)|X\right]$ by regression methods is sufficient.

The primary goal of the unconditional quantile regression is to estimate how a small increase, t, in the explanatory variable impacts unconditional quantile of the dependent variable. This is achieved by unconditional quantile partial effect (UQPE). If Y is a function of observed X covariates and unobservable ϵ, in a form of some unknown mapping h ($Y = h(X, \epsilon)$), then the impact on the unconditional distribution of Y, caused by an infinitesimal change in a continuous variable X on the τth quantile, is given by:

$$\beta(\tau) = \lim_{t \to 0} \frac{Q_\tau\left[h(X + t, \epsilon)\right] - Q_\tau\left[Y\right]}{t} \tag{3.10}$$

where $Q_\tau\left[Y\right]$ is the τth quantile of the unconditional distribution of Y. This depicts the case when X is univariate, however, it can be extended for the case when X is multivariate:

$$\beta_j(\tau) = \lim_{t_j \to 0} \frac{Q_\tau \left[h(\left[X_j + t_j; X_{-j} \right], \epsilon) \right] - Q_\tau \left[Y \right]}{t_j} \tag{3.11}$$

More formally, if a continuous variable X is increased by an infinitesimal change t, from X to $X + t$, the change will result in counterfactual distribution $F^*_{Y,t}(y)$. If ν is any distributional statistic then the impact of the change in X on the distributional statistic ν can be written as[2]:

$$\begin{aligned}
\beta(\nu) &\equiv \lim_{t \to 0} \frac{\nu(F^*_{Y,t}) - \nu(F_Y)}{t} \\
&= \int \frac{d\mathbb{E}\left[RIF(Y; \nu) | X = x \right]}{dx} dF(x)
\end{aligned} \tag{3.12}$$

This can be extended to the case, when X is a binary random variable. Let us assume that X can be either 1 or 0, i.e. $X \in 0, 1$. If probability of $X = 1$ is P_x then the infinitesimal change in this probability would result in the counterfactual distribution of $F^*_{Y,t}(y)$. The effect of this change on the distributional statistic can be written as:

$$\begin{aligned}
\beta(\nu) &\equiv \lim_{t \to 0} \frac{\nu(F^*_{Y,t}) - \nu(F_y)}{t} \\
&= \mathbb{E}\left[RIF(Y; \nu, F) | X = 1 \right] - \mathbb{E}\left[RIF(Y; \nu, F) | X = 0 \right]
\end{aligned} \tag{3.13}$$

To apply the unconditional quantile regression to this study, first, I define the recentered influence function specification for income:

$$RIF(y_i; q_\tau) = \beta_{0,\tau} + \sum_{j=1}^{J} \beta_{j,\tau} x^j_{i,\tau} + \epsilon_{i,\tau} \tag{3.14}$$

where $RIF(y_i; q_\tau)$ is the recentered influence function of income y_i at quantile q_τ; x^j (j=1,...,J) are explanatory variables; $\beta_{0,\tau}$ and $\beta_{j,\tau}$ are coefficients of the explanatory variables on the τth quantile of income; and $\epsilon_{i,\tau}$ is an error term.

Firpo et al. (2011) distinguish several advantages of the recentered influence function regression due to its linearity. The most important advantage of this method is that one does not have to worry about monotonicity. This fact emerges from inversion of proportion of the interest, performed locally, which relaxes a need of evaluating the global impact at all points of the distribution. The simplicity of regression makes it easy to interpret and the decomposition is path independent.

To study the gender income gap, Oaxaca-Blinder decomposition is employed (Oaxaca (1973), Blinder (1973)). First, considering the fact that income is strongly skewed right, the sample mean is not necessarily the most informative. When the distribution is skewed right, a sample mean tends to be biased towards the right tail and the difference between mean and median increases as distribution becomes more skewed. Therefore, a great emphasis should not be placed on the sample mean, because those individuals earning high incomes would be a false representation of

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[2]The proof is provided by Firpo et al. (2009)

the typical income. This might be an especially relevant issue in a country such as Estonia (Rõõm and Anspal (2010)), where income dispersion is high. Due to this reason unconditional quantile regression is applied. Second, the Oaxaca-Blinder decomposition is applied to the estimates derived from RIF-regression. The decomposition method allows writing the difference between income estimates of men and women in the following way:

$$
\begin{aligned}
\widehat{\Delta}_{M-F}^{\tau} &= \overline{X}_F \widehat{\beta}_{M,\tau} - \overline{X}_F \widehat{\beta}_{M,\tau} + \overline{X}_M \widehat{\beta}_{M,\tau} - \overline{X}_F \widehat{\beta}_{F,\tau} \\
&= \overline{X}_F \left(\widehat{\beta}_{M,\tau} - \widehat{\beta}_{F,\tau} \right) + \widehat{\beta}_{M,\tau} (\overline{X}_M - \overline{X}_F) \\
&= \widehat{\Delta}_S^{\tau} + \widehat{\Delta}_X^{\tau}
\end{aligned}
\tag{3.15}
$$

where $\widehat{\Delta}_{M-F}^{\tau}$ refers to the income difference between men and women at τ^{th} quantile of the income distribution, $\overline{X}_M$ and $\overline{X}_F$ are sample averages of the explanatory variables, $\widehat{\beta}_{M,\tau}$ and $\widehat{\beta}_{F,\tau}$ are respective coefficients of the explanatory variables, derived from RIF-regression for men and women separately.

The first term of the right-hand-side of the equation (3.15) ($\widehat{\Delta}_S^{\tau}$) is called a structure effect, while the second term is referred to as composition effect ($\widehat{\Delta}_X^{\tau}$). Structure and composition effects are also referred to as unexplained and explained parts of the differential, respectively. Since a reported gender status is considered as a group membership indicator, either male or female, its immutable nature implies that unexplained part of the differential can be attributed to the discrimination. However, in case of income, unlike the case of wages, the unexplained part is not necessarily discrimination. This unexplained part is related to the institutions to some extent, for example, how generous public transfers are towards those raising children at home. The composition effect, or the explained part of the differential, captures the gap that is due to the difference in the observed characteristics between men and women. Such characteristics could be education, field of occupation, employment status, etc.

Gardaezabal and Ugidos (2004) and Oaxaca and Ransom (1999) argue that choice of base group has a large impact on the contribution of each explanatory variable to the structure effect. In this paper, men are considered as a base group. The composition effect can be interpreted how income would differ between men and women, had they had different observable characteristics but same returns (i.e. returns of men) on these characteristics. On the contrary, the structure effect shows how income would differ between men and women, had they had the same characteristics (i.e. characteristics of women) but different returns. The rationale behind using men as a base group is the author's expectation of the discrimination in favor of men, which makes interpretation of the structure effect of the gap straightforward.

Ponthieux and Meurs (2015) highlight one classic difficulty associated with decomposition methods that "the measurement error of some key variables may be more marked for women than for men" (p. 1014). The striking example of this problem is the labour market experience, which very often is proxied as a difference of current age and school-leaving age (potential experience). Given the fact that women are more likely to have interruptions in the career, their experience is overestimated, leading to downward bias of returns to experience and therefore upward bias of the unexplained part of the wage gap. Neumark and Korenman (1992) point

to the difficulty of choosing wage equation (simply, omitted variable bias).

Ponthieux and Meurs (2015) argue that apart from the observed characteristics, there are some unobserved ones that determine the employment status of an individual, and they might be correlated with the productivity and the wage. Neuman and Oaxaca (1998) propose treatment for selection bias, which is arisen due to the fact that workers are not a random sample of the working-age population, by the inclusion of the inverse Mills ratio (Heckman, 1976, 1979) in the wage equation. The inverse Mills ratio, which is sometimes called as a correction term, is derived from the probit model of the probability of being employed. Theoretically, this proposal seems to work rather well, however, it has practical limitations (Vella, 1998).

The analysis is conducted in Stata 14.2. For the *RIF*-regression command *rifreg*[3] was used, and for Oaxaca-Blinder decomposition the command *oaxaca8*[4].

4 Data

The methodology, described in Section 3, is applied to the dataset of European Union Statistics on Income and Living Conditions (EU-SILC, hereafter) provided by Eurostat. The dataset collects information at both personal and household levels for the year 2016. The EU-SILC data has two important features that distinguish it from the other datasets. First, it collects data on income for personal and household levels, which makes it more desirable for income analysis compared to strictly personal or household level datasets. Secondly, it contains information on 25 countries (23 EU and 2 Non-EU countries) for individuals aged 16 and above. Such rich dataset allows researchers to study income distribution patterns over age groups and make cross-country analysis, which itself reveals institutional effects to some extent. The dataset includes 420,520 observations over 25 countries. The sample size of females within each country is systematically larger than the sample of males. The only exceptions are Finland, where the males' sample exceeds females' sample size, and Sweden, where the sample sizes are almost equal. In addition, there is a variation in males' and females' sample sizes within each-country's each age group: despite the fact that females' sample is larger than males' within a country, this does not imply that number of females systematically exceeds number of males in an age-group (the detailed information regarding the sample size of each country is given in appendix, Table A.1). However, the difference is rather small for each country. In addition, I applied survey weights so that the results are the representative of the whole distribution.

The income of an individual is computed as a sum of household level income per household member and personal level income. To compute the household level income per its member, aggregate household income has been divided by the number of its members. In other words, it is assumed a priori that the household pools and equally distributes income among its members. This approach can be criticized as it precludes intrahousehold inequality. However, to the author's best knowledge, there is no other consistent way of redistributing household income among its members. As for the personal level income, the dataset allows inclusion of other

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[3]Nicole M. Fortin based on Firpo et al. (2009) - *rifreg*
[4]Jann (2005, revised in 2008) - *oaxaca8*

EU:	Austria, Belgium, Bulgaria, Czechia, Germany, Denmark, Estonia, Greece, Spain, Finland, France, Croatia, Hungary, Latvia, Lithuania, The Netherlands, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, UK[1]
Non-EU:	Norway, Serbia.

[1] At the time the paper was written, the United Kingdom was in EU.

sources of income than just employment income. Moreover, the EU-SILC data collect information on income during the previous 12 months. In the data, the income components were initially given in local currencies. To make cross-country results comparable, all components have been converted into Euros[5]. The Table 2 shows the income sources included at both, household and personal levels.

Similar to wages, the distribution of income is positively skewed. However, unlike the wages, to rescale income, it is impossible to apply the logarithmic transformation. The reason lies in different income sources that may be positive as well as negative, which is not the case for wages. For instance, gross cash losses from self-employment (Table 2) may outweigh income from other sources and result in negative total income. To deal with such problems, Johnson (1949) proposed inverse hyperbolic sine (IHS, hereafter) transformation. The importance of IHS transformation has been highlighted by Pence (2006) (also see e.g. Poterba et al. (1995)). The IHS of income is written in the following manner:

$$\theta^{-1} sinh^{-1}\left(\theta Y\right) = \theta^{-1} ln\left(\theta Y + \left(\theta^2 Y^2 + 1\right)^{\frac{1}{2}}\right) \tag{4.1}$$

where θ[6] is a scaling parameter and Y is total income. The main advantage of the IHS transformation is its linearity around the origin. This feature is especially important for very low income. The logarithmic transformation would treat 100% change at the lower and upper tails of the distribution in the same way (Pence, 2006). The fact that the IHS transformation approximates logarithm in the right tail of the distribution can be considered as another advantage.

Table A.2 presents the average share of each income component in the total income. It is observed that apart from employment income, which constitutes a substantial portion of the total income (on average 49.25% for men and 42.22% for women), there are other sources that contribute to the composition of the total income. The high share of unemployment income is not surprising. For some time, an individual could have been unemployed, thus receiving unemployment income, and after that time they could become employed and started receiving employment income. Also, Table A.2 shows that employment income has a bigger share of men's income compared to women's. On the contrary, a share of household income is

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[5] Average annual exchange rate of 2015 is used for conversion.

[6] In this study the scaling parameter is set to $\theta = 1$ as it made the distribution closer to normal, therefore, IHS transformation could be written as $sinh^{-1}\left(Y\right) = ln\left(Y + \left(Y^2 + 1\right)^{\frac{1}{2}}\right)$

TABLE 2: Income components

Level	Components
Personal:	(1) Gross employee cash or near cash income;
	(2) Company car;
	(3) Gross cash benefits or losses from self-employment;[1]
	(4) Pensions received from individual private plans;[2]
	(5) Unemployment benefits;
	(6) Old-age benefits;
	(7) Survivor's benefits;
	(8) Sickness benefits;
	(9) Disability benefits;
	(10) Education-related allowances.
Household:	(11) Income from rental of a property or land;
	(12) Family/children related allowances;
	(13) Social exclusion not elsewhere classified;
	(14) Housing allowances;
	(15) Regular inter-household cash transfers received;
	(16) Interests, dividends, profit from capital investments; [3]
	(17) Income received by people aged under 16.

[1] Includes royalties.
[2] Includes only those sources that are not classified in European System of integrated Social Protection Statistics (ESSPROS).
[3] Investments in unincorporated business.
 Note: Income components are assigned to either personal or household level by the survey.

always higher for women. The assumption of the absence of intrahousehold inequality, implies that the variation in individual household level income is primarily driven by single-headed households. Moreover, in all countries (excluding Sweden), the share of profits and losses from self-employment is higher for men. Since many income components are reported on the annual basis (for example, profits and losses from self-employment and interests, dividends, and profits from capital investments), in this paper, I study the gap in the annual income rather than monthly.

The set of explanatory variables includes age, education, employment status, occupation, marital status, citizenship status, and children under 3 or 15 years. A more tentative classification of the explanatory variables is displayed in Table 3.

Individuals are grouped into 4 age categories: 1) <25; 2) 26-45; 3) 46-65; and 4) >65. From the study, I excluded individuals who are below 24, living with their parents and reported their occupation as student, i.e. I dropped economically dependent household members from the study data. As for the education, the variable provided in the EU-SILC data initially had several categories, which later have been grouped into the following 3 broader categories. Primary education includes individuals with less than primary or primary, and those with lower secondary education. Secondary education group consists of individuals with either, upper secondary, or post-secondary (non-tertiary) education. And individuals with short cycle tertiary, bachelor, master, or doctorate degrees are grouped in tertiary education

group[7].

TABLE 3: Classification of the explanatory variables

Variable	Components
Age	Individuals aged 16 - 81
Education	Primary, secondary, tertiary.
Employment Status	Full- and part-time worker, unemployed, inactive.
Occupation	Managers; professionals; technicians and associate professionals; clerical support workers; services and sales workers; skilled agricultural, forestry and fishery workers; craft and related trades workers; elementary occupations; plant and machine operators and assemblers.
Marital status	Single, married, cohabitants.
Citizenship status	Citizen, non-citizen.
Children younger than 3	Whether there are children below 3 in the household
Children younger than 15	Whether there are children below 15 in the household

Another group of explanatory variables that have been grouped into broader categories is self-defined economic status. Those individuals, who reported that they were working full-time (either employed or self-employed) have been assigned to full-time workers, while those working part-time (either employed or self-employed) have been assigned to part-time workers. The group of unemployed individuals includes those, who reported their current economic status as unemployed. Pupils, students, trainees, interns, permanently disabled or unfit to work, compulsory military and community service workers, also those fulfilling domestic tasks and care responsibilities were assigned to inactive group.

The data on occupation is collected in accordance to ISCO-08[8] classification. Individuals who participated in the EU-SILC survey were asked to report the occupation of most recent main job. If an individual was unemployed, occupation for the last main job was reported. Most individuals reported detailed codes for their occupation (either for sub-major, or sub-minor), however, some part of the total population reported more generalized occupational fields. Generalizing more specified categories seems to be more reasonable rather than specifying generalized categories into narrower ones without any knowledge of the real occupation of the individual. Therefore, to achieve one format across the countries' samples, detailed occupations have been grouped into broader groups. The armed forces occupations were grouped together with technicians.

Marital status includes three categories: single, married, and cohabitants. Single individuals include those who have never been married, as well as separated, divorced, and widowed individuals. Those who reported their marital status as married have been assigned to the group of married people, and group of cohabiting individuals includes those living in a consensual union without a legal basis.

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[7]This approach follows *ISCED* 2011 methodology, implemented by Eurostat.

[8] ISCO-08 Structure, index correspondence with ISCO-88 is available at https://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm

The low response rate to the questions regarding the industry, firm size, and health conditions, does not allow their inclusion in the regression model. The inclusion of these variables would result in losing the substantial portion of the total observations (approx. 54% in case of industry, approx. 55% in case of firm size, and more than 15% in case of health conditions).

For robustness, total income is divided into three groups: employment income, private transfers and capital income, and public transfers. Employment income incorporates all income sources of either employee or self-employed ((1), (2), and (3) components from Table 2). The private transfers and capital income include: private pensions, received from individual plans; rent income; inter-household transfers; interests and profits from capital investments, and income of individuals below 16 ((4), (11), (15), (16) and (17) from Table 2). And lastly, public transfers include the rest of both, personal and household income components ((5), (6), (7), (8), (9), (10), (12), (13), and (14) from Table 2)).

Figure 1 shows average share of each these income group in total income for all countries across age groups. The share of employment income peaks for age group 25-44 almost for all countries. In Sweden, it increases gradually for all age groups and then drops for people over 65, as in every country.

FIGURE 1: Average share of different income sources in total income
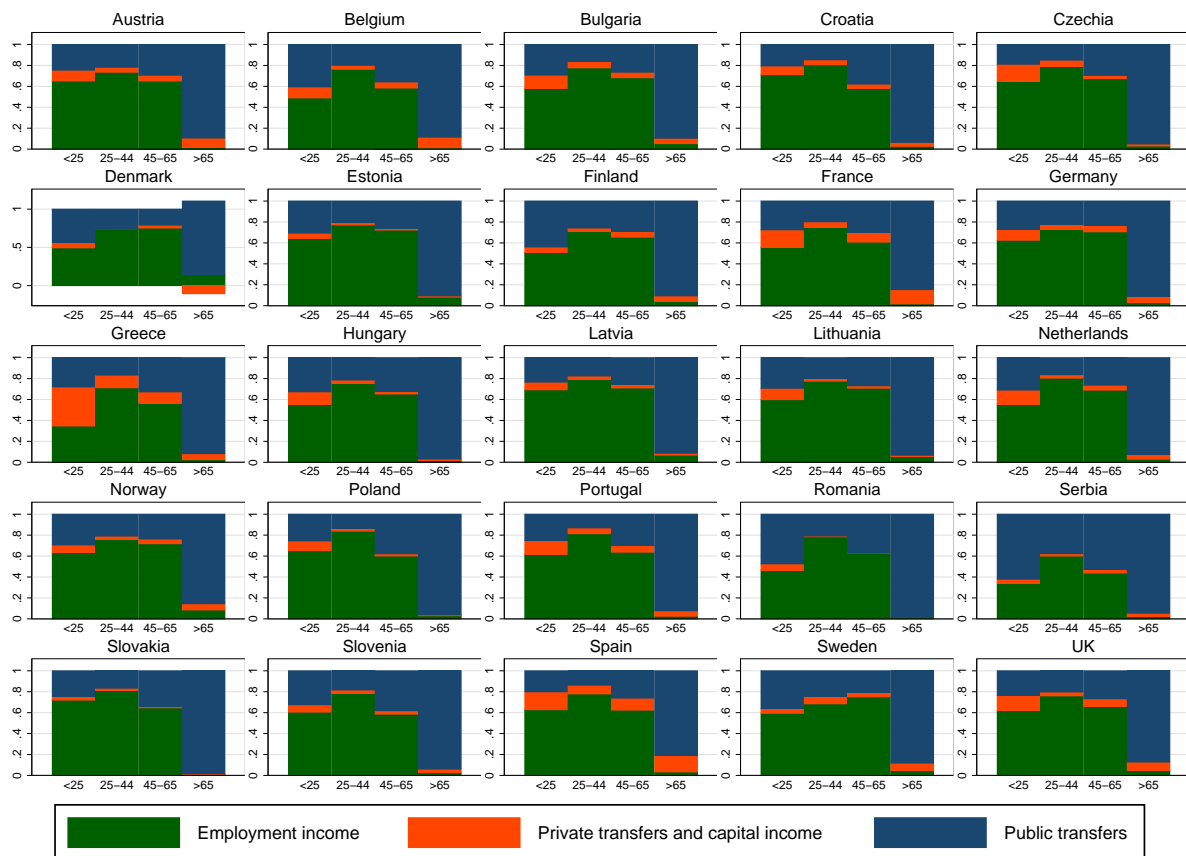
Source: author's calculation from EU-SILC 2016.

In all countries public transfers constitute the largest share of total income for individuals above 65. Unlike from employment income and public transfers, there is a heterogeneity in income from private transfers and capital. Interesting trends

emerge for Greece and Denmark. In Greece, the share of this income group for individuals below 25 is the largest over all countries. On the other hand, this income component has negative share in total income for Danes older than 65.

In the next section, first, I analyze aggregate income gap in all countries over the given age groups. Next, the gap in each above-mentioned income component is analyzed in the similar manner. It allows to determine which income component could have the largest contribution to the total gap. Employment income gap is analyzed only for those between age 25-44 and between age 45-65. This is due to the fact that there are very few employed[9] individuals in the other two age groups. On average only 2.5% and 1% of the total sample receive employment income in age groups of below 25 and over 65, respectively. The approach to leave out individuals below age 25 and over age 65 from the employment income gap analysis is in line with Christofides et al. (2013), who analyzed the gender wage gap, using EU-SILC data for year 2007.

5   Results

In this section, I present results derived from EU-SILC data by applying unconditional quantile regression and Oaxaca-Blinder decomposition, discussed in Section 3. Before analyzing the gap over the different age groups, first, decomposition results for pooled age groups are presented[10]. Tables A.3, A.4, and A.5 show detailed decomposition results of total income gap for the 20th, median, and 90th percentiles, respectively.

For the low-income individuals, unexplained income gap is mostly due to marriage status: being married or cohabiting with partner widens unexplained income gap. The gender income gap at 20th percentile can be explained by managerial occupations, as well as training in craft and trade and plant and machinery occupations, and economic status of being inactive. Likewise, as for the gaps at median income, being married has a major contribution to the unexplained portion, while inactive economic status can account for the largest portion of the explained gap. In addition, part-time working can explain significant part of the explained gap for some countries. Similar to the previous two income percentiles, for the high-income individuals, marriage accounts for the largest part of the unexplained gap, while being inactive and having training in managerial, clerical and administrative, and service and sales occupations have positive contribution to the explained income gap.

The detailed decomposition of gender employment income gap (the largest part of the total income for individuals below age 65) are reported in Tables A.6, A.7, and A.8 for 20th, 50th, and 90th percentiles, respectively. For the low-income individuals in most of the countries, part-time employment and secondary education contribute positively to the explained gap. Furthermore, training in crafts and related trade could account for significant portion of the explained gap. Similar to the total income gap, the unexplained gap of the employment income is mainly due to marriage status (however, it is not statistically significant for some countries). Likewise, in case of median employment income gap, part-time employment has

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[9]Please note that the term "employed" includes full- and part-time (self-) employed individuals.

[10]Please note that throughout the section terms "unconditional" and "raw"' (or "total") are used as synonyms. Also, terms "unexplained" and "conditional" gaps are used interchangeably.

significant contribution to the explained gap, while marriage accounts for large part of the unexplained gap. And finally, among high-income individuals, economic status of being a part-time worker or inactive have major contribution to the explained gap for most of the countries. Moreover, training in clerical and service occupations has significant positive effect on the explained gap. As in all other cases, marriage constitutes large part of the employment income gap at the upper end of the distribution. Across the distribution tertiary education tends to lower the explained gap: more women enroll in universities and choose degrees that are primarily male-dominated, also female graduates outnumber their male counterparts. This can be considered as a consequence of the women's strategy to attain more education to reduce the disparity. However, despite these changes, the concentration at lowest-earning occupations (e.g. teachers) still remains the problem for women. The reason why secondary education does not impact the gap for median and high-income individuals could be explained in a following manner: people at median and upper end of the income distribution are expected to have higher education than those at the lower end, therefore, for them the differences in lower levels of education are not likely to have significant impact on the gap.

The findings of marriage having large impact on unexplained gap of either total income or employment income are line with earlier literature, known as "marriage premium" for men (e.g. see Dougherty (2006) for selection effects). Given the fact that women are underpaid compared to their male counterparts, for maximizing the household income the married couple would rather focus on male partner's labor market activities and allocate female partner's time to household chores.

5.1 Results for the gap in total income

The results are reported for different age groups that allow observing the behaviour of the income gap over different age categories. Tables A.9, A.10, A.11, and A.12 show results of the unconditional quantile regression decomposition obtained for 9 quantiles (10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, and 90%) for the individuals below age 25, between 25-44 and 45-65, and over age 65, respectively. The upper parts of these tables show how much of the total income gap can be explained, while lower parts report the portion that cannot be explained by differences in observed characteristics. There is a variation in the statistical significance of the gaps, either raw, explained, or unexplained for all age groups. Figure 2 reports the median income gap for all age groups across the countries. Detailed decomposition of the total income gap is provided in appendix, Figure B.1.

The results shown in Figure 2 are interpreted by age groups. First, I analyze the youngest age group, which is followed by individuals between 25-44 and 45-65, and, lastly, the oldest age group of the sample is analyzed.

According to the Figure 2, for individuals below age 25, the unconditional median income gap systematically favours men in all countries, except in Finland, Greece, Portugal, and Sweden, where the gap is in favour of women. On the contrary, the conditional median income gap favours women only in Estonia, Greece, the Netherlands, Norway, and Sweden. As observed, in Greece and Sweden both unconditional and conditional gaps favour women (i.e., the gaps are negative), however, unconditional gap is lower than the conditional one. This fact implies that the explained part of the total income gap is negative as well, i.e. had men and

women had the same returns, the differences in observed characteristics would benefit women more than men. Likewise, in Finland, Portugal, Romania, Serbia, the conditional income gap exceeds median raw gap, again implying that the explained part of the total gap is in favour of women. The largest median raw income gap in favour of men is reported to be in Bulgaria (0.695 log points), while the largest median gap favouring women is observed in Greece (-0.807 log points). In Bulgaria the unexplained part of the total gap is also the largest among all studied countries and accounts for 0.726 log points of the total median gap. According to the report on world population prospects by United Nations[11], Bulgaria is the fastest shrinking country in Europe, which is mostly due to brain drain among young population. Also, the share of female emigrants with tertiary education in total emigration is approximately 4 percentage points higher than men's[12]. This could be the reason why Bulgaria has the largest median total income gap among the youngest. However, statistical significance of either raw or unexplained gaps varies across countries, which can be attributed to the small sample size in some countries (Table A.1).

FIGURE 2: Median total income gap for all countries.
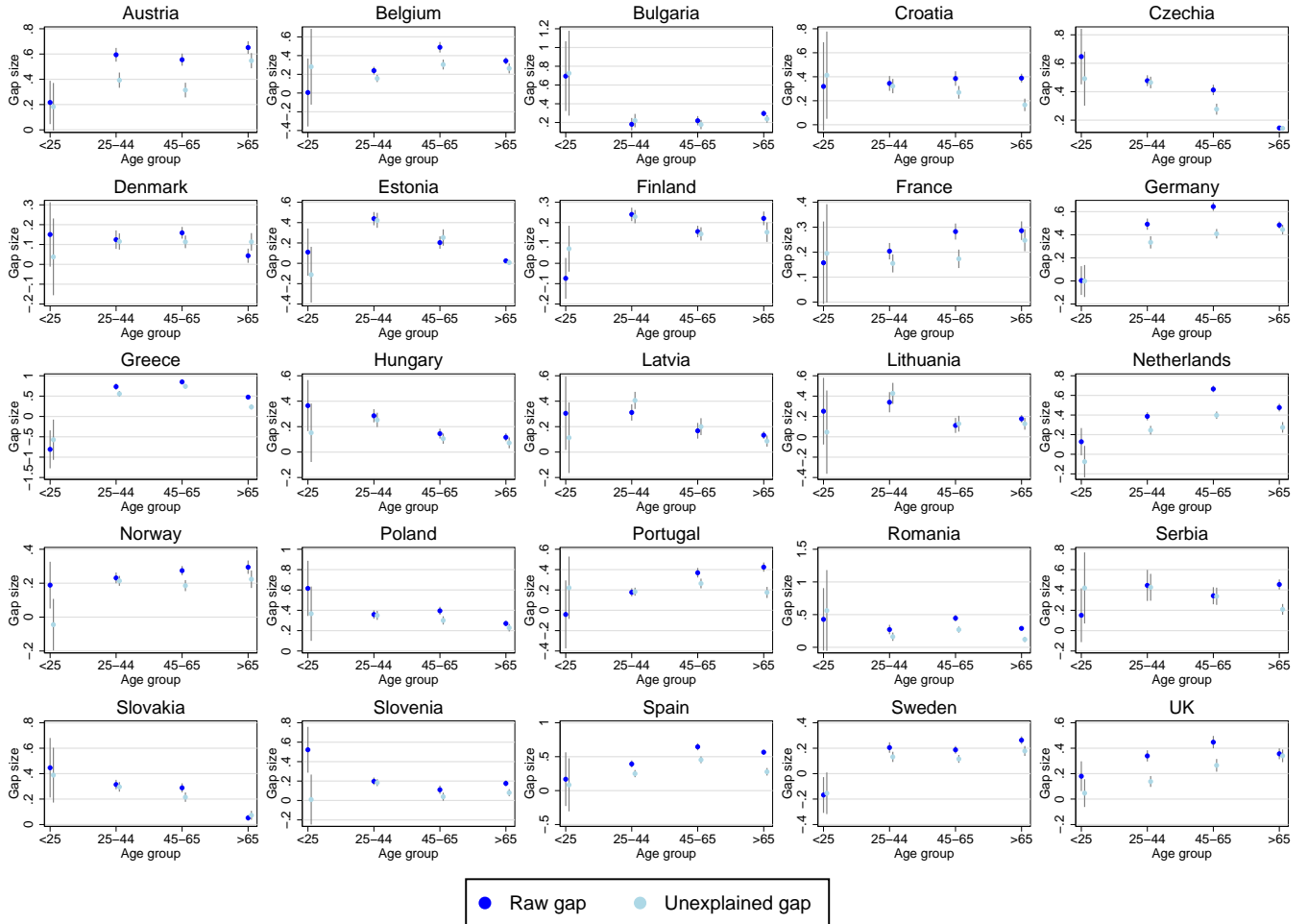
Note: confidence intervals are shown for 90% confidence level.
Source: author's calculation from EU-SILC 2016.

Next, results for individuals between 25-44 are summarized. Unlike the previously analyzed age group, the total median gap favours men in all countries. In

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[11]2017 Revision of World Population Prospects is available at United Nations' *website*.

[12]Database on Immigrants in OECD and non-OECD Countries: *DIOC*. OECD, 2011.

Bulgaria, Latvia, and Lithuania unexplained part of the total gap is larger than the total gap itself. This implies that in these countries differences in observed characteristics benefit women rather than men. However, in other countries both explained and unexplained parts of the total gap favour men. The largest total median gap is reported for Greece and only 0.176 out of 0.733 log points can be explained by the control variables. In the age group of 25-44, Greece is also observed to have the largest unexplained median gap, which accounts for 0.557 log points. On the other hand, Denmark is shown to have the lowest unconditional and conditional median gaps (0.124 and 0.115 log points, respectively). The observed characteristics can account for 201 out of 0.594 and 0.339 log points in the UK and Austria, respectively, which is the largest portion among all other countries (Table A.10). In contrast to the previous age group, the results reported for the individuals between 25-44 are statistically significant in all countries.

In the following age group of 45-65, similar to age group of 25-44, the unconditional median income gap is always in favour of men. In Estonia, Latvia, and Lithuania the portion of the total income gap that is due to the differences in observed characteristics is in favour of women. In other countries both explained and unexplained gaps benefit men more than women. The largest total median gap is again observed in Greece, where only 0.109 out of 0.849 log points can be explained by the control variables, making Greece the country with the largest unexplained part of the raw gap (Table A.11). Christofides et al. (2013) found that in Greece public sector employment is associated with a reduced gender wage gap. According to the labor force survey, conducted by International Labour Organization[13], the share of public sector employment decreased drastically following the 2008 crisis. Assuming that most of these people moved to private sector, that could have laid a solid foundation to the enlargement of the employment income and, therefore, total income gaps (e.g. see de Castro et al. (2013)). Greece is followed by the Netherlands, Spain, and Germany, where the unconditional median total income gaps are estimated to be 0.666, 0.646, and 0.644, respectively. The lowest total median income gap is reported in Lithuania (0.112 log points). However, more interesting indicator is unexplained part of the total income gap, which is the lowest in Slovenia (0.039 log points). As it is shown in Section 5.2, Slovenia is the country with the lowest median employment income gap among people between 45-65, which could be lowering the total median income gap to some extent. In addition, both unconditional and conditional median gaps are statistically significant in all countries for the given age group.

And finally, for individuals over age 65, the unconditional median total income gap always favours men over women. The differences in observed characteristics are in favour of women in Denmark and Slovakia (-0.071 and -0.020 log points, respectively). In all other countries, both unconditional and conditional gaps are observed to be in favour of men. The largest unconditional and conditional median gaps are reported for Austria (0.651 and 0.547 log points, respectively), while the

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[13]Informaton on public employment by sectors and sub-sectors of national accounts is available at International Labour Organization's *website.*

lowest unconditional and conditional gaps are observed in Estonia[14]. These findings can mostly be attributed to the gap in public transfers as it is shown below, in Section 5.4, where it is reported that in Austria and Estonia there are the largest and the lowest median gaps in public transfers, respectively.

Since the prime interest of this study is to examine the portion of the gap that cannot be explained by the differences in observed characteristics, next, the conditional median gap is analyzed over the age groups. In each country the conditional median gap demonstrates several patterns over these age categories. In Bulgaria and France, the unexplained median gap has U-shaped pattern (unexplained part of the total gap is high at the lower and upper tails of the distribution). In particular, the unexplained median gaps for age groups 25-44 and 45-65 are lower compared to the other two groups. However, the conditional median gap has predominantly inverse U-shaped form (unexplained part of the total gap is lower at the low and upper tails of the distribution) in some countries. Namely, in Belgium, Denmark, Estonia, Finland, Greece, Hungary, Latvia, Lithuania, the Netherlands, Portugal, Serbia, and Spain, where the unexplained gaps peak at age groups 25-44 or 45-65. From these countries, in Denmark, Estonia, Finland, Hungary, Latvia, Lithuania and Serbia the gap is the largest for individuals between 25-44, while in Belgium, Greece, the Netherlands, Portugal, and Spain the gap is largest in age group 45-65. In other countries, the gap demonstrates either increasing or decreasing, or much more complex form. For example, in Austria, Germany, Norway, Sweden and the UK the unexplained gap peaks for the oldest age group. On the other hand, in Croatia, Czechia, Poland, and Slovakia the gap decreases over age groups. In Romania and Slovenia, the unexplained median gap has relatively complex form.

In addition to the the median income gap, there is a significant variation within each of these age groups. This within-group variation is easily observed in Figure B.1. Similar to median income gap, the unexplained gap behaviour within groups is also analyzed from the youngest to the oldest age groups across the countries.

In Austria, Bulgaria, Croatia, Czechia, Lithuania, and Spain the unexplained gap in favour of men is systematically lower for people with high income (upper end of the distribution) in the youngest age category. On the contrary, in Estonia, Finland, Germany, Greece, Hungary, the Netherlands, Norway, and Slovenia, the unexplained gap in favour of men is the largest for high-income individuals[15]. In France, Latvia, Poland and Slovakia, the unexplained gap is the largest in the middle of the distribution (i.e., inverse U-shaped pattern). The gap is the lowest around median in Portugal and the UK (i.e., U-shaped pattern). Belgium, Romania, Serbia and Sweden have rather complex pattern of the unexplained gap across the distribution of total income among the individuals below age 25.

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[14]Please note that in Estonia both unconditional and conditional gaps (0.024 and 0.007, respectively) are the lowest among all countries for the given age group, and they are both statistically insignificant. Also, Estonia is the only country in the age group of >65, where results are statistically insignificant at all confidence levels (Table A.12).

[15]Please note that in these countries, excluding Germany and Hungary, the unexplained part of the total income gap favours women rather than men at the lower end of the distribution. However, this effect gradually decreases or totally fades away at the higher end of the distribution. The decrease in the unexplained gap in favour of women could be interpreted as an increase in the unexplained gap, which favours men.

In the age group of 25-44, the size of the conditional gap is predominantly increasing. Specifically, in Belgium, Denmark, Estonia, Finland, France, Hungary, Lithuania, Norway, and Sweden the unexplained gap is the largest among people with high income. In Austria and Germany, the unexplained gap is lower for the low-income individuals but is relatively flat from median upwards. Unlike from these countries, in Croatia, Greece, Romania, Slovakia, and Spain the gap is larger for low-income individuals (in Spain the gap first decreases and then is relatively flat for upper end of the distribution). Also, in Poland, the gap is largest for the lower end of the distribution, becoming flat starting from median. The gap is observed to be relatively low around median in Bulgaria, Czechia, Portugal and the UK. Somewhat similar U-shaped pattern is reported for the Netherlands and Portugal, where the lowest unexplained gap is at the lower end of the distribution. In this age group Slovenia and Serbia are the only countries with inverse U-shaped form of the unexplained gap.

Next, results for age group 45-65 are summarized. In Austria, Croatia, Greece, the Netherlands, Poland, Romania and Spain the largest unexplained gap is present at the lower end of the income distribution. On the other hand, in Denmark, Estonia, Finland, Hungary, Latvia, Lithuania, Slovakia and Sweden the largest unexplained gap is observed at the upper end of the distribution. In Bulgaria, France, Norway, and the UK the lowest gap is reported around median income. In Germany and Serbia, the unexplained gap demonstrates inverse U-shaped pattern, however, the gap is observed to be the lowest not around median but at the lower percentiles of the distribution. In Belgium, Portugal, and Slovenia the gap shows rather complex pattern.

In the oldest age group, the unexplained gap has rather complex shape over the whole distribution in Croatia, Czechia, Denmark, Greece, Hungary, Romania and Slovakia. In Romania and Hungary the lowest unexplained gap is reported at 20th and 30th percentiles, respectively. Likewise, in Croatia and Denmark, the lowest gap is observed at 40th percentile. On the contrary to these countries, in Slovakia the lowest gap is at 80th percentile, while in Czechia and Greece at 90th percentile. In Austria, Belgium, and Norway the unexplained gap is systematically lower for high-income individuals. Somewhat similar pattern is observed in France, Germany, and the UK, where the gap decreases throughout the distribution and increases for the individuals with the highest income in the given age group. In Spain, the lowest gap is reported around median, however, for upper income percentiles the gap increases and becomes relatively flat. In Bulgaria, Estonia, Finland, Latvia, Lithuania, Poland, Slovenia, and Sweden the gap is systematically larger at the upper end of the distribution. In Serbia, for the individuals with the lowest income the gap is the largest. However, for the 20th percentile it is in favour of women and starts to benefit men more from 30th percentile onwards.

5.2 Results for the gap in employment income

The following part of the paper examines the gap in greater details. First, as described in Section 4, the gap in the employment income is analyzed. The set of explanatory variables includes the same controls as for the total income. The gap is analyzed for the age groups of 25-44 and 45-65. Detailed results are reported in

Appendix A, Table A.13 and Table A.14

The upper panel of Figure 3 reports unconditional and conditional employment income gaps in all 25 countries. In the age group of 25-44, the unconditional and conditional median employment gaps are always in favour of men. The largest unexplained gaps are observed in Latvia and Estonia, where they amount to 0.463 and 0.456 log points, respectively. The fact that Estonia has one of the largest employment income gap in Europe has also been highlighted by earlier studies (see, *inter alia*, Christofides et al. (2013), Rõõm and Anspal (2010)). In this age group the unexplained employment gap is the lowest in Romania (0.087 log points). The recent study by Boll and Lagemann (2018) also provides evidence that in Romania there is lowest unconditional and conditional employment income gaps. In 15 out of 25 countries, the explained part of the total gap is in favour of women (there countries are: Bulgaria, Croatia, Czechia, Denmark, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, Serbia, Slovakia, and Slovenia.). In the rest of the countries, both explained and unexplained gaps are in favour of men.

FIGURE 3: Median gap in employment income for all countries.
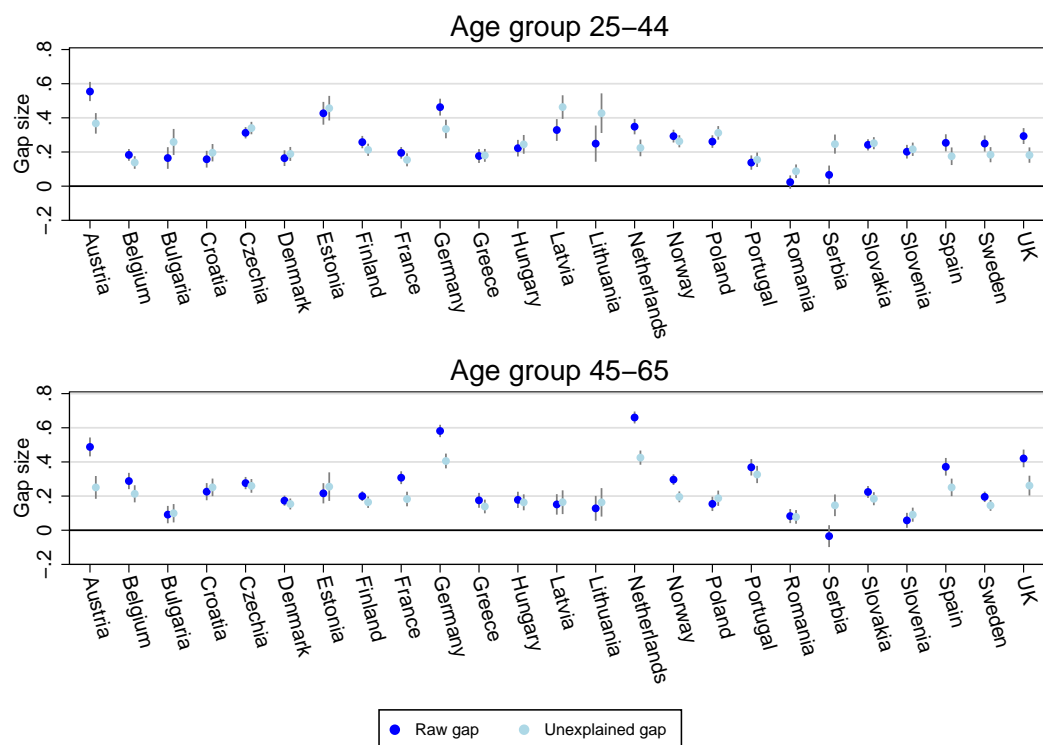
Note: confidence intervals are shown for 90% confidence level.
Source: author's calculation from EU-SILC 2016.

In the age group of 45-65 the results are somewhat different from the previous age group (lower panel of Figure 3). The largest unconditional median gap is reported for the Netherlands (0.66 log points), where the unexplained part is also the largest among all other countries (0.425 log points). The unconditional median employment income gap in the Netherlands is almost equal to the median total income gap for the same age group, shown in the previous subsection. In the given age group the only country, where the unconditional median gap is in favour of women, is Romania (however, statistically insignificant). The lowest unconditional median

gap, which is in favour of men, is reported for Slovenia (0.061 log points). This is also in line with the findings of Boll and Lagemann (2018). In Latvia and Estonia, the unconditional and conditional median gaps are lower compared to the previous age group, where these indicators were the largest. Moreover, the number of countries, where the explained part of the gap was in favour of women, has also decreased from 15 to 8. These countries are: Bulgaria, Croatia, Estonia, Latvia, Lithuania, Poland, Serbia, and Slovenia.

In order to check how an unobserved segregation among industries and firm sizes could have influenced the analysis, the robustness check has been done for 5 countries (Czechia, Estonia, the Netherlands, Norway, and the UK) for the median employment income gap. The detailed results are reported in Table 4. It is observed that compared to the employment income specification, when industry and firm size controls are included, the current study underestimates the explained part of the employment income gap, while the unexplained part is overestimated in most of the cases. This leads to the overestimation of the total employment income gap in all cases apart from Estonia (age group 45-65). Hence, it must be noted that exclusion of these controls is a clear limitation of the study.

The analysis revealed the significant heterogeneity across the countries not only for median employment income gap but for the whole distribution. The gap reveals interesting behaviour across the distribution, which is shown in Table A.13 and Table A.14. These results allow to examine "glass ceiling" and "sticky floors" effects.

TABLE 4: Robustness check for industry and firm size covariates.

Country	Explained			Unexplained			Total		
	Study	Robust	Diff.	Study	Robust	Diff.	Study	Robust	Diff.
Age group 25-44									
Czechia	-0.028	0.012	-0.040	0.340	0.294	0.046	0.312	0.306	0.006
Estonia	-0.030	0.004	-0.034	0.456	0.377	0.079	0.426	0.381	0.045
Netherlands	0.125	0.114	0.011	0.224	0.177	0.047	0.349	0.291	0.058
Norway	0.030	0.069	-0.039	0.263	0.183	0.080	0.293	0.252	0.041
UK	0.111	0.137	-0.026	0.182	0.155	0.027	0.293	0.292	0.001
Age group 45-65									
Czechia	0.017	0.020	-0.003	0.260	0.253	0.007	0.277	0.273	0.004
Estonia	-0.039	-0.002	-0.037	0.255	0.253	0.002	0.216	0.251	-0.035
Netherlands	0.235	0.236	-0.001	0.425	0.289	0.136	0.660	0.525	0.135
Norway	0.101	0.129	-0.028	0.195	0.097	0.098	0.296	0.226	0.070
UK	0.159	0.187	-0.028	0.261	0.231	0.030	0.420	0.418	0.002

Note: Statistical significance is not shown for convenience purposes.
Source: author's calculations from EU-SILC 2016 data.

As proposed by Christofides et al. (2013), there exists glass ceiling effect if gap at 90th percentile is at least 2 percentage points larger than the gap for a reference percentile. Likewise, sticky floor effect is present when the gap at 10th percentile is 2 percentage points larger than the reference percentile gap size. Due to the fact that IHS transformed income is linear around its origin, the gap for very low incomes should be interpreted in monetary values, while gaps for larger incomes can be interpreted, roughly speaking, in percentages (to be more precise, as in case of logarithmic transformation). The former is mostly observed at 10th percentile of the distribution. For this reason, to show existence of sticky floor effects, instead of 10th percentile, as described by Christofides et al. (2013), 20th percentile will be compared to reference gap. For the reference, median employment income gap is taken.

These effects can be easily seen from the shape of the unconditional employment income gap on Figure B.2. U-shaped raw gap implies that both effects could be present in a country, then this country can be further examined whether it satisfies the suggested definition of the effects. On the contrary, inverse U-shaped raw gap shows that neither of these effects are present in a country. The increasing and decreasing graphs can be a good indication of the presence of glass ceiling and sticky floor effects, respectively. However, there are countries, where the unconditional gap has complex shape and no prior assumption can be made.

Table 5 shows whether there is the evidence of either sticky floor or glass ceiling effects. It can be observed that in Belgium, Czechia, France, Greece, and Norway both effects are present in both age groups. The presence of these effects in Greece is in line with the findings of Olivetti and Petrongolo (2008), who showed that labor market is mostly populated by highly skilled female workers (positive selection). However, the results partially conform with the findings of Christofides et al. (2013), who showed that neither of these effects is present in Greece and Spain. In Finland and the UK sticky floor and glass ceiling effects are present in the age group of 25-44, while only the latter is observed in the older age group. On the contrary, in Slovakia and Sweden both effects are reported for the age group 45-65, while only sticky floor is observed in the younger age group. In Austria, Germany, and the Netherlands only sticky floor effect is observed in both age groups. In contrast, only glass ceiling effect is present in Bulgaria and Lithuania for both age categories. In Croatia there is the evidence of only sticky floors effect in age group 25-44. Similarly, in Estonia only glass ceiling is observed in the age group 45-65. On the contrary, in Poland, Portugal, Romania, and Serbia only glass ceiling is reported for the age group of 25-44. In Denmark, glass ceiling effect is observed in the younger age group, whereas the evidence of both effects is reported for the older age group. The data provides the evidence of sticky floor and glass ceiling effects in the age group of 25-44 and 45-65, respectively, in Latvia and Slovenia. The evidence of sticky floor effect is found in Spain for the age group 45-65. Hungary is the only country, where both sticky floor and glass ceiling effects are observed in the age group 25-44, while only sticky floor evidence is provided for the age group 45-65.

TABLE 5: Sticky floor and glass ceiling effects over age groups.

| | Age Group | | | |
| | 25 − 44 | | 45 − 65 | |
	Sticky floor	Glass ceiling	Sticky floor	Glass ceiling
Austria	Yes		Yes	
Belgium	Yes	Yes	Yes	Yes
Bulgaria		Yes		Yes
Croatia	Yes			
Czechia	Yes	Yes	Yes	Yes
Denmark		Yes	Yes	Yes
Estonia				Yes
Finland	Yes	Yes		Yes
France	Yes	Yes	Yes	Yes
Germany	Yes		Yes	
Greece	Yes	Yes	Yes	Yes
Hungary	Yes	Yes	Yes	
Latvia	Yes			Yes
Lithuania		Yes		Yes
Netherlands	Yes		Yes	
Norway	Yes	Yes	Yes	Yes
Poland		Yes		
Portugal		Yes		
Romania		Yes		
Serbia		Yes		Yes
Slovakia	Yes		Yes	Yes
Slovenia	Yes			Yes
Spain			Yes	
Sweden	Yes		Yes	Yes
UK	Yes	Yes		Yes

Note: Sticky floors effect is present if the total gap at the 20th percentile is at least 2 percentage points larger than the gap at 50th percentile.

Note: Glass ceiling effect is present if the total gap at the 90th percentile is at least 2 percentage points larger than the gap at 50th percentile.

Source: author's calculation from EU-SILC 2016.

5.3 Results for the gap in private transfers and capital income

In this subsection, principal findings of the gender gap in private transfers and capital income are presented. As shown in Figure 1, the private transfers and capital income constitute significant portion of the total income in some countries (for example, France, Greece, Spain, the UK), while its share is relatively low in other countries (for example, Serbia, Slovakia, Slovenia). In the post-communist countries, the relatively short time to accumulate wealth could possibly explain why this income category has relatively low share (Meriküll et al. (2018)). The gender gap in this income category is analyzed in the similar manner as for the total income: first each

age group is analyzed across these countries, and then its development over the life-cycle is investigated.

Figure 4 reports results for all countries, except Romania, which has been excluded due to data limitations. For the youngest age group, it can be observed that most of the estimates are statistically insignificant. Among those, which are significant at the given confidence level, France has the largest unconditional (0.838 log points) and conditional (0.986 log poins) gaps in favour of men. However, the differences in observed characteristics benefit women more than men. On the contrary, in Hungary, both unconditional and conditional gaps are in favour of women (1.116 and 0.882 log points, respectively[16]). What is even more striking is that the observed characteristics benefit women more as well[17].

FIGURE 4: Median gap in private transfers and capital income for all countries.
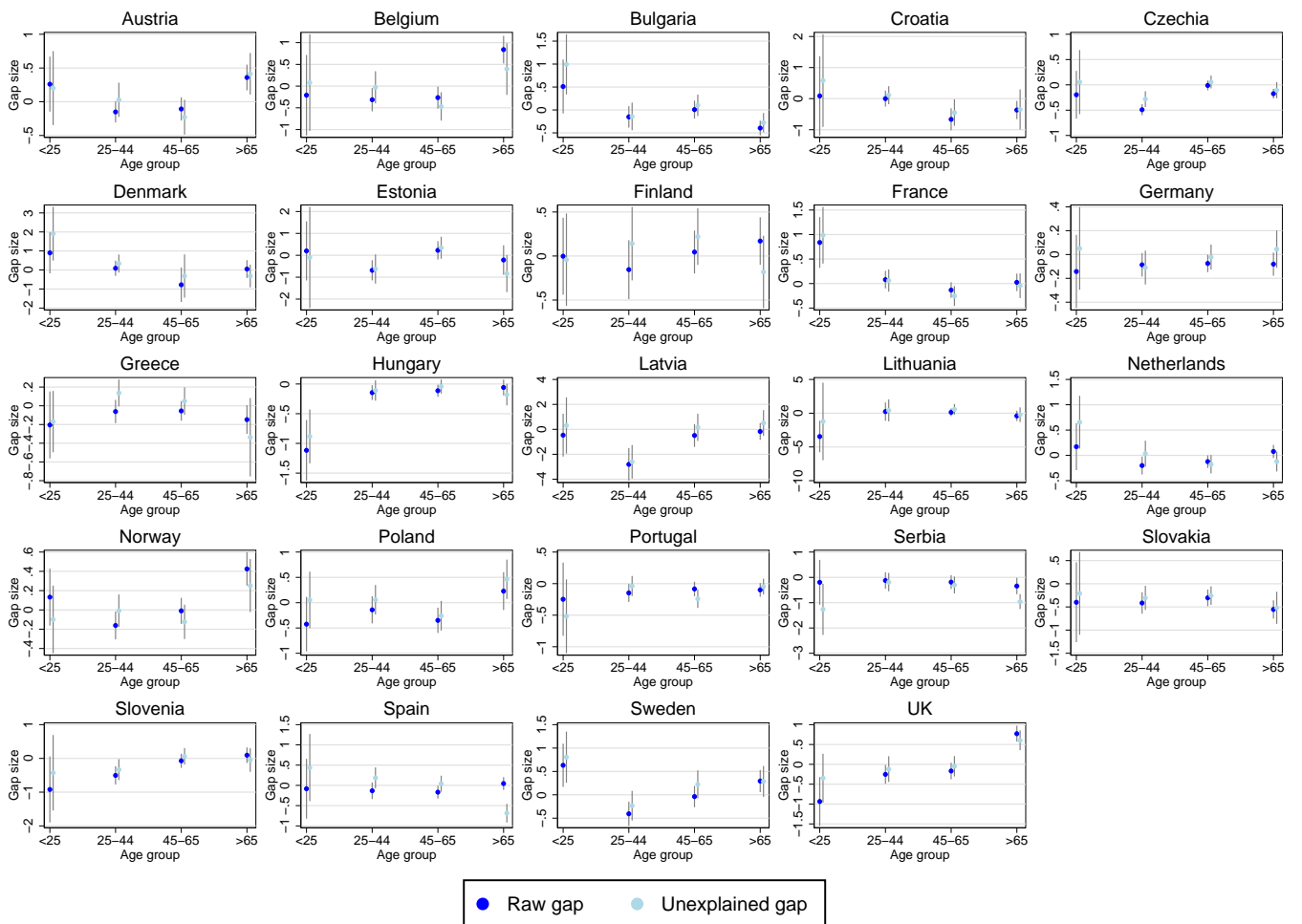
Note: confidence intervals are shown for 90% confidence level.
Note: Romania is excluded due to data limitations.
Source: author's calculation from EU-SILC 2016.

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[16]Please, note that gaps are reported as positive values, since they are in favour of women.

[17]In the Figure 4, Lithuania has also somewhat large median gap benefiting women, however, as described in the previous subsection, such large gap is an indicator that the differential is given in absolute values. Thus, it is difficult to say decisively that in Lithuania there is a larger gap favouring women than in Hungary.

In the following age group of 25-44, the unconditional median gap in private transfers and capital income is systematically in favour of women and, occasionally, in favour of men (e.g., Denmark, France, and Lithuania), however, rarely statistically significant. The differences in the observed characteristics always favour women, except in Serbia. As for the next age group of 45-65, the gap predominantly favours women. In France, Norway, and Portugal the observed characteristics benefit men more than women. The largest unconditional median gap is reported for Denmark, however, it is statistically insignificant. In Croatia there is the largest statistically significant unconditional median gap in favour of women (0.668 log points).

Among the people over age 65, the number of countries, where the unconditional median gap favours men, increases: in 11 out of 24 countries the median raw gap is positive. However, out of these 11 countries the median gap is statistically significant only in Austria, Belgium, Norway, Sweden, and the UK. The largest median gap, which favours men, is reported for Belgium (0.84 log points), followed by the UK (0.773 log points). On the contrary, in Slovakia there is the largest gap in favour of women (0.554 log points).

There are countries, where the median gap peaks for the youngest and the oldest individuals. For example, in Austria, the Netherlands, Norway, and Sweden, the gap has U-shaped pattern and favours men for individuals below age 25 and over age 65. On the contrary, there are countries, where the same pattern occurs, however, in favour of women. For example, in Greece, Lithuania, Serbia, and Slovakia, in the youngest and oldest age groups there is the largest median gap, which favour women. In Bulgaria, Croatia, Denmark, France, and Spain the unexplained median gap is favour of men in the youngest age group, then gradually decreases and favours women for the eldest individuals.

5.4 Results for the gap in public transfers

The final income category that is analyzed in this paper is public transfers. The detailed decomposition of the gap is provided in Tables A.19, A.20, A.21 and A.22 for each age group, respectively. The information regarding the median gap in public transfers is shown in Figure 5.

In the youngest age group, the unconditional median gap is observed to be predominantly in favour of women, and occasionally in favor of men. In the countries, where the raw gap favours men (Austria, Bulgaria, Croatia, Greece, Latvia, Poland, and Serbia) the gap is not statistically significant. On the other hand, in 9 out of 18 countries (Denmark, Estonia, Hungary, the Netherlands, Norway, Slovakia, Slovenia, Sweden, and the UK), the gap, favouring women, is statistically significant. The largest gap is reported in the Netherlands, where the gap is mostly unexplained by the differences in the observed characteristics (-0.672 out of -0.832 log points). However, in Denmark, the country with the second largest median gap in favour of women, only a little portion of the raw gap is unexplained (0.144 out of 0.82 log points). In the majority of countries, where the unconditional median gap in public transfers favours women, both explained and unexplained gaps are in favour of women as well. In Belgium, Germany, Portugal, and Spain the observed characteristics benefit men more.

In the following age group of individuals between 25-44, somewhat similar results are observed: in most of the countries, the gap is in favour of women. The largest unconditional median gap, favouring men, is reported for Greece (0.309 log points), while in Norway there is an evidence of the largest gap in favour of women (0.395 log points). As for the age group of 45-65, the largest raw gap that favours men is observed in Portugal (0.415 log points). Moreover, there is a large number of countries where the unconditional gap benefits women more than men: Austria, Belgium, Czechia, Denmark, Germany, Greece, Hungary, Latvia, the Netherlands, Norway, Romania, Serbia, Slovakia, Slovenia, Sweden, and the UK.

FIGURE 5: Median gap in public transfers for all countries.
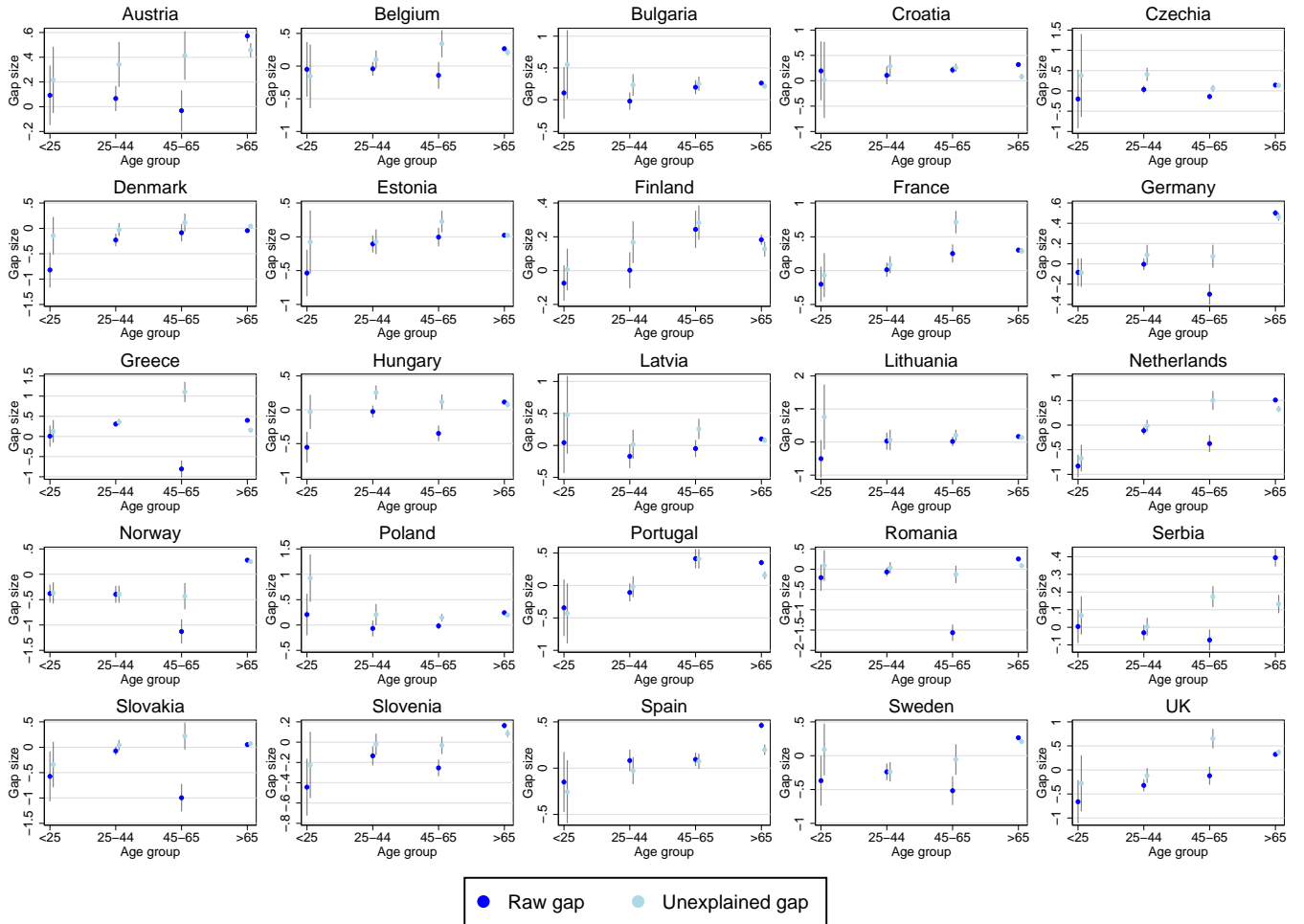
Note: confidence intervals are shown for 90% confidence level.
Source: author's calculation from EU-SILC 2016.

Unlike from the results for all previous age groups, among the oldest, both unconditional and conditional medium gaps in public transfers are in favour of men. The only exception is Denmark, where the unconditional gap favours women (0.044 log points). Moreover, all estimates are statistically significant. The largest unconditional gap is observed in Austria, where the differences in observed characteristics can account for 0.116 out of 0.573 log points. In Estonia there is an evidence of the smallest gap in favour of men (0.023 log points). In the vast majority of countries both explained and unexplained part of the total gap are in favour of men (the explained gap favours women only in Denmark, Slovakia, and the UK).

Figure 5 shows that for most of the countries the unconditional median gap favouring men peaks at the oldest age group. One possible explanation for this observation could be high rate of tobacco and alcohol consumption among men (EHIS (2015)[18], Mäkelä et al. (2006)) throughout their life that may result in increased sickness and disability benefits at older ages. On the contrary, the short life-expectancy of males can explain why women have "advantage" at early years, which contributes to increased survivor's benefits that is granted to people under retirement age, when a spouse or partner dies. Also, given the fact of increased women's participation in education, this can contribute to higher educational allowances compared to men.

5.5 Impact of the institutional factors on the unexplained total income gap.

The paper also studies the effects of institutional factors on the unexplained gap at different quantiles of the distribution. In total, eight institutional factors are analyzed: (1) union density, (2) strictness of employment protection legislation, (3) Kaitz index[19], (4) maternity pay entitlement, (5) formal child care for children under 3, (6) pensions system design, (7) minimum wage setting, and (8) national minimum wage. The data on these factors has been collected from several sources[20]. The information on union density is collected from administrative data for year 2015[21]. The employment protection indicator is collected for 2013, however, 2014 data is used for Slovenia and Lithuania, due to its absence for 2013. Kaitz index is also calculated for wages in 2013. As suggest by Christofides et al. (2013), maternity pay entitlement has been calculated as a product of maternity leave length (weeks) and pay rate (%). Information on formal child care is based on EU-SILC 2016 data and depicts average weekly hours spent at pre-school and day care centers. Pension design is ordinal variable with three levels: public, combined, and private. Likewise, national minimum wage and minimum wage setting variables are ordinal variables with 3 and 6 levels, respectively[22].

Table 6 reports Spearman correlation coefficients between the institutional factors and unconditional total income gaps at the 20th, 50th, and 90th quantiles across all age groups. As observed, union density has significant negative impact on the unexplained gap for individuals below age 25 and between 25-44. Blau and Kahn (1992, 1996) provide the evidence of reducing wage dispersion as unionization rates increase in a country. Given the fact the employment income is a large part of the total income for the individuals in the above-mentioned age groups, it is logical to expect the higher unionization rates to reduce the unexplained and, therefore, raw

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[18]European health interview survey (EHIS), 2015.

[19]Kaitz index is defined as the ratio of nominal minimum wage to average wage.

[20]Data on (1), (2), (3), (4), (5), and (6) factors have been collected from OECD databases, while information on (7) and (8) variables are provided by the ICTWSS (Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 51 countries between 1960 and 2014).

[21]Estonia is the only country for which survey data has been used. Due to data limitations, 2014 and 2013 data have been used for Poland and Greece, respectively.

[22]National minimum wage levels are no statutory minimum wage, statutory minimum wage in some sectors, and statutory national minimum wage. Levels for minimum wage setting range from between agents collective agreement to the minimum wage set by government without a fixed rule.

total income gap. Another interesting finding is that the union density has no significant impact on high-income individuals. This is rather intuitive because high-income individuals are less likely to join trade unions and if so, bargaining power of trade unions in the negotiations for pay increase is expected to be low.

TABLE 6: Correlation of unexplained total income gap with institutional factors.

Age-group	Percentile	Union density	Employee protection	Kaitz index[1]	Maternity pay entitlement[2]	Formal child-care for children under 3[3]	Minimum wage setting	National minimum wage	Pension design
< 25	20	0.197	0.121	-0.054	-0.344	-0.292	-0.014	-0.030	-0.378
	50	-0.390*	0.139	0.285	0.062	0.103	0.507**	0.304	-0.416*
	90	-0.211	-0.233	0.175	-0.013	0.114	0.061	0.232	0.069
25 − 44	20	-0.546**	0.012	0.498**	0.419*	0.064	0.815***	0.616***	-0.295
	50	-0.493**	-0.007	-0.032	0.746***	-0.108	0.390*	0.168	-0.240
	90	-0.358	-0.100	-0.296	0.150	0.043	-0.066	-0.146	0.026
45 − 65	20	-0.040	0.230	0.612**	0.144	-0.153	0.421*	0.378	-0.359
	50	-0.191	0.204	0.233	0.387	-0.459**	0.276	0.309	-0.304
	90	-0.118	-0.263	-0.129	-0.254	0.166	-0.170	-0.058	0.587***
> 65	20	0.274	0.291	0.075	-0.221	-0.398*	-0.164	-0.017	-0.255
	50	0.233	0.237	0.064	-0.100	-0.508**	-0.150	-0.085	-0.328
	90	0.065	0.085	0.099	-0.143	-0.440*	-0.101	-0.047	-0.232

[1] Minimum wage divided by average wage.
[2] Product of maternity leave length (weeks) and pay rate (%).
[3] Average usual weekly hours for children using early childhood education and care services.
Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Source: author's calculations.

The employment protection is found to have no significant impact on the unexplained total income gap. Also, the impact of pension design among the youngest individuals remains puzzling. However, Kaitz index, minimum wage setting, and national minimum wage have significant positive impact on the unexplained gap for individuals between 25-44 and 45-65. On the contrary, the minimum wage setting and national minimum wage have negative impact on the employment income gap for low income individuals (not reported in the paper). This result is in line with earlier literature, where it is shown that the introduction of minimum wage reduces the gender wage gap (e.g. see Bargain et al. (2018)). This could partially explain why the setting of minimum wage increases the unexplained total income gap: once minimum wages are set, those individuals who might be receiving some

public transfers due to low income, they do not qualify for those benefits anymore, which might have been larger than the marginal increase in the employment income.

Maternity pay entitlement is found to have significant negative impact on the unconditional total income gap for individuals between 25-44. Given the fact that women are most fertile in their twenties and early thirties, when the maternity leave and its pay rate are regulated by state laws, the increase of either of these indicators would put more burden on employer. Therefore, employers are more likely to offer lower wages to women. Also, Farré (2016) highlighted that more generous maternity leave increases women's labor force participation in low paying jobs and their absence in high-profile occupations.

The formal child-care has negative impact on the unexplained total income gap for the oldest individuals. It turns out to have significant impact not only on low-income but, also, on high-income individuals. In many countries informal child-care still dominates over formal care, especially for Eastern and Central European countries (Mills et al. (2013)). The burden of informal child-care, which is typically not paid, is usually put on grandmothers. The increase of formal child-care allows grandmothers to dedicate their time to paid tasks, which would otherwise be spent on free child-care for their grandchildren.

6 Conclusions

The paper studies the gender income gap across 25 countries over 4 age groups. For the analysis survey data of European Union Statistics on Income and Living Conditions (2016) is used, which, in addition to other demographic and socio-economic information, collects data on personal and household level income. To examine the gender income gap, 17 different income sources are aggregated: 10 personal level and 7 household level. For extending the scope of the paper, these income sources have further been grouped into 3 categories: employment income, private transfers and capital income, and public transfers. To study the factors contributing to the gap, unconditional quantile regression is applied for both genders, and then the difference is estimated by Oaxaca-Blinder decomposition method.

The analysis showed that the gender income gap is still inarguable problem in EU. However, even though the gap is mostly in favour of men, this is not always the case. The reported results unveiled the the high level of heterogeneity among countries. In addition, there is a large degree of variation observed within each country's age group. In each country the conditional median gap demonstrates several patterns over these age categories. In Bulgaria and France, the unexplained median gap has U-shaped pattern In particular, the unexplained median gaps for age groups 25-44 and 45-65 are lower compared to the other two groups. However, the conditional median gap has predominantly inverse U-shaped form in Belgium, Denmark, Estonia, Finland, Greece, Hungary, Latvia, Lithuania, the Netherlands, Portugal, Serbia, and Spain, where the unexplained gaps peak at age groups 25-44 or 45-65.

Among the individuals below age 25, the largest unconditional median income gap in favour of men is reported for Bulgaria, while the largest unconditional median income gap favouring women is observed in Greece. The intuition behind the

largest gap in Bulgaria could be the enormous rate of brain drain among the young individuals. In the given age group, the unexplained part of the total gap in favour of men is systematically lower for people with high income in Austria, Bulgaria, Croatia, Czechia, Lithuania, and Spain. However, the unexplained gap favouring men is large for the high-income individuals in Estonia, Finland, Germany, Greece, Hungary, and the Netherlands. In the following age group of 25-44, the largest unconditional median income gap favouring men is observed in Greece, while the lowest gap is reported for Denmark. The dramatic decrease in the public sector employment, which is found to have negative impact on the employment income gap, could have contributed to the increased total income gap (through employment income gap) as people moved towards the private sectors. The unexplained gap is predominantly increasing in this age group. There are countries, where the unexplained gap is lower at the bottom of the distribution (for example, Croatia, Greece, Romania, Slovakia), while in some countries the gap is the largest among individuals with high-income (for example, Belgium, Denmark, Estonia, Finland, Norway, Sweden). Similar to the previous age group, among individuals between 45-65 the largest unconditional median gap is observed in Greece, while the lowest is reported in Lithuania (both in favour of men). In this age category the largest unexplained gap is present at the lower end of the distribution in Austria, Croatia, Greece, the Netherlands, Poland, Romania and Spain, while the largest gap is observed at the upper end of the distribution in Denmark, Estonia, Finland, Hungary, Latvia, Lithuania, Slovakia, and Sweden. As for the oldest age group the largest unconditional median gap in favour of men is reported in Austria, while it is the lowest in Estonia. Since the public transfers constitute the largest part of the total income among these individuals, it is rather expected that the gap could be caused by the gap in public transfers, as it has been shown in the study. On the other hand, in Denmark there is the largest gap in favour of women. The unexplained gap is systematically larger for low-income individuals in Austria, Belgium, and Norway, while it is the lowest for high-income individuals in Bulgaria, Estonia, Finland, Latvia, Lithuania, Poland, Slovenia, and Sweden.

Next, the paper also studies the gender gap in employment income for two age groups: 25-44 and 45-65. In the latter, the largest unconditional median gaps are found in Latvia and Estonia, and the lowest – in Romania. In the former age group, there is the evidence of the largest and the lowest unconditional median gaps in the Netherlands and Slovenia, respectively. Furthermore, the glass ceiling and sticky floor effects are investigated for these age groups. The analysis showed that both of these effects are present in Belgium, Czechia, France, Greece, and Norway. The presence of these effects provide the strong evidence of positive selection in the labor market.

Furthermore, the paper studies the factors contributing to the explained and unexplained parts of the total and employment income for pooled age groups. In case of total income, marriage status has the largest impact on the unexplained gap in favour of man across most of the countries, providing evidence of "marriage premium"' for men. On the other hand, managerial occupations accounts for significant part of the explained gap at 20th and 90th percentiles, while inactive economic contributes large part of the explained gap at median income. Similar to the total income, marriage accounts for the largest portion of the unexplained gap in the employment income. The main factors that contribute to the significant portion of the

explained gap is found to be part-time employment. Furthermore, the tertiary education is found to lower the gap, which could be attributed to women participation in male-dominated degrees. However, the concentration at the lowest earning occupations still remains the problem for women. The secondary education is found to have no significant impact on high-income individuals, which could be due to the fact that high earners are expected to have higher education than those at the lower end of the income distribution. Therefore, for them the differences in lower level of education are not likely to have significant impact on the gap.

The paper also investigates the gender gap in private transfers and capital income. For the individuals below age 25, the largest statistically significant unconditional and conditional median gaps are reported for France, while there is the evidence of the largest unconditional and conditional median gaps in favour of women in Hungary. In the age group of 25-44, the differences in the observed characteristics always favour women for median income, except in Serbia. In the subsequent age group, the largest unconditional median gap favouring women is observed in Denmark, though not statistically significant. Among the oldest, the largest statistically significant unconditional median gap is reported for Belgium, while the lowest is observed in Slovakia.

And finally, the gender gap in public transfers is examined. In the youngest age group, the unconditional median gap is predominantly in favour of women. The largest statistically significant gap favouring women has been reported for the Netherlands. In the following age group of 25-44, the largest unconditional median gap favouring men is observed in Greece, while the evidence of the largest gap in favour of women is found in Norway. Increased trend of enrolling in higher education institutions and receiving more education-related allowances could be a reason why the gap favours women at young ages. Also, due to high mortality rates of men, women are more likely to receive survivor's benefits. Unlike from these age groups, for individuals above age 65, both unconditional and conditional median gaps are in favour of men in all countries but Denmark, where the gap benefits women more. The largest and the lowest unconditional median gaps are found in Austria and Estonia, respectively. Moreover, in vast majority of countries, the gap peaked for the oldest age group.

The analysis of the institutional factors showed that the membership of trade unions and minimum wage setting have no significant impact on the unexplained total income gap among the high-income individuals. Furthermore, more generous maternity leave enlarges the unexplained gap for the individuals between 25-44, while the formal child-care is negatively related to the unexplained gap for the oldest individuals, as they can allocate the time, which would otherwise be spent on informal child-care, to paid tasks.

Nowadays most of the policies, which aim to achieve gender income equality, are based on "one-size-fits-all" philosophy. However, these policies fail to take into account the differences that exist within a country's age groups for different income sources. Focusing only the gap in particular part of the aggregate income, whether in favour of men or women, could have detrimental effects on the gap in another income source. To tackle the problem of gender income inequality, current policies must be updated and be more versatile so that they would cover various sources of income for different age groups.

7 References

Akerlof, G. A. and R. E. Kranton (2000). "Economics and Identity". In: *Quarterly Journal of Economics* 115.3, pp. 715–753.

— (2010). "Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being." In: *Princeton University Press.*

Albrecht J., Björklund A. Vroman S. (2003). "Is there a glass ceiling in Sweden?" In: *Journal of Labour Economics* 21.1, pp. 145–177.

Altoji, J. G. and R. M. Blank (1999). "Race and gender in the labor market". In: *Handbook of Labor Economics* 3. Editors: Ashenfelter, O. and Card, D., pp. 3143–3259.

Anspal, S., L. Kraut, and T. Rõõm (2010). "Sooline palgalõhe Eestis: empiiriline analüüs". In: *Eesti Rakendusuuringute Keskus CentAR, Poliitikauuringute Keskus PRAXIS, Sotsiaalministeerium.* Translated: Tiia Raudma.

Arrow, K. (1973). "The theory of discrimination." In: *Princeton University* Working Paper No. 30(A).

Arulampalam W. Booth, A. L. Bryan M. L. (2007). "Is there a glass ceiling over Europe? Exploring the gender pay gap across the wage distribution". In: *Industrial and Labor Relations Review* 60.2, pp. 163–186.

Azmat, G. and B. Petrongolo (2014). "Gender and the labor market: what have we learned from field and lab experiments?" In: *CEPR* Working Paper No. 40.

Baker, M. and N. M. Fortin (1999). "Women's wages in women's work: a US/Canada comparison of the roles of unions and "public goods" sector jobs." In: *American Economic Review* 89.2, pp. 198–203.

Balleer A., Gómez-Salvador R. and J. Turunen (2009). "Labour force participation in the euro area. A cohort based analysis". In: *European Central Bank Working Paper Series* 1049.

Bargain, O., K. Doorley, and P. Van Kerm (2018). "Minimum wages and the gender gap in pay: new evidence from the UK and Ireland". In: *Institute of Labor Economics, Discussion Paper Series* 11502.

Barth, E. and H. Dale-Olsen (2009). "Monopsonistic discrimination, worker turnover, and the gender wage gap." In: *Labor Economics* 16.5, pp. 589–597.

Bauer, T. K. and M. Sinning (2008). "An extension to the Blinder-Oaxaca decomposition to nonlinear models." In: *Advances in Statistical Analysis* 92.2, pp. 197–206.

Becker, G. S. (1957). "The economics of discrimination." In: *Chicago: University of Chicago Press.*

— (1985). "Human capital, effort and the sexual division of labor." In: *Journal of Labor Economics* 3, pp. 33–58.

— (1993). "Human Capital: a Theoretical and Empirical Analysis, with Special Reference to Education." In: *Chicago: University of Chicago Press* 3rd ed.

Bergmann, B. (1974). "Occupational segregation, wages, and profits when employers discriminate by race or sex." In: *Eastern Economic Journal* 1.1-2, pp. 103–110.

Bianchi, S. M. and N. Rytina (1986). "The decline in occupational sex segregation during the 1970s: census and cps comparisons." In: *Demography* 23.1, pp. 79–86.

Black, D. A. et al. (2008). "Gender wage disparities among the highly educated." In: *Jurnal of Human Resources* 43.3, pp. 630–659.

Blau, F. D. (2012). "Gender, Inequality, and Wages." In: *Oxford University Press*, p. 576.

Blau, F. D., P. Brummund, and A. Y. H. Liu (2013). "Trends in occupational segregation by gender 1970-2009: adjusting for the impact of changes in the occupational coding system." In: *Demography* 50.2, pp. 471–492.

Blau, F. D. and W. E. Hendricks (1979). "Occupational segregation by sex: trends and prospects." In: *Journal of Human Resources* 14.2, pp. 197–210.

Blau, F. D. and L. M. Kahn (1992). "The gender earnings gap: learning from international comparisons". In: *American Economic Review* 82.2, pp. 533–538.

— (1996). "Wage structure and gender earnings differentials: an international comparison." In: *Econometrica* 63.250, pp. 29–62.

— (2013). "Female labor supply: why is the United State falling behind?" In: *American Economic Review* 103.3, pp. 251–256.

— (a,2006). "The gender pay gap: going, going, going, ... but not gone." In: *Blau, F.D., Brinton, M.C., Grugsky, D.B. (Eds), The declining significance of gender?*, pp. 37–66.

— (b,2006). "The US gender pay gap in the 1990s: slowing convergence." In: *Industrial and Labor Relations Review* 60, pp. 45–66.

Blau, F. D., P. Simpson, and D. Anderson (1998). "Continuing progress? Trends in occupational segregation in the United States over the 1970s and 1980s". In: *Feminist Economics* 4.3, pp. 29–71.

Blinder, A. S. (1973). "Wage discrimination: reduced form and structural estimates". In: *The Journal of Human Resources* 8.4, pp. 436–455.

Boll, C. and A. Lagemann (2018). "Gender pay gap in EU countries based on SES (2014)". In: *Luxembourg: Office for Official Publications of the European Communities.*

Bonnet, C., A. Keogh, and B. Rapoport (2013). "How can we explain the gender wealth gap in France?" In: *INED* Working Paper No. 191.

Booth, A. L., M. Francesconi, and J. Frank (2003). "A sticky floors model of promotion, pay, and gender." In: *European Economic Review* 47.2, pp. 295–322.

Borah, B. J. and A. Basu (2013). "Highlighting differences between conditional and unconditional quantile regression approaches through an application to assess medication adherence." In: *Health Economics* 22.9, pp. 1052–1070.

Brown, C. and M. Corcoran (1997). "Sex-based differences in school content and the male/female wage gap." In: *Journal of Labor Economics* 15, pp. 431–465.

Cannings, K. and C. Montmarquette (1990). "Marginal momentum: a simultaneous model of the career progress of male and female managers." In: *Industrial and Labor Relations Review* 44.2, p. 212.

Castro, F. de, M. Salto, and H. Steiner (2013). "The gap between public and private wages: new evidence for the EU." In: *Directorate General Economic and Monetary Affairs, European Commision.*

Caucutt, E. M., N. Guner, and J. Knowles (2002). "Why do women wait? Matching, wage inequality, and the incentives for fertility delay." In: *Review of Economic Dynamics* 5.4, pp. 815–855.

Chatterji, M., K. Mumford, and P. N. Smith (2011). "The public-private sector gender wage differential in Britain: evidence from matched employee-wokrplace data". In: *Applied Economics* 43.26, pp. 3819–3833.

Chernozhukov V., Fernández-Val I. Melly B. (2013). "Inference on counterfactual distributions". In: *Econometrica* 81.6, pp. 2205–2268.

Christofides, L. N., A. Polycarpoua, and K. Vrachimis (2013). "Gender wage gaps, 'sticky floors' and 'glass ceilings' in Europe". In: *Labour Economics* 21, pp. 86–102.

Chun, H. and I. Lee (2001). "Why do married men earn more: productivity or marriage selection?" In: *Economic Inquiry* 39.2, pp. 307–319.

Commission, European (2016). "European Union Statitics on Income and Living Conditions." In: *Eurostat*.

Cornwell, C. and P. Rupert (1997). "Unobservable individual effects, marriage and the erarnings of young men." In: *Economic Inquiry* 35.2, pp. 285–294.

Cukrowska-Torzewska, E. and A. Lovasz (2016). "Are children driving the gender wage gap? Comparative evidence from Poland and Hungary." In: *Economics of Transition* 24.2, pp. 259–297.

D'Alessio, G. (2018). "Gender wealth gap in Italy." In: *Banca D'Italia Ocassional Papers* No. 433.

Daly, A. et al. (2006). "The gender wage gap in four countries". In: *The Economic Record* 82.257, pp. 165–176.

"Database on Immigrants in OECD and non-OECD Countries: DIOC." (2011). In: *OECD*.

Depalo D., Pereira M. C. Eugéne B. Papapetrou E. Perez J. J. Reiss L. Roter M. (2011). "The public sector pay gap in a seletion of Euro area countries." In: *European Central Bank* Working Paper Series No. 1406.

DiNardo, J., N. Fortin, and T. Lmieux (1996). "Labour market institutions and the distribution of wages, 1973-1992: a semi-parametric approach." In: *Econometrica* 64.5, pp. 1001–1044.

Dougherty, C. (2006). "The marriage earnings premium as a distributed fixed efect." In: *Journal of Human Resources.* 41.2, pp. 433–443.

Fairlie, R. W. (2005). "An extension of the Blinder-Oaxaca decomposition technique to log and probit models." In: *Journal of Economic and Social Measurement* 30.4, pp. 305–316.

Farré, L. (2016). "Parental leave policies and gender equality: a survey of the literature". In: *Estudios de Economia Aplicada* 34, pp. 45–60.

Firpo, S., N. M. Fortin, and T. Lemieux (2009). "Unconditional quantile regressions". In: *Econometrica* 77.3, pp. 953–973.

— (2011). "Decomposition methods in economics". In: *Handbook of Labor Economics* 4a, pp. 1–102.

Fortin, N. M. and T. Lemieux (2000). "Are women's wage gains men's losses? A distributional test." In: *American Economic Review* 90, pp. 456–460.

Gardeazabal, J. and A. Ugidos (2004). "More on identification in detailed wage decompositions". In: *The Review of Economics and Statistics* 86.4, pp. 1034–1036.

Gneezy, U., M. Niederle, and A. Rustichini (2003). "Performance in competitive environments: gender differences." In: *Quarterly Journal of Economics* 118.3, pp. 1049–1074.

Goldin, C. (2006). "The quiet revolution that transformed women's employment, education, and family." In: *American Economic Review* 96.2, pp. 1–21.

— (2013). "A pollution theory of discrimination: male and female differences in occupations and earnings." In: *NBER* Working Paper No. 8985.

— (2014). "A grand gender convergence: its last chapter." In: *American Economic Review* 104.4, pp. 1091–1119.

Hampel, F. R. (1974). "The influence curve and its role in robust estimation". In: *Journal of the American Statistical Association* 69.346, pp. 383–393.

Heckman, J. J. (1976). "The common structure of statistical models of truncation, sample selection and limited dependent variables and a simple estimator for such models." In: *Ann. of Economic and Social Measures* 5.4, pp. 475–492.

— (1979). "Sample selection bias as a specification error." In: *Econometrics* 47.1, pp. 153–161.

Hegewisch, A. et al. (2010). "Separate and not equal? Gender segregation in the labor market and the gender wage gap." In: *Institute for Women's Policy Research.* Briefing Paper No. 377.

Hirsch, B., T. Schank, and C. Schnabel (2010). "Differences in labor supply to monopsonistic firms and the gender pay gap: an empirical analysis using linked employer-employee data from Germany." In: *Journal of Labor Economics* 28.2, pp. 291–330.

Hunt, J. (2002). "The transition in East Germany: when is a ten-point fall in the gender wage gap bad news?" In: *Journal of Labour Economics* 20.1, pp. 148–169.

Jann, B. (2008). "OAXACA8: Stata module to compute decompositions of outcome differentials". In: *Statistical Software Components S450604, Boston College Department of Economics*.

Johnson, N. L. (1949). "Systems of frequency curves generated by methods of translation." In: *Biometrika*. 36.1/2, pp. 149–176.

Juhn, C., K. M. Murphy, and B. Pierce (1991). "Accounting for the slowdown in black-white wage convergence." In: *Kosters, M.H. (Ed.), Workers and Their Wages. AEI Press*, pp. 107–143.

— (1993). "Wage inequality and the rise in returns to skill." In: *Journal of Political Economy* 101.3, pp. 410–442.

Koenker, R. W. (2005). "Quantile Regression". In: *Cambridge University Press*.

Koenker, R. W. and G. Basset (1978). "Regression quantiles". In: *Econometrica* 46.1, pp. 33–50.

Lavy, V. (2012). "Gender differences in market competitiveness in a real workplace: evidence from performanc-based pay tournaments among teachers." In: *NBER Wokrking Paper No. 14338*.

Lazear, E. P. and S. Rosen (1990). "Male-female wage differentials in job ladders." In: *Journal of Labor Economics* 8.1, pp. 106–123.

Loury, L. D. (1997). "Gender earnings gap among college-educated workers". In: *Industrial and Labor Relations Review* 50.4, pp. 580–593.

Machado, J. F. and J. Mata (2005). "Counterfactul decomposition of changes in wage distributions using quantile regression". In: *Journal of Applied Econometrics* 20, pp. 445–465.

Manning, A. and F. Saidi (2010). "Understanding the gender pay gap: what's competition got to do with it?" In: *Industrial and Labor Relations Review* 118.530, pp. 983–1024.

Manning, A. and J. Swaffield (2008). "The gender gap in early-career wage growth." In: *The Economic Journal* 118.530, pp. 983–1024.

Mehay, S. L. and W. R. Bowman (2005). "Marital status and productivity: evidence from personnel data." In: *Southern Economic Journal* 72.1, pp. 63–77.

Merikül, J., M. Kukk, and T. Rõõm (2018). "What explains the gender gap in wealth? Evidence from administrative wealth data." In: *mimeo*.

Miller, A. R. (2011). "The effects of motherhood timing on career path." In: *Journal of Population Economics* 24.3, pp. 1071–1100.

Mills, M. et al. (2014). "Use of childcare in the EU Member States and progress towards the Barcelona targets". In: *Short Statistical Report, European Union* 1.

Mäkelä, P. et al. (2006). "Drinking patterns and their gender differences in europe". In: *Alcohol & Alcoholism* 41.Supplement 1, pp. 8–18.

Nakosteen, R. A. and M. A. Zimmer (1997). "Men, money and marriage: are high earners more prone than low earners to marry?" In: *Social Science Quarterly* 78.1, pp. 66–82.

Neuman, S. and R. L. Oaxaca (1998). "Estimating labour market discrimination with selectivity corrected wage equations: methodological considerations and an illustration from Israel." In: *Centre for Economic Policy Research* Working Paper No. w4019.

Neumark, D. and S. Koreman (1992). "Sources of bias in women's wage equations: results using subling data." In: *NBER* Working Paper No. W4019.

Niederle M. Vesterlund, L. (2007). "Do women shy away from competition? Do men compete too much?" In: *Quarterly Journal of Economics* 122.3, pp. 1067–1101.

Oaxaca, R. L. (1973). "Male-female wage differentials in urban labor markets". In: *International Economic Review* 14.3, pp. 693–709.

Oaxaca, R. L. and M. Ransom (1999). "Identification in detailed wage decompositions". In: *The Review of Economics and Statistics* 81.1, pp. 154–157.

OECD (2013). "Strictness of employment protection legislation: individual and collective dismissals". In: *OECD Employment and Labour Market Statistics (database)*.

— (2015a). "Earnings: real minimum and average wages". In: *OECD Employment and Labour Market Statistics (database)*.

— (2015b). "Trade unions: trade union density". In: *OECD Employment and Labour Market Statistics (database)*.

— (2016a). "Formal care and education for very young children". In: *OECD Family Database*.

— (2016b). "Key characteristics of parental leave systems". In: *OECD Family Database*.

— (2017). "Pensions at a Glance 2017: OECD and G20 Indicators". In: *OECD Publishing, Paris*.

Olivetti, C. and B. Petrongolo (2008). "Uequal pay or unequal employment? A cross-country analysis of gender gaps." In: *Journal of Labour Economics* 26.4, pp. 621–654.

Ñopo, H. (a,2008). "Matching as a tool to decompose wage gaps". In: *The Review of Economics and Statistics* 90.2, pp. 290–299.

— (b,2008). "An extension of the Blinder-Oaxaca decomposition to a continuum of comparison groups." In: *Economic Letters* 100.2, pp. 292–296.

Pence, Karen M. (2006). "The role of wealth transformations: an application to estimating the effect of tax incentives on saving." In: *The B.E. Journal of Economic Analysis & Policy* 5.1, pp. 1–26.

Phelps, E. S. (1972). "The statistical theory of racism and sexism." In: *American Economic Review* 62.4, pp. 659–661.

Polachek, S. W. (1981). "Occupational self-segregation: a human capital approach to sex differences in occupational structure". In: *The Review of Economics and Statistics* 63.1, pp. 60–69.

Ponthieux, S. and D. Meurs (2015). "Gender inequality". In: *Handbook of Income Distribution* 2A, pp. 981–1146.

Poterba James M., Steven F. Venti and A. Wise David (1995). "Do 401(k) contributions crowd out other personal saving?" In: *Journal of Public Economics* 58.1, pp. 1–32.

Salverda, W. and D. Checchi (2014). "Labour-market institutions and the dispersion of wage earnings." In: *Handbook of Income Distribution* 2B, pp. 1535–1727.

Sierminska, E. M., J. R. Frick, and M. M. Grabka (2010). "Examining the gender wealth gap." In: *Oxford Economic Papers* 62.4, pp. 669–690.

Smith. N. Smith, V. Verner M. (2013). "Why are so few females promoted into CEO and Vice President Positions: Danish empirical evidence, 1997-2007." In: *Industrial and Labor Relations Review* 66.2, pp. 380–408.

Vella, F. (1998). "Models with sample selection bias: a survey." In: *Journal of Human Resources* 33.1, pp. 127–169.

Viitanen, T. (2014). "The motherhood wage gap in the UK over the life cycle." In: *Review of Economics of the Household* 12.2, pp. 259–276.

Visser, J. (2016). "ICTWSS Data base". In: *Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam.* 5.1.

Waldfogel, J. (1998). "The family gap for young women in the United States and Britain: can maternity leave make a difference?" In: *Journal of Labor Economics* 16.3, pp. 505–545.

Weiberg, B. (2000). "Computer use and the demand for female workers". In: *Industrial and Labor Relations Review* 53.2, pp. 2290–3008.

Weichselbaumer, D. and R. Winter-Ebmer (2005). "A meta-analysis of the international gender wage gap." In: *Journal of Economic Survey* 19.3, pp. 479–511.

Appendix A

TABLE A.1: Distribution of males and females across countries.

Country	Age Group								Total
	< 25		25 − 44		45 − 65		> 65		
	Male	Female	Male	Female	Male	Female	Male	Female	
Austria	395	286	1,488	1,630	1,936	2,130	1,173	1,387	10,425
Belgium	235	180	1,672	1,767	1,879	2,004	1,124	1,291	10,152
Bulgaria	307	272	2,014	1,897	2,731	2,880	1,873	2,889	14,863
Croatia	389	290	2,118	2,070	3,126	3,319	1,892	2,661	15,865
Czechia	265	250	2,290	2,289	2,625	2,913	1,962	2,691	15,285
Denmark	297	299	1,198	1,268	2,269	2,474	1,623	1,587	11,015
Estonia	380	285	1,787	1,745	2,134	2,357	1,151	1,810	11,649
Finland	709	540	2,690	2,766	4,239	4,198	2,104	2,089	19,335
France	572	459	2,708	2,909	3,843	4,097	2,320	2,907	19,815
Germany	447	383	2,187	2,534	4,478	5,207	3,376	3,562	22,174
Greece	733	616	4,991	4,999	6,517	7,123	5,130	5,948	36,057
Hungary	378	302	2,054	2,142	2,659	3,230	1,520	2,585	14,870
Latvia	242	219	1,558	1,607	1,816	2,299	1,034	2,307	11,082
Lithuania	190	137	910	965	1,806	2,158	1,023	1,743	8,932
Netherlands	599	543	2,678	2,955	4,939	5,412	2,407	2,655	22,188
Norway	568	452	1,885	1,942	2,472	2,635	1,250	1,195	12,399
Poland	886	670	4,016	4,050	4,677	5,309	2,423	3,666	25,697
Portugal	455	390	2,929	3,186	3,847	4,375	2,573	3,445	21,200
Romania	309	235	2,020	2,068	2,781	3,032	1,949	2,505	14,899
Serbia	398	319	2,293	2,202	2,704	2,768	1,443	1,998	14,125
Slovakia	330	267	2,257	2,261	2,220	2,721	1,073	1,737	12,866
Slovenia	402	222	3,310	3,094	4,022	4,239	1,981	2,396	19,666
Spain	538	432	4,225	4,332	5,630	5,997	3,276	4,265	28,695
Sweden	390	318	1,435	1,488	1,929	1,987	1,455	1,440	10,442
UK	485	516	2,453	2,935	2,901	3,155	2,086	2,293	16,824
Total									420,520

Source: author's calculations from EU-SILC 2016 data.

TABLE A.2: Average share of each income component in total income
(%).

| Country | | | | | | Male | | | | | |
	Empl[1]	Comp. Car[2]	Profit/Loss[3]	Pens[4]	Unempl[5]	Old-age[6]	Suvivor[7]	Sickness[8]	Disabled[9]	Ed. allowance[10]	HH inc[11]
Austria	50.59	0.00	8.17	0.60	3.30	24.91	0.46	0.59	2.87	0.32	8.18
Belgium	47.16	0.28	7.45	0.04	6.62	24.59	0.03	0.50	4.05	0.06	9.23
Bulgaria	48.67	0.08	7.37	0.03	0.94	29.18	0.47	0.60	3.85	0.05	8.76
Croatia	41.77	0.10	10.03	0.01	0.83	26.48	0.45	0.40	11.31	0.19	8.43
Czechia	50.19	0.31	10.37	0.10	0.72	29.01	0.55	0.45	3.63	0.11	4.58
Denmark	65.56	0.36	4.32	0.00	4.79	30.76	0.07	0.36	3.19	2.10	-11.53
Estonia	56.88	1.16	3.07	0.05	1.24	22.49	0.14	0.73	6.16	0.40	7.69
Finland	45.15	0.39	11.43	1.25	5.87	21.15	0.14	0.69	3.71	1.49	8.73
France	48.52	0.00	4.16	0.04	3.90	27.89	0.12	0.18	1.09	0.12	13.98
Germany	47.72	0.37	4.67	0.41	2.99	31.80	0.37	0.43	2.40	0.36	8.49
Greece	30.02	0.05	17.32	0.00	0.73	37.09	0.17	0.02	1.78	0.01	12.80
Hungary	51.37	0.04	4.79	0.00	1.72	28.62	0.16	0.19	4.42	0.23	8.45
Latvia	57.39	0.03	4.34	0.02	1.49	23.82	0.24	0.91	3.86	0.15	7.75
Lithuania	49.43	0.08	7.49	0.01	1.87	26.49	0.64	1.16	6.75	0.07	6.01
Netherlands	55.42	0.58	6.19	0.04	2.51	22.26	0.03	0.44	2.51	0.97	9.04
Norway	62.12	0.39	3.77	0.41	1.17	16.81	0.04	1.55	5.61	1.29	6.84
Poland	49.88	0.03	10.95	0.00	0.85	24.80	0.49	0.12	6.24	0.22	6.42
Portugal	46.53	0.14	6.42	0.21	3.83	28.94	0.62	0.58	3.56	0.26	8.92
Romania	41.72	0.00	15.14	0.00	0.01	33.84	0.67	0.00	3.45	0.01	5.15
Serbia	31.50	0.00	14.62	0.00	0.61	18.99	0.58	0.12	6.17	0.01	27.40
Slovakia	53.33	0.09	8.74	0.02	0.54	23.80	0.38	0.30	4.32	0.12	8.35
Slovenia	49.58	0.20	8.83	0.07	1.46	22.32	0.39	1.17	5.77	0.41	9.81
Spain	48.31	0.03	8.55	0.73	6.58	22.85	0.83	0.54	3.67	0.20	7.73
Sweden	55.94	0.43	0.19	1.34	1.61	24.75	0.05	1.62	1.29	2.68	10.10
UK	46.45	0.59	9.50	1.91	1.05	25.72	0.11	0.16	3.39	0.18	10.95
Total	49.25	0.23	7.92	0.3	2.29	25.97	0.33	0.55	4.20	0.48	8.49

| Country | | | | | | Female | | | | | |
	Empl[1]	Comp. Car[2]	Profit/Loss[3]	Pens[4]	Unempl[5]	Old-age[6]	Survivor[7]	Sickness[8]	Disabled[9]	Ed. allowance[10]	HH inc[11]
Austria	42.72	0.00	3.91	0.57	3.01	24.20	4.88	0.69	1.18	0.28	18.57
Belgium	42.92	0.11	2.92	0.03	5.54	23.16	1.01	0.70	4.47	0.19	18.94
Bulgaria	39.76	0.00	3.35	0.03	1.06	37.82	2.03	0.89	2.63	0.02	12.41
Croatia	36.03	0.02	5.33	0.03	0.93	24.06	13.02	0.36	5.76	0.14	14.32
Czechia	40.25	0.07	4.01	0.10	0.44	37.16	3.03	0.60	3.74	0.11	10.49
Denmark	52.17	0.07	2.00	0.00	7.25	24.20	0.24	0.99	4.97	2.97	5.14
Estonia	49.01	0.26	1.29	0.03	1.33	30.60	0.11	0.81	5.44	0.43	10.69
Finland	47.85	0.14	6.91	1.11	6.11	19.70	1.39	0.61	3.55	1.23	11.39
France	43.07	0.00	2.06	0.04	3.07	28.15	0.40	0.09	0.97	0.11	22.03
Germany	43.92	0.10	2.42	0.37	2.74	26.36	3.89	0.43	2.55	0.43	16.78
Greece	25.50	0.01	10.20	0.00	0.91	28.57	9.54	0.04	1.32	0.04	23.85
Hungary	38.03	0.01	2.48	0.00	1.27	40.19	0.45	0.23	3.78	0.20	13.35
Latvia	43.28	0.01	2.68	0.02	1.28	37.49	0.38	0.97	2.90	0.16	10.83
Lithuania	41.42	0.02	5.32	0.02	1.69	36.16	1.98	1.06	4.56	0.10	7.68
Netherlands	47.53	0.11	5.62	0.02	2.15	22.28	0.18	0.45	2.91	1.01	17.73
Norway	56.86	0.08	1.74	0.17	0.89	16.72	0.20	2.58	9.42	1.67	9.68
Poland	39.41	0.00	4.16	0.01	1.44	34.65	5.08	0.27	3.51	0.25	11.21
Portugal	43.76	0.04	3.26	0.16	2.60	26.46	6.12	0.70	2.72	0.19	13.99
Romania	31.96	0.00	8.23	0.00	0.01	40.00	4.49	0.02	3.13	0.02	12.13
Serbia	25.32	0.00	4.50	0.03	0.35	17.75	9.09	0.14	4.25	0.08	38.50
Slovakia	44.45	0.02	3.48	0.02	0.42	30.58	3.90	0.41	4.54	0.19	11.99
Slovenia	43.48	0.04	4.60	0.05	1.44	24.21	4.94	1.61	4.59	0.62	14.41
Spain	41.34	0.00	5.29	0.55	6.51	12.11	10.52	0.46	2.34	0.27	20.61
Sweden	53.48	0.11	1.34	1.42	1.41	24.18	0.13	2.52	2.23	2.97	10.22
UK	42.04	0.09	3.73	0.77	0.70	25.84	1.32	0.20	3.79	0.41	21.12
Total	42.22	0.05	4.03	0.22	2.18	27.70	3.53	0.71	3.65	0.56	15.12

[1] Gross employee cash or near cash income.
[2] Company car.
[3] Gross cash benefits or losses from self-employment.
[4] Pensions received from individual private plans.
[5] Unemployment benefits.
[6] Old-age benefits.
[7] Survivor' benefits.
[8] Sickness benefits.
[9] Disability benefits.
[10] Education-related allowances.
[11] Household income at individual level.
 Source: author's calculations from EU-SILC 2016 data.

TABLE A.3: Detailed decomposition of the 20th percentile total income gap for pooled country sample

Explained

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Age	-0.067***	-0.017***	-0.058***	-0.009***	-0.019**	-0.077***	-0.031***	-0.033***	-0.042***	-0.054***	-0.063***	-0.044***	-0.085***	-0.045***	-0.022**	-0.033***	-0.074***	-0.090***	-0.099***	-0.023***	-0.037***	-0.071***	-0.034***	-0.017***	-0.017***
Children <15	-0.001	0.000	0.000	-0.004*	0.000	-0.002*	0.002	-0.002	-0.002	0.000	0.000	0.001	0.000	0.000	-0.001	-0.004**	0.000	0.000	0.000	-0.004**	-0.001	0.000	0.000	0.000	0.000
Children <3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	-0.001	0.000	-0.001	-0.001	-0.002	0.000	0.000	0.000	0.000	-0.002*
Secondary edu.	-0.001	0.000	0.000	0.000	0.014*	0.013**	-0.017***	0.007**	0.000	0.017***	0.007***	0.030***	0.013***	0.007*	0.018**	0.000	0.013***	0.030***	0.018***	0.035***	0.006**	0.014**	0.006**	0.018***	-0.001
Tertiary edu.	0.029***	0.006***	-0.003	-0.007*	-0.001	0.003*	-0.018*	-0.005**	-0.021***	-0.005***	0.000	-0.009*	-0.017***	-0.009***	-0.013***	0.000	-0.008*	-0.013***	-0.008*	-0.026***	-0.005*	-0.026***	-0.012*	-0.005**	-0.001
Married	0.003	0.001	0.004*	0.012*	0.001	-0.006*	0.003*	0.005**	0.003**	0.005***	0.012***	0.011***	0.002	0.004**	0.002	0.010***	0.004**	0.004**	0.010**	0.016**	0.001	0.003***	0.011***	0.001	0.001
Cohabiting	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.005***	0.000	0.005***	0.002	0.000	0.002	0.002	0.002	0.002	0.000	0.006	0.001	0.001	0.001	0.001	0.001
Part-time	0.133**	0.081***	0.004	0.008*	0.031**	0.076***	0.013**	0.083***	0.013***	0.211***	0.021***	0.006**	0.083***	0.010*	0.106***	0.039***	0.028***	0.035***	0.039***	0.093***	0.008*	0.007**	0.093***	0.045**	0.114***
Unemployed	-0.033**	-0.005	-0.070**	0.004	-0.050**	-0.008*	-0.031***	-0.009*	-0.031***	-0.020***	-0.052***	-0.068***	0.001	-0.067***	-0.005*	0.028***	0.005	-0.022**	-0.007	-0.032***	-0.016*	0.017**	-0.004	-0.005	-0.026**
Inactive	0.129**	0.083***	0.081***	0.084***	0.111**	0.076***	0.111**	0.055***	0.083***	0.101***	0.172***	0.124***	0.207***	0.169***	0.124***	0.092***	0.173***	0.124***	0.174***	0.103***	0.092***	0.072***	0.105***	0.055***	0.130***
Managerial	0.039**	0.030**	0.032**	0.029**	0.006	0.013*	0.006	0.023***	0.004*	0.044***	0.020***	0.053***	0.061***	0.040***	0.061***	0.028***	0.072***	0.087***	0.034***	0.025***	0.011**	0.025***	0.053***	0.019***	0.042***
Professional	0.002	-0.01	0.102**	-0.106**	0.012**	-0.016*	-0.044***	0.009	-0.002	-0.002	-0.001	-0.002	-0.072**	-0.077***	0.040***	-0.033***	-0.042***	-0.097***	-0.080***	-0.086***	-0.028**	-0.059***	-0.049**	-0.090***	-0.004
Technician	0.028**	0.101**	0.029**	0.134**	0.012**	0.003	0.076***	0.021***	0.003	0.021***	0.003	0.021***	0.116**	0.132**	0.002	0.026**	0.047**	0.112**	0.047**	-0.006	0.015**	0.075***	0.052**	0.007	0.000
Clerical	-0.072**	-0.037***	-0.084***	-0.073**	-0.037*	0.012**	-0.010*	-0.126***	-0.036***	-0.052***	0.164***	-0.052***	-0.090***	-0.058*	-0.065***	-0.042***	-0.064***	-0.042***	-0.082***	-0.047***	-0.011**	-0.137***	-0.058**	0.076***	-0.004
Service/Sales	-0.093***	-0.056***	-0.098***	-0.106**	-0.050**	0.015**	-0.096***	-0.166***	-0.111***	-0.096***	-0.071***	-0.071***	-0.136***	-0.077***	-0.067***	-0.021	-0.136***	-0.080***	-0.257***	-0.194***	-0.059***	-0.046***	-0.143***	-0.166***	-0.091***
Agricultural	0.000	0.001	0.101**	0.001	-0.004	0.000	0.005**	0.000	0.000	0.006**	0.196***	0.003	-0.002	-0.003	0.001	-0.006	0.001	-0.006	-0.006	0.000	0.000	0.003	0.007	0.052*	0.000
Craft/trade	0.193**	0.134**	0.182**	0.116**	0.101**	0.02	0.200**	0.071***	0.076***	0.164***	0.177***	0.080***	0.290**	0.063***	0.080***	0.024*	0.255**	0.290**	0.481***	0.298***	0.097***	0.298**	0.052**	0.076***	0.071***
Plant/machinery	0.059**	0.048**	0.173**	0.134**	0.050**	0.015*	0.102**	0.026***	0.071***	0.026***	0.112**	0.059***	0.294**	0.118***	0.042**	0.024*	0.294**	0.294**	0.294**	0.145***	0.066***	0.043***	0.202**	0.037**	0.037**
Elementary	-0.066**	-0.030**	0.004	-0.037**	-0.015**	0.000	-0.058***	0.000	-0.030***	-0.058***	-0.017***	-0.067***	-0.013***	-0.011**	-0.013***	0.011***	-0.055***	-0.178***	-0.050***	-0.037***	-0.015**	-0.110***	-0.013***	-0.003	-0.003
Non-citizen	0.003	-0.001	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
Total	0.314***	0.413***	0.148***	0.308***	0.149***	0.069***	0.137***	0.209***	0.127***	0.346***	0.327***	0.096***	0.346***	0.114***	0.313***	0.095***	0.197***	0.150***	0.429***	-0.07	0.083***	0.086***	0.090***	0.090***	0.186***

Unexplained

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Age	-0.457***	-1.854***	-0.072	-4.684***	-0.560***	0.049	0.238***	0.094	-0.438***	0.043	-3.433***	-3.647***	-0.303***	-0.211	-0.238***	0.059	-3.000***	-2.755***	-4.487***	-0.853***	-0.146	0.361**	-5.633***	-0.606***	-0.606***
Children <15	0.009	-0.106***	-0.017	-0.167**	0.012	-0.028*	-0.018	-0.001	-0.057***	-0.007	-0.808***	0.007	-0.033*	0.036	-0.033*	0.056	0.056	-0.066***	-0.253***	0.298***	-0.002	-0.162***	-0.162***	-0.035**	-0.054***
Children <3	0.043***	-0.017	-0.013	-0.084***	0.043**	0.006	0.014**	0.016***	-0.065***	-0.007	0.034***	-0.006	0.01	0.018	-0.003	-0.011	0.005	-0.011	-0.068*	0.031	0.037***	0.003	-0.064***	0.029***	-0.054***
Secondary edu.	0.186***	0.002	0.093***	-0.189*	0.099***	0.048*	0.076***	0.000	-0.028	0.197***	-0.117	0.090**	0.090*	0.055	0.090**	0.024*	0.411***	-0.027	0.365***	0.145***	0.037***	0.038*	0.015*	0.048*	0.023
Tertiary edu.	0.090***	0.089***	0.002	-0.091*	0.031***	0.028	0.009	0.031***	0.000	-0.007	0.043**	0.065**	0.062**	0.055	0.050**	-0.006	0.057	0.108**	-0.068**	0.313***	0.046	-0.016	0.052**	-0.053	0.027
Married	0.670***	0.820***	1.451***	0.219***	0.113***	0.091*	0.042***	0.089***	0.406**	0.735***	2.617***	0.196***	0.132***	0.177***	0.406***	0.024*	0.255**	0.631***	1.203***	0.997***	0.313***	0.038*	0.164***	0.501***	0.501***
Cohabiting	0.049***	0.045***	0.042***	0.008	0.021***	-0.091*	0.042***	0.143***	0.042***	0.041***	0.091***	0.024***	0.063***	0.213***	0.054***	0.024**	0.024**	0.108**	0.189***	0.145***	0.012**	0.021**	0.055**	0.095***	0.095***
Part-time	-0.149***	-0.070***	-0.013*	0.021***	0.023**	0.003	0.006	0.094***	-0.077	0.087***	0.155***	0.010**	-0.031***	-0.031***	0.406***	0.068***	0.024**	0.068***	0.026	0.042***	0.007	0.032***	0.045**	-0.080**	-0.080**
Unemployed	-0.030***	-0.005	0.014	0.014	0.003	-0.033*	0.010*	0.042***	-0.016**	0.041***	0.015*	0.039***	0.037***	-0.031**	-0.118**	0.011	0.024**	-0.004	0.026	0.001	0.007	0.032***	0.055***	-0.017***	0.003
Inactive	0.420***	0.572***	-0.009	-0.065***	-0.027	0.023	0.165***	-0.034	-0.215***	0.047	1.397**	-0.004	0.150***	-0.047***	0.039***	0.026	0.506***	1.901**	1.901**	0.158	0.120***	0.320***	2.328***	-0.059**	0.278***
Managerial	-0.030**	-0.052***	0.009	-0.062**	0.005*	-0.004	0.008**	0.008***	-0.015**	0.007	-0.025**	-0.005	-0.198**	-0.026**	-0.036	0.007	-0.077**	-0.021**	-0.022**	0.032**	-0.003	-0.004	-0.031***	0.015***	0.007
Professional	-0.076**	-0.289***	0.055	-0.378***	0.017	-0.002	0.073**	0.091*	-0.077***	0.007	-0.522**	-0.05	-0.047*	0.048	0.001	0.007	-0.291**	-0.126**	-0.512**	0.145***	-0.015	-0.003	-0.266**	0.114***	-0.021
Technician	-0.083**	-0.130***	0.028**	-0.238***	0.013	-0.012	0.091***	0.031***	-0.081***	0.063	-0.241**	-0.037	-0.003	0.027	0.089***	-0.003	-0.169***	-0.061***	-0.274**	0.138***	-0.006	0.006	-0.169***	0.051***	0.011
Clerical	-0.052*	-0.176***	0.038*	-0.265***	0.02	-0.021	0.044**	0.000	-0.044**	0.039	-0.456**	-0.03	0.041**	0.006	0.079***	0.004	-0.157***	-0.067***	-0.180**	0.158***	-0.009	-0.001	-0.303***	0.008	0.018
Service/Sales	-0.158***	-0.168***	0.047	-0.480**	-0.009	0.025	0.015**	0.000	-0.078**	0.060**	-0.723**	-0.021	-0.201**	0.08	-0.002	-0.002	-0.201**	-0.151**	-0.563**	0.218***	0.015	0.038*	-0.391**	0.102**	0.037
Agricultural	-0.052***	0.008*	0.008	-0.094**	-0.009	-0.006*	0.015**	0.015**	-0.019**	0.060*	-0.718**	0.004	-0.075**	-0.008	0.003*	-0.002	-0.042	-0.071**	-0.837**	0.042**	-0.004*	0.032**	-0.070**	0.004	0.037
Craft/trade	0.002	-0.018*	0.033*	-0.120**	0.006	-0.006*	-0.019**	-0.018*	-0.089**	0.009*	-0.092**	0.004	0.016*	0.009	0.004	-0.030**	-0.075**	-0.056**	-0.473**	0.098***	-0.002	0.003	-0.095***	0.006**	0.003
Plant/machinery	-0.005	-0.035***	0.036***	-0.091***	-0.004	0.003	0.013**	0.032	-0.018*	0.053**	-0.089**	-0.003	-0.001	0.008	0.001	0.002	-0.030**	-0.209**	-0.216**	0.035***	0.003	0.013	-0.034**	0.011**	0.003
Elementary	-0.043	-0.192***	-0.091***	-0.384***	0.001	0.003	-0.018**	0.021*	-0.049**	0.021*	-0.322**	-0.043	-0.011	0.006	0.042**	-0.006	-0.144**	-0.430**	-0.430**	0.197***	-0.018	0.018	-0.331**	0.017*	0.016
Non-citizen	-0.003	0.019	0.002	-0.005	0.001	0.003	0.000	0.004**	0.001	0.025*	0.009	-0.043	-0.005	0.003	0.006	0.008	-0.001	-0.001	0.001	0.006	0.000	0.001	0.015	-0.003	0.012
Constant	0.117	2.057***	4.695***	-0.005	0.308***	-0.134	-0.17	-0.566***	0.656***	-0.814***	5.591***	0.444***	0.084	-0.061	-0.259*	0.204***	2.505***	2.460***	5.825***	-0.351	0.604***	0.078	4.077***	-0.738***	0.028
Total	0.450***	0.148***	0.658***	0.308***	0.149***	-0.052	-0.17	0.080***	0.333***	0.285***	2.247***	0.114***	-0.026	0.169***	0.284***	0.204***	0.331***	0.293***	1.186***	0.590***	0.166***	0.111***	1.104***	0.097***	0.336***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Base for education variables is primary education; for marital status - single; for employment status - full-time worker; for occupation - army workers and technicians.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.4: Detailed decomposition of median total income gap for pooled country sample

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Explained																									
Age	-0.028***	-0.008***	-0.012***	-0.020***	-0.006***	-0.008*	-0.012	-0.016***	-0.020***	-0.015***	-0.016***	-0.013***	-0.013***	-0.018***	-0.020***	-0.013***	-0.018***	-0.013***	-0.012***	-0.003	-0.018***	-0.020***	-0.016***	-0.016***	-0.008***
Children <15	-0.001	-0.002*	-0.001	-0.001	-0.002*	-0.003*	-0.003*	-0.002	-0.002	-0.004***	-0.002	-0.001	-0.001	0.000	-0.004***	-0.004***	0.000	-0.004**	0.000	-0.005***	-0.002*	-0.002*	-0.002**	-0.001	-0.001
Children <3	0.000	0.000	0.000	0.000	0.000	0.000	0.002	-0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.001
Secondary edu.	0.011**	0.005**	0.000	0.007**	0.013***	0.007***	-0.012	0.012**	0.024***	0.009*	0.003***	0.000	0.006***	0.009*	0.006***	0.015***	0.008***	0.020***	0.000	0.042***	0.013***	0.010**	0.017**	0.004***	0.000
Tertiary edu.	0.018***	-0.004	-0.043***	-0.007**	-0.001	-0.018*	-0.026***	0.014**	-0.007***	0.004*	-0.011***	-0.051***	-0.018***	-0.019**	-0.012***	0.003*	-0.018***	-0.016***	0.007	-0.015***	-0.009***	-0.029***	0.010***	-0.016***	-0.003
Married	0.003*	0.003*	0.007**	0.006***	0.006***	0.003**	0.006**	0.004**	0.004*	0.017***	0.006***	0.016***	0.005**	0.016***	0.011***	0.001	0.011***	0.004***	0.008***	0.004***	0.008***	0.002	0.004***	0.017***	0.006***
Cohabiting	0.001	0.000	0.000	0.000	0.000	0.000	0.001*	0.001	0.000	0.001*	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001*	0.000	0.000	0.000	0.000	0.001	0.000	0.002*
Part-time	0.080***	0.052***	0.002	0.010***	0.008***	0.037***	0.043***	0.016***	0.039***	0.130***	0.003**	0.007***	0.012***	0.007	0.099***	0.022***	0.009***	0.018***	0.008***	0.011***	0.008***	0.011***	0.057***	0.054***	0.083***
Unemployed	-0.013***	-0.003	-0.032***	-0.021***	-0.024***	-0.010***	-0.024***	0.016***	-0.010***	-0.010**	-0.016***	-0.015*	-0.027***	-0.032**	0.038***	0.018***	-0.006**	-0.014**	-0.006***	0.000	-0.002	-0.002	0.057***	0.000	0.055***
Inactive	0.092***	-0.003	0.116***	0.151***	0.206***	0.097***	0.266***	0.042***	0.130***	0.016***	0.099***	0.244***	0.027***	0.099***	0.209***	0.091***	0.091***	0.153***	0.134***	0.125***	0.116***	0.058***	0.104***	0.010***	0.079***
Managerial	0.007**	0.007**	0.006**	0.004**	0.007***	0.007***	0.008	0.010***	0.008***	0.006***	0.004**	0.020***	0.009***	0.020***	0.006***	0.017***	0.020***	0.006***	0.017***	0.015***	0.004***	0.007***	0.004***	0.017***	0.000
Professional	0.000	-0.002	-0.023***	-0.019***	-0.023***	-0.008*	-0.007***	-0.003	-0.007***	0.024***	0.005***	0.009***	-0.020***	0.041***	-0.020***	0.007*	-0.020***	-0.024***	0.047***	-0.005***	0.004***	-0.013***	0.007***	0.005***	-0.001
Technician	0.001	0.004**	0.007**	0.001	0.007***	0.007**	0.003**	0.001	0.003**	-0.001	0.011***	0.020**	0.011***	-0.002	0.011***	0.000	0.017***	0.010*	-0.001	0.015***	0.007***	0.004*	0.005**	-0.002	0.017***
Clerical	0.003	-0.002	-0.002	-0.007**	-0.001	0.012**	0.007	0.009	0.003	-0.016**	-0.015*	-0.004	0.003	-0.004	0.003	0.018**	-0.002	-0.010**	-0.015***	0.002	-0.010***	0.002	0.012***	-0.002	-0.010**
Service/Sales	0.025***	0.011***	0.001	0.001	0.032***	0.007	0.002	0.018**	0.013**	0.025***	-0.003***	-0.006*	0.027***	-0.001	0.022**	0.060***	-0.004	-0.019***	-0.014***	-0.004***	-0.010***	0.002	-0.009***	0.024***	0.015***
Agricultural	0.002	-0.005	0.002*	-0.005	0.002*	-0.008*	-0.002	0.009	-0.006***	-0.006***	-0.032*	-0.001	-0.001	0.007	-0.006***	-0.018**	-0.019***	-0.024***	-0.014***	-0.005***	-0.002*	-0.010***	-0.009***	-0.009***	-0.007***
Craft/trade	-0.026***	-0.004	0.015**	-0.046***	-0.013*	-0.007***	0.009	-0.003	-0.019***	-0.046***	0.005***	-0.004**	0.007	-0.002	-0.020***	-0.010***	0.049***	0.047***	0.049***	-0.004	-0.013***	0.014*	-0.008***	-0.007***	0.015***
Plant/machinery	-0.010***	-0.001	0.034***	0.001	0.014***	0.000	0.013	0.007	-0.011***	-0.006***	0.020***	0.010*	-0.006***	-0.002	-0.006***	0.014***	0.010***	0.034***	0.058***	0.007***	0.004*	0.041***	-0.002	-0.006**	-0.006**
Elementary	0.024***	0.023***	0.003*	0.026***	0.000	0.006***	0.020***	0.020**	0.009***	0.003*	0.009***	0.009***	0.007***	0.011***	0.007***	0.007***	0.011***	0.002	0.002	0.007***	0.007***	0.005**	0.012***	-0.002	-0.001
Non-citizen	0.001	0.000	-0.001	0.003*	0.000	0.000	-0.004**	0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000
Total	0.190***	0.091***	0.149***	0.226***	0.115***	0.243***	0.070***	0.081***	0.240***	0.158***	0.075***	0.131***	0.148***	0.131***	0.234***	0.089***	0.089***	0.083***	0.191***	0.093***	0.132***	0.095***	0.151***	0.120***	0.198***
Unexplained																									
Age	-0.101	-0.240***	0.049	-0.274***	-0.119***	0.092	-0.033	-0.042	-0.051	-0.440***	-0.957***	-0.142***	-0.004	-0.078	-0.067	-0.004	-0.389***	-0.108	-0.519***	-0.829***	-0.261***	-0.267***	-0.458***	0.007	-0.094
Children <15	0.017	0.006	0.013	-0.016	0.009	0.037	0.009	0.015*	0.051	-0.027***	-0.022*	0.013	-0.009	0.009	0.007	0.007	0.002	-0.006	0.004	-0.040**	0.002	0.014	0.007	-0.017	-0.052
Children <3	0.016***	-0.007	0.011*	0.019***	0.020***	0.009*	-0.003	0.014***	0.014***	0.018***	-0.003	0.018***	0.022***	0.01	-0.009**	0.017***	0.041***	0.019**	0.012	0.004***	0.002	0.022***	0.034***	0.015***	-0.015**
Secondary edu.	0.000	-0.035	0.003	-0.120***	0.030*	0.030*	0.037	-0.014	-0.006	0.060***	0.005	0.040***	0.025	0.069*	0.002	-0.002	0.002	-0.031***	0.004	-0.120***	0.056*	-0.107***	-0.010**	0.018	0.008
Tertiary edu.	0.002	-0.060***	0.034*	-0.037***	0.006	0.028	0.106***	-0.02	0.005	0.052***	0.008	0.064***	0.04	0.076**	-0.014	-0.014	0.024***	0.003	0.003	-0.024	0.025**	-0.012	0.047***	-0.018	0.008
Married	0.260***	0.135***	0.131***	0.195***	0.173***	0.084***	0.098***	0.072***	0.136***	0.344***	0.607***	0.052***	0.095***	0.103***	0.348***	0.057***	0.205***	0.201***	0.137***	0.319***	0.162***	0.033*	0.383***	0.030*	0.286***
Cohabiting	0.032**	0.008*	0.020**	0.000	0.034***	0.023***	0.017**	0.020**	0.017**	0.093***	0.008**	0.014***	0.017**	0.011***	0.038***	0.023***	0.020***	0.020***	0.003	0.008*	0.008***	0.005	0.015***	0.017*	0.055***
Part-time	-0.002	-0.013	0.001	0.026*	0.000	0.017*	0.016*	0.009*	0.009*	0.011**	0.014***	-0.001	0.007	-0.012*	0.035*	0.008**	0.010**	0.014**	-0.006**	0.008**	0.005	0.005	-0.014**	-0.023*	0.014
Unemployed	0.012**	0.014**	0.018**	-0.001	-0.010**	-0.035**	-0.035***	-0.002	-0.006	0.007*	0.007	-0.004	0.006	0.006	-0.065***	0.005	0.023***	0.006	0.023***	-0.006***	0.008*	0.000	-0.014***	0.011***	0.014
Inactive	0.139***	0.056*	0.167***	0.188***	0.073***	-0.008**	-0.009*	-0.005	0.012**	0.011***	0.113***	0.006	0.012**	-0.038	0.052***	0.010**	0.010***	0.169***	0.076***	0.134***	-0.006**	0.025***	0.126***	0.011***	0.007***
Managerial	-0.016***	-0.011***	-0.005	-0.013***	-0.001	0.030*	-0.015	-0.005	-0.007***	-0.003	-0.004***	-0.004*	-0.012	-0.002	-0.004***	-0.005	-0.005*	-0.005*	-0.009***	-0.009***	-0.050***	-0.015***	-0.004***	-0.003	0.001
Professional	-0.016***	-0.080***	-0.005	-0.081***	-0.013***	-0.049***	-0.038	-0.008	-0.007***	-0.003	-0.004***	-0.004*	-0.012	0.028	-0.055***	-0.059***	-0.005*	-0.009	-0.084***	-0.053***	-0.018***	-0.041***	-0.034***	-0.014	-0.017
Technician	-0.077***	-0.034***	0.002	-0.045***	-0.021**	-0.017**	-0.001	-0.003	-0.047***	-0.041***	-0.043***	-0.004	-0.017	0.018	-0.045***	-0.020***	-0.001	-0.014***	-0.042***	-0.074***	-0.012	-0.009	-0.034***	-0.013	-0.001
Clerical	-0.061***	-0.058***	-0.003	-0.056***	-0.027***	-0.02	-0.035***	-0.060***	-0.077***	-0.077***	-0.073***	-0.009	0.007	0.004	-0.052***	-0.059***	-0.017***	-0.029***	-0.033***	-0.029***	-0.017	-0.007	-0.015***	-0.017	-0.022**
Service/Sales	-0.082***	-0.031***	-0.002	-0.096***	-0.048***	-0.009	-0.019	-0.037***	-0.040***	-0.048***	-0.128***	-0.005	0.016	-0.002	-0.064***	-0.029*	-0.017***	-0.014**	-0.133***	-0.081***	-0.01	-0.006	-0.048***	-0.025***	-0.018
Agricultural	-0.018***	0.000	-0.002	-0.002	-0.008*	-0.002	-0.004	-0.005*	-0.007***	-0.001	-0.040***	-0.013***	0.017***	-0.002	-0.003*	-0.001	0.017***	-0.010**	0.014	-0.001	-0.001*	-0.006	-0.011***	0.000	0.000
Craft/trade	-0.008*	-0.002	0.002	-0.020***	-0.020***	-0.003*	-0.010*	0.001	-0.018***	-0.004***	-0.006***	-0.002	-0.01	0.01	-0.005***	-0.006	-0.004	-0.003	-0.006	-0.034***	-0.005*	-0.004**	-0.006*	0.018	-0.004**
Plant/machinery	-0.007***	-0.005	0.008	0.013***	-0.015***	-0.002	-0.010*	0.001	-0.011***	-0.004***	-0.011***	0.008	-0.001	0.002	-0.012***	-0.005	0.001	-0.003	-0.046***	-0.014***	-0.004**	0.000	-0.004**	-0.004**	-0.004**
Elementary	-0.046***	-0.045***	-0.028*	-0.051***	-0.038***	-0.034*	-0.034*	-0.003	-0.030***	-0.016***	-0.056***	0.003	0.003	-0.034	-0.011**	0.003	-0.017***	-0.047***	-0.059***	-0.057***	-0.014*	-0.013*	-0.046***	-0.001	-0.012**
Non-citizen	-0.014*	0.000	-0.001	-0.002	0.001	-0.003	0.013	-0.003	0.001	-0.001	0.000	0.000	0.000	0.001	-0.005	0.002	0.000	0.000	0.000	0.008***	0.007***	0.015***	-0.010*	0.001	-0.006
Constant	0.377***	0.642***	0.200***	0.292***	0.408***	1.082***	0.258***	0.196***	0.262***	0.574***	0.742***	0.255***	0.206***	0.254***	0.223***	0.319***	0.859***	1.151***	0.298***	0.3001*	0.406***	0.310***	0.388***	0.049	-0.036
Total	0.363***	0.240***	0.213***	0.213***	0.036***	0.036**	0.258***	0.196***	0.058	0.574***	0.087	0.124***	0.255***	0.011	0.254***	0.194***	0.265***	0.223	0.319***	0.308***	0.154***	0.147***	0.211***	0.147***	-0.036

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.
Base for education variables is primary education; for marital status - single; for employment status - full-time worker; for occupation - army workers and technicians.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.5: Detailed decomposition of the 90th percentile total income gap for pooled country sample

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Explained																									
Age	-0.033***	-0.001	-0.018***	-0.003	-0.018***	-0.004**	0.006	-0.011***	-0.030***	-0.011***	-0.017***	-0.002	-0.001	0.016	-0.012***	-0.011***	-0.011***	-0.045***	-0.008*	-0.008	-0.015***	-0.028***	-0.020***	-0.016***	-0.008***
Children <15	-0.001	-0.005*	-0.002	-0.001	-0.004*	-0.004**	0.001	0.000	0.001	0.000	-0.001	0.000	0.000	0.000	0.000	-0.003***	-0.001	-0.002	-0.003***	-0.001	-0.001	-0.003*	-0.002*	-0.003***	-0.002**
Children <3	0.000	-0.002	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.001	0.000	-0.001
Secondary edu.	-0.001	0.003	-0.002*	0.003	-0.002*	0.003	0.013***	-0.002	0.000	0.003	-0.002	-0.001	0.013***	-0.02	0.000	-0.004	0.001	0.000	-0.004	-0.001	0.002	0.006*	0.003	-0.002	0.006*
Tertiary edu.	0.002	-0.006	-0.037***	-0.011***	-0.043***	-0.012***	-0.018***	-0.014***	-0.051***	-0.027***	-0.054***	-0.023***	-0.02	-0.031***	-0.023***	-0.014***	-0.023***	-0.061***	-0.066***	-0.007	-0.012***	-0.012***	-0.033***	-0.014***	-0.004
Married	0.002	0.003*	0.004*	0.004**	0.006**	0.001	0.002	0.007	0.003*	0.007	0.014**	0.008***	0.011***	0.061**	0.011***	0.004**	0.011***	0.009***	0.004**	0.003*	0.002	0.001	0.004***	0.000	0.004**
Cohabiting	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.002	0.000	0.000	0.000	0.000	0.000	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Part-time	0.047***	0.035*	0.001	0.008*	0.010*	0.008*	0.018***	0.005*	0.017*	0.067**	0.008***	0.006*	0.015*	0.046**	0.055**	0.007*	0.021***	0.055***	0.007*	0.021***	0.005*	0.007**	0.021***	0.029***	0.036***
Unemployed	-0.007*	-0.001	-0.008**	-0.001	-0.012*	-0.003*	-0.012***	-0.002*	-0.002	-0.003***	-0.007**	-0.012***	0.000	-0.012***	0.000	-0.007	0.002	-0.012***	-0.004***	-0.004*	-0.004***	-0.004**	0.000	0.000	-0.004***
Inactive	0.098***	0.060**	0.076***	0.082***	0.072***	0.035***	0.044***	0.036***	0.052**	0.057***	0.123***	0.075***	0.041*	0.057***	0.063***	0.041**	0.074***	0.063***	0.042***	0.125***	0.073***	0.073***	0.047***	0.036***	0.067***
Managerial	0.018**	0.011**	0.016**	0.002	0.029**	0.044**	-0.003*	0.036**	0.026**	0.005**	-0.003***	0.016***	0.038***	0.057**	0.028**	0.001	0.074***	0.021***	0.080***	-0.040***	0.010***	0.005*	0.036**	0.011**	0.026**
Professional	0.001	0.001	-0.063**	0.029**	-0.023**	-0.011**	0.027**	0.002	0.016**	-0.003**	-0.007*	-0.013**	0.001	0.029	0.000	0.001	0.002	0.000	-0.008**	-0.004**	-0.004**	0.005*	0.000	0.001	0.000
Technician	-0.006*	-0.006**	-0.007	0.000	-0.023**	-0.011**	-0.039**	0.002	-0.010**	0.005***	0.000	-0.020**	-0.038**	-0.017***	-0.008**	0.016**	-0.020***	-0.026***	0.009***	-0.005*	0.010**	0.006**	-0.008***	-0.008***	0.000
Clerical	0.029*	0.012**	0.009	0.016**	0.012	0.025**	0.063**	0.003*	0.012**	0.009***	0.026**	0.003	0.026**	0.000	0.004**	0.018**	0.021**	0.029**	0.021**	-0.001	-0.001	0.000	0.003	-0.002	-0.002
Service/Sales	0.057**	0.026*	0.01	0.026**	0.015**	0.008	0.043**	0.008	0.048**	0.035**	0.006	0.027***	0.049**	0.034**	0.003	0.018**	0.034**	0.029**	0.029**	0.003	0.020**	0.022**	0.023**	0.059***	0.061***
Agricultural	0.002	-0.006**	0.002	0.000	-0.002*	0.008	-0.001	0.002	-0.015***	-0.005***	-0.002	-0.009***	-0.002	0.008*	-0.002	0.007***	-0.006*	0.007***	-0.005***	-0.005*	0.000	-0.004***	-0.010***	-0.002*	-0.008***
Craft/trade	-0.099***	-0.055***	-0.008	-0.042***	-0.033***	-0.019	-0.070***	-0.023***	-0.070***	-0.073***	-0.044***	-0.030***	-0.046***	-0.004	-0.038***	-0.044***	-0.046***	-0.017***	-0.017***	0.000	-0.025***	-0.004***	-0.048***	-0.071***	-0.048***
Plant/machinery	-0.037***	-0.024***	-0.008	-0.027***	-0.016***	-0.016***	-0.013***	-0.023***	-0.048***	-0.013***	-0.024***	-0.022***	-0.019***	-0.006	-0.019***	-0.017***	-0.022***	-0.013***	0.003	-0.009*	-0.022***	-0.013***	-0.029***	-0.037***	-0.026***
Elementary	0.045**	0.026**	0.011***	0.013***	0.000	0.008***	0.040**	0.008***	0.040***	0.003*	0.005	0.011***	0.007***	0.009***	0.007***	0.006***	0.045**	0.001	0.045***	0.001	0.007***	0.020***	0.006***	0.003	0.003
Non-citizen	0.001	0.000	0.000	0.000	0.000	-0.003***	0.005	0.008***	0.005	0.005***	0.011***	0.009***	0.006**	-0.006	-0.001	0.006***	-0.022***	0.045***	0.001	0.002*	0.007***	0.001	0.020***	0.001	-0.001
Total	0.135***	0.058***	-0.01	0.023*	0.076***	0.020*	-0.007	0.035***	0.069***	0.158***	0.087***	0.047***	0.002	-0.05	0.158***	0.035***	0.053***	-0.033*	0.079***	0.037***	0.062***	-0.006	0.006	0.008	0.131***
Unexplained																									
Age	-0.037	0.029	0.094	-0.210***	-0.276***	-0.122***	0.018	-0.055	-0.209***	-0.251***	-0.149**	-0.212***	0.029	-0.176	-0.105*	0.111**	-0.308***	0.074	-0.143	-0.034	0.098	-0.094	-0.255***	0.136*	0.141
Children <15	0.016	0.028*	0.076**	-0.019	0.088***	0.027	0.079***	0.008	-0.026	0.008	-0.005	0.012	0.023	0.081**	0.002	0.014	0.005	0.016	0.016	-0.006	0.038**	0.026*	0.006	-0.001	0.013
Children <3	-0.004	0.009	0.015	0.020**	0.011	0.000	0.005	0.005	0.001	0.005	0.034**	0.027**	0.027**	0.029	0.010	0.020**	0.018**	0.020**	0.010	0.023**	0.007	0.020*	0.011	0.003	0.011
Secondary edu.	-0.039**	0.004*	0.072**	0.016**	0.044**	0.022*	0.060***	0.036**	0.001	0.053**	0.034**	0.041**	0.041**	0.883**	0.036**	0.029*	0.045**	0.025**	0.020*	0.023**	0.071***	0.020**	0.003	0.020**	0.027*
Tertiary edu.	-0.026	0.026	0.063**	-0.025	0.017	0.060***	0.096**	-0.013	-0.031**	-0.009	-0.015	0.036**	0.036**	0.111**	0.036**	-0.01	-0.006	0.014	-0.01	-0.061***	-0.007	0.013	-0.016	0.013	0.081***
Married	0.063**	0.088***	0.088***	0.043*	0.105***	0.006	0.011	0.025	0.097***	0.058***	0.073***	0.075***	0.075***	0.076	0.104***	0.050***	0.099***	0.038	0.019	0.061**	0.064**	0.030	0.073***	0.073***	
Cohabiting	0.01	0.000	0.001	0.000	0.006	-0.015*	0.028**	0.002	-0.006	-0.007	-0.001	0.009*	0.009*	-0.006	0.018**	-0.003	0.009*	0.019	-0.003	0.000	0.008	0.013	0.03	0.004	0.073***
Part-time	0.090***	0.047**	0.000	0.043*	-0.015*	0.005	0.028**	0.004	0.006	-0.001	0.014*	0.000	0.000	0.076	-0.003	0.001	0.000	-0.005	0.004**	0.000	0.008	0.018*	0.007	0.002	0.025**
Unemployed	0.015*	0.016**	0.011***	0.008***	-0.006*	0.005	0.005	0.004	0.011	0.033***	0.015*	0.007***	0.007***	0.011	0.013***	0.014**	0.012**	0.010**	0.019	0.001	0.001	0.004	0.002	0.004	0.007***
Inactive	0.087***	0.055*	0.054*	0.160***	0.108***	0.076**	0.005	0.012	-0.088***	0.160***	0.033***	0.013*	0.126**	0.191***	-0.018	0.162***	0.124***	0.162***	0.162***	0.059	-0.007	0.073***	0.057**	-0.014	0.078***
Managerial	-0.008	-0.012*	-0.01	0.009**	0.007**	0.007*	-0.002	-0.006*	-0.017***	0.003	-0.002	-0.005	-0.008	-0.017**	-0.022**	-0.002	-0.005	-0.002	-0.001	-0.006	-0.003	0.001	-0.013***	-0.007	-0.006
Professional	-0.057**	-0.031**	0.058*	-0.073**	0.048***	-0.004	-0.029	-0.006*	-0.060***	-0.076**	-0.060***	0.012*	0.012*	0.053	-0.076**	-0.039**	-0.076**	-0.105***	0.042*	-0.014	-0.014	0.001	-0.161***	-0.027	-0.077***
Technician	-0.045**	-0.018*	-0.014	-0.022**	-0.006	0.002	0.013	-0.002	-0.031***	-0.037***	-0.031***	0.004	0.004	-0.013	-0.031***	-0.019**	-0.012	-0.019***	-0.011	0.005	-0.004	-0.003	-0.026***	-0.006	-0.011
Clerical	-0.045**	-0.032**	-0.027*	0.017*	-0.005	-0.018	-0.010*	-0.004	-0.063***	-0.027	-0.051***	0.001	0.041**	0.061**	-0.040***	-0.023**	-0.024***	-0.025**	-0.019**	-0.031**	-0.037***	-0.011	-0.045***	-0.019***	-0.029***
Service/Sales	-0.063***	-0.027**	0.017	0.000	-0.006	0.01	0.01	-0.004	-0.055***	-0.029***	-0.029***	0.002	0.002	0.064	-0.031***	-0.033***	-0.024***	-0.096***	-0.037***	0.003	-0.042***	-0.003	-0.065***	0.041**	-0.048***
Agricultural	-0.008	-0.008	0.008	-0.008	-0.011	-0.006	0.004	-0.002	-0.020***	-0.007*	-0.010*	-0.003*	-0.003*	-0.02	-0.003*	-0.002	-0.014	-0.010*	-0.002	0.002	-0.001	-0.001	-0.006**	-0.002	-0.007*
Craft/trade	-0.013***	-0.007**	0.008	-0.004	-0.004***	-0.001	-0.005	-0.013**	-0.020***	-0.021***	-0.030***	0.009**	0.009**	0.028**	-0.003***	-0.003	-0.002	0.010**	0.013**	0.002	-0.001	-0.001	-0.012**	-0.003***	-0.002
Plant/machinery	-0.010***	-0.010***	0.008	-0.007*	-0.001	-0.004***	-0.003	0.000	-0.021***	0.001	-0.009***	0.012*	0.012*	0.009**	-0.001	0.004	0.004	-0.003*	0.008*	0.013**	0.004	0.013**	-0.006***	-0.002	0.007***
Elementary	-0.049***	-0.026***	-0.002	0.001	0.003	-0.003	-0.016	-0.003	-0.048***	-0.007*	-0.022***	-0.005	-0.005	0.046**	-0.009**	-0.005***	-0.001	-0.038***	-0.001	-0.003	-0.012*	-0.008	-0.056***	-0.010***	-0.020***
Non-citizen	0.000	0.001	0.008	0.008	0.007	-0.004***	-0.006	0.000	-0.003***	-0.007*	0.003	0.009***	0.009***	0.009**	-0.001	0.001	0.004	0.010**	0.008*	0.020***	0.003	0.000	0.006**	0.003	-0.001
Constant	0.433***	0.145***	-0.224***	0.350***	0.202***	0.087*	0.319***	0.232***	0.384***	0.335***	0.499***	0.129*	0.026***	-0.23	0.148*	0.280***	0.341***	0.608***	0.198***	0.139	0.256***	0.146***	0.235***	0.183***	0.292***
Total	0.220***	0.294***	0.294***	0.181***	0.363***	0.262***	0.397***	0.232***	0.248***	0.275***	0.217***	0.206***	0.273***	0.381***	0.354***	0.342***	0.290***	0.308***	0.198***	0.163***	0.256***	0.146***	0.235***	0.247***	0.292***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Base for education variables is primary education; for marital status - single; for employment status - full-time worker; for occupation - army workers and technicians.

Source: author's calculations from EU-SILC 2016 data.

TABLE A.6: Detailed decomposition of the 20th percentile employment income gap for pooled country sample

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Explained																									
Age	-0.009	-0.003	-0.003	-0.002	0.001	-0.008	-0.009	-0.003	0.001	0.011	-0.003	0.000	-0.001	0.000	-0.001	0.000	0.000	0.000	0.000	-0.009	0.000	-0.002	0.000	-0.003	0.000
Children <15	0.000	-0.002	-0.001	-0.001	-0.001	0.013*	-0.004	-0.004	-0.001	-0.002	0.000	-0.002	-0.004	-0.001	0.000	-0.002	0.000	-0.001	-0.001	-0.020**	-0.004	-0.007	-0.001	0.003	0.001
Children <3	0.006*	-0.001	0.001	0.001	0.001	-0.001	0.002	-0.001	0.001	-0.001	0.002	0.002	-0.001	-0.001	-0.001	0.000	0.000	0.000	0.000	0.000	-0.002	0.000	0.000	0.000	0.001
Secondary edu.	0.029**	0.003	0.005*	0.012*	0.012*	0.005*	0.024*	0.075**	0.018*	0.066**	0.010**	0.066**	0.034*	0.025***	0.018*	0.063*	0.024*	0.000	0.051*	0.016*	0.000	0.016*	0.007*	0.033**	0.000
Tertiary edu.	0.013	-0.012	0.001	-0.012	-0.046***	-0.008	-0.002	-0.009**	-0.026*	-0.035***	-0.041***	-0.079**	-0.041***	-0.026**	-0.044***	-0.092***	-0.044***	-0.017*	-0.164***	-0.098***	-0.002	-0.045**	-0.045	-0.047**	-0.006
Married	-0.009*	0.001	-0.005*	-0.006	-0.002	0.005*	-0.002	-0.002	0.004*	0.004*	-0.002	0.004	0.013*	0.007**	0.006	0.003*	0.003*	0.007**	0.004	-0.005*	0.000	0.011*	0.011**	0.004	0.008**
Cohabiting	-0.005	0.001	0.000	0.000	0.000	0.000	0.005	0.001	0.001	0.007	0.000	-0.003	0.002	-0.007	0.002	-0.002	0.000	0.000	-0.002	-0.001	0.000	-0.005	-0.001	-0.013*	0.003
Part-time	0.445**	0.175**	-0.001	0.047**	0.041**	0.033*	0.112**	0.076**	0.502***	0.796***	0.104***	0.040**	0.596***	0.040**	0.050**	0.232**	0.050**	0.055*	-1.841***	0.016*	0.028**	0.020*	0.233***	0.264***	0.382***
Unemployed	-0.040*	-0.002	-0.028	-0.048	0.007	0.000	0.005	-0.072*	-0.072*	-0.011	-0.001	-0.019*	-0.011	-0.007	-0.002	-0.011	-0.007	0.007**	-0.001	-0.009	-0.007	-0.009	-0.039	-0.012	-0.001
Inactive	0.157**	0.012	-0.002	0.007	0.000	0.227**	0.072**	0.221***	0.034*	0.590***	0.596***	0.007	0.197**	0.009	0.001	-0.002	0.016*	0.000	0.282***	-0.01	0.005	0.056	-0.001	0.056	0.029**
Managerial	0.040*	0.017*	0.012*	0.004*	0.062***	0.004*	0.062**	0.057***	0.044*	0.056**	0.050**	0.056*	0.134**	0.056***	0.018**	0.050**	0.006*	0.054*	0.034*	0.034**	0.040**	0.020*	0.046*	0.024	0.031*
Professional	-0.040**	-0.036**	-0.058**	-0.265***	-0.032**	0.007	-0.105*	-0.022	-0.012	-0.012	-0.003	0.033**	-0.091**	0.033***	-0.009*	-0.006**	0.006*	0.009*	-0.132**	-0.099	-0.007	-0.037*	-0.098**	0.005	-0.019
Technician	0.003	0.007	-0.022	-0.023	0.011	0.011	0.002	0.031	0.013	0.003	0.000	0.031	0.009	0.013	0.009	0.000	0.009	0.009	-0.094	0.008**	0.000	0.055	0.032**	0.019	0.031*
Clerical	-0.086*	-0.044**	-0.023**	-0.060**	0.023**	0.002	0.011	0.057**	0.011	0.013	0.040***	0.031	0.016*	0.031	0.028**	0.050**	0.025**	0.015*	-0.132***	0.083**	0.040**	0.035	0.033***	0.097***	-0.011
Service/Sales	-0.105**	-0.029**	-0.019	-0.003	-0.008	-0.003	0.011	-0.015	0.011	-0.036	-0.009	-0.027	0.004	-0.016	0.000	0.000	-0.007	0.009	-0.094	0.141	-0.001	0.037	-0.166***	-0.125***	-0.051
Agricultural	0.001	-0.005	-0.009*	0.057**	0.033**	-0.003	-0.041	-0.002	-0.002	0.003	0.000	-0.047**	0.002	0.005	0.013	-0.081**	-0.007	0.002	0.004	0.017	0.002	0.025	0.017	0.024	0.005
Craft/trade	0.235**	0.074**	0.032*	0.309**	0.057**	0.018**	0.124*	0.196**	0.384***	0.196**	0.064**	-0.178	0.056***	0.085**	0.013	-0.370***	0.085**	0.113**	-0.513***	0.083**	0.040**	0.055	0.201***	0.468***	0.096*
Plant/machinery	0.073**	0.037**	0.034**	0.259***	0.033**	0.088**	0.088**	0.097**	0.343***	0.082***	0.181***	0.082***	0.047**	0.099**	0.030**	-0.137***	0.056**	0.047**	0.236***	0.257***	0.048**	0.158***	0.265***	0.043***	0.04
Elementary	-0.072**	0.002	0.000	-0.041**	-0.066**	0.000	-0.062**	-0.066**	-0.066**	-0.009	-0.009	0.064**	-0.008	-0.003	-0.009	0.030**	-0.007	-0.051***	0.012	-0.001	-0.001	-0.037*	-0.039	-0.016	0.000
Non-citizen	-0.002	-0.003	0.000	0.000	0.000	-0.011**	-0.011**	0.000	-0.001	-0.001	-0.009	0.001	-0.001	-0.001	-0.001	0.002	0.000	0.000	-0.001	0.000	0.005	0.005	-0.003	-0.001	0.001
Total	0.633***	0.202***	0.063*	0.103*	0.142**	0.257***	0.257***	0.201***	0.547***	0.831***	0.627***	0.827***	0.380***	0.030**	0.047**	0.380***	0.030**	0.047**	0.333***	0.083**	0.040**	0.190***	0.311***	0.195***	0.399***
Unexplained																									
Age	0.261	-0.414***	-0.686***	-0.901**	-0.135	-0.516	0.057	-0.187	0.489*	1.541***	-0.132	1.998***	-0.353**	-0.51	-0.054	0.649**	-1.093*	-0.09	-0.607	-0.09	-0.029	-0.206	-0.135
Children <15	0.07	-0.007	0.005	0.021	0.042**	-0.099	-0.012	0.153***	-0.004	0.025	0.022*	0.025	-0.004	0.06	0.055	0.120**	0.004	0.013	0.115	0.034*	0.025	0.04	0.018	0.183	-0.098*
Children <3	0.078***	0.005	0.082***	0.081*	0.008	0.017	0.026**	0.013	-0.021	0.006	0.022**	0.006	0.057***	0.103***	0.011	0.118***	0.025*	0.015*	0.02	0.000	-0.003	0.095***	0.004	-0.206	-0.135
Secondary edu.	0.527***	-0.121***	0.159	0.159	0.063	-0.044	-0.044	-0.08	-0.08	1.025***	-0.08	1.025***	-0.035	-0.365*	-0.058	0.106	-0.128*	0.009	-0.248	0.141	0.041	0.04	0.033*	0.097***	-0.098*
Tertiary edu.	0.272**	-0.225***	0.066	0.108	0.108	0.05	0.111	-0.096	0.067	0.416***	0.072	0.416***	-0.004	-0.352	-0.001	-0.194**	-0.138*	0.026	-0.157	0.078	0.025	0.114	0.02	0.007	-0.036
Married	0.127*	0.054*	0.097	0.031	0.130**	0.031	0.094**	0.081	0.094**	0.304**	0.159***	0.304**	0.099**	0.11	0.304***	-0.001	0.02	0.077**	0.329	0.064	0.094**	0.064	0.200***	0.047	0.07
Cohabiting	0.054*	0.007	0.001	0.001	0.031	-0.002	0.031	0.06	0.031	0.053***	0.001	0.089***	0.000	-0.007	0.089***	0.036*	0.016*	0.012	0.036*	-0.01	0.005	0.039	0.001	0.056	0.029**
Part-time	-0.323**	-0.016	-0.003	-0.002	-0.034	0.032**	-0.034	-0.034	-0.037*	-0.037*	-0.007	-0.037*	0.042**	-0.007	-0.530**	-0.186**	0.034**	0.010*	0.282**	-0.01	0.002	0.048**	-0.156***	-0.224**	-0.136***
Unemployed	-0.002	0.005	0.032	-0.016	0.005	0.009	0.009	-0.046	-0.034	0.016*	-0.088**	-0.088**	0.034**	0.071**	-0.530**	-0.015	0.027**	0.006	0.02	0.115	0.048**	-0.092**	-0.031	-0.073**	0.000
Inactive	0.021	0.006	-0.003	0.01	0.009	-0.190**	-0.190**	-0.085*	-0.085*	-0.016*	-0.037*	0.034**	0.034**	-0.007	-0.186**	0.010*	0.010*	0.147**	-0.01	0.096**	-0.001	-0.055*	0.000	-0.098*	-0.004
Managerial	-0.049***	-0.024	0.059***	-0.003	-0.014**	-0.174**	-0.055	-0.304***	-0.339***	-0.037***	-0.091**	-0.360***	-0.078**	-0.106**	-0.078**	0.120**	0.026**	0.054*	-0.132**	0.054*	-0.003	-0.092**	-0.006***	-0.303**	0.009**
Professional	-0.227***	-0.169*	-0.014	-0.005	-0.128**	-0.028	-0.159	-0.012	-0.028	1.025***	-0.028	-0.050**	0.009	-0.076**	-0.360***	-0.178**	-0.044**	0.009	-0.132**	-0.047	0.041	-0.092**	-0.031	-0.303**	-0.009
Technician	-0.270***	-0.06	-0.079*	0.03	-0.093**	-0.05	-0.08	-0.099	-0.339***	-0.473***	-0.022	-0.473***	-0.035	-0.128*	-0.078**	-0.147	0.009	-0.248	-1.661***	-0.094	-0.131	0.096	0.088**	0.128**	-0.047**
Clerical	-0.163***	-0.102*	0.033	0.033	-0.052	0.011	0.111	-0.099	-0.099	-0.292***	-0.052	-0.412***	0.056*	-0.128	-0.042	-0.069	0.009	-0.004	-0.743***	-0.113	-0.008	0.064	0.166*	0.166*	-0.03
Service/Sales	-0.366***	-0.05	-0.05	-0.181**	-0.181**	0.308**	0.308**	0.236**	-0.473***	-0.296***	-0.022	-0.412***	-0.07**	0.11	-0.077	-0.406**	-0.228**	0.001	-0.393***	-0.099	-0.012	0.107	0.200***	0.056	-0.011
Agricultural	-0.050***	-0.003	0.003	0.01	0.075	-0.009	-0.06	-0.114	-0.02	-0.296***	-0.009**	-0.506**	-0.061	-0.121	-0.064	-0.021**	-0.011	-0.002	-1.841***	0.211	0.034**	-0.031	0.113	0.047	-0.011
Craft/trade	-0.037***	0.000	-0.025**	0.003	-0.124**	-0.008	-0.007	-0.007	-0.007	-0.339***	-0.027**	-0.118**	0.056***	-0.068	-0.078**	-0.063**	-0.063**	-0.005	-0.837***	0.000	-0.001	-0.001	-0.036	0.007	-0.07
Plant/machinery	-0.022**	-0.021**	-0.038**	-0.007	-0.038**	-0.025	-0.025	-0.027	-0.126	-0.028	-0.007	-0.10**	-0.021**	-0.428**	-0.004	-0.41**	-0.041**	-0.001	-0.513***	0.017	-0.005	0.005	-0.001	0.128**	-0.002
Elementary	-0.073	-0.063	-0.029	0.086	0.036**	-0.058	0.111***	0.111***	-0.063**	-0.063**	0.003	-0.571***	-0.061	-0.15	-0.042	-0.009	-0.127**	-0.01	-0.501***	-0.046	-0.017	0.091	0.067	0.036	0.033
Non-citizen	-0.088***	-0.008	-0.003	-0.003	-0.001	0.021	-0.058	-0.031	-0.029	-0.015	-0.009	-0.15	-0.004	-0.15	0.011	-0.009	-0.002*	0.001	-0.001	-0.02	-0.005	0.005	-0.039	-0.012	-0.007
Constant	0.362	1.357***	1.091***	0.594	0.611***	0.624	0.351	0.97	0.182	-1.043***	0.282***	0.97	0.704**	1.922***	0.511	0.746	1.809***	0.125	7.478***	1.058*	0.156	0.250**	-0.675	-0.405	0.401
Total	0.05	0.169***	0.283***	0.183*	0.299***	-0.290**	0.096*	-0.136*	-0.136*	0.282***	0.165	0.187***	0.704**	0.270***	-0.174**	0.073	0.030**	0.047**	0.333***	0.126	0.156	0.250**	-0.039	0.032	0.044

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Base for education variables is primary education; for marital status - single; for employment status - full-time worker; for occupation - army workers and technicians.

Source: author's calculations from EU-SILC 2016 data.

TABLE A.7: Detailed decomposition of the median employment income gap for pooled country sample

Explained	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Age	-0.005	0.002	-0.002	-0.002	0.000	0.010**	0.010**	0.001	0.000	-0.005**	-0.005*	0.009***	0.018***	-0.007**	-0.005*	0.003**	0.004***	0.008**	0.000	0.004***	0.000	0.000	0.009***	0.009***	0.000
Children <15	0.000	-0.004*	0.000	0.001	0.001	-0.004**	0.001	-0.002	0.001	0.002	0.001	-0.007***	-0.001	-0.003	0.000	-0.001	-0.001	0.000	-0.001	-0.001	0.000	-0.004*	0.004***	-0.003*	0.000
Children <3	0.001	-0.002	-0.001	-0.001	0.001	0.000	-0.004	-0.001	0.000	0.001	0.000	0.000	-0.003	-0.003	0.001	0.002	-0.001	-0.001	0.002	-0.001	-0.001	-0.001	0.000	-0.002*	0.001
Secondary edu.	0.006*	0.025**	0.025**	0.010***	0.011***	0.010*	0.021***	0.006**	0.000	0.007***	0.021***	0.009***	0.021***	0.034***	0.000	0.009***	0.000	0.010*	0.005***	0.000	0.000	0.010**	0.011***	0.011***	0.001
Tertiary edu.	0.004	-0.074***	-0.041***	-0.011***	-0.029***	-0.084***	-0.021***	-0.012***	-0.029***	-0.086***	-0.043***	-0.008***	-0.022***	-0.043***	-0.008***	-0.022***	-0.046***	-0.043***	-0.022***	-0.048***	-0.033***	-0.021***	-0.033***	-0.021***	-0.012***
Married	-0.005*	0.001	-0.010**	-0.005*	0.001	-0.003**	0.006**	0.000	0.002	0.004**	0.002	0.004***	0.013**	0.002	0.004**	0.000	0.005**	0.006***	-0.004**	0.002	-0.002*	0.000	0.004***	0.005**	0.005**
Cohabiting	-0.003*	0.002	0.000	-0.003	0.000	0.001	0.001	-0.003	0.002	-0.001	-0.001	0.000	0.000	-0.011	-0.003	-0.001	0.000	0.000	-0.001	-0.001	-0.001	-0.002*	0.004***	-0.001	0.005**
Part-time	0.175***	0.068**	0.006**	0.015*	0.017	0.057**	0.052**	0.031**	0.089**	0.162***	0.011**	0.024**	0.016**	0.016**	0.198***	0.049***	0.020**	0.029***	0.007*	0.033***	0.009**	0.033***	0.117***	0.098**	0.131***
Unemployed	-0.009*	0.000	0.016**	0.018**	0.009**	0.014**	0.009	0.018**	0.003	0.034***	0.091***	0.019***	0.034***	0.016**	0.027***	0.021***	0.000	0.000	-0.007***	0.014**	-0.002	0.013**	0.005**	0.013**	0.000
Inactive	0.040**	0.005*	0.018**	0.023**	0.007	0.009	0.036***	0.045***	0.006*	0.003*	0.034***	0.021***	0.008*	0.016**	0.034***	0.021***	0.004	-0.007***	0.000	0.005***	0.014**	-0.001	0.002	0.004	0.002
Managerial	0.000	0.003	0.001	-0.001	-0.001	0.007***	0.036***	-0.002	0.036***	0.005**	0.001	0.004***	-0.001	0.016**	-0.001	0.000	0.002	0.003**	0.001	0.000	-0.002	0.005***	0.002	0.000	0.001
Professional	-0.001	0.001	-0.036**	-0.013	-0.019**	0.036***	0.007***	-0.013	-0.086**	-0.007	0.001	-0.007	-0.001	-0.007	-0.001	-0.001	-0.007**	0.016**	-0.001	0.000	0.000	-0.001	-0.003*	-0.001	-0.009*
Technician	0.000	0.000	0.004	0.003	0.000	0.014**	-0.021***	-0.004*	-0.021***	0.000	0.000	-0.014**	-0.004	-0.033***	0.004*	-0.007**	0.005	0.005	-0.004	0.005	0.005	-0.004*	0.003*	0.017***	-0.003
Clerical	0.015**	0.010*	-0.003	0.021**	0.014**	0.021**	0.018**	0.021***	0.018**	0.002	-0.011	-0.018**	-0.014**	-0.011	0.025***	0.005	0.006	0.007	0.000	-0.002	0.002	-0.002	0.017***	0.012	0.012
Service/Sales	0.044**	0.014*	0.029*	0.032**	0.009*	-0.016	0.014**	0.009	0.037***	0.026***	0.019*	0.025***	-0.017	-0.038**	-0.017	-0.014	0.007	-0.017	-0.014	-0.006	-0.002	-0.006	0.044***	0.017***	0.021
Agricultural	-0.002	-0.008**	-0.005*	-0.006**	-0.002*	-0.008**	0.002	-0.010**	-0.020***	-0.006***	-0.007*	-0.007	-0.006**	0.009*	-0.007*	-0.012**	0.009*	-0.016***	-0.002	-0.025***	0.000	-0.005**	-0.010**	-0.014***	-0.008**
Craft/trade	-0.002	-0.039**	0.002	-0.036**	-0.023**	0.046**	-0.018*	-0.022***	-0.040***	-0.050***	-0.055***	-0.008	-0.033***	-0.008	-0.041***	-0.028	-0.028	-0.057***	-0.041***	-0.006	-0.025***	-0.005	0.044**	-0.022***	0.011
Plant/machinery	-0.012**	-0.009*	0.016	0.007**	-0.003	0.025**	0.025**	-0.004	-0.014***	-0.014***	-0.061***	0.000	-0.128***	0.000	-0.024***	-0.028***	-0.028***	-0.041***	-0.005	0.018**	0.000	0.003	0.000	-0.020***	-0.006
Elementary	0.035***	0.029***	-0.014**	0.007***	0.013***	-0.001	-0.021***	0.006**	0.018**	0.002	0.002	0.000	-0.007**	0.025***	0.000	0.025***	0.018***	0.045***	0.000	0.019***	0.018***	0.016***	0.023***	0.017***	0.012
Non-citizen	-0.001	-0.002	0.000	-0.026**	-0.003	0.001	0.001	-0.004	0.025**	0.000	0.006**	-0.001	-0.024***	0.033	0.005*	0.000	-0.028***	-0.001	-0.001	0.000	0.000	0.003	-0.020***	-0.001	0.000
Total	0.220***	0.054***	-0.061***	-0.029*	0.044***	0.044***	0.081***	0.098***	0.164***	0.033***	0.059***	0.049***	-0.047***	0.232***	0.063***	-0.01	-0.033***	-0.021*	0.019***	0.01	-0.002	0.111***	0.097***	0.157***	
Unexplained																									
Age	0.001	-0.149**	-0.061	-0.004	-0.154***	0.024	-0.129	-0.008	-0.049	-0.125*	-0.511***	-0.051	-0.204***	-0.284*	0.069	-0.05	-0.211***	0.154*	-0.013	-0.267***	-0.110*	-0.276***	0.011	-0.028	0.031
Children <15	0.064***	-0.016	0.059***	0.047***	0.027*	0.043***	0.027	0.043***	-0.01	0.028**	-0.008	0.014	0.057***	-0.023	0.057***	-0.005	0.016	-0.006	-0.005	-0.002	0.041***	0.027	0.000	0.026*	0.026*
Children <3	0.014**	0.005	-0.003	0.023***	0.001	0.023***	0.007	0.012*	0.022	-0.009*	-0.020***	0.011*	0.000	0.022	-0.020***	0.002	0.016	-0.020***	-0.001	0.002	-0.001	0.045***	0.045***	0.035***	0.003
Secondary edu.	0.029	-0.028*	0.044	0.060*	0.059	0.034	0.032	-0.002	0.006	-0.045	0.036***	0.008	0.036***	-0.1	-0.011	0.034***	-0.011	0.022*	-0.017	0.000	-0.014	0.020	-0.005	0.008	0.012
Tertiary edu.	-0.006	-0.076**	0.056*	0.066***	0.016	0.073***	0.067	0.032	-0.004	-0.045	0.000	0.036	0.000	-0.103	-0.019	-0.018	-0.011	0.022	0.005	0.024	-0.015	-0.021	0.012	-0.001	-0.001
Married	0.061**	0.086***	0.120***	0.101***	0.036*	0.106***	0.106***	0.052***	0.106***	0.050**	0.025***	0.018**	0.025***	0.071***	0.058***	0.055**	0.135***	0.098***	0.055**	0.119***	0.059***	0.119***	0.060**	0.073***	-0.001
Cohabiting	0.016	0.008	0.008	0.003	0.019***	0.006	0.024	-0.007	0.004	-0.019***	0.007	-0.011	0.007	-0.015	0.012**	0.016*	0.012**	0.001	-0.003	0.001	0.002	0.002	0.007	0.007	0.004
Part-time	0.058**	0.053**	-0.002	0.003	-0.028**	0.019**	-0.003	0.049**	0.194**	0.050**	0.040***	0.027***	0.040***	-0.001	-0.003	0.040***	-0.006	-0.010*	-0.004	-0.011**	0.005	-0.004	-0.01	0.068**	0.004
Unemployed	0.017**	0.002	-0.001	-0.002	0.005**	0.011**	-0.003	0.010**	0.027**	0.012**	0.007**	0.008**	0.000	0.009	0.007**	0.005**	-0.006	0.000	0.000	0.001	0.005	-0.005	0.007**	0.007**	0.000
Inactive	0.034**	0.001	-0.017**	0.018**	0.005	0.011**	0.005*	-0.004	0.040***	0.012**	0.040***	0.030**	0.021**	0.006	0.030**	0.059***	-0.008**	0.005**	0.000	-0.020***	0.003	0.013*	0.012*	0.029***	0.005***
Managerial	-0.019**	-0.008	-0.007	-0.003	-0.002	-0.003	-0.002	-0.002	-0.010**	-0.006*	-0.010**	-0.004	-0.023**	-0.013	-0.023**	0.001	-0.024***	-0.016**	-0.004*	-0.002	-0.002	-0.002	-0.009**	-0.004	0.000
Professional	-0.111**	-0.066*	-0.002	-0.002	-0.006*	-0.002	-0.045**	-0.025*	-0.196**	-0.006**	-0.134**	-0.083**	0.036**	0.003	-0.077**	0.001	-0.083**	0.016**	-0.077**	-0.002	-0.028**	-0.002	-0.084***	-0.022**	-0.007
Technician	-0.122**	-0.027	0.006	-0.023**	-0.018	0.002	-0.012	-0.012	-0.090**	-0.127**	-0.090**	-0.081**	-0.061**	0.005	-0.081**	0.014	-0.030**	-0.043**	-0.02	0.000	-0.018	0.02	-0.027**	0.001	0.001
Clerical	-0.071**	-0.051**	-0.013	-0.034**	-0.026**	-0.017	-0.021	-0.030**	-0.141**	-0.110**	-0.141**	-0.062**	0.000	0.034**	0.000	-0.017**	-0.042**	-0.049**	-0.043**	0.007	-0.031**	0.005	-0.041**	-0.029***	-0.02
Service/Sales	-0.092**	-0.005	-0.031	0.034**	-0.026**	0.007	0.015	-0.030**	-0.069**	-0.069**	-0.069**	0.000	0.053**	0.065*	0.000	0.021	-0.047**	-0.023	-0.044	0.025	0.007	-0.004	-0.041**	-0.038*	0.04
Agricultural	-0.010**	-0.001	-0.003	0.004	0.02	0.015	-0.04	-0.024	-0.101**	-0.002**	-0.083**	0.001	0.016*	0.000	-0.055***	0.005**	-0.012**	-0.023	-0.026	0.000	-0.018	0.013	-0.027**	-0.018	0.003
Craft/trade	-0.014**	0.000	0.004	-0.002	0.007	-0.008	-0.001	-0.012	-0.196**	-0.007**	-0.050**	0.005**	0.000	0.005**	-0.057***	-0.004**	-0.016***	-0.012**	-0.011**	0.007	-0.007	0.002	-0.003	-0.003	0.003
Plant/machinery	-0.008**	0.012	-0.003	0.004	-0.008	0.000	-0.001	-0.007**	-0.013**	-0.002	-0.014**	0.000	0.033	-0.001	-0.024**	0.009**	-0.012**	-0.005	-0.026	-0.002	-0.018	0.005	-0.004	-0.016*	-0.001
Elementary	-0.041**	-0.017	-0.027*	-0.002	0.006	-0.008**	-0.017	-0.064**	-0.018**	-0.022**	-0.014**	0.000	-0.032**	-0.001	-0.032**	0.000	-0.032**	-0.059**	0.005	0.014	-0.002	0.021**	0.021**	-0.002	0.01
Non-citizen	-0.031***	-0.007	0.003*	0.009	0.008	-0.008**	0.006	-0.006	0.001	-0.018**	0.000	0.003**	0.007	-0.008**	0.005*	0.000	0.018**	-0.005	-0.018	-0.002	-0.001	-0.003	-0.014	0.001	-0.009
Constant	0.498***	0.475***	0.038	0.003*	0.208***	0.266*	0.266*	0.186***	0.306***	0.698***	1.225***	0.023	0.282*	0.484*	0.412***	0.126	0.584***	0.237*	0.223	0.332***	0.329***	0.265***	0.239*	0.160*	0.218***
Total	0.266***	0.171***	0.183***	0.163***	0.300***	0.102***	0.355***	0.126***	0.135***	0.349***	0.197***	0.123***	0.293***	0.282*	0.271***	0.276***	0.240***	0.219***	0.250***	0.036***	0.195***	0.219***	0.329***	0.124***	0.218***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Base for education variables is primary education; for marital status - single; for employment status - full-time worker; for occupation - army workers and technicians.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.8: Detailed decomposition of the 90th percentile employment income gap for pooled country sample

Explained

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Age	-0.006	0.011***	0.000	0.000	0.006**	-0.001	0.000	0.001	0.000	0.000	-0.003*	0.000	0.003	0.014	0.003	0.000	0.000	0.018***	0.003*	0.008***	-0.002	0.001	0.009***	0.004	0.000
Children <15	0.000	-0.005*	-0.003	0.003	-0.006**	-0.001	-0.001	-0.001	0.001	-0.001	0.001	-0.002	0.000	-0.005**	-0.005**	-0.005***	0.002	-0.001	-0.005**	-0.002	-0.005*	-0.001	-0.005***	-0.003	-0.002
Children <3	-0.001	0.001	0.002	0.002	0.061*	0.002	0.001	0.000	0.008**	0.000	0.000	0.000	0.008**	0.041***	0.002	0.000	-0.003	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.001
Secondary edu.	-0.001	0.004*	0.061***	-0.003	-0.001	-0.003	0.001	0.001	0.003	0.000	0.003	0.001	0.014*	-0.003	0.000	0.002	0.011	0.008***	0.002	0.001	0.001	0.004*	0.004*	0.001	0.000
Tertiary edu.	0.003	-0.044***	-0.070***	-0.061***	-0.063***	-0.023***	-0.021***	0.000	-0.023***	-0.035***	-0.027***	-0.021***	-0.056***	-0.087***	-0.014***	-0.033***	-0.067***	-0.087***	-0.094***	-0.094***	-0.032***	-0.069***	-0.033***	-0.017*	-0.021***
Married	-0.002	0.000	-0.004	-0.003	0.000	0.000	0.004	0.000	0.003	0.002	0.002	0.000	0.006*	0.000	0.001	0.001	0.002	0.001	-0.001	0.000	-0.002	0.004*	0.003*	-0.001	0.003*
Cohabiting	0.000	0.000	0.001	-0.001	0.000	-0.001	-0.003	0.000	-0.001	0.000	0.001	0.000	-0.001	0.002	0.000	-0.001	0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.001
Part-time	0.089***	0.057***	0.000	0.009***	0.010***	0.021***	0.025***	0.011***	0.043***	0.087***	0.003*	0.000	0.011***	0.004	0.105***	0.025***	0.007	0.024***	0.000	0.004*	0.000	0.013***	0.051***	0.054***	0.054***
Unemployed	-0.003	0.000	0.000	-0.002	0.000	0.000	0.000	0.000	0.001	-0.001	0.000	0.000	0.001	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	-0.003*	0.000	0.000	-0.001	-0.001
Inactive	0.025**	-0.003*	-0.002	0.005*	-0.027**	0.003	0.001	-0.002	0.011***	0.025***	0.018***	0.000	0.030***	0.018***	0.025***	0.000	0.013***	0.009***	0.024***	-0.028***	-0.001	0.024***	0.033***	0.006**	0.040***
Managerial	0.019**	0.011*	0.003	0.000	0.035***	0.006**	0.027***	0.015***	0.035***	0.028***	0.010***	0.035***	0.018***	0.011***	0.017***	0.024***	0.017***	0.024***	-0.001	0.009***	0.010***	0.007**	0.006**	0.002	0.006**
Professional	-0.004	0.010	-0.006*	-0.001	0.003	-0.007	-0.007	-0.002	0.023***	0.006	-0.012	-0.002	-0.001	0.002	-0.001	-0.004	-0.025*	-0.001	-0.004	-0.042**	0.001	0.006	-0.002	-0.002	-0.009
Technician	-0.001	0.003	0.004	-0.003	0.000	0.000	-0.011**	0.014***	0.006	0.014***	-0.007	-0.003	0.000	0.000	0.000	-0.007***	0.000	-0.004	0.002	-0.014***	0.009	-0.005	-0.007	-0.002	-0.002
Clerical	0.032**	0.024**	0.000	0.017***	0.024**	0.009*	0.009*	0.006	0.063***	0.020**	0.016*	0.009*	0.000	0.000	0.000	0.000	0.000	0.020**	0.020**	0.016***	0.002	0.017***	0.030***	-0.002	0.015***
Service/Sales	0.065***	0.023**	0.009	0.037***	0.017***	0.017***	0.044***	0.020**	0.074***	0.025**	0.006	0.000	0.000	0.000	0.040***	0.000	0.006	0.030***	0.001	0.002	0.005	0.002	0.005	0.002	0.009
Agricultural	-0.002	0.000	0.000	-0.004*	0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	-0.021	0.000	0.000	-0.021	0.013***	-0.001	-0.018***	-0.004	0.009	0.013***	-0.001	0.003
Craft/trade	-0.105***	-0.060***	0.000	-0.039***	-0.049***	-0.036***	-0.087***	-0.052***	-0.087***	-0.055***	-0.019	-0.033***	-0.033***	0.007	-0.044***	-0.038***	-0.044***	-0.106***	0.027	-0.013***	-0.013***	-0.072***	-0.057***	-0.011***	-0.010***
Plant/machinery	-0.040***	-0.030***	0.000	-0.036***	-0.018***	-0.015*	-0.028***	-0.087***	-0.054***	-0.014***	-0.023***	-0.033***	-0.044***	-0.008	-0.038***	-0.017***	-0.015*	-0.044***	-0.001	-0.005***	0.000	-0.057***	-0.040***	-0.071***	-0.001
Elementary	0.039***	0.025***	-0.003	0.025***	0.009***	-0.018***	0.044***	0.005*	-0.014***	-0.023***	0.000	0.023***	0.003**	0.000	0.000	0.000	0.013***	0.013***	0.000	0.002	0.000	0.001	-0.007	0.003***	0.027
Non-citizen	0.000	0.002	0.000	0.005*	0.000	-0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.003
Total	0.107***	0.024	-0.137***	0.000	-0.001	0.000	0.024	0.007	0.087***	0.105***	0.013	-0.006	0.014***	0.134***	0.134***	0.014	0.014	0.107***	0.000	0.000	0.001	0.017***	0.000	0.000	0.078***

Unexplained

	Austria	Belgium	Bulgaria	Croatia	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	UK
Age	-0.193*	0.041	0.203	-0.112	0.077	0.133	0.077	0.037	-0.044	-0.214***	-0.211*	0.061	0.061	-0.243	-0.170**	0.006	0.206	-0.137	0.038	0.038	-0.007	-0.194***	-0.137	0.023	0.153*
Children <15	0.026	0.040*	0.094**	0.077***	0.036**	0.085***	0.036**	0.021	0.036**	0.021	0.002	0.041***	0.037	0.037	0.061	0.037	0.071**	0.038	0.038	0.038	0.035*	0.006	0.023	-0.004	0.024
Children <3	-0.007	-0.009	-0.009	-0.003	-0.003	0.003	0.002	0.009	0.004	-0.007	-0.007	0.014	0.010	0.066	-0.020**	-0.003	0.021*	0.019	-0.013	-0.013	0.002	-0.011	-0.007	-0.003	0.006
Secondary edu.	-0.032	0.014	-0.037	0.059	0.014	-0.037	0.011	-0.005	-0.011	-0.027	0.009	0.022	0.078	0.022	0.014	0.014	-0.020**	0.014	0.014	0.014	0.001	0.013	0.033	-0.008	0.017
Tertiary edu.	0.003	0.089***	0.098***	0.023	0.029	0.051*	0.038	0.028	0.017	0.004	0.040	0.049	0.117	0.117	0.073***	0.047***	-0.016	0.032	0.032	0.065	0.038	0.020	0.040*	0.003	0.095***
Married	0.076**	0.044**	0.056	0.074*	0.037	-0.013	0.100***	0.028	0.137***	0.045*	0.050	0.083**	0.135*	0.135*	0.041***	0.041***	0.122***	0.007	0.043	0.043	0.077***	0.064***	0.075***	0.040*	0.036
Cohabiting	0.008	0.001	0.001	-0.001	-0.001	-0.001	-0.001	0.018	0.018	-0.002	-0.002	-0.007	-0.007	-0.007	0.012	-0.008	0.011	-0.013	-0.013	-0.005	0.021*	0.008	0.021*	-0.008	0.045*
Part-time	0.079**	0.018	-0.001	0.006	-0.020*	0.037*	-0.004	0.096***	0.011***	0.096***	-0.004	-0.001	-0.007	0.004	0.193***	0.012	0.008	-0.020**	0.000	-0.020**	-0.007**	0.021*	-0.008	0.015	0.045*
Unemployed	0.009***	-0.002	-0.006	0.001	0.001	-0.004	-0.004	-0.003	0.001	0.005***	-0.001	-0.002	0.004	0.004	0.000	-0.008	-0.020**	0.008	0.008	0.006*	-0.009***	-0.007**	0.015	-0.008	0.000
Inactive	0.007	0.004	-0.005	-0.006	-0.004	-0.003	-0.003	0.002	-0.027**	-0.001	-0.003	0.002	-0.001	0.006	-0.017***	-0.001	0.008	-0.009	0.004	0.002	-0.001	-0.003	0.008*	-0.001	0.008*
Managerial	0.003	-0.002	-0.018	0.001	0.001	0.001	0.002	-0.003	0.001	0.000	-0.004	-0.001	0.000	-0.001	0.026**	0.005	-0.001	0.002	0.002	-0.011	-0.006	-0.018*	-0.007	-0.018*	0.000
Professional	-0.045*	-0.018	-0.002	-0.002	-0.012	-0.011	-0.005	-0.005	-0.001	0.010*	0.005***	0.023	-0.007***	-0.023***	-0.024***	-0.001	0.000	-0.013***	-0.01	-0.031***	-0.003	-0.006	-0.01	-0.007	-0.018*
Technician	-0.028	-0.014	-0.023	-0.023	-0.012	0.006	0.001	-0.011	-0.008	-0.03	-0.026	-0.011	-0.011	-0.018	-0.017***	0.002	-0.014	-0.014	0.026	0.023	0.022	0.013	-0.005	-0.003	-0.003
Clerical	-0.017	-0.026	-0.017	-0.005	-0.007	0.006	0.002	-0.002	0.000	-0.118***	-0.115***	-0.02	0.012	-0.013	-0.022	-0.004	-0.023	-0.014	0.023	0.023	-0.016	0.002	0.005	-0.013	0.05
Service/Sales	-0.033	-0.009	-0.009	-0.007	-0.014	-0.009	0.033	0.001	-0.005***	-0.065***	-0.056	0.016	0.055	0.055	-0.058***	-0.007	-0.023	-0.056	-0.056	-0.039***	-0.043***	-0.01	-0.024	-0.018*	0.092
Agricultural	0.000	0.000	-0.001	0.001	0.001	0.001	0.002	-0.005	0.000	0.000	0.012	0.055	-0.013	0.012	-0.006	0.000	-0.006	-0.019	-0.007	0.000	0.000	-0.007	0.005	-0.001	0.001
Craft/trade	-0.005	-0.001	-0.001	-0.003	-0.002	0.001	-0.003	-0.033***	-0.033***	-0.003	0.088	0.088	0.078	0.088	-0.017***	0.006	-0.016	0.008	0.029	0.034	0.001	0.072***	-0.099***	-0.005	0.082***
Plant/machinery	-0.004**	-0.003	0.005	-0.002	-0.004**	-0.006*	-0.004**	-0.059***	-0.059***	0.000	0.004	-0.013	0.12	0.004	-0.001	-0.002	-0.033	0.013	0.034	-0.018	0.001	0.02	-0.039***	-0.002	0.017
Elementary	-0.030**	-0.015	0.002	-0.018***	-0.003	-0.003	0.006	0.005**	-0.050***	-0.028**	0.040*	-0.003	0.004	0.040*	0.000	0.000	0.007	0.023	0.047	0.026	0.000	0.064*	-0.035***	-0.035***	0.027
Non-citizen	0.007	0.002	0.000	0.000	-0.001	0.000	0.000	0.000	0.009	-0.003	-0.003	0.009	0.009	0.002	0.001	-0.002	-0.005	-0.013	0.000	-0.006	0.000	-0.009	0.002	0.002	-0.004
Constant	0.508***	0.264***	0.377***	-0.13	0.376***	0.282***	0.180***	0.287***	0.542***	0.472***	0.717***	0.252***	0.17	-0.053	0.344***	0.318***	0.605***	0.157	0.138***	0.357***	0.073	0.262***	0.207***	0.280***	-0.483***
Total	0.284***	0.377***	0.173***	0.376***	0.279***	0.439***	0.267***	0.260***	0.243***	0.288***	0.209***	0.251***	0.252***	0.357***	0.17	0.358***	0.271***	0.338***	0.271***	0.377***	0.138***	0.202***	0.253***	0.262***	0.311***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Base for education variables is primary education; for marital status - single; for employment status - full-time worker; for occupation - army workers and technicians.

Source: author's calculations from EU-SILC 2016 data.

TABLE A.9: Income gap decomposition for the age group <25

Country	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Quantile:				
					Explained				
Austria	0.266 (0.249)	0.090 (0.123)	0.129 (0.091)	0.000 (0.088)	0.034 (0.087)	0.144* (0.086)	0.146* (0.079)	0.178** (0.069)	0.097 (0.063)
Belgium	-0.137 (0.270)	-0.097 (0.333)	-0.072 (0.218)	-0.154 (0.193)	-0.275 (0.210)	-0.017 (0.208)	0.049 (0.172)	-0.043 (0.148)	0.179 (0.115)
Bulgaria	0.000 (.)	-0.153 (0.350)	-0.206 (0.260)	-0.096 (0.235)	-0.031 (0.205)	0.037 (0.181)	-0.046 (0.158)	0.027 (0.131)	0.051 (0.128)
Croatia	0.000 (.)	0.000 (.)	-0.297 (0.345)	-0.074 (0.213)	-0.094 (0.155)	-0.013 (0.146)	0.013 (0.135)	0.063 (0.127)	0.058 (0.109)
Czechia	-0.893 (1.166)	-0.042 (0.259)	0.229 (0.185)	0.222** (0.100)	0.155* (0.079)	0.075 (0.069)	0.008 (0.062)	-0.026 (0.061)	-0.071 (0.055)
Denmark	-0.170 (0.158)	0.037 (0.120)	-0.032 (0.078)	0.038 (0.075)	0.113 (0.072)	0.095 (0.061)	0.054 (0.056)	0.095* (0.052)	0.114 (0.072)
Estonia	-0.222 (0.491)	0.341 (0.307)	0.118 (0.266)	0.259 (0.198)	0.222 (0.138)	0.136 (0.126)	0.109 (0.127)	0.028 (0.108)	0.076 (0.102)
Finland	-0.130* (0.068)	-0.276*** (0.078)	-0.247*** (0.065)	-0.202*** (0.057)	-0.146*** (0.053)	-0.094* (0.053)	-0.037 (0.052)	-0.030 (0.054)	-0.039 (0.061)
France	-0.006 (0.157)	-0.049 (0.140)	-0.066 (0.112)	-0.051 (0.101)	-0.038 (0.097)	0.042 (0.084)	0.036 (0.063)	0.019 (0.055)	-0.036 (0.059)
Germany	-0.036 (0.145)	0.019 (0.082)	0.028 (0.064)	-0.024 (0.062)	0.004 (0.060)	-0.005 (0.058)	-0.044 (0.057)	-0.055 (0.064)	-0.029 (0.097)
Greece	0.000 (.)	0.000 (.)	0.254 (0.365)	0.151 (0.259)	-0.235 (0.233)	-0.233 (0.199)	0.080 (0.143)	0.142 (0.123)	0.003 (0.107)
Hungary	-0.196 (0.367)	0.160 (0.178)	0.180 (0.144)	0.147 (0.113)	0.213** (0.105)	0.092 (0.093)	-0.025 (0.084)	-0.085 (0.073)	-0.060 (0.068)
Latvia	-0.099 (0.521)	0.226 (0.308)	0.270 (0.247)	0.192 (0.198)	0.192 (0.157)	0.080 (0.133)	-0.038 (0.128)	-0.029 (0.128)	0.145* (0.086)
Lithuania	0.229 (2.373)	-0.033 (0.777)	0.095 (0.282)	0.005 (0.235)	0.206 (0.222)	0.084 (0.222)	0.464** (0.199)	0.435** (0.195)	0.535** (0.208)
Netherlands	0.196* (0.119)	0.117 (0.084)	0.059 (0.068)	0.067 (0.066)	0.204*** (0.066)	0.244*** (0.072)	0.165** (0.068)	0.159** (0.066)	0.096 (0.066)
Norway	0.066 (0.118)	0.161 (0.099)	0.190** (0.083)	0.201** (0.078)	0.233*** (0.080)	0.278*** (0.079)	0.252*** (0.070)	0.244*** (0.059)	0.167*** (0.051)
Poland	0.000 (.)	0.000 (.)	0.536 (0.356)	0.386** (0.160)	0.249** (0.108)	0.319*** (0.104)	0.212** (0.102)	0.021 (0.091)	-0.007 (0.087)
Portugal	0.000 (.)	-0.721** (0.360)	-0.481* (0.270)	-0.298 (0.205)	-0.262 (0.165)	-0.176 (0.129)	-0.171 (0.117)	-0.284** (0.115)	-0.234** (0.109)
Romania	0.000 (.)	0.005 (0.547)	-0.045 (0.373)	0.207 (0.350)	-0.135 (0.310)	0.187 (0.240)	0.129 (0.242)	0.288 (0.214)	0.113 (0.193)
Serbia	-0.109** (0.054)	-0.174*** (0.067)	-0.206** (0.098)	-0.174 (0.122)	-0.268* (0.161)	-0.002 (0.335)	-0.287 (0.318)	-0.115 (0.176)	-0.003 (0.122)
Slovakia	-0.058 (0.564)	0.375 (0.321)	0.253 (0.329)	0.166 (0.110)	0.058 (0.082)	-0.023 (0.076)	0.041 (0.069)	0.045 (0.071)	0.059 (0.051)
Slovenia	0.746*** (0.253)	0.639*** (0.155)	0.482*** (0.133)	0.631*** (0.129)	0.512*** (0.122)	0.385*** (0.099)	0.357*** (0.080)	0.283*** (0.066)	0.249*** (0.077)
Spain	-0.035 (0.042)	-0.279 (1.114)	-0.041 (0.347)	0.021 (0.182)	0.083 (0.147)	0.061 (0.128)	0.046 (0.119)	0.009 (0.120)	0.162 (0.108)
Sweden	-0.050 (0.160)	-0.112 (0.111)	-0.108 (0.093)	-0.072 (0.091)	-0.014 (0.083)	0.031 (0.079)	0.092 (0.080)	0.143* (0.079)	0.165** (0.072)
UK	-0.118 (0.410)	0.116 (0.151)	0.131 (0.105)	0.189*** (0.072)	0.133** (0.056)	0.144*** (0.049)	0.141*** (0.046)	0.114** (0.046)	0.072* (0.041)
					Unexplained				
Austria	0.897** (0.447)	0.480** (0.245)	0.268* (0.147)	0.193 (0.120)	0.183 (0.114)	0.042 (0.105)	-0.066 (0.093)	-0.002 (0.082)	0.015 (0.079)
Belgium	0.069 (0.584)	0.104 (0.476)	0.254 (0.305)	0.278 (0.241)	0.281 (0.246)	0.146 (0.240)	0.421** (0.195)	0.443** (0.190)	0.028 (0.169)
Bulgaria	-0.088*** (0.000)	0.749 (0.501)	0.683** (0.344)	0.497 (0.306)	0.726*** (0.275)	0.462* (0.252)	0.495** (0.238)	0.248 (0.199)	0.153 (0.213)
Croatia	-0.164 (.)	0.342 (0.749)	1.423** (0.556)	0.497 (0.315)	0.413* (0.221)	0.347* (0.194)	0.147 (0.181)	0.029 (0.173)	0.004 (0.158)
Czechia	1.765 (1.486)	0.905** (0.358)	0.466** (0.231)	0.542*** (0.140)	0.492*** (0.115)	0.430*** (0.096)	0.421*** (0.086)	0.426*** (0.083)	0.390*** (0.084)
Denmark	0.091 (0.208)	-0.107 (0.148)	0.186* (0.107)	0.109 (0.113)	0.038 (0.118)	0.108 (0.103)	0.071 (0.092)	0.020 (0.062)	0.134 (0.084)
Estonia	0.048 (0.840)	-0.808** (0.389)	-0.474* (0.276)	-0.269 (0.228)	-0.111 (0.166)	-0.005 (0.153)	0.019 (0.163)	0.197 (0.145)	0.200 (0.143)
Finland	-0.402*** (0.124)	-0.172* (0.101)	-0.080 (0.079)	0.037 (0.069)	0.072 (0.069)	0.064 (0.073)	0.035 (0.069)	0.055 (0.076)	0.124 (0.089)
France	0.013 (0.274)	0.171 (0.204)	0.121 (0.157)	0.172 (0.133)	0.195 (0.120)	0.097 (0.111)	0.134 (0.092)	0.081 (0.086)	0.072 (0.102)
Germany	-0.211 (0.187)	0.018 (0.113)	-0.059 (0.097)	-0.004 (0.089)	-0.001 (0.084)	0.015 (0.080)	0.058 (0.077)	0.065 (0.083)	0.105 (0.127)
Greece	-0.086 (.)	-0.173 (.)	-0.965* (0.585)	-0.921** (0.375)	-0.572* (0.301)	-0.297 (0.232)	-0.347* (0.177)	-0.186 (0.162)	0.059 (0.151)
Hungary	0.324 (0.435)	0.148 (0.249)	0.146 (0.187)	0.267* (0.148)	0.152 (0.140)	0.269** (0.133)	0.375*** (0.127)	0.325*** (0.124)	0.216* (0.113)
Latvia	1.069 (0.951)	-0.220 (0.411)	-0.231 (0.284)	0.079 (0.205)	0.113 (0.168)	0.073 (0.153)	0.297* (0.158)	0.264 (0.169)	-0.081 (0.128)
Lithuania	-5.894* (3.243)	-0.079 (0.878)	0.181 (0.340)	0.144 (0.257)	0.046 (0.249)	0.181 (0.252)	-0.006 (0.212)	-0.154 (0.200)	-0.193 (0.198)
Netherlands	-0.603*** (0.221)	-0.181 (0.130)	-0.044 (0.107)	0.025 (0.110)	-0.076 (0.098)	-0.088 (0.102)	-0.051 (0.098)	-0.006 (0.085)	0.135 (0.087)
Norway	-0.151 (0.228)	-0.180 (0.160)	-0.186* (0.112)	-0.045 (0.100)	-0.044 (0.092)	-0.027 (0.088)	0.143* (0.077)	0.183** (0.072)	0.210*** (0.066)
Poland	-0.237 (.)	-1.674** (0.710)	0.329 (0.453)	0.554** (0.249)	0.367** (0.162)	0.158 (0.148)	0.137 (0.143)	0.239* (0.131)	0.235* (0.122)
Portugal	0.145 (.)	0.867 (0.584)	0.447 (0.384)	0.259 (0.253)	0.222 (0.186)	0.248 (0.173)	0.198 (0.165)	0.406** (0.164)	0.427*** (0.154)
Romania	0.046*** (0.000)	-0.033 (0.615)	0.296 (0.424)	0.222 (0.418)	0.562 (0.376)	0.099 (0.219)	0.696*** (0.237)	0.321 (0.258)	0.093 (0.248)
Serbia	0.075 (0.081)	0.241** (0.096)	0.316** (0.128)	0.241 (0.163)	0.420** (0.212)	0.224 (0.424)	0.500 (0.387)	0.220 (0.221)	0.084 (0.165)
Slovakia	0.146 (1.544)	-0.199 (0.414)	0.348 (0.359)	0.633*** (0.183)	0.388*** (0.131)	0.312*** (0.110)	0.200* (0.104)	0.149 (0.102)	0.051 (0.081)
Slovenia	-0.763* (0.400)	-0.175 (0.249)	-0.108 (0.197)	-0.257 (0.167)	0.010 (0.156)	0.199 (0.132)	0.203* (0.112)	0.119 (0.106)	0.070 (0.107)
Spain	-0.148*** (0.036)	0.879 (1.601)	0.498 (0.601)	0.109 (0.289)	0.085 (0.237)	-0.024 (0.210)	-0.146 (0.188)	0.093 (0.168)	-0.050 (0.140)
Sweden	-0.157 (0.249)	0.172 (0.180)	-0.123 (0.127)	-0.123 (0.116)	-0.154 (0.100)	-0.127 (0.093)	-0.031 (0.088)	-0.004 (0.087)	-0.094 (0.084)
UK	0.341 (0.557)	0.183 (0.200)	0.044 (0.130)	0.034 (0.091)	0.047 (0.066)	-0.023 (0.058)	0.029 (0.052)	0.140*** (0.052)	0.201*** (0.055)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.10: Income gap decomposition for the age group 25-44

Country					Quantile:				
	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained				
Austria	0.684*** (0.161)	0.885*** (0.095)	0.535*** (0.047)	0.287*** (0.031)	0.201*** (0.027)	0.160*** (0.025)	0.125*** (0.024)	0.078*** (0.025)	0.071* (0.038)
Belgium	0.664*** (0.133)	0.501*** (0.074)	0.256*** (0.035)	0.143*** (0.023)	0.083*** (0.019)	0.046*** (0.018)	0.019 (0.019)	-0.002 (0.021)	-0.012 (0.023)
Bulgaria	-0.022 (0.176)	0.117 (0.107)	0.116** (0.049)	0.014 (0.038)	-0.039 (0.035)	-0.078** (0.034)	-0.069** (0.032)	-0.077** (0.030)	-0.080*** (0.030)
Croatia	0.755 (0.854)	0.280** (0.121)	0.175** (0.056)	0.086*** (0.028)	0.022 (0.024)	-0.018 (0.023)	-0.017 (0.024)	-0.052** (0.025)	-0.041* (0.024)
Czechia	0.776*** (0.125)	0.299*** (0.042)	0.130*** (0.027)	0.054** (0.021)	0.013 (0.018)	0.005 (0.017)	-0.017 (0.018)	-0.034 (0.022)	-0.033 (0.025)
Denmark	0.215*** (0.072)	0.149*** (0.052)	0.221*** (0.061)	0.081** (0.035)	0.009 (0.024)	-0.027 (0.020)	-0.058*** (0.018)	-0.058*** (0.019)	-0.045** (0.019)
Estonia	0.239* (0.127)	0.272*** (0.082)	0.176*** (0.065)	0.020 (0.046)	0.017 (0.037)	-0.047 (0.033)	-0.071** (0.031)	-0.075*** (0.030)	-0.114*** (0.032)
Finland	0.093** (0.041)	0.251*** (0.053)	0.135*** (0.029)	0.057*** (0.020)	0.011 (0.017)	-0.009 (0.015)	-0.014 (0.015)	-0.024 (0.015)	-0.031* (0.018)
France	0.326*** (0.078)	0.246*** (0.044)	0.113*** (0.023)	0.072*** (0.021)	0.049** (0.020)	0.027 (0.018)	0.023 (0.019)	0.007 (0.018)	0.017 (0.022)
Germany	0.506*** (0.078)	0.737*** (0.082)	0.544*** (0.058)	0.233*** (0.032)	0.157*** (0.025)	0.115*** (0.023)	0.078*** (0.020)	0.050** (0.021)	0.040* (0.023)
Greece	-0.000 (0.001)	1.218*** (0.156)	0.551*** (0.061)	0.346*** (0.035)	0.176*** (0.025)	0.076*** (0.020)	0.017 (0.017)	-0.001 (0.018)	-0.006 (0.021)
Hungary	0.727*** (0.153)	0.322*** (0.060)	0.134*** (0.030)	0.046* (0.027)	0.033 (0.027)	-0.006 (0.025)	-0.059** (0.025)	-0.057** (0.025)	-0.055** (0.022)
Latvia	0.645*** (0.196)	0.209*** (0.059)	0.006 (0.044)	-0.054 (0.036)	-0.095*** (0.034)	-0.139*** (0.032)	-0.126*** (0.030)	-0.121** (0.030)	-0.141*** (0.038)
Lithuania	0.241 (0.200)	0.063 (0.078)	-0.040 (0.056)	-0.079 (0.050)	-0.087* (0.047)	-0.121*** (0.045)	-0.151*** (0.049)	-0.180*** (0.060)	-0.100** (0.048)
Netherlands	0.678*** (0.110)	0.412*** (0.047)	0.334*** (0.032)	0.214*** (0.026)	0.141*** (0.022)	0.079*** (0.020)	0.052*** (0.020)	0.060*** (0.021)	0.046* (0.028)
Norway	0.317*** (0.054)	0.173*** (0.040)	0.102*** (0.025)	0.035*** (0.017)	0.017 (0.015)	0.004 (0.014)	-0.006 (0.015)	-0.019 (0.016)	-0.015 (0.018)
Poland	0.453** (0.221)	0.276*** (0.043)	0.141*** (0.027)	0.075*** (0.021)	0.009 (0.020)	-0.005 (0.019)	-0.015 (0.019)	-0.026 (0.019)	-0.017 (0.020)
Portugal	0.124 (0.269)	0.161** (0.074)	0.041* (0.021)	0.015 (0.017)	-0.006 (0.017)	-0.047 (0.018)	-0.089*** (0.021)	-0.138*** (0.023)	-0.153*** (0.026)
Romania	2.610*** (0.303)	1.067*** (0.145)	0.549*** (0.063)	0.187*** (0.027)	0.110*** (0.023)	0.060*** (0.022)	0.019 (0.022)	-0.011 (0.021)	-0.015 (0.023)
Serbia	0.058 (0.037)	0.051 (0.059)	0.177 (0.141)	0.098 (0.111)	0.018 (0.048)	-0.057 (0.036)	-0.074** (0.032)	-0.107*** (0.030)	-0.067*** (0.025)
Slovakia	0.708*** (0.177)	0.301*** (0.046)	0.106*** (0.023)	0.050*** (0.017)	0.018 (0.015)	0.002 (0.014)	-0.008 (0.015)	-0.015 (0.015)	-0.009 (0.022)
Slovenia	0.425*** (0.080)	0.281*** (0.071)	0.086*** (0.023)	0.041** (0.019)	0.014 (0.017)	-0.027* (0.016)	-0.068*** (0.016)	-0.091*** (0.016)	-0.116*** (0.019)
Spain	0.482*** (0.107)	0.335*** (0.057)	0.313*** (0.042)	0.219*** (0.031)	0.143*** (0.023)	0.092*** (0.021)	0.063*** (0.021)	-0.004 (0.019)	-0.036* (0.020)
Sweden	0.158* (0.090)	0.146** (0.066)	0.115*** (0.038)	0.106*** (0.025)	0.073*** (0.020)	0.055*** (0.018)	0.014 (0.017)	-0.026 (0.017)	-0.050*** (0.019)
UK	0.825*** (0.119)	0.478*** (0.058)	0.360*** (0.028)	0.265*** (0.023)	0.201*** (0.022)	0.151*** (0.021)	0.099*** (0.019)	0.074*** (0.021)	0.044** (0.021)
					Unexplained				
Austria	0.286 (0.198)	0.026 (0.114)	0.276*** (0.059)	0.442*** (0.042)	0.393*** (0.037)	0.371*** (0.033)	0.361*** (0.032)	0.342*** (0.033)	0.361*** (0.047)
Belgium	0.166 (0.180)	-0.004 (0.082)	0.165*** (0.042)	0.163*** (0.029)	0.156*** (0.023)	0.158*** (0.022)	0.171*** (0.022)	0.210*** (0.026)	0.237*** (0.033)
Bulgaria	0.441* (0.238)	0.219 (0.153)	0.202*** (0.067)	0.165*** (0.048)	0.220*** (0.043)	0.310*** (0.043)	0.340*** (0.044)	0.360*** (0.047)	0.333*** (0.055)
Croatia	2.917*** (1.112)	0.662*** (0.181)	0.597*** (0.085)	0.462*** (0.050)	0.322*** (0.036)	0.261*** (0.035)	0.287*** (0.037)	0.254*** (0.041)	0.179*** (0.043)
Czechia	0.165 (0.139)	0.606*** (0.060)	0.532*** (0.039)	0.492*** (0.029)	0.465*** (0.025)	0.410*** (0.023)	0.429*** (0.024)	0.445*** (0.029)	0.503*** (0.037)
Denmark	-0.385*** (0.124)	-0.279*** (0.078)	-0.302*** (0.064)	-0.007 (0.035)	0.115*** (0.025)	0.158*** (0.023)	0.191*** (0.024)	0.239*** (0.026)	0.274*** (0.030)
Estonia	0.015 (0.162)	-0.037 (0.086)	0.236*** (0.069)	0.439*** (0.052)	0.422*** (0.045)	0.454*** (0.041)	0.475*** (0.042)	0.457*** (0.043)	0.536*** (0.054)
Finland	0.043 (0.059)	-0.071 (0.062)	0.142*** (0.033)	0.193*** (0.024)	0.229*** (0.020)	0.246*** (0.019)	0.262*** (0.019)	0.299*** (0.021)	0.298*** (0.028)
France	0.166* (0.100)	0.109** (0.052)	0.147*** (0.029)	0.127*** (0.022)	0.155*** (0.022)	0.184*** (0.022)	0.189*** (0.023)	0.224*** (0.024)	0.229*** (0.035)
Germany	-0.000 (0.112)	-0.242** (0.097)	0.057 (0.067)	0.337*** (0.040)	0.334*** (0.032)	0.341*** (0.029)	0.317*** (0.028)	0.317*** (0.028)	0.348*** (0.031)
Greece	-0.230*** (0.002)	0.141 (0.184)	1.091*** (0.101)	0.795*** (0.068)	0.557*** (0.042)	0.395*** (0.030)	0.317*** (0.027)	0.256*** (0.028)	0.224*** (0.029)
Hungary	-0.226 (0.180)	0.257*** (0.074)	0.298*** (0.047)	0.248*** (0.036)	0.253*** (0.034)	0.304*** (0.033)	0.371*** (0.034)	0.364*** (0.037)	0.411*** (0.041)
Latvia	-0.320 (0.237)	0.330*** (0.072)	0.390*** (0.050)	0.453*** (0.043)	0.406*** (0.041)	0.465*** (0.042)	0.448*** (0.042)	0.406*** (0.044)	0.462*** (0.061)
Lithuania	0.347 (0.273)	0.498*** (0.112)	0.316*** (0.066)	0.422*** (0.059)	0.427*** (0.063)	0.441*** (0.066)	0.496*** (0.074)	0.547*** (0.099)	0.494*** (0.098)
Netherlands	0.282 (0.185)	0.138* (0.072)	0.094** (0.042)	0.190*** (0.032)	0.245*** (0.027)	0.284*** (0.025)	0.284*** (0.025)	0.282*** (0.026)	0.301*** (0.036)
Norway	-0.148* (0.084)	0.086* (0.045)	0.182*** (0.028)	0.224*** (0.021)	0.214*** (0.018)	0.211*** (0.017)	0.255*** (0.018)	0.307*** (0.021)	0.343*** (0.027)
Poland	5.688*** (0.271)	1.440*** (0.131)	0.628*** (0.063)	0.304*** (0.029)	0.350*** (0.027)	0.363*** (0.026)	0.370*** (0.027)	0.409*** (0.030)	0.383*** (0.036)
Portugal	0.389 (0.364)	0.179 (0.109)	0.123*** (0.032)	0.117*** (0.024)	0.183*** (0.024)	0.197*** (0.027)	0.259*** (0.033)	0.273*** (0.040)	0.306*** (0.048)
Romania	-0.698* (0.364)	0.906*** (0.172)	1.332*** (0.117)	0.983*** (0.132)	0.161*** (0.039)	0.158*** (0.038)	0.284*** (0.038)	0.187*** (0.039)	0.265*** (0.043)
Serbia	0.042 (0.062)	0.186** (0.083)	0.551*** (0.177)	0.783*** (0.156)	0.427*** (0.080)	0.204*** (0.048)	0.220*** (0.046)	0.258*** (0.046)	0.204*** (0.046)
Slovakia	-0.096 (0.209)	0.590*** (0.085)	0.325*** (0.034)	0.295*** (0.025)	0.296*** (0.023)	0.251*** (0.022)	0.291*** (0.023)	0.274*** (0.025)	0.298*** (0.033)
Slovenia	0.228** (0.114)	0.252*** (0.086)	0.360*** (0.045)	0.183*** (0.025)	0.184*** (0.022)	0.221*** (0.022)	0.232*** (0.023)	0.234*** (0.025)	0.264*** (0.034)
Spain	2.262*** (0.416)	0.405*** (0.106)	0.175*** (0.061)	0.208*** (0.042)	0.250*** (0.032)	0.207*** (0.028)	0.228*** (0.028)	0.253*** (0.029)	0.187*** (0.034)
Sweden	-0.107 (0.122)	0.061 (0.077)	0.142*** (0.045)	0.130*** (0.031)	0.132*** (0.024)	0.152*** (0.021)	0.185*** (0.021)	0.233*** (0.022)	0.263*** (0.030)
UK	0.633*** (0.211)	0.208** (0.084)	0.124*** (0.040)	0.143*** (0.029)	0.138*** (0.026)	0.176*** (0.024)	0.222*** (0.024)	0.235*** (0.028)	0.306*** (0.033)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.11: Income gap decomposition for the age group 45-65

Country	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained				
Austria	0.332*** (0.079)	0.351*** (0.059)	0.304*** (0.042)	0.283*** (0.034)	0.240*** (0.029)	0.204*** (0.028)	0.171*** (0.030)	0.187*** (0.031)	0.224*** (0.032)
Belgium	0.239*** (0.054)	0.262*** (0.039)	0.277*** (0.038)	0.237*** (0.031)	0.184*** (0.026)	0.143*** (0.022)	0.118*** (0.020)	0.091*** (0.020)	0.106*** (0.025)
Bulgaria	0.005 (0.087)	0.049 (0.035)	0.050* (0.026)	0.046** (0.023)	0.041* (0.022)	0.024 (0.021)	-0.001 (0.022)	-0.053** (0.024)	-0.076** (0.034)
Croatia	-0.007 (0.161)	0.106*** (0.039)	0.186*** (0.035)	0.158*** (0.027)	0.115*** (0.023)	0.108*** (0.023)	0.063*** (0.023)	0.027 (0.023)	0.007 (0.022)
Czechia	0.245*** (0.039)	0.289*** (0.028)	0.256*** (0.025)	0.197*** (0.024)	0.135*** (0.021)	0.091*** (0.019)	0.080*** (0.018)	0.075*** (0.017)	0.090*** (0.026)
Denmark	0.098* (0.059)	0.134*** (0.035)	0.114*** (0.021)	0.075*** (0.016)	0.046*** (0.016)	0.015 (0.016)	-0.007 (0.015)	-0.017 (0.016)	-0.006 (0.022)
Estonia	-0.102 (0.067)	-0.029 (0.043)	-0.081 (0.052)	-0.071 (0.046)	-0.050 (0.037)	-0.025 (0.034)	-0.052 (0.035)	-0.084** (0.040)	-0.106* (0.060)
Finland	-0.055 (0.037)	-0.093*** (0.035)	-0.030 (0.029)	-0.006 (0.022)	0.012 (0.017)	0.013 (0.016)	0.015 (0.014)	0.009 (0.013)	0.004 (0.015)
France	0.180*** (0.041)	0.202*** (0.027)	0.145*** (0.019)	0.134*** (0.017)	0.109*** (0.017)	0.101*** (0.019)	0.084*** (0.018)	0.104*** (0.019)	0.131*** (0.030)
Germany	0.443*** (0.054)	0.636*** (0.048)	0.488*** (0.031)	0.318*** (0.023)	0.235*** (0.019)	0.191*** (0.017)	0.193*** (0.015)	0.179*** (0.016)	0.229*** (0.020)
Greece	0.569 (0.553)	0.206** (0.086)	0.221*** (0.045)	0.155*** (0.026)	0.109*** (0.016)	0.101*** (0.012)	0.102*** (0.012)	0.127*** (0.012)	0.154*** (0.018)
Hungary	-0.001 (0.049)	0.084*** (0.032)	0.111*** (0.026)	0.065*** (0.021)	0.039** (0.020)	0.016 (0.021)	-0.002 (0.023)	-0.023 (0.021)	-0.020 (0.023)
Latvia	-0.215** (0.104)	-0.047 (0.073)	0.016 (0.050)	-0.022 (0.042)	-0.032 (0.037)	-0.040 (0.032)	-0.051* (0.031)	-0.093*** (0.032)	-0.095** (0.037)
Lithuania	-0.102 (0.179)	-0.003 (0.076)	-0.055 (0.052)	-0.016 (0.039)	-0.017 (0.037)	-0.043 (0.037)	-0.046 (0.037)	-0.053 (0.038)	-0.067 (0.045)
Netherlands	0.340*** (0.044)	0.439*** (0.035)	0.379*** (0.024)	0.317*** (0.019)	0.268*** (0.017)	0.230*** (0.016)	0.223*** (0.016)	0.212*** (0.018)	0.212*** (0.022)
Norway	0.094*** (0.035)	0.100*** (0.023)	0.104*** (0.019)	0.105*** (0.016)	0.089*** (0.016)	0.091*** (0.017)	0.061*** (0.019)	0.053*** (0.017)	0.028 (0.028)
Poland	0.083 (0.093)	0.169*** (0.030)	0.200*** (0.026)	0.146*** (0.019)	0.095*** (0.018)	0.079*** (0.017)	0.062*** (0.017)	0.045** (0.019)	-0.003 (0.023)
Portugal	-0.047 (0.227)	0.212*** (0.044)	0.150*** (0.029)	0.129*** (0.023)	0.106*** (0.022)	0.080*** (0.024)	0.029 (0.024)	0.024 (0.025)	0.024 (0.029)
Romania	0.494** (0.219)	0.400*** (0.088)	0.321*** (0.036)	0.253*** (0.025)	0.176*** (0.019)	0.155*** (0.019)	0.121*** (0.019)	0.075*** (0.018)	0.073*** (0.022)
Serbia	-0.183*** (0.056)	-0.637*** (0.108)	-0.640*** (0.105)	-0.151*** (0.054)	0.005 (0.038)	0.056* (0.032)	0.095*** (0.029)	0.055* (0.029)	0.082*** (0.026)
Slovakia	0.071 (0.099)	0.113*** (0.030)	0.095*** (0.025)	0.104*** (0.021)	0.074*** (0.018)	0.059*** (0.015)	0.051*** (0.015)	0.053*** (0.018)	0.056*** (0.020)
Slovenia	0.036 (0.036)	0.033 (0.021)	0.059*** (0.022)	0.073*** (0.023)	0.072*** (0.022)	0.048** (0.019)	0.007 (0.017)	-0.030* (0.018)	-0.039* (0.020)
Spain	0.325*** (0.065)	0.322*** (0.045)	0.301*** (0.033)	0.260*** (0.026)	0.192*** (0.021)	0.123*** (0.018)	0.100*** (0.016)	0.078*** (0.016)	0.057*** (0.016)
Sweden	0.169** (0.067)	0.139*** (0.044)	0.121*** (0.023)	0.099*** (0.017)	0.072*** (0.016)	0.048*** (0.015)	0.030* (0.016)	0.026 (0.018)	0.023 (0.020)
UK	0.174** (0.073)	0.208*** (0.043)	0.274*** (0.037)	0.239*** (0.027)	0.182*** (0.023)	0.170*** (0.022)	0.130*** (0.022)	0.126*** (0.023)	0.165*** (0.034)
					Unexplained				
Austria	1.018*** (0.166)	0.346*** (0.079)	0.374*** (0.051)	0.310*** (0.041)	0.315*** (0.035)	0.305*** (0.033)	0.292*** (0.035)	0.248*** (0.036)	0.175*** (0.037)
Belgium	1.551*** (0.255)	0.275*** (0.055)	0.266*** (0.046)	0.266*** (0.036)	0.305*** (0.032)	0.254*** (0.030)	0.215*** (0.028)	0.181*** (0.027)	0.227*** (0.033)
Bulgaria	0.242 (0.172)	0.183*** (0.048)	0.197*** (0.036)	0.136*** (0.031)	0.178*** (0.030)	0.203*** (0.030)	0.231*** (0.031)	0.287*** (0.035)	0.383*** (0.052)
Croatia	5.352*** (0.177)	1.168*** (0.167)	0.398*** (0.047)	0.399*** (0.036)	0.270*** (0.032)	0.247*** (0.028)	0.300*** (0.029)	0.289*** (0.033)	0.149*** (0.036)
Czechia	0.077 (0.060)	0.018 (0.033)	0.124*** (0.025)	0.211*** (0.025)	0.277*** (0.024)	0.298*** (0.023)	0.269*** (0.023)	0.246*** (0.022)	0.269*** (0.033)
Denmark	-0.103 (0.082)	-0.020 (0.046)	0.017 (0.027)	0.069*** (0.021)	0.113*** (0.019)	0.191*** (0.020)	0.231*** (0.020)	0.286*** (0.023)	0.356*** (0.036)
Estonia	-0.068 (0.099)	-0.031 (0.054)	0.024 (0.061)	0.171*** (0.057)	0.254*** (0.049)	0.253*** (0.046)	0.263*** (0.050)	0.330*** (0.058)	0.393*** (0.088)
Finland	-0.008 (0.047)	0.081* (0.045)	0.072** (0.034)	0.112*** (0.025)	0.145*** (0.020)	0.179*** (0.019)	0.205*** (0.018)	0.238*** (0.019)	0.247*** (0.026)
France	0.712*** (0.082)	0.331*** (0.042)	0.250*** (0.031)	0.169*** (0.024)	0.173*** (0.023)	0.187*** (0.024)	0.218*** (0.024)	0.224*** (0.026)	0.280*** (0.036)
Germany	0.692*** (0.122)	0.200*** (0.064)	0.294*** (0.040)	0.424*** (0.030)	0.409*** (0.025)	0.387*** (0.023)	0.313*** (0.021)	0.278*** (0.021)	0.246*** (0.023)
Greece	6.507*** (0.583)	7.938*** (0.091)	2.272*** (0.117)	1.135*** (0.066)	0.740*** (0.034)	0.457*** (0.025)	0.302*** (0.022)	0.207*** (0.021)	0.188*** (0.025)
Hungary	0.023 (0.082)	0.001 (0.048)	-0.011 (0.035)	0.050* (0.027)	0.106*** (0.025)	0.132*** (0.026)	0.181*** (0.031)	0.149*** (0.031)	0.152*** (0.036)
Latvia	0.173 (0.144)	0.066 (0.089)	0.105* (0.058)	0.144*** (0.045)	0.200*** (0.041)	0.217*** (0.038)	0.182*** (0.039)	0.215*** (0.042)	0.274*** (0.053)
Lithuania	-0.283 (0.272)	0.014 (0.103)	0.101* (0.060)	0.143*** (0.046)	0.129*** (0.047)	0.140*** (0.047)	0.146*** (0.050)	0.188*** (0.057)	0.215*** (0.071)
Netherlands	1.770*** (0.132)	0.523*** (0.061)	0.416*** (0.036)	0.405*** (0.026)	0.398*** (0.023)	0.404*** (0.021)	0.379*** (0.021)	0.366*** (0.023)	0.340*** (0.027)
Norway	0.196*** (0.047)	0.212*** (0.030)	0.172*** (0.024)	0.164*** (0.020)	0.186*** (0.020)	0.208*** (0.020)	0.279*** (0.023)	0.342*** (0.023)	0.424*** (0.039)
Poland	6.268*** (0.121)	0.494*** (0.116)	0.287*** (0.037)	0.308*** (0.029)	0.301*** (0.024)	0.325*** (0.022)	0.310*** (0.023)	0.262*** (0.027)	0.246*** (0.034)
Portugal	7.737*** (0.286)	1.277*** (0.246)	0.475*** (0.051)	0.257*** (0.033)	0.264* (0.029)	0.392*** (0.029)	0.466*** (0.030)	0.365*** (0.036)	0.325*** (0.043)
Romania	4.498*** (0.248)	1.712*** (0.199)	0.692*** (0.097)	0.306*** (0.038)	0.270*** (0.028)	0.205*** (0.025)	0.221*** (0.026)	0.267*** (0.027)	0.201*** (0.034)
Serbia	0.421*** (0.066)	1.340*** (0.119)	1.543*** (0.152)	0.527*** (0.074)	0.338*** (0.051)	0.219*** (0.041)	0.177*** (0.035)	0.204*** (0.037)	0.138*** (0.041)
Slovakia	0.039 (0.135)	0.097** (0.040)	0.127*** (0.031)	0.172*** (0.026)	0.215*** (0.022)	0.218*** (0.021)	0.188*** (0.022)	0.210*** (0.025)	0.256*** (0.031)
Slovenia	0.176*** (0.067)	0.094*** (0.031)	0.110*** (0.031)	0.073** (0.030)	0.039 (0.025)	0.101*** (0.022)	0.111*** (0.022)	0.092*** (0.025)	0.132*** (0.032)
Spain	4.881*** (0.333)	1.382*** (0.121)	0.632*** (0.056)	0.517*** (0.039)	0.454*** (0.030)	0.452*** (0.028)	0.357*** (0.026)	0.274*** (0.025)	0.178*** (0.028)
Sweden	-0.021 (0.098)	0.053 (0.058)	0.067** (0.029)	0.085*** (0.021)	0.116*** (0.019)	0.151*** (0.019)	0.189*** (0.020)	0.195*** (0.025)	0.249*** (0.031)
UK	0.688*** (0.176)	0.261*** (0.065)	0.185*** (0.049)	0.220*** (0.036)	0.265*** (0.030)	0.248*** (0.029)	0.320*** (0.030)	0.305*** (0.032)	0.342*** (0.045)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.12: Income gap decomposition for the age group >65

Country	Quantile:								
	10th	20th	30th	40th	50th	60th	70th	80th	90th
	Explained								
Austria	0.105* (0.059)	0.168*** (0.044)	0.143*** (0.034)	0.116*** (0.030)	0.104*** (0.026)	0.092*** (0.024)	0.088*** (0.024)	0.133*** (0.026)	0.168*** (0.034)
Belgium	0.168*** (0.047)	0.119*** (0.032)	0.097*** (0.026)	0.076*** (0.025)	0.080*** (0.025)	0.119*** (0.019)	0.112*** (0.018)	0.119*** (0.020)	0.144*** (0.027)
Bulgaria	0.073*** (0.023)	0.059*** (0.016)	0.066*** (0.016)	0.057*** (0.016)	0.058*** (0.017)	0.069*** (0.018)	0.064*** (0.021)	0.046* (0.024)	0.047* (0.028)
Croatia	0.890*** (0.159)	0.320*** (0.053)	0.314*** (0.035)	0.302*** (0.028)	0.223*** (0.028)	0.149*** (0.022)	0.128*** (0.021)	0.103*** (0.031)	0.073 (0.056)
Czechia	0.015** (0.007)	0.016** (0.008)	0.014 (0.010)	0.010 (0.009)	0.003 (0.008)	-0.006 (0.008)	0.004 (0.014)	0.006 (0.014)	0.103*** (0.029)
Denmark	-0.049*** (0.011)	-0.073*** (0.012)	-0.080*** (0.014)	-0.077*** (0.016)	-0.070*** (0.018)	-0.051** (0.021)	-0.009 (0.026)	0.052** (0.025)	0.121*** (0.028)
Estonia	0.071** (0.034)	0.064*** (0.021)	0.027** (0.012)	0.024** (0.011)	0.017 (0.011)	0.018 (0.013)	0.040 (0.024)	0.108* (0.058)	0.153* (0.082)
Finland	0.026 (0.021)	0.021 (0.022)	0.063*** (0.023)	0.077*** (0.023)	0.068*** (0.023)	0.093*** (0.022)	0.121*** (0.023)	0.125*** (0.026)	0.153*** (0.034)
France	0.071** (0.028)	0.030 (0.018)	0.020 (0.017)	0.025 (0.017)	0.039** (0.019)	0.044** (0.022)	0.050** (0.024)	0.044 (0.031)	0.089*** (0.033)
Germany	0.199*** (0.047)	0.080*** (0.026)	0.039* (0.020)	0.026 (0.018)	0.039** (0.017)	0.048*** (0.018)	0.046** (0.021)	0.092*** (0.026)	0.104*** (0.040)
Greece	0.125*** (0.042)	0.184*** (0.043)	0.202*** (0.055)	0.267*** (0.041)	0.242*** (0.033)	0.211*** (0.030)	0.165*** (0.030)	0.174*** (0.012)	0.125*** (0.012)
Hungary	0.030 (0.046)	0.009 (0.027)	0.035 (0.022)	0.021 (0.023)	0.044** (0.021)	0.066*** (0.021)	0.078*** (0.023)	0.090*** (0.033)	0.158*** (0.032)
Latvia	0.063** (0.025)	0.039** (0.020)	0.037** (0.018)	0.024 (0.019)	0.046** (0.022)	0.077*** (0.027)	0.152*** (0.041)	0.276*** (0.074)	0.276*** (0.061)
Lithuania	0.024 (0.038)	0.024 (0.029)	0.050* (0.029)	0.052* (0.028)	0.049* (0.027)	0.046 (0.030)	0.100** (0.042)	0.126*** (0.050)	0.142 (0.099)
Netherlands	0.093** (0.042)	0.113*** (0.028)	0.101*** (0.026)	0.150*** (0.026)	0.202*** (0.024)	0.193*** (0.023)	0.212*** (0.020)	0.212*** (0.024)	0.250*** (0.024)
Norway	-0.026 (0.029)	0.000 (0.030)	0.019 (0.027)	0.035 (0.025)	0.071*** (0.024)	0.084*** (0.025)	0.112*** (0.032)	0.111*** (0.034)	0.175*** (0.046)
Poland	0.041 (0.031)	0.071*** (0.026)	0.077*** (0.022)	0.062*** (0.019)	0.042** (0.018)	0.044** (0.018)	0.045** (0.020)	0.058*** (0.022)	0.081*** (0.027)
Portugal	0.050** (0.021)	0.180*** (0.021)	0.175*** (0.022)	0.204*** (0.025)	0.249*** (0.027)	0.301*** (0.030)	0.288*** (0.034)	0.239*** (0.031)	0.188*** (0.034)
Romania	0.179*** (0.045)	0.335*** (0.040)	0.282*** (0.029)	0.194*** (0.022)	0.168*** (0.022)	0.195*** (0.017)	0.166*** (0.018)	0.126*** (0.016)	0.096*** (0.019)
Serbia	0.750*** (0.093)	0.667*** (0.068)	0.388*** (0.036)	0.290*** (0.030)	0.245*** (0.023)	0.195*** (0.020)	0.176*** (0.020)	0.129*** (0.022)	0.113*** (0.032)
Slovakia	0.037** (0.019)	0.030** (0.015)	0.009 (0.013)	-0.010 (0.013)	-0.020 (0.016)	-0.024 (0.018)	-0.025 (0.018)	-0.004 (0.020)	0.014 (0.024)
Slovenia	0.142*** (0.030)	0.093*** (0.020)	0.098*** (0.017)	0.091*** (0.016)	0.096*** (0.016)	0.077*** (0.019)	0.091*** (0.025)	0.112*** (0.029)	0.096*** (0.028)
Spain	0.373*** (0.077)	0.347*** (0.034)	0.301*** (0.034)	0.312*** (0.033)	0.289*** (0.033)	0.225*** (0.038)	0.218*** (0.030)	0.170*** (0.030)	0.085*** (0.019)
Sweden	0.025 (0.029)	0.036 (0.024)	0.052** (0.021)	0.076*** (0.018)	0.085*** (0.019)	0.106*** (0.024)	0.077*** (0.027)	0.085*** (0.031)	0.027 (0.038)
UK	-0.024 (0.024)	-0.035* (0.019)	-0.024 (0.018)	-0.003 (0.019)	0.016 (0.021)	0.037 (0.024)	0.065** (0.026)	0.085*** (0.025)	0.149*** (0.034)
	Unexplained								
Austria	1.941*** (0.255)	0.822*** (0.078)	0.610*** (0.051)	0.556*** (0.041)	0.547*** (0.037)	0.474*** (0.035)	0.411*** (0.035)	0.337*** (0.034)	0.256*** (0.041)
Belgium	3.407*** (0.675)	1.139*** (0.181)	0.359*** (0.047)	0.281*** (0.034)	0.264*** (0.032)	0.221*** (0.025)	0.217*** (0.024)	0.198*** (0.026)	0.135*** (0.035)
Bulgaria	0.148*** (0.035)	0.190*** (0.025)	0.175*** (0.024)	0.207*** (0.024)	0.238*** (0.024)	0.268*** (0.025)	0.313*** (0.030)	0.328*** (0.036)	0.311*** (0.046)
Croatia	0.174 (0.208)	0.193*** (0.065)	0.041 (0.043)	-0.009 (0.033)	0.166*** (0.032)	0.218*** (0.027)	0.127*** (0.026)	0.147*** (0.035)	0.249*** (0.061)
Czechia	0.158*** (0.010)	0.141*** (0.011)	0.094*** (0.012)	0.124*** (0.011)	0.142*** (0.009)	0.122*** (0.010)	0.115*** (0.016)	0.109*** (0.017)	0.067** (0.033)
Denmark	0.134*** (0.017)	0.136*** (0.017)	0.115*** (0.022)	0.099*** (0.024)	0.113*** (0.027)	0.119*** (0.031)	0.159*** (0.038)	0.106*** (0.039)	0.100** (0.042)
Estonia	-0.192*** (0.046)	-0.117*** (0.028)	-0.020 (0.016)	-0.008 (0.015)	0.007 (0.015)	0.024 (0.016)	0.061** (0.030)	0.122* (0.066)	0.214** (0.102)
Finland	0.093*** (0.030)	0.127*** (0.029)	0.124*** (0.030)	0.120*** (0.029)	0.153*** (0.029)	0.144*** (0.027)	0.149*** (0.028)	0.203*** (0.031)	0.247*** (0.041)
France	0.726*** (0.063)	0.460*** (0.030)	0.373*** (0.027)	0.298*** (0.026)	0.248*** (0.027)	0.229*** (0.029)	0.218*** (0.031)	0.217*** (0.040)	0.256*** (0.050)
Germany	0.907*** (0.070)	0.724*** (0.044)	0.575*** (0.032)	0.509*** (0.026)	0.445*** (0.025)	0.385*** (0.026)	0.348*** (0.028)	0.310*** (0.033)	0.390*** (0.046)
Greece	8.833*** (0.044)	0.286*** (0.048)	0.343*** (0.057)	0.262*** (0.044)	0.234*** (0.035)	0.276*** (0.032)	0.319*** (0.032)	0.257*** (0.016)	0.216*** (0.018)
Hungary	0.093 (0.065)	0.084** (0.035)	0.053* (0.029)	0.080*** (0.028)	0.072*** (0.026)	0.083*** (0.026)	0.106*** (0.028)	0.118*** (0.039)	0.068* (0.039)
Latvia	-0.065* (0.034)	-0.016 (0.025)	0.033 (0.023)	0.071*** (0.024)	0.086*** (0.027)	0.096*** (0.031)	0.098** (0.044)	0.111 (0.080)	0.139* (0.076)
Lithuania	0.116** (0.050)	0.150*** (0.040)	0.137*** (0.041)	0.138*** (0.038)	0.128*** (0.035)	0.160*** (0.039)	0.137*** (0.052)	0.181*** (0.064)	0.263** (0.109)
Netherlands	0.257*** (0.052)	0.395*** (0.036)	0.462*** (0.033)	0.362*** (0.037)	0.274*** (0.033)	0.327*** (0.029)	0.324*** (0.026)	0.343*** (0.029)	0.347*** (0.028)
Norway	0.357*** (0.038)	0.349*** (0.039)	0.336*** (0.035)	0.290*** (0.033)	0.223*** (0.031)	0.203*** (0.032)	0.181*** (0.039)	0.260*** (0.041)	0.195*** (0.056)
Poland	0.091** (0.040)	0.134*** (0.033)	0.160*** (0.028)	0.202*** (0.024)	0.229*** (0.022)	0.230*** (0.022)	0.257*** (0.024)	0.237*** (0.027)	0.252*** (0.033)
Portugal	0.277*** (0.036)	0.170*** (0.027)	0.175*** (0.029)	0.170*** (0.032)	0.176*** (0.033)	0.163*** (0.035)	0.307*** (0.038)	0.379*** (0.040)	0.268*** (0.043)
Romania	0.074 (0.054)	0.050 (0.045)	0.093*** (0.033)	0.234*** (0.026)	0.121*** (0.024)	0.117*** (0.019)	0.227*** (0.019)	0.317*** (0.020)	0.120*** (0.027)
Serbia	1.088*** (0.154)	-0.183** (0.079)	0.128*** (0.043)	0.213*** (0.038)	0.210*** (0.032)	0.192*** (0.030)	0.148*** (0.029)	0.151*** (0.032)	0.204*** (0.047)
Slovakia	0.081*** (0.026)	0.082*** (0.021)	0.063*** (0.018)	0.063*** (0.018)	0.072*** (0.021)	0.077*** (0.023)	0.068*** (0.024)	0.058** (0.026)	0.063* (0.032)
Slovenia	0.074* (0.041)	0.128*** (0.027)	0.124*** (0.024)	0.111*** (0.022)	0.080*** (0.022)	0.096*** (0.023)	0.112*** (0.031)	0.173*** (0.037)	0.216*** (0.041)
Spain	3.991*** (0.230)	1.300*** (0.132)	0.367*** (0.049)	0.132*** (0.034)	0.277*** (0.034)	0.435*** (0.039)	0.421*** (0.033)	0.450*** (0.035)	0.430*** (0.031)
Sweden	0.230*** (0.041)	0.222*** (0.033)	0.189*** (0.027)	0.190*** (0.024)	0.178*** (0.024)	0.203*** (0.028)	0.288*** (0.032)	0.281*** (0.040)	0.363*** (0.052)
UK	0.679*** (0.038)	0.528*** (0.031)	0.452*** (0.029)	0.413*** (0.030)	0.340*** (0.030)	0.338*** (0.033)	0.328*** (0.035)	0.363*** (0.036)	0.382*** (0.051)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.13: Employment income gap decomposition for the age group 25-44

Country	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Quantile:				
					Explained				
Austria	1.392*** (0.226)	0.722*** (0.083)	0.396*** (0.042)	0.253*** (0.031)	0.187*** (0.026)	0.145*** (0.026)	0.100*** (0.026)	0.073*** (0.026)	0.063 (0.042)
Belgium	0.442*** (0.108)	0.218*** (0.036)	0.125*** (0.023)	0.073*** (0.019)	0.044** (0.018)	0.017 (0.018)	-0.006 (0.019)	-0.012 (0.021)	0.010 (0.020)
Bulgaria	-0.062 (0.126)	-0.050 (0.078)	-0.089** (0.036)	-0.112*** (0.034)	-0.094*** (0.034)	-0.120*** (0.035)	-0.112*** (0.032)	-0.109*** (0.030)	-0.116*** (0.037)
Croatia	-0.021 (0.087)	0.044 (0.040)	0.021 (0.021)	-0.012 (0.019)	-0.038* (0.020)	-0.049** (0.021)	-0.051** (0.022)	-0.054** (0.022)	-0.076*** (0.026)
Czechia	0.267*** (0.050)	0.100*** (0.026)	0.023 (0.019)	-0.010 (0.017)	-0.028* (0.016)	-0.019 (0.015)	-0.030* (0.016)	-0.050** (0.022)	-0.049* (0.025)
Denmark	0.439** (0.191)	0.272*** (0.104)	0.154*** (0.063)	0.018 (0.027)	-0.025 (0.021)	-0.042** (0.019)	-0.067*** (0.018)	-0.048*** (0.017)	-0.044** (0.018)
Estonia	0.192* (0.102)	0.086 (0.073)	0.041 (0.049)	-0.048 (0.039)	-0.030 (0.031)	-0.049* (0.028)	-0.080*** (0.029)	-0.081*** (0.030)	-0.087*** (0.030)
Finland	0.391*** (0.106)	0.463*** (0.064)	0.138*** (0.023)	0.084*** (0.018)	0.045*** (0.016)	0.010 (0.016)	0.001 (0.015)	-0.009 (0.015)	-0.023 (0.018)
France	0.324*** (0.097)	0.345*** (0.060)	0.116*** (0.023)	0.064*** (0.019)	0.041** (0.020)	0.035* (0.020)	0.021 (0.020)	0.013 (0.019)	0.027 (0.022)
Germany	1.125*** (0.164)	0.679*** (0.079)	0.317*** (0.038)	0.184*** (0.026)	0.128*** (0.024)	0.093*** (0.022)	0.059*** (0.020)	0.041* (0.022)	0.042* (0.025)
Greece	0.097** (0.048)	0.097*** (0.029)	0.053** (0.024)	0.019 (0.018)	-0.004 (0.015)	-0.018 (0.013)	-0.034*** (0.013)	-0.035** (0.014)	-0.031 (0.021)
Hungary	0.381*** (0.092)	0.094** (0.042)	0.036 (0.024)	-0.019 (0.024)	-0.022 (0.025)	-0.062*** (0.024)	-0.064*** (0.022)	-0.047** (0.023)	-0.039* (0.024)
Latvia	0.211** (0.087)	0.027 (0.046)	-0.066* (0.038)	-0.115*** (0.033)	-0.134*** (0.032)	-0.145*** (0.030)	-0.124*** (0.029)	-0.111*** (0.030)	-0.133*** (0.038)
Lithuania	-0.025 (0.115)	-0.142** (0.059)	-0.188*** (0.050)	-0.157*** (0.048)	-0.178*** (0.048)	-0.204*** (0.049)	-0.202*** (0.054)	-0.239*** (0.063)	-0.116** (0.051)
Netherlands	1.013*** (0.168)	0.434*** (0.063)	0.286*** (0.036)	0.182*** (0.027)	0.125*** (0.023)	0.068*** (0.021)	0.058*** (0.020)	0.060*** (0.021)	0.070*** (0.027)
Norway	0.411*** (0.145)	0.239*** (0.056)	0.107*** (0.024)	0.042** (0.017)	0.030** (0.015)	0.014 (0.014)	0.007 (0.015)	-0.010 (0.016)	-0.006 (0.017)
Poland	0.090** (0.035)	0.006 (0.021)	-0.010 (0.017)	-0.037** (0.016)	-0.051*** (0.016)	-0.062*** (0.017)	-0.079*** (0.019)	-0.064*** (0.017)	-0.061*** (0.020)
Portugal	0.150*** (0.051)	0.044*** (0.016)	0.017 (0.015)	0.002 (0.016)	-0.017 (0.016)	-0.060*** (0.021)	-0.109*** (0.024)	-0.131*** (0.023)	-0.122*** (0.025)
Romania	-0.056 (0.067)	-0.177** (0.080)	-0.063** (0.027)	-0.045*** (0.016)	-0.064*** (0.016)	-0.119*** (0.025)	-0.096*** (0.019)	-0.094*** (0.020)	-0.109*** (0.026)
Serbia	-0.453*** (0.110)	-0.446*** (0.086)	-0.266*** (0.042)	-0.189*** (0.027)	-0.180*** (0.025)	-0.173*** (0.026)	-0.200*** (0.026)	-0.157*** (0.026)	-0.175*** (0.035)
Slovakia	0.064 (0.042)	0.006 (0.023)	-0.006 (0.015)	-0.010 (0.013)	-0.010 (0.012)	-0.020 (0.013)	-0.019 (0.014)	-0.033** (0.015)	-0.011 (0.019)
Slovenia	0.155** (0.077)	0.130*** (0.044)	0.031 (0.019)	0.015 (0.018)	-0.014 (0.016)	-0.049*** (0.016)	-0.084*** (0.016)	-0.099*** (0.016)	-0.142*** (0.021)
Spain	0.229** (0.099)	0.253*** (0.059)	0.177*** (0.038)	0.121*** (0.028)	0.079*** (0.023)	0.033 (0.021)	0.023 (0.020)	-0.027 (0.019)	-0.055*** (0.021)
Sweden	0.287** (0.146)	0.242*** (0.068)	0.150*** (0.037)	0.105*** (0.024)	0.065*** (0.019)	0.048*** (0.017)	0.019 (0.016)	-0.020 (0.016)	-0.053*** (0.020)
UK	0.435*** (0.089)	0.354*** (0.032)	0.246*** (0.027)	0.155*** (0.023)	0.111*** (0.021)	0.083*** (0.020)	0.048*** (0.019)	0.030 (0.021)	0.013 (0.021)
					Unexplained				
Austria	-0.269 (0.265)	0.409*** (0.113)	0.448*** (0.064)	0.409*** (0.046)	0.368*** (0.037)	0.357*** (0.035)	0.333*** (0.035)	0.304*** (0.036)	0.313*** (0.053)
Belgium	-0.067 (0.131)	0.134** (0.052)	0.141*** (0.030)	0.134*** (0.024)	0.139*** (0.022)	0.151*** (0.022)	0.164*** (0.024)	0.198*** (0.027)	0.202*** (0.032)
Bulgaria	0.173 (0.192)	0.148 (0.109)	0.186*** (0.050)	0.234*** (0.045)	0.259*** (0.046)	0.367*** (0.048)	0.377*** (0.047)	0.370*** (0.050)	0.348*** (0.068)
Croatia	0.381*** (0.125)	0.353*** (0.073)	0.272*** (0.036)	0.210*** (0.031)	0.196*** (0.031)	0.246*** (0.033)	0.199*** (0.037)	0.166*** (0.039)	0.165*** (0.046)
Czechia	0.407*** (0.084)	0.360*** (0.037)	0.394*** (0.027)	0.375*** (0.025)	0.340*** (0.022)	0.317*** (0.021)	0.351*** (0.023)	0.437*** (0.030)	0.453*** (0.040)
Denmark	-0.208 (0.300)	-0.321** (0.142)	-0.024 (0.067)	0.141*** (0.031)	0.189*** (0.025)	0.193*** (0.024)	0.233*** (0.024)	0.248*** (0.026)	0.284*** (0.030)
Estonia	0.127 (0.133)	0.240*** (0.089)	0.426*** (0.062)	0.511*** (0.051)	0.456*** (0.044)	0.406*** (0.041)	0.426*** (0.043)	0.441*** (0.047)	0.463*** (0.054)
Finland	0.255* (0.143)	0.212*** (0.076)	0.370*** (0.043)	0.236*** (0.027)	0.213*** (0.022)	0.259*** (0.021)	0.269*** (0.021)	0.291*** (0.022)	0.309*** (0.028)
France	0.089 (0.131)	0.049 (0.074)	0.138*** (0.030)	0.130*** (0.023)	0.154*** (0.023)	0.176*** (0.023)	0.195*** (0.024)	0.234*** (0.028)	0.234*** (0.036)
Germany	-0.712*** (0.200)	0.165 (0.102)	0.327*** (0.054)	0.367*** (0.038)	0.335*** (0.033)	0.313*** (0.031)	0.274*** (0.029)	0.285*** (0.030)	0.311*** (0.035)
Greece	0.268*** (0.080)	0.282*** (0.046)	0.232*** (0.036)	0.233*** (0.028)	0.180*** (0.023)	0.163*** (0.022)	0.169*** (0.021)	0.192*** (0.024)	0.231*** (0.034)
Hungary	0.190 (0.131)	0.307*** (0.064)	0.166*** (0.036)	0.184*** (0.031)	0.245*** (0.033)	0.314*** (0.034)	0.318*** (0.035)	0.289*** (0.039)	0.400*** (0.043)
Latvia	0.531*** (0.139)	0.378*** (0.060)	0.439*** (0.046)	0.464*** (0.041)	0.463*** (0.042)	0.481*** (0.042)	0.425*** (0.043)	0.393*** (0.046)	0.451*** (0.062)
Lithuania	0.649*** (0.218)	0.373*** (0.096)	0.426*** (0.067)	0.432*** (0.069)	0.427*** (0.071)	0.479*** (0.074)	0.483*** (0.086)	0.539*** (0.109)	0.445*** (0.097)
Netherlands	-0.364 (0.232)	0.104 (0.085)	0.140*** (0.048)	0.215*** (0.036)	0.224*** (0.030)	0.249*** (0.027)	0.250*** (0.026)	0.244*** (0.027)	0.254*** (0.034)
Norway	0.316* (0.181)	0.466*** (0.075)	0.442*** (0.043)	0.330*** (0.028)	0.263*** (0.022)	0.270*** (0.020)	0.266*** (0.020)	0.317*** (0.022)	0.359*** (0.026)
Poland	0.449*** (0.078)	0.164*** (0.030)	0.251*** (0.024)	0.315*** (0.023)	0.312*** (0.024)	0.345*** (0.025)	0.356*** (0.030)	0.378*** (0.031)	0.359*** (0.041)
Portugal	0.164* (0.086)	0.099*** (0.027)	0.097*** (0.024)	0.187*** (0.023)	0.155*** (0.026)	0.238*** (0.030)	0.314*** (0.037)	0.257*** (0.041)	0.312*** (0.048)
Romania	0.542*** (0.132)	0.119* (0.067)	0.087*** (0.029)	0.164*** (0.023)	0.087*** (0.024)	0.267*** (0.034)	0.233*** (0.033)	0.168*** (0.036)	0.182*** (0.055)
Serbia	0.042 (0.158)	0.174* (0.095)	0.156*** (0.045)	0.194*** (0.033)	0.246*** (0.034)	0.189*** (0.038)	0.312*** (0.039)	0.295*** (0.040)	0.336*** (0.063)
Slovakia	0.221*** (0.060)	0.266*** (0.032)	0.254*** (0.023)	0.239*** (0.022)	0.252*** (0.021)	0.254*** (0.021)	0.250*** (0.023)	0.246*** (0.027)	0.256*** (0.034)
Slovenia	0.323*** (0.107)	0.411*** (0.065)	0.312*** (0.041)	0.186*** (0.027)	0.216*** (0.024)	0.239*** (0.024)	0.237*** (0.025)	0.221*** (0.027)	0.284*** (0.037)
Spain	0.058 (0.153)	-0.003 (0.088)	0.050 (0.051)	0.169*** (0.038)	0.175*** (0.031)	0.198*** (0.029)	0.212*** (0.029)	0.246*** (0.031)	0.188*** (0.036)
Sweden	0.268 (0.189)	0.377*** (0.098)	0.305*** (0.057)	0.227*** (0.038)	0.184*** (0.027)	0.174*** (0.023)	0.204*** (0.022)	0.240*** (0.023)	0.286*** (0.033)
UK	0.183 (0.115)	0.146*** (0.043)	0.125*** (0.034)	0.180*** (0.030)	0.182*** (0.027)	0.192*** (0.026)	0.186*** (0.027)	0.197*** (0.031)	0.304*** (0.036)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.14: Employment income gap decomposition for the age group 45-65

Country					Quantile:				
	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained				
Austria	0.805*** (0.254)	0.561*** (0.110)	0.317*** (0.052)	0.289*** (0.038)	0.237*** (0.034)	0.185*** (0.035)	0.197*** (0.035)	0.185*** (0.037)	0.230*** (0.035)
Belgium	0.418*** (0.101)	0.147*** (0.042)	0.099*** (0.029)	0.086*** (0.025)	0.075*** (0.022)	0.054** (0.021)	0.037 (0.022)	0.043* (0.026)	0.095*** (0.031)
Bulgaria	-0.098 (0.079)	-0.090** (0.045)	-0.029 (0.021)	-0.009 (0.022)	-0.008 (0.023)	-0.041* (0.024)	-0.061** (0.025)	-0.114** (0.030)	-0.140*** (0.040)
Croatia	0.083 (0.083)	0.002 (0.039)	-0.013 (0.025)	-0.020 (0.024)	-0.025 (0.024)	-0.052** (0.025)	-0.053** (0.023)	-0.049* (0.022)	-0.032 (0.025)
Czechia	0.420*** (0.086)	0.147*** (0.033)	0.078*** (0.024)	0.044** (0.020)	0.017 (0.019)	0.013 (0.019)	0.014 (0.018)	0.018 (0.017)	0.002 (0.032)
Denmark	1.664*** (0.496)	0.163*** (0.034)	0.096*** (0.019)	0.047*** (0.016)	0.019 (0.016)	0.014 (0.015)	-0.010 (0.016)	-0.016 (0.016)	-0.004 (0.020)
Estonia	0.003 (0.127)	0.038 (0.056)	-0.022 (0.043)	-0.023 (0.039)	-0.039 (0.038)	-0.045 (0.039)	-0.083* (0.043)	-0.105** (0.052)	-0.116 (0.081)
Finland	0.120 (0.147)	0.020 (0.070)	0.038 (0.033)	0.051*** (0.020)	0.035** (0.017)	0.027* (0.016)	0.022 (0.014)	0.013 (0.012)	0.008 (0.014)
France	0.550*** (0.172)	0.360*** (0.045)	0.186*** (0.024)	0.159*** (0.020)	0.125*** (0.020)	0.121*** (0.020)	0.096*** (0.019)	0.121*** (0.022)	0.167*** (0.035)
Germany	1.387*** (0.138)	0.507*** (0.043)	0.316*** (0.029)	0.229*** (0.022)	0.176*** (0.019)	0.172*** (0.017)	0.162*** (0.017)	0.173*** (0.018)	0.240*** (0.025)
Greece	0.105** (0.043)	0.136*** (0.028)	0.095*** (0.023)	0.053*** (0.017)	0.036** (0.015)	0.021 (0.014)	0.017 (0.015)	0.038** (0.015)	0.043* (0.026)
Hungary	0.816*** (0.159)	0.378*** (0.072)	0.138*** (0.033)	0.071*** (0.025)	0.015 (0.023)	-0.017 (0.024)	-0.035 (0.023)	-0.049 (0.022)	-0.044* (0.024)
Latvia	-0.135 (0.103)	-0.069 (0.049)	-0.069* (0.040)	-0.001 (0.040)	-0.013 (0.035)	-0.036 (0.033)	-0.061* (0.032)	-0.125*** (0.035)	-0.149*** (0.044)
Lithuania	0.065 (0.114)	-0.016 (0.041)	-0.020 (0.036)	0.025 (0.038)	-0.035 (0.038)	-0.042 (0.036)	-0.058 (0.039)	-0.054 (0.043)	-0.054 (0.049)
Netherlands	1.482*** (0.169)	0.613*** (0.050)	0.402*** (0.028)	0.285*** (0.022)	0.235*** (0.019)	0.221*** (0.017)	0.216*** (0.018)	0.197*** (0.020)	0.220*** (0.023)
Norway	0.580*** (0.163)	0.192*** (0.032)	0.124*** (0.021)	0.100*** (0.018)	0.101*** (0.016)	0.096*** (0.016)	0.080*** (0.016)	0.051*** (0.015)	0.036* (0.018)
Poland	0.019 (0.074)	0.017 (0.028)	0.005 (0.022)	-0.023 (0.021)	-0.033 (0.020)	-0.027 (0.020)	-0.038* (0.021)	-0.076** (0.024)	-0.106*** (0.029)
Portugal	0.202*** (0.067)	0.075*** (0.028)	0.071*** (0.026)	0.064*** (0.025)	0.042 (0.026)	0.002 (0.028)	-0.029 (0.030)	-0.027 (0.032)	-0.035 (0.036)
Romania	0.033 (0.078)	-0.002 (0.096)	0.038 (0.030)	0.023 (0.019)	0.005 (0.019)	-0.014 (0.022)	-0.037 (0.019)	-0.043* (0.021)	-0.068** (0.031)
Serbia	-0.126 (0.093)	-0.329*** (0.108)	-0.346*** (0.080)	-0.198*** (0.043)	-0.181*** (0.034)	-0.167*** (0.031)	-0.147*** (0.030)	-0.103*** (0.030)	-0.087** (0.034)
Slovakia	0.128*** (0.047)	0.085*** (0.027)	0.073*** (0.019)	0.056*** (0.017)	0.040*** (0.015)	0.039*** (0.015)	0.043*** (0.016)	0.039* (0.021)	0.043* (0.024)
Slovenia	0.060 (0.135)	-0.062 (0.087)	-0.053 (0.038)	-0.030 (0.025)	-0.033 (0.021)	-0.060*** (0.018)	-0.085*** (0.018)	-0.098*** (0.020)	-0.086*** (0.022)
Spain	0.634*** (0.133)	0.378*** (0.053)	0.293*** (0.039)	0.211*** (0.026)	0.121*** (0.022)	0.089*** (0.020)	0.077*** (0.019)	0.043*** (0.017)	0.038** (0.016)
Sweden	0.280* (0.165)	0.181*** (0.055)	0.099*** (0.021)	0.077*** (0.017)	0.050*** (0.016)	0.035** (0.015)	0.018 (0.016)	0.009 (0.019)	0.004 (0.021)
UK	0.413*** (0.088)	0.431*** (0.055)	0.276*** (0.034)	0.186*** (0.026)	0.159*** (0.024)	0.145*** (0.025)	0.094*** (0.024)	0.109*** (0.027)	0.182*** (0.043)
					Unexplained				
Austria	0.056 (0.295)	0.157 (0.123)	0.331*** (0.062)	0.279*** (0.046)	0.251*** (0.041)	0.284*** (0.041)	0.237*** (0.040)	0.230*** (0.041)	0.189*** (0.038)
Belgium	-0.057 (0.129)	0.245*** (0.054)	0.277*** (0.038)	0.246*** (0.033)	0.213*** (0.030)	0.184*** (0.029)	0.188*** (0.030)	0.228*** (0.033)	0.221*** (0.041)
Bulgaria	-0.121 (0.127)	0.045 (0.062)	0.022 (0.030)	0.065** (0.032)	0.100*** (0.033)	0.168*** (0.033)	0.223*** (0.036)	0.320*** (0.043)	0.391*** (0.066)
Croatia	0.096 (0.112)	0.123*** (0.047)	0.186*** (0.033)	0.195*** (0.030)	0.251*** (0.031)	0.267*** (0.033)	0.243*** (0.035)	0.160*** (0.036)	0.137*** (0.043)
Czechia	0.057 (0.113)	0.271*** (0.041)	0.293*** (0.031)	0.276*** (0.026)	0.260*** (0.024)	0.250*** (0.024)	0.259*** (0.023)	0.260*** (0.024)	0.386*** (0.044)
Denmark	-1.357** (0.642)	0.046 (0.050)	0.068*** (0.026)	0.117*** (0.021)	0.154*** (0.020)	0.190*** (0.019)	0.248*** (0.021)	0.299*** (0.024)	0.351*** (0.036)
Estonia	-0.184 (0.175)	-0.010 (0.073)	0.211*** (0.055)	0.227*** (0.052)	0.255*** (0.051)	0.313*** (0.054)	0.313*** (0.060)	0.396*** (0.074)	0.464*** (0.116)
Finland	-0.442** (0.176)	-0.055 (0.081)	0.071* (0.037)	0.129*** (0.023)	0.164*** (0.020)	0.194*** (0.019)	0.238*** (0.018)	0.254*** (0.020)	0.264*** (0.025)
France	0.059 (0.225)	0.259*** (0.064)	0.224*** (0.038)	0.152*** (0.027)	0.183*** (0.026)	0.202*** (0.026)	0.225*** (0.027)	0.218*** (0.028)	0.280*** (0.040)
Germany	-0.367** (0.166)	0.476*** (0.068)	0.452*** (0.040)	0.416*** (0.030)	0.406*** (0.026)	0.349*** (0.024)	0.288*** (0.023)	0.255*** (0.023)	0.224*** (0.027)
Greece	0.583*** (0.081)	0.373*** (0.050)	0.358*** (0.040)	0.252*** (0.033)	0.139*** (0.024)	0.151*** (0.023)	0.182*** (0.023)	0.170*** (0.025)	0.261*** (0.042)
Hungary	0.831*** (0.160)	-0.007 (0.090)	0.104** (0.044)	0.071** (0.029)	0.163*** (0.028)	0.183*** (0.032)	0.196*** (0.034)	0.157*** (0.033)	0.176*** (0.040)
Latvia	0.058 (0.125)	0.113* (0.058)	0.131*** (0.045)	0.111** (0.044)	0.164*** (0.042)	0.178*** (0.040)	0.160*** (0.042)	0.235*** (0.048)	0.336*** (0.065)
Lithuania	0.011 (0.154)	0.058 (0.050)	0.143*** (0.046)	0.086* (0.050)	0.163*** (0.051)	0.159*** (0.051)	0.157*** (0.056)	0.207*** (0.063)	0.204** (0.080)
Netherlands	-0.562*** (0.218)	0.300*** (0.067)	0.406*** (0.040)	0.429*** (0.030)	0.425*** (0.025)	0.413*** (0.023)	0.383*** (0.024)	0.374*** (0.026)	0.335*** (0.028)
Norway	0.039 (0.221)	0.318*** (0.044)	0.254*** (0.029)	0.233*** (0.023)	0.195*** (0.019)	0.206*** (0.019)	0.259*** (0.019)	0.352*** (0.020)	0.405*** (0.028)
Poland	0.093 (0.102)	0.038 (0.036)	0.124*** (0.029)	0.161*** (0.028)	0.187*** (0.027)	0.151*** (0.028)	0.179*** (0.029)	0.225*** (0.035)	0.232*** (0.046)
Portugal	0.086 (0.089)	0.093*** (0.033)	0.154*** (0.030)	0.238*** (0.029)	0.326*** (0.031)	0.419*** (0.034)	0.388*** (0.041)	0.278*** (0.043)	0.360*** (0.054)
Romania	0.496*** (0.105)	-0.041 (0.076)	0.020 (0.032)	0.141*** (0.024)	0.078*** (0.024)	0.187*** (0.028)	0.195*** (0.031)	0.129*** (0.033)	0.125** (0.053)
Serbia	0.081 (0.133)	0.035 (0.161)	-0.049 (0.072)	0.142*** (0.043)	0.146*** (0.039)	0.221*** (0.038)	0.195*** (0.043)	0.179*** (0.048)	0.329*** (0.053)
Slovakia	0.293** (0.136)	0.166*** (0.039)	0.185*** (0.027)	0.181*** (0.024)	0.184*** (0.023)	0.150*** (0.023)	0.148*** (0.024)	0.221*** (0.030)	0.282*** (0.036)
Slovenia	0.489*** (0.172)	0.024 (0.114)	-0.012 (0.044)	0.050* (0.029)	0.091*** (0.025)	0.108*** (0.025)	0.073*** (0.026)	0.089*** (0.027)	0.168*** (0.034)
Spain	0.029 (0.183)	0.157** (0.077)	0.178*** (0.052)	0.208*** (0.036)	0.251*** (0.031)	0.215*** (0.030)	0.189*** (0.028)	0.178*** (0.027)	0.167*** (0.029)
Sweden	-0.040 (0.218)	0.093 (0.073)	0.111*** (0.028)	0.118*** (0.021)	0.145*** (0.019)	0.171*** (0.019)	0.195*** (0.021)	0.213*** (0.025)	0.266*** (0.032)
UK	-0.109 (0.140)	-0.005 (0.079)	0.163*** (0.049)	0.243*** (0.038)	0.261*** (0.035)	0.288*** (0.036)	0.330*** (0.036)	0.294*** (0.040)	0.362*** (0.057)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.15: Private transfers and capital income gap decomposition for the age group <25

Country	Quantile:								
	10th	20th	30th	40th	50th	60th	70th	80th	90th
	Explained								
Austria	0.562 (0.475)	0.369 (0.254)	0.234 (0.251)	0.167 (0.239)	0.060 (0.260)	0.193 (0.276)	0.152 (0.321)	0.158 (0.290)	0.254 (0.241)
Belgium	-0.503* (0.263)	0.182 (0.376)	0.132 (0.375)	-0.134 (0.436)	-0.290 (0.521)	-0.603 (0.695)	-1.219* (0.737)	-0.956* (0.542)	-0.554 (0.470)
Bulgaria	-0.222 (0.537)	-0.340 (0.851)	-0.185 (0.477)	-0.280 (0.318)	-0.483 (0.322)	-0.499 (0.315)	-0.195 (0.377)	0.430 (0.488)	0.358 (0.682)
Croatia	-0.401 (0.254)	-0.615 (0.391)	-0.765 (0.484)	-0.828 (0.724)	-0.493 (0.695)	0.049 (0.567)	-0.142 (0.502)	-0.535 (0.470)	-0.680 (0.510)
Czechia	0.040 (0.175)	0.104 (0.225)	-0.096 (0.262)	-0.217 (0.267)	-0.250 (0.316)	-0.124 (0.369)	-0.678 (0.462)	-0.308 (0.403)	-0.668* (0.386)
Denmark	-0.507** (0.249)	-1.063*** (0.327)	-1.234** (0.530)	-1.691 (0.892)	-1.005* (0.581)	-0.478 (0.499)	0.254 (0.462)	0.729 (0.503)	0.675* (0.385)
Estonia	3.589 (3.193)	3.225 (2.077)	0.280 (2.654)	0.139 (1.777)	0.298 (1.297)	-0.431 (1.118)	-0.618 (1.005)	-0.983 (0.855)	0.222 (0.691)
Finland	-0.065 (0.113)	-0.220 (0.243)	-0.303 (0.276)	-0.107 (0.221)	0.039 (0.184)	0.089 (0.162)	0.023 (0.149)	0.241* (0.142)	0.264 (0.170)
France	-0.655** (0.261)	-0.639** (0.284)	-0.941*** (0.307)	-0.260 (0.268)	-0.148 (0.192)	-0.230 (0.170)	-0.141 (0.168)	-0.090 (0.178)	-0.267 (0.182)
Germany	0.057 (0.171)	-0.105 (0.163)	-0.099 (0.116)	-0.149 (0.117)	-0.193 (0.125)	-0.367** (0.186)	-0.693*** (0.257)	-0.524** (0.216)	-0.446** (0.203)
Greece	-0.510 (0.861)	-0.162 (0.229)	-0.122 (0.190)	-0.119 (0.176)	-0.036 (0.171)	0.028 (0.145)	0.083 (0.098)	0.080 (0.087)	0.103 (0.070)
Hungary	0.154 (0.160)	0.246 (0.175)	-0.103 (0.180)	-0.329* (0.183)	-0.234 (0.218)	-0.446 (0.276)	-0.577 (0.436)	-0.420 (0.434)	0.129 (0.315)
Latvia	-0.163 (0.553)	-0.729 (0.737)	-1.600* (0.889)	-0.964 (1.929)	-0.777 (1.161)	-0.954 (0.990)	-1.039 (0.863)	-0.010 (0.728)	-0.051 (0.574)
Lithuania	-0.237 (1.024)	-0.079 (1.009)	0.769 (2.192)	0.769 (2.192)	-2.237 (3.456)	-0.599 (3.100)	0.140 (2.200)	-0.133 (1.936)	-0.277 (1.150)
Netherlands	-0.481 (1.230)	-0.497 (0.552)	-0.526** (0.263)	-0.664*** (0.222)	-0.484** (0.200)	-0.407 (0.213)	-0.427* (0.223)	-0.057 (0.198)	-0.255 (0.179)
Norway	-0.003 (0.138)	-0.118 (0.208)	0.032 (0.183)	0.158 (0.156)	0.232* (0.128)	0.164 (0.117)	0.242** (0.113)	0.219* (0.129)	0.131 (0.210)
Poland	-0.310 (0.449)	-0.220 (0.435)	-0.468 (0.364)	-0.497* (0.290)	-0.478* (0.279)	-0.672** (0.261)	-0.713** (0.292)	-1.115** (0.435)	-0.988 (0.772)
Portugal	0.828 (1.262)	0.269 (0.248)	0.133 (0.218)	0.108 (0.218)	0.270 (0.246)	0.161 (0.225)	0.214 (0.194)	0.192 (0.199)	0.229 (0.300)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	0.000 (0.000)	0.173 (0.390)	0.407 (0.417)	0.862* (0.478)	1.069* (0.609)	0.988 (0.658)	0.128 (0.689)	-0.861 (0.645)	-0.918* (0.535)
Slovakia	-0.053 (0.070)	-0.219 (0.197)	0.163 (0.266)	0.163 (0.266)	-0.190 (0.359)	-0.427 (0.592)	0.049 (0.912)	0.009 (0.592)	0.446 (0.502)
Slovenia	-0.064 (0.300)	0.178 (0.364)	-0.348 (0.399)	-0.476 (0.439)	-0.494 (0.482)	-0.452 (0.526)	-0.345 (0.436)	-0.144 (0.375)	-0.266 (0.292)
Spain	-0.011 (0.314)	-0.145 (0.350)	-0.001 (0.343)	-0.301 (0.332)	-0.521 (0.324)	-0.447 (0.337)	-0.445 (0.339)	-0.295 (0.307)	-0.334 (0.269)
Sweden	-0.113 (0.173)	-0.142 (0.182)	-0.113 (0.201)	-0.027 (0.217)	-0.173 (0.219)	-0.230 (0.241)	-0.107 (0.220)	0.101 (0.200)	0.362* (0.212)
UK	-0.335** (0.132)	-0.530*** (0.184)	-0.545** (0.238)	-0.489** (0.235)	-0.588** (0.234)	-0.656*** (0.242)	-0.688*** (0.260)	-0.497** (0.206)	-0.296 (0.187)
	Unexplained								
Austria	0.150 (0.660)	-0.252 (0.320)	-0.280 (0.314)	-0.055 (0.306)	0.201 (0.333)	0.201 (0.356)	0.071 (0.486)	-0.030 (0.426)	0.131 (0.320)
Belgium	0.308 (0.273)	-0.355 (0.482)	-0.133 (0.500)	0.009 (0.563)	0.080 (0.677)	0.808 (0.821)	1.442 (1.102)	1.380* (0.799)	1.155 (0.717)
Bulgaria	0.629 (0.597)	0.958 (0.979)	0.778 (0.569)	0.860** (0.416)	0.994** (0.399)	0.924** (0.372)	0.461 (0.438)	0.043 (0.510)	0.565 (0.894)
Croatia	-0.095 (0.478)	-0.061 (0.603)	-0.293 (0.688)	0.606 (0.917)	0.581 (0.907)	-0.127 (0.824)	-0.345 (0.663)	0.047 (0.481)	0.309 (0.745)
Czechia	-0.091 (0.241)	-0.086 (0.302)	-0.102 (0.324)	-0.006 (0.386)	0.055 (0.386)	-0.151 (0.454)	0.596 (0.551)	0.053 (0.478)	0.052 (0.477)
Denmark	-0.007 (0.407)	0.233 (0.492)	0.109 (0.808)	1.187 (1.154)	1.907** (0.857)	1.763** (0.807)	0.455 (0.747)	0.581 (0.702)	1.141** (0.529)
Estonia	-6.194* (3.179)	-4.516** (2.085)	-1.522 (2.552)	-0.043 (1.814)	-0.099 (1.405)	0.419 (1.292)	0.292 (1.193)	0.636 (0.963)	-0.816 (0.785)
Finland	0.519** (0.246)	0.576 (0.405)	0.404 (0.552)	-0.203 (0.372)	-0.042 (0.319)	-0.100 (0.290)	0.271 (0.272)	0.029 (0.265)	0.154 (0.306)
France	0.953*** (0.340)	1.345*** (0.393)	1.596*** (0.438)	1.263*** (0.422)	0.986*** (0.352)	0.988*** (0.323)	0.574* (0.304)	0.407 (0.289)	0.307 (0.311)
Germany	-0.110 (0.295)	-0.161 (0.253)	0.005 (0.192)	0.121 (0.198)	0.051 (0.211)	0.215 (0.308)	0.334 (0.414)	0.404 (0.327)	0.004 (0.292)
Greece	-0.837 (0.976)	-0.125 (0.294)	-0.034 (0.239)	-0.053 (0.223)	-0.169 (0.199)	-0.099 (0.177)	-0.067 (0.148)	-0.030 (0.149)	-0.059 (0.133)
Hungary	-0.267 (0.185)	-0.324 (0.223)	-0.044 (0.214)	0.058 (0.278)	-0.882*** (0.276)	-0.557** (0.271)	0.028 (0.467)	0.419 (0.488)	0.472 (0.407)
Latvia	0.178 (0.714)	0.814 (0.911)	1.160 (1.009)	0.390 (2.293)	0.310 (1.368)	0.294 (1.192)	0.219 (1.051)	-0.582 (0.834)	-0.436 (0.649)
Lithuania	-0.847 (0.988)	0.235 (1.225)	-0.443 (2.476)	-3.626 (2.729)	-1.221 (3.489)	-2.871 (3.197)	-3.326 (2.144)	-1.704 (1.955)	-2.014 (1.353)
Netherlands	0.653 (1.824)	0.543 (0.784)	0.751** (0.375)	0.872** (0.339)	0.655** (0.317)	0.513 (0.356)	0.282 (0.371)	0.073 (0.347)	0.356 (0.344)
Norway	-0.153 (0.228)	0.215 (0.373)	-0.151 (0.301)	-0.146 (0.250)	-0.099 (0.213)	-0.010 (0.199)	-0.204 (0.191)	-0.203 (0.205)	-0.009 (0.333)
Poland	0.240 (0.516)	0.355 (0.535)	0.409 (0.452)	0.345 (0.408)	0.054 (0.339)	-0.001 (0.332)	-0.108 (0.360)	0.164 (0.487)	0.051 (0.940)
Portugal	-0.778 (1.537)	-0.249 (0.408)	-0.329 (0.320)	0.056 (0.334)	-0.518 (0.356)	-0.434 (0.371)	-0.557 (0.349)	-0.655* (0.362)	-0.378 (0.431)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	0.151 (0.208)	-0.439 (0.469)	-0.500 (0.419)	-0.827 (0.544)	-1.264** (0.614)	-0.917 (0.570)	-0.118 (0.639)	0.736 (0.584)	0.894 (0.671)
Slovakia	-0.054 (0.084)	-0.034 (0.290)	-0.185 (0.380)	-0.212 (0.380)	-0.209 (0.542)	-1.291* (0.751)	-0.608 (0.963)	0.106 (0.640)	-0.053 (0.523)
Slovenia	-0.129 (0.327)	-0.041 (0.677)	0.148 (0.726)	-0.587 (0.683)	-0.425 (0.680)	-0.238 (0.643)	0.368 (0.567)	-0.118 (0.439)	0.073 (0.486)
Spain	-0.350 (0.441)	0.092 (0.481)	-0.048 (0.479)	0.221 (0.485)	0.440 (0.504)	0.013 (0.528)	-0.458 (0.471)	-0.120 (0.439)	0.197 (0.386)
Sweden	0.190 (0.227)	0.534** (0.254)	0.425 (0.289)	0.583* (0.323)	0.805** (0.333)	0.989*** (0.378)	0.805** (0.368)	0.257 (0.334)	-0.247 (0.327)
UK	0.053 (0.172)	-0.133 (0.284)	-0.152 (0.419)	-0.289 (0.410)	-0.347 (0.374)	-0.641* (0.335)	0.057 (0.305)	-0.043 (0.312)	0.031 (0.312)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Note: Romania is excluded due to data limitations.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.16: Private transfers and capital income gap decomposition for
the age group 25-44

Country	10th	20th	30th	40th	Quantile: 50th	60th	70th	80th	90th
					Explained				
Austria	0.030 (0.236)	0.101 (0.148)	0.040 (0.112)	-0.074 (0.110)	-0.180 (0.123)	-0.180 (0.169)	-0.375* (0.224)	-0.779*** (0.273)	-0.926*** (0.273)
Belgium	-0.411** (0.170)	-0.250*** (0.096)	-0.250*** (0.096)	-0.176 (0.118)	-0.286* (0.162)	-0.271 (0.171)	-0.286 (0.243)	-0.123 (0.227)	0.033 (0.171)
Bulgaria	-0.163 (0.138)	-0.028 (0.132)	-0.086 (0.115)	-0.038 (0.115)	-0.010 (0.120)	0.136 (0.126)	0.158 (0.132)	0.230 (0.149)	0.286* (0.149)
Croatia	0.063 (0.115)	0.023 (0.101)	-0.087 (0.095)	-0.117 (0.095)	-0.109 (0.110)	-0.238* (0.136)	-0.331** (0.164)	-0.216 (0.156)	-0.215 (0.176)
Czechia	-0.175** (0.081)	-0.187** (0.080)	-0.221*** (0.077)	-0.232*** (0.068)	-0.209*** (0.071)	-0.282*** (0.089)	-0.374*** (0.101)	-0.358*** (0.116)	-0.417*** (0.152)
Denmark	-0.180*** (0.066)	-0.153** (0.077)	-0.151* (0.091)	-0.306*** (0.111)	-0.247 (0.165)	-0.572* (0.337)	-0.291 (0.349)	-0.267 (0.329)	0.051 (0.224)
Estonia	-0.428 (0.304)	-0.432 (0.589)	-0.478 (0.403)	-0.272 (0.348)	-0.059 (0.327)	-0.186 (0.299)	0.002 (0.289)	0.099 (0.287)	0.212 (0.264)
Finland	0.074 (0.069)	0.048 (0.078)	0.085 (0.101)	-0.216 (0.166)	-0.295* (0.163)	-0.372*** (0.128)	-0.260** (0.122)	-0.180 (0.110)	-0.138 (0.084)
France	0.057 (0.147)	0.079 (0.140)	-0.031 (0.132)	-0.009 (0.110)	0.019 (0.101)	-0.066 (0.107)	-0.067 (0.106)	-0.111 (0.104)	0.025 (0.117)
Germany	0.020 (0.133)	0.177* (0.102)	0.077 (0.072)	0.056 (0.061)	0.023 (0.062)	0.055 (0.081)	-0.037 (0.100)	-0.227* (0.131)	-0.301* (0.160)
Greece	-0.113* (0.060)	-0.454** (0.181)	-0.189** (0.079)	-0.163*** (0.057)	-0.199*** (0.050)	-0.185*** (0.047)	-0.160*** (0.049)	-0.192*** (0.054)	-0.169** (0.066)
Hungary	0.004 (0.047)	0.001 (0.057)	0.008 (0.053)	-0.000 (0.063)	-0.036 (0.076)	-0.125 (0.117)	-0.228 (0.177)	-0.115 (0.130)	-0.256* (0.155)
Latvia	-0.059 (0.096)	-0.114 (0.120)	-0.190 (0.128)	-0.222* (0.134)	-0.204 (0.219)	-0.054 (0.756)	-0.332 (0.581)	-0.251 (0.354)	-0.592* (0.326)
Lithuania	-0.033 (0.201)	-0.088 (0.265)	-0.026 (0.351)	-0.203 (0.496)	-0.174 (0.692)	-0.543 (0.579)	-0.428 (0.544)	-0.784* (0.475)	-1.184** (0.590)
Netherlands	-0.801*** (0.272)	-0.827 (0.997)	-0.302 (0.226)	-0.171 (0.137)	-0.235** (0.114)	-0.234** (0.106)	-0.290*** (0.111)	-0.292** (0.129)	-0.185* (0.110)
Norway	-0.128 (0.098)	-0.401** (0.159)	-0.267** (0.117)	-0.146 (0.090)	-0.152** (0.069)	-0.138** (0.059)	-0.088 (0.056)	-0.024 (0.058)	0.037 (0.079)
Poland	-0.304 (0.278)	-0.143 (0.231)	-0.162 (0.180)	-0.241 (0.152)	-0.199 (0.138)	-0.114 (0.148)	-0.018 (0.149)	-0.335*** (0.129)	-0.340** (0.168)
Portugal	-0.134 (0.157)	-0.197 (0.187)	-0.105 (0.071)	-0.126** (0.056)	-0.110* (0.057)	-0.164** (0.060)	-0.197** (0.098)	-0.198** (0.089)	-0.224** (0.088)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	0.129 (0.118)	0.170 (0.116)	0.151 (0.124)	0.060 (0.121)	0.064 (0.132)	-0.028 (0.121)	-0.006 (0.124)	-0.099 (0.130)	-0.352 (0.259)
Slovakia	0.044 (0.061)	-0.020 (0.064)	-0.131* (0.067)	-0.131* (0.067)	-0.110 (0.088)	-0.103 (0.123)	-0.319* (0.193)	-0.743** (0.312)	-0.171 (0.201)
Slovenia	-0.068 (0.047)	-0.038 (0.062)	-0.096 (0.088)	-0.178** (0.087)	-0.171* (0.095)	-0.207** (0.096)	-0.144 (0.092)	-0.213** (0.101)	-0.170* (0.103)
Spain	-0.178** (0.078)	-0.116 (0.091)	-0.113 (0.086)	-0.142* (0.086)	-0.319*** (0.093)	-0.312*** (0.094)	-0.247*** (0.089)	-0.183** (0.074)	-0.109 (0.075)
Sweden	0.002 (0.079)	-0.149* (0.089)	-0.265** (0.123)	-0.268** (0.126)	-0.173 (0.131)	-0.231 (0.147)	-0.295** (0.139)	-0.276** (0.128)	-0.241** (0.123)
UK	0.005 (0.064)	0.005 (0.064)	-0.133 (0.098)	-0.059 (0.128)	-0.132 (0.142)	-0.134 (0.162)	-0.213 (0.183)	-0.299 (0.183)	-0.402* (0.217)
					Unexplained				
Austria	-0.267 (0.278)	-0.166 (0.179)	-0.033 (0.138)	0.018 (0.137)	0.029 (0.154)	0.054 (0.209)	0.005 (0.281)	0.423 (0.336)	0.584* (0.332)
Belgium	0.035 (0.188)	0.090 (0.114)	0.494*** (0.119)	-0.115 (0.159)	-0.028 (0.225)	0.054 (0.238)	-0.595 (0.406)	-0.030 (0.305)	-0.215 (0.234)
Bulgaria	0.069 (0.230)	-0.243 (0.197)	-0.147 (0.174)	-0.335* (0.174)	-0.142 (0.183)	-0.392** (0.188)	-0.180 (0.195)	-0.311 (0.217)	-0.355 (0.223)
Croatia	-0.029 (0.200)	0.003 (0.165)	0.208 (0.156)	0.136 (0.155)	0.110 (0.176)	0.239 (0.219)	0.291 (0.268)	0.030 (0.251)	0.042 (0.281)
Czechia	-0.156* (0.094)	-0.246** (0.096)	-0.191** (0.092)	0.116 (0.085)	-0.282*** (0.095)	0.132 (0.116)	-0.093 (0.136)	-0.250 (0.155)	-0.000 (0.193)
Denmark	0.247** (0.110)	0.282** (0.137)	0.275* (0.156)	0.557*** (0.193)	0.340 (0.287)	0.942 (0.582)	0.095 (0.733)	-0.889 (0.611)	-0.813** (0.362)
Estonia	-1.403*** (0.525)	-0.782 (0.732)	-0.511 (0.497)	-0.634 (0.439)	-0.626 (0.405)	-0.438 (0.369)	-0.381 (0.357)	-0.646* (0.354)	-0.458 (0.305)
Finland	-0.325*** (0.102)	-0.105 (0.118)	-0.221 (0.158)	-0.037 (0.262)	0.141 (0.254)	0.018 (0.208)	-0.202 (0.198)	-0.239 (0.179)	-0.110 (0.143)
France	0.037 (0.183)	0.027 (0.180)	0.159 (0.171)	0.115 (0.147)	0.061 (0.138)	0.035 (0.147)	-0.055 (0.146)	-0.020 (0.137)	-0.001 (0.142)
Germany	0.045 (0.177)	-0.176 (0.144)	-0.128 (0.101)	-0.124 (0.084)	-0.109 (0.086)	-0.107 (0.113)	-0.036 (0.141)	0.065 (0.185)	0.163 (0.213)
Greece	0.197 (0.180)	-0.029 (0.273)	-0.013 (0.138)	-0.023 (0.103)	0.137 (0.088)	0.106 (0.085)	0.081 (0.089)	0.051 (0.093)	0.116 (0.106)
Hungary	-0.015 (0.057)	-0.051 (0.070)	-0.087 (0.071)	-0.053 (0.085)	-0.109 (0.104)	-0.043 (0.154)	0.087 (0.232)	0.083 (0.173)	0.270 (0.203)
Latvia	0.047 (0.136)	0.064 (0.174)	0.086 (0.192)	-0.595** (0.238)	-2.603*** (0.816)	-3.426*** (0.906)	-1.201* (0.676)	-0.468 (0.431)	0.009 (0.412)
Lithuania	0.044 (0.324)	0.159 (0.380)	0.219 (0.454)	0.196 (0.688)	0.410 (0.988)	0.669 (0.811)	0.403 (0.744)	0.079 (0.724)	0.759 (0.847)
Netherlands	0.401 (0.334)	-1.527 (1.254)	-0.026 (0.292)	-0.011 (0.186)	0.034 (0.155)	0.053 (0.147)	0.065 (0.156)	0.112 (0.182)	-0.028 (0.159)
Norway	-0.474*** (0.162)	-0.262 (0.198)	-0.178 (0.153)	-0.113 (0.122)	-0.008 (0.103)	-0.084 (0.095)	-0.201** (0.094)	-0.268*** (0.103)	-0.347** (0.140)
Poland	0.026 (0.341)	-0.280 (0.301)	-0.167 (0.227)	0.060 (0.197)	0.058 (0.177)	0.054 (0.192)	-0.038 (0.188)	0.288 (0.188)	0.543** (0.261)
Portugal	-0.200 (0.261)	-0.136 (0.266)	-0.035 (0.116)	-0.028 (0.094)	-0.037 (0.096)	-0.281** (0.126)	-0.020 (0.177)	0.044 (0.167)	-0.123 (0.184)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	-0.192 (0.169)	-0.216 (0.180)	-0.185 (0.194)	-0.040 (0.194)	-0.188 (0.221)	-0.088 (0.196)	-0.101 (0.190)	0.067 (0.202)	0.293 (0.358)
Slovakia	-0.180** (0.082)	-0.122 (0.087)	-0.113 (0.090)	-0.152* (0.090)	-0.305* (0.158)	-0.360 (0.251)	-1.262*** (0.320)	-0.354 (0.423)	-0.424 (0.282)
Slovenia	-0.085 (0.071)	-0.146 (0.122)	-0.107 (0.165)	-0.162 (0.170)	-0.332* (0.188)	-0.294 (0.181)	-0.513*** (0.172)	-0.314* (0.179)	-0.338* (0.178)
Spain	0.174 (0.125)	0.110 (0.144)	0.071 (0.145)	-0.014 (0.143)	0.186 (0.156)	0.197 (0.163)	0.122 (0.155)	0.050 (0.129)	-0.071 (0.129)
Sweden	-0.025 (0.114)	-0.021 (0.131)	-0.007 (0.182)	-0.032 (0.186)	-0.233 (0.193)	-0.201 (0.212)	-0.054 (0.206)	-0.076 (0.193)	-0.088 (0.190)
UK	-0.113 (0.083)	0.015 (0.101)	-0.049 (0.132)	-0.250 (0.175)	-0.119 (0.197)	-0.249 (0.228)	-0.384 (0.251)	-0.159 (0.242)	0.140 (0.281)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Note: Romania is excluded due to data limitations.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.17: Private transfers and capital income gap decomposition for
the age group 45-65

Country	Quantile:								
	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained					
Austria	0.234 (0.183)	0.181 (0.116)	0.168 (0.103)	0.164 (0.108)	0.122 (0.124)	0.017 (0.154)	-0.264 (0.191)	-0.171 (0.169)	-0.188 (0.201)
Belgium	-0.045 (0.066)	0.074 (0.081)	0.017 (0.093)	0.065 (0.125)	0.204 (0.136)	0.276 (0.174)	0.300 (0.206)	0.128 (0.136)	0.072 (0.120)
Bulgaria	-0.025 (0.096)	-0.145* (0.081)	-0.144* (0.081)	-0.133 (0.089)	-0.094 (0.090)	-0.054 (0.092)	-0.029 (0.093)	0.048 (0.093)	0.150 (0.116)
Croatia	0.018 (0.136)	-0.192 (0.124)	-0.203* (0.122)	-0.234 (0.146)	-0.219 (0.177)	-0.206 (0.162)	-0.096 (0.139)	-0.091 (0.137)	0.042 (0.144)
Czechia	0.026 (0.043)	-0.026 (0.047)	-0.043 (0.045)	-0.066 (0.054)	-0.067 (0.055)	-0.073 (0.061)	-0.129 (0.085)	-0.195* (0.110)	-0.069 (0.132)
Denmark	-0.012 (0.066)	-0.070 (0.077)	-0.217** (0.094)	-0.232 (0.142)	-0.459 (0.401)	-0.169 (0.433)	-0.086 (0.219)	-0.071 (0.145)	-0.180 (0.127)
Estonia	0.669 (1.259)	-0.504* (0.294)	-0.306 (0.237)	-0.048 (0.255)	-0.119 (0.206)	-0.102 (0.203)	-0.274 (0.214)	-0.343 (0.271)	-0.277 (0.279)
Finland	-0.031 (0.044)	0.070 (0.078)	-0.012 (0.122)	-0.146 (0.135)	-0.175 (0.126)	-0.210 (0.138)	-0.105 (0.130)	-0.104 (0.117)	-0.087 (0.102)
France	0.380** (0.153)	0.422*** (0.122)	0.276*** (0.097)	0.113 (0.081)	0.121 (0.078)	0.169** (0.074)	0.152** (0.063)	0.204*** (0.057)	0.169*** (0.064)
Germany	0.091 (0.087)	-0.043 (0.063)	-0.055 (0.048)	-0.019 (0.045)	-0.054 (0.048)	-0.066 (0.071)	-0.198** (0.101)	-0.131 (0.112)	-0.199* (0.120)
Greece	-0.214** (0.101)	-0.310** (0.140)	-0.195* (0.109)	-0.148** (0.072)	-0.105 (0.067)	-0.165*** (0.060)	-0.161** (0.078)	-0.261*** (0.093)	-0.323 (0.198)
Hungary	0.004 (0.019)	-0.038 (0.026)	-0.046 (0.028)	-0.050 (0.032)	-0.071* (0.041)	-0.096 (0.061)	-0.125 (0.088)	-0.071 (0.126)	-0.043 (0.189)
Latvia	0.043 (0.106)	-0.081 (0.129)	-0.178 (0.135)	-0.416** (0.202)	-0.651 (0.411)	-0.236 (0.416)	-0.133 (0.248)	-0.213 (0.207)	-0.184 (0.245)
Lithuania	-0.301* (0.165)	-0.648*** (0.209)	-1.076*** (0.281)	-0.569* (0.344)	-0.434 (0.343)	-0.304 (0.321)	-0.322 (0.287)	-0.377 (0.282)	-0.453 (0.323)
Netherlands	-0.322 (0.253)	-0.086 (1.058)	0.198 (0.176)	0.134 (0.099)	0.051 (0.081)	0.035 (0.077)	-0.002 (0.080)	0.008 (0.082)	0.040 (0.086)
Norway	0.263 (0.192)	0.225* (0.129)	0.118 (0.090)	0.159** (0.076)	0.114 (0.075)	0.105 (0.080)	0.057 (0.082)	0.035 (0.091)	0.162 (0.102)
Poland	-0.104 (0.193)	-0.143 (0.149)	-0.133 (0.136)	-0.133 (0.126)	-0.090 (0.126)	-0.097 (0.131)	-0.102 (0.149)	0.035 (0.167)	-0.053 (0.161)
Portugal	0.334 (0.223)	0.138 (0.092)	0.152*** (0.058)	0.155** (0.061)	0.155** (0.061)	0.280*** (0.084)	0.252*** (0.083)	0.157** (0.079)	0.129* (0.066)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	-0.055 (0.073)	-0.050 (0.086)	-0.136 (0.101)	0.055 (0.126)	0.116 (0.133)	0.051 (0.130)	0.035 (0.120)	0.003 (0.124)	0.000 (0.176)
Slovakia	0.009 (0.036)	0.003 (0.054)	-0.026 (0.059)	-0.026 (0.059)	-0.048 (0.070)	-0.103 (0.100)	-0.023 (0.127)	0.131 (0.237)	0.118 (0.115)
Slovenia	-0.012 (0.036)	-0.079 (0.063)	-0.073 (0.069)	-0.097 (0.071)	-0.131* (0.077)	-0.070 (0.073)	-0.037 (0.069)	-0.034 (0.074)	-0.020 (0.094)
Spain	-0.012 (0.094)	-0.163* (0.084)	-0.188** (0.081)	-0.220*** (0.080)	-0.209*** (0.075)	-0.120* (0.072)	-0.053 (0.061)	-0.089 (0.059)	-0.075 (0.058)
Sweden	-0.044 (0.088)	-0.082 (0.137)	-0.128 (0.142)	-0.251** (0.127)	-0.263** (0.117)	-0.238** (0.107)	-0.155 (0.095)	-0.175* (0.096)	-0.185 (0.127)
UK	0.058 (0.057)	-0.143* (0.075)	-0.190* (0.104)	-0.098 (0.105)	-0.119 (0.105)	-0.219** (0.111)	-0.271** (0.123)	-0.268** (0.114)	-0.198* (0.119)
					Unexplained					
Austria	-0.230 (0.228)	-0.248* (0.144)	-0.209 (0.129)	-0.235* (0.135)	-0.229 (0.156)	-0.056 (0.195)	0.077 (0.247)	-0.050 (0.215)	-0.077 (0.242)
Belgium	-0.095 (0.104)	-0.207* (0.118)	-0.180 (0.134)	-0.497*** (0.184)	-0.469** (0.198)	-0.666** (0.298)	-0.680** (0.293)	-0.382* (0.206)	-0.223 (0.181)
Bulgaria	-0.025 (0.150)	0.110 (0.130)	0.076 (0.127)	0.138 (0.141)	0.102 (0.142)	0.054 (0.151)	0.082 (0.152)	-0.149 (0.162)	-0.141 (0.187)
Croatia	-0.203 (0.214)	-0.077 (0.181)	-0.223 (0.188)	-0.134 (0.225)	-0.449* (0.258)	-0.278 (0.223)	-0.293 (0.194)	-0.179 (0.190)	-0.251 (0.194)
Czechia	-0.054 (0.064)	-0.163** (0.068)	0.117* (0.066)	-0.034 (0.074)	0.056 (0.077)	0.083 (0.086)	0.044 (0.120)	0.020 (0.158)	-0.234 (0.194)
Denmark	-0.070 (0.130)	-0.049 (0.144)	0.127 (0.171)	0.018 (0.254)	-0.316 (0.690)	0.015 (0.698)	-0.149 (0.373)	-0.310 (0.247)	0.020 (0.215)
Estonia	0.328 (1.410)	1.404*** (0.538)	0.791** (0.389)	0.320 (0.381)	0.346 (0.305)	0.133 (0.288)	0.139 (0.303)	0.262 (0.370)	0.801* (0.422)
Finland	0.000 (0.067)	0.007 (0.114)	0.131 (0.177)	0.300 (0.214)	0.220 (0.195)	0.295 (0.207)	0.157 (0.199)	0.076 (0.168)	0.250 (0.153)
France	-0.465** (0.218)	-0.466*** (0.180)	-0.356** (0.143)	-0.170 (0.123)	-0.253** (0.124)	-0.318*** (0.115)	-0.339*** (0.103)	-0.258*** (0.090)	-0.171* (0.099)
Germany	-0.154 (0.122)	0.006 (0.087)	0.013 (0.064)	-0.027 (0.059)	-0.021 (0.064)	-0.053 (0.093)	0.131 (0.131)	-0.133 (0.155)	-0.001 (0.155)
Greece	-0.264 (0.178)	0.008 (0.222)	-0.003 (0.153)	0.065 (0.101)	0.050 (0.089)	0.066 (0.082)	0.067 (0.099)	0.096 (0.114)	0.229 (0.225)
Hungary	0.011 (0.032)	0.028 (0.040)	0.025 (0.045)	-0.040 (0.054)	-0.042 (0.072)	-0.035 (0.103)	-0.016 (0.150)	-0.085 (0.212)	-0.134 (0.298)
Latvia	-0.056 (0.150)	0.078 (0.178)	0.139 (0.189)	0.284 (0.295)	0.158 (0.661)	-0.138 (0.611)	-0.324 (0.375)	-0.303 (0.319)	-0.145 (0.360)
Lithuania	0.329 (0.222)	0.802*** (0.291)	1.126*** (0.390)	0.584 (0.474)	0.573 (0.477)	0.305 (0.456)	0.128 (0.417)	0.373 (0.402)	0.072 (0.480)
Netherlands	-0.100 (0.343)	-1.190 (1.329)	-0.493** (0.232)	-0.275** (0.133)	-0.175 (0.110)	-0.152 (0.107)	-0.188* (0.113)	-0.191 (0.117)	-0.302** (0.123)
Norway	-0.553** (0.266)	-0.407** (0.179)	-0.205 (0.126)	-0.219** (0.109)	-0.124 (0.108)	-0.030 (0.114)	0.026 (0.121)	0.078 (0.136)	-0.092 (0.162)
Poland	0.007 (0.322)	-0.008 (0.236)	-0.133 (0.194)	-0.154 (0.179)	-0.259 (0.178)	-0.130 (0.178)	-0.107 (0.200)	-0.335 (0.224)	-0.114 (0.256)
Portugal	-0.329 (0.324)	-0.183 (0.139)	-0.219** (0.092)	-0.237*** (0.088)	-0.240*** (0.088)	-0.423*** (0.136)	-0.373*** (0.132)	-0.174 (0.128)	-0.314** (0.143)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	0.102 (0.120)	0.036 (0.141)	0.013 (0.166)	-0.375** (0.191)	-0.303 (0.203)	-0.343* (0.203)	-0.267 (0.184)	-0.250 (0.198)	-0.153 (0.270)
Slovakia	-0.002 (0.061)	-0.061 (0.088)	-0.010 (0.097)	-0.049 (0.097)	-0.256** (0.122)	0.114 (0.161)	-0.384 (0.245)	-0.541 (0.359)	-0.481** (0.203)
Slovenia	-0.019 (0.068)	0.069 (0.123)	0.070 (0.136)	-0.004 (0.140)	0.061 (0.148)	0.042 (0.143)	-0.143 (0.136)	-0.054 (0.139)	-0.079 (0.176)
Spain	-0.082 (0.142)	-0.009 (0.127)	0.034 (0.126)	0.075 (0.124)	0.043 (0.120)	-0.088 (0.115)	-0.150 (0.101)	-0.123 (0.097)	-0.087 (0.095)
Sweden	-0.010 (0.135)	-0.040 (0.204)	0.039 (0.214)	0.247 (0.193)	0.224 (0.181)	0.189 (0.164)	0.154 (0.147)	0.155 (0.150)	0.233 (0.197)
UK	-0.099 (0.085)	0.066 (0.105)	0.061 (0.157)	-0.010 (0.156)	-0.048 (0.155)	0.030 (0.163)	-0.016 (0.177)	0.138 (0.166)	0.143 (0.174)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Note: Romania is excluded due to data limitations.
Source: author's calculations from EU-SILC 2016 data.

Table A.18: Private transfers and capital income gap decomposition for the age group >65

Country					Quantile:				
	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained				
Austria	-0.041 (0.168)	-0.166 (0.110)	-0.199* (0.104)	-0.142 (0.126)	-0.055 (0.148)	0.070 (0.201)	0.356 (0.251)	0.656*** (0.221)	0.154 (0.227)
Belgium	-0.003 (0.108)	-0.003 (0.108)	-0.194 (0.164)	-0.282 (0.198)	0.447 (0.317)	0.066 (0.422)	0.619* (0.367)	0.352 (0.270)	0.197 (0.151)
Bulgaria	-0.132 (0.115)	-0.214*** (0.080)	-0.138** (0.066)	-0.139* (0.078)	-0.119 (0.084)	-0.148 (0.095)	-0.154 (0.102)	-0.211* (0.121)	-0.208 (0.145)
Croatia	-0.544*** (0.177)	-0.515*** (0.178)	-0.645*** (0.179)	-0.666*** (0.183)	-0.019 (0.339)	0.064 (0.198)	-0.065 (0.205)	-0.237 (0.203)	-0.006 (0.181)
Czechia	0.005 (0.079)	0.041 (0.069)	0.006 (0.066)	0.028 (0.078)	-0.069 (0.080)	0.006 (0.085)	-0.170 (0.111)	-0.200* (0.120)	-0.237 (0.185)
Denmark	0.454** (0.179)	0.646*** (0.234)	2.085*** (0.644)	0.902*** (0.344)	0.367* (0.202)	-0.007 (0.149)	-0.029 (0.123)	-0.041 (0.110)	-0.135 (0.111)
Estonia	0.021 (0.608)	0.977 (1.209)	0.803 (0.645)	0.563 (0.518)	0.619* (0.376)	0.524 (0.365)	0.082 (0.363)	0.312 (0.347)	-0.030 (0.317)
Finland	0.140 (0.165)	0.444* (0.252)	0.541** (0.221)	0.388** (0.192)	0.351* (0.180)	0.167 (0.186)	0.160 (0.165)	0.135 (0.126)	0.071 (0.132)
France	0.022 (0.145)	0.232 (0.159)	0.062 (0.125)	0.227* (0.125)	0.070 (0.115)	-0.015 (0.105)	0.015 (0.095)	-0.082 (0.107)	0.050 (0.092)
Germany	0.142 (0.153)	0.036 (0.058)	-0.048 (0.046)	-0.114** (0.048)	-0.126* (0.072)	0.014 (0.112)	-0.077 (0.115)	-0.076 (0.136)	-0.037 (0.149)
Greece	-0.798*** (0.171)	-1.026*** (0.229)	-0.163 (0.304)	0.090 (0.280)	0.188 (0.243)	0.031 (0.225)	-0.096 (0.234)	-0.201 (0.282)	-0.345 (0.428)
Hungary	0.042 (0.092)	0.062 (0.068)	0.030 (0.070)	0.017 (0.081)	0.121 (0.098)	0.155 (0.114)	0.130 (0.179)	0.115 (0.245)	0.372 (0.342)
Latvia	-0.091 (0.143)	-0.065 (0.187)	-0.214 (0.284)	-0.538 (0.433)	-0.674 (0.499)	-0.989** (0.491)	-0.976** (0.456)	-0.710* (0.301)	-0.721*** (0.264)
Lithuania	-0.301 (0.831)	-0.126 (0.477)	0.002 (0.569)	0.051 (0.576)	-0.181 (0.521)	0.146 (0.446)	0.165 (0.432)	-0.096 (0.415)	-0.860** (0.430)
Netherlands	0.589 (0.813)	0.334* (0.199)	0.211* (0.126)	0.305*** (0.099)	0.199* (0.089)	0.169* (0.093)	0.170 (0.111)	0.359*** (0.086)	0.103 (0.106)
Norway	0.601* (0.355)	0.278 (0.187)	0.283* (0.161)	0.150 (0.144)	0.173 (0.125)	0.186* (0.111)	0.161 (0.111)	0.220** (0.112)	0.317*** (0.095)
Poland	-1.148** (0.484)	-1.084** (0.440)	-0.292 (0.248)	-0.381 (0.235)	-0.234 (0.226)	0.187 (0.365)	-0.080 (0.419)	0.207 (0.363)	0.835* (0.493)
Portugal	-0.096 (0.160)	-0.140 (0.140)	-0.087 (0.066)	-0.052 (0.045)	-0.052 (0.045)	0.026 (0.066)	-0.013 (0.110)	0.236** (0.119)	0.253** (0.112)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	-0.183 (0.183)	-0.138 (0.133)	-0.150 (0.135)	-0.159 (0.133)	0.614*** (0.151)	0.742*** (0.185)	0.620*** (0.189)	0.580** (0.212)	0.433** (0.212)
Slovakia	0.122 (0.102)	0.193** (0.098)	0.214** (0.101)	0.214** (0.101)	-0.035 (0.159)	-0.253 (0.210)	0.444 (0.278)	1.096*** (0.339)	0.537 (0.383)
Slovenia	-0.116 (0.117)	0.189 (0.169)	0.222 (0.177)	0.178 (0.166)	0.145 (0.153)	0.163 (0.146)	0.122 (0.140)	0.073 (0.164)	0.050 (0.195)
Spain	0.419 (0.688)	0.063 (0.478)	-0.201 (0.311)	0.198 (0.450)	0.731*** (0.123)	0.503*** (0.176)	0.412*** (0.153)	0.301* (0.144)	0.264** (0.103)
Sweden	-0.014 (0.269)	0.116 (0.200)	-0.004 (0.161)	-0.010 (0.157)	0.008 (0.142)	0.113 (0.121)	0.105 (0.106)	0.097 (0.092)	0.007 (0.087)
UK	-0.049 (0.079)	0.115 (0.114)	0.171 (0.118)	0.121 (0.105)	0.166* (0.099)	0.117 (0.091)	0.021 (0.084)	0.019 (0.083)	0.038 (0.095)
					Unexplained				
Austria	0.249 (0.216)	0.379*** (0.143)	0.343** (0.134)	0.401** (0.157)	0.414** (0.187)	0.543** (0.253)	0.357 (0.335)	-0.170 (0.292)	0.313 (0.286)
Belgium	0.304** (0.132)	0.116 (0.129)	0.036 (0.189)	0.246 (0.226)	0.393 (0.362)	0.581 (0.490)	0.148 (0.467)	-0.192 (0.327)	-0.046 (0.210)
Bulgaria	-0.006 (0.154)	0.008 (0.115)	-0.065 (0.100)	-0.134 (0.118)	-0.277** (0.127)	-0.191 (0.141)	-0.175 (0.150)	-0.097 (0.179)	0.186 (0.216)
Croatia	0.524*** (0.203)	0.441* (0.233)	0.350 (0.229)	0.282 (0.245)	-0.348 (0.392)	-0.526** (0.248)	-0.276 (0.257)	-0.047 (0.255)	0.013 (0.214)
Czechia	-0.161* (0.091)	-0.237*** (0.082)	0.013 (0.081)	-0.263*** (0.094)	-0.105 (0.097)	-0.187* (0.104)	-0.203 (0.135)	-0.086 (0.151)	0.014 (0.235)
Denmark	-1.038*** (0.330)	-1.586*** (0.460)	-3.677*** (1.019)	-0.877 (0.595)	-0.317 (0.362)	0.223 (0.269)	0.311 (0.225)	0.287 (0.203)	0.384* (0.204)
Estonia	-1.043 (1.038)	-1.985 (1.559)	-0.969 (0.902)	-0.720 (0.742)	-0.835 (0.515)	-0.820 (0.505)	-0.146 (0.523)	-0.510 (0.452)	-0.315 (0.487)
Finland	-0.119 (0.209)	-0.428 (0.326)	-0.400 (0.303)	-0.139 (0.264)	-0.181 (0.250)	0.306 (0.254)	0.423* (0.230)	0.365* (0.188)	0.311 (0.195)
France	-0.002 (0.225)	-0.370 (0.238)	-0.098 (0.183)	-0.210 (0.168)	-0.044 (0.153)	0.043 (0.139)	-0.021 (0.128)	0.003 (0.144)	-0.112 (0.147)
Germany	0.028 (0.210)	0.012 (0.079)	0.047 (0.062)	0.095 (0.065)	0.045 (0.095)	0.149 (0.142)	0.226 (0.155)	0.263 (0.185)	0.150 (0.186)
Greece	0.674*** (0.226)	0.569** (0.262)	-0.095 (0.323)	-0.364 (0.292)	-0.336 (0.255)	-0.197 (0.236)	-0.041 (0.244)	0.018 (0.293)	0.249 (0.441)
Hungary	-0.074 (0.095)	-0.105 (0.071)	-0.097 (0.076)	-0.166* (0.093)	-0.179 (0.111)	-0.326** (0.140)	-0.175 (0.208)	-0.286 (0.280)	-0.430 (0.398)
Latvia	0.104 (0.204)	0.191 (0.262)	0.185 (0.381)	0.419 (0.557)	0.506 (0.629)	0.530 (0.626)	0.546 (0.573)	0.232 (0.403)	0.251 (0.396)
Lithuania	0.656 (0.950)	0.296 (0.625)	-0.340 (0.774)	-0.563 (0.754)	-0.217 (0.658)	-0.411 (0.529)	-0.546 (0.496)	-0.169 (0.475)	0.762 (0.626)
Netherlands	-2.739** (1.229)	-0.397 (0.270)	-0.202 (0.173)	-0.269** (0.133)	-0.122 (0.120)	-0.117 (0.125)	-0.136 (0.149)	-0.366*** (0.121)	-0.098 (0.145)
Norway	-0.478 (0.465)	-0.031 (0.253)	-0.001 (0.210)	0.243 (0.188)	0.252 (0.167)	0.224 (0.150)	0.334** (0.151)	0.370** (0.152)	0.357** (0.140)
Poland	1.092*** (0.328)	1.755*** (0.422)	0.674 (0.278)	0.545** (0.252)	0.462* (0.236)	-0.107 (0.426)	0.252 (0.479)	-0.192 (0.423)	-0.728 (0.468)
Portugal	-0.149 (0.253)	-0.100 (0.188)	0.066 (0.100)	-0.002 (0.076)	-0.047 (0.076)	-0.489*** (0.111)	-0.024 (0.158)	-0.403** (0.181)	-0.432** (0.172)
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serbia	0.235 (0.189)	0.304* (0.178)	0.162 (0.176)	0.064 (0.180)	-0.956*** (0.179)	-0.935*** (0.196)	-0.885*** (0.185)	-0.827*** (0.190)	-0.454*** (0.173)
Slovakia	-0.230 (0.157)	-0.442*** (0.138)	-0.201 (0.149)	-0.530*** (0.149)	-0.519** (0.210)	0.240 (0.270)	-0.722** (0.360)	-1.489*** (0.420)	-0.768 (0.470)
Slovenia	-0.063 (0.145)	-0.191 (0.235)	-0.377 (0.240)	-0.177 (0.226)	-0.050 (0.213)	-0.081 (0.201)	0.113 (0.196)	0.147 (0.232)	0.109 (0.283)
Spain	-0.347 (0.695)	0.037 (0.487)	0.353 (0.321)	-0.098 (0.458)	-0.685*** (0.140)	-0.415** (0.192)	-0.267 (0.169)	-0.112 (0.159)	0.059 (0.122)
Sweden	0.262 (0.356)	0.447 (0.239)	0.377 (0.239)	0.386* (0.225)	0.286 (0.201)	0.199 (0.171)	0.216 (0.152)	0.269** (0.134)	0.380*** (0.132)
UK	0.252** (0.114)	0.070 (0.162)	0.388** (0.172)	0.549*** (0.158)	0.607*** (0.152)	0.659*** (0.142)	0.816*** (0.135)	0.717*** (0.136)	0.554*** (0.150)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Note: Romania is excluded due to data limitations.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.19: Public transfers gap decomposition for the age group <25

Country	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Quantile:				
					Explained				
Austria	0.080 (0.178)	0.015 (0.127)	-0.117 (0.106)	-0.120 (0.096)	-0.125 (0.100)	-0.140 (0.118)	-0.233 (0.146)	-0.097 (0.201)	-0.239 (0.220)
Belgium	0.212 (0.210)	0.095 (0.210)	0.164 (0.209)	0.097 (0.229)	0.107 (0.227)	0.205 (0.260)	0.435 (0.278)	0.291 (0.203)	0.084 (0.178)
Bulgaria	-0.306 (0.240)	-0.540* (0.284)	-0.513** (0.248)	-0.407 (0.263)	-0.447* (0.271)	-0.354 (0.286)	-0.428 (0.292)	-0.619* (0.325)	-0.524* (0.304)
Croatia	0.045 (0.118)	0.004 (0.259)	0.266 (0.271)	0.156 (0.407)	0.177 (0.389)	-0.105 (0.365)	0.277 (0.273)	0.204 (0.258)	0.065 (0.220)
Czechia	-0.321 (0.339)	-0.318 (0.439)	-0.893 (0.681)	-0.784 (0.659)	-0.579 (0.633)	-0.125 (0.395)	-0.203 (0.334)	-0.469 (0.306)	-0.666** (0.295)
Denmark	-0.072 (0.094)	-0.520** (0.246)	-0.826*** (0.239)	-0.826*** (0.243)	-0.676*** (0.204)	-0.414** (0.164)	-0.304** (0.127)	-0.340*** (0.122)	-0.138* (0.073)
Estonia	-0.146 (0.098)	-0.159 (0.115)	-0.053 (0.157)	-0.267 (0.168)	-0.459** (0.212)	-0.576** (0.276)	-0.464 (0.322)	-0.706** (0.307)	-0.565*** (0.197)
Finland	-0.107 (0.116)	-0.210* (0.123)	-0.118 (0.093)	-0.093 (0.061)	-0.081 (0.052)	0.007 (0.048)	0.012 (0.047)	0.037 (0.053)	0.034 (0.073)
France	-0.037 (0.249)	-0.080 (0.165)	-0.244* (0.147)	-0.208 (0.138)	-0.134 (0.132)	-0.169 (0.135)	-0.050 (0.131)	-0.087 (0.138)	-0.126 (0.114)
Germany	0.017 (0.035)	0.017 (0.035)	0.017 (0.035)	0.002 (0.050)	0.002 (0.050)	-0.019 (0.059)	-0.043 (0.064)	0.029 (0.090)	-0.077 (0.110)
Greece	-0.214** (0.107)	-0.090 (0.112)	-0.078 (0.099)	-0.119 (0.102)	-0.119 (0.102)	-0.319** (0.127)	-0.372*** (0.119)	-0.634*** (0.238)	-0.491** (0.226)
Hungary	-0.098* (0.057)	-0.181** (0.073)	-0.229*** (0.082)	-0.310*** (0.101)	-0.522*** (0.130)	-0.741*** (0.177)	-0.715*** (0.162)	-0.588*** (0.149)	-0.437*** (0.148)
Latvia	-0.197 (0.357)	0.062 (0.339)	-0.171 (0.350)	-0.355 (0.318)	-0.434 (0.291)	-0.386 (0.262)	-0.362 (0.261)	-0.277 (0.240)	-0.422 (0.257)
Lithuania	-0.018 (0.415)	-0.536 (0.404)	-0.301 (0.448)	-1.018** (0.514)	-1.262** (0.596)	-1.395** (0.580)	-2.030*** (0.613)	-1.482** (0.714)	-0.780 (0.532)
Netherlands	0.053 (0.149)	-0.189 (0.120)	-0.157 (0.115)	-0.190 (0.121)	-0.160 (0.130)	-0.073 (0.101)	-0.036 (0.088)	-0.062 (0.088)	-0.133 (0.081)
Norway	-0.070 (0.120)	-0.364** (0.145)	-0.264** (0.114)	-0.137* (0.078)	-0.011 (0.081)	-0.036 (0.081)	-0.040 (0.090)	0.088 (0.092)	0.093 (0.264)
Poland	-0.378** (0.189)	-0.549** (0.226)	-0.796*** (0.291)	-0.911*** (0.280)	-0.718*** (0.233)	-0.674*** (0.220)	-0.637*** (0.201)	-0.817*** (0.226)	-0.729*** (0.278)
Portugal	0.257 (0.316)	0.127 (0.248)	-0.027 (0.191)	-0.068 (0.178)	0.087 (0.189)	-0.005 (0.212)	0.021 (0.264)	-0.246 (0.254)	0.131 (0.285)
Romania	-0.327* (0.191)	-0.057 (0.186)	-0.047 (0.173)	-0.167 (0.184)	-0.296 (0.199)	-0.163 (0.256)	-0.209 (0.335)	-0.635* (0.350)	-0.817*** (0.312)
Serbia	-0.015 (0.032)	0.026 (0.046)	0.007 (0.044)	-0.036 (0.041)	-0.063 (0.043)	-0.053 (0.046)	-0.014 (0.054)	-0.069 (0.060)	-0.116 (0.160)
Slovakia	-0.190** (0.097)	-0.166** (0.070)	-0.166** (0.070)	-0.209* (0.110)	-0.232* (0.124)	-0.471*** (0.153)	-1.226*** (0.368)	-0.934*** (0.321)	-0.930** (0.445)
Slovenia	-0.117 (0.253)	-0.219 (0.185)	-0.392** (0.184)	-0.453*** (0.160)	-0.218 (0.152)	-0.257* (0.133)	-0.225 (0.140)	-0.360** (0.147)	-0.685*** (0.209)
Spain	-0.144 (0.317)	-0.333 (0.309)	-0.209 (0.263)	0.059 (0.173)	0.105 (0.152)	-0.045 (0.143)	-0.186 (0.128)	-0.251* (0.130)	-0.306 (0.188)
Sweden	-0.102 (0.104)	-0.139 (0.094)	-0.133 (0.140)	-0.205 (0.162)	-0.461** (0.203)	-0.573*** (0.213)	-0.370** (0.187)	-0.195 (0.144)	-0.068 (0.119)
UK	0.026 (0.030)	-0.091 (0.096)	-0.272** (0.125)	-0.263 (0.164)	-0.383 (0.297)	-0.325 (0.286)	-0.184 (0.206)	-0.226 (0.183)	-0.085 (0.168)
					Unexplained				
Austria	0.089 (0.216)	0.274 (0.188)	0.368** (0.166)	0.232 (0.160)	0.217 (0.163)	0.090 (0.191)	0.021 (0.223)	-0.169 (0.281)	-0.071 (0.308)
Belgium	-0.225 (0.294)	-0.083 (0.301)	-0.345 (0.311)	-0.137 (0.314)	-0.157 (0.296)	-0.184 (0.321)	-0.258 (0.348)	-0.036 (0.342)	-0.465 (0.387)
Bulgaria	0.393 (0.259)	0.675** (0.293)	0.655** (0.262)	0.480 (0.320)	0.554* (0.329)	0.342 (0.346)	0.430 (0.364)	0.835** (0.400)	0.574 (0.418)
Croatia	-0.025 (0.172)	-0.144 (0.303)	-0.466 (0.330)	-0.315 (0.488)	0.017 (0.456)	0.123 (0.423)	-0.110 (0.335)	-0.038 (0.302)	-0.102 (0.332)
Czechia	0.511 (0.370)	0.326 (0.455)	0.632 (0.640)	0.643 (0.612)	0.380 (0.622)	0.259 (0.392)	0.278 (0.328)	0.579* (0.324)	0.837** (0.361)
Denmark	-0.443 (0.854)	-0.964*** (0.364)	-0.806*** (0.267)	-0.299 (0.278)	-0.144 (0.226)	-0.322 (0.207)	-0.120 (0.161)	0.419*** (0.162)	0.112 (0.108)
Estonia	0.458* (0.246)	0.142 (0.268)	-0.596** (0.241)	-0.260 (0.249)	-0.076 (0.284)	0.112 (0.339)	-0.092 (0.388)	0.352 (0.358)	0.467* (0.253)
Finland	-0.155 (0.166)	-0.216 (0.182)	-0.072 (0.114)	0.008 (0.088)	0.007 (0.075)	-0.026 (0.072)	0.013 (0.071)	-0.013 (0.080)	-0.076 (0.108)
France	-0.405 (0.374)	-0.225 (0.251)	0.034 (0.219)	-0.078 (0.203)	-0.067 (0.198)	0.034 (0.197)	-0.117 (0.189)	0.140 (0.196)	0.141 (0.174)
Germany	0.052 (0.065)	-0.061 (0.063)	-0.040 (0.075)	-0.087 (0.082)	-0.086 (0.085)	-0.015 (0.096)	-0.403*** (0.110)	-0.473*** (0.163)	-0.191 (0.181)
Greece	0.156 (0.173)	-0.146 (0.167)	0.120 (0.168)	0.075 (0.167)	0.127 (0.170)	0.221 (0.221)	-0.075 (0.251)	0.283 (0.340)	0.522 (0.341)
Hungary	0.019 (0.078)	0.087 (0.106)	-0.137 (0.129)	-0.153 (0.140)	-0.032 (0.153)	0.349* (0.196)	0.447** (0.191)	0.334* (0.192)	0.238 (0.202)
Latvia	0.659 (0.520)	-0.179 (0.457)	0.147 (0.461)	0.331 (0.408)	0.477 (0.369)	0.173 (0.341)	0.123 (0.337)	0.088 (0.327)	0.321 (0.346)
Lithuania	-0.168 (0.591)	-0.288 (0.398)	-0.527 (0.458)	0.192 (0.530)	0.759 (0.598)	0.896 (0.645)	1.437** (0.666)	1.228 (0.824)	0.799 (0.600)
Netherlands	-0.650*** (0.223)	-0.428** (0.175)	-0.622*** (0.168)	-0.715*** (0.165)	-0.672*** (0.163)	-0.498*** (0.130)	-0.354** (0.143)	-0.073 (0.147)	-0.142 (0.163)
Norway	-0.212 (0.230)	-0.079 (0.213)	-0.170 (0.151)	0.079 (0.117)	-0.369*** (0.127)	-0.408*** (0.117)	-0.071 (0.124)	-0.409*** (0.135)	-0.183 (0.327)
Poland	0.487** (0.240)	0.471* (0.257)	0.751** (0.296)	1.109*** (0.309)	0.925*** (0.284)	0.741*** (0.282)	0.719*** (0.288)	0.636** (0.323)	0.793*** (0.387)
Portugal	-0.695* (0.418)	-0.535 (0.342)	-0.294 (0.273)	-0.242 (0.271)	-0.430 (0.281)	-0.585** (0.276)	-0.251 (0.323)	0.050 (0.331)	-0.159 (0.373)
Romania	-0.122 (0.201)	-0.267 (0.208)	-0.145 (0.186)	-0.191 (0.203)	0.089 (0.229)	-0.189 (0.314)	-0.161 (0.421)	0.499 (0.440)	0.916** (0.425)
Serbia	-0.002 (0.047)	0.002 (0.064)	0.017 (0.063)	0.043 (0.062)	0.067 (0.066)	0.031 (0.069)	0.030 (0.084)	-0.041 (0.112)	-0.247 (0.269)
Slovakia	0.047 (0.127)	0.113 (0.124)	0.416*** (0.159)	-0.256 (0.212)	-0.341 (0.272)	-0.711*** (0.205)	0.284 (0.389)	0.318 (0.354)	0.637 (0.500)
Slovenia	-0.867** (0.358)	-0.655*** (0.250)	-0.381* (0.221)	-0.068 (0.197)	-0.225 (0.198)	-0.113 (0.188)	-0.169 (0.197)	-0.039 (0.210)	0.432 (0.289)
Spain	0.346 (0.477)	-0.197 (0.413)	-0.164 (0.310)	-0.168 (0.229)	-0.255 (0.207)	-0.204 (0.196)	-0.014 (0.189)	0.064 (0.199)	0.221 (0.270)
Sweden	-0.283* (0.148)	-0.070 (0.151)	-0.106 (0.189)	-0.268 (0.213)	0.092 (0.232)	0.102 (0.249)	0.311 (0.230)	0.439** (0.187)	0.174 (0.167)
UK	-0.133 (0.107)	-0.208 (0.156)	-0.152 (0.193)	-0.381 (0.246)	-0.278 (0.354)	-0.019 (0.340)	0.018 (0.260)	0.098 (0.229)	-0.165 (0.217)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.20: Public transfers gap decomposition for the age group 25-44

Country					Quantile:				
	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained				
Austria	-0.213* (0.110)	-0.258** (0.107)	-0.323*** (0.096)	-0.294*** (0.091)	-0.275*** (0.099)	-0.272*** (0.099)	-0.335*** (0.101)	-0.453*** (0.111)	-0.587*** (0.136)
Belgium	-0.108** (0.047)	-0.329*** (0.090)	-0.191*** (0.068)	-0.133** (0.062)	-0.143** (0.066)	-0.125 (0.085)	-0.186** (0.093)	-0.096 (0.104)	-0.129 (0.091)
Bulgaria	-0.151* (0.080)	-0.265*** (0.083)	-0.204*** (0.079)	-0.228*** (0.079)	-0.254*** (0.071)	-0.352*** (0.080)	-0.500*** (0.098)	-0.467*** (0.080)	-0.259*** (0.072)
Croatia	0.015 (0.111)	0.039 (0.109)	-0.007 (0.092)	-0.089 (0.097)	-0.181** (0.087)	-0.114 (0.086)	-0.141 (0.088)	-0.240* (0.098)	-0.279** (0.112)
Czechia	-0.545*** (0.129)	-0.885*** (0.173)	-0.827*** (0.201)	-0.622*** (0.134)	-0.371*** (0.091)	-0.389*** (0.084)	-0.456*** (0.080)	-0.609*** (0.102)	-0.750*** (0.136)
Denmark	-0.015 (0.014)	-1.407*** (0.208)	-0.412*** (0.065)	-0.312*** (0.050)	-0.205*** (0.054)	-0.171** (0.067)	-0.343*** (0.126)	-0.076 (0.080)	0.053 (0.056)
Estonia	-0.106 (0.109)	-0.068 (0.090)	-0.093 (0.068)	-0.068 (0.071)	-0.033 (0.092)	-0.142 (0.105)	-0.184* (0.095)	-0.216*** (0.084)	-0.022 (0.067)
Finland	-0.386*** (0.084)	-0.349*** (0.052)	-0.230*** (0.059)	-0.278*** (0.076)	-0.166** (0.066)	-0.023 (0.051)	-0.026 (0.046)	-0.065 (0.044)	-0.044 (0.044)
France	-0.091 (0.063)	-0.021 (0.049)	-0.031 (0.058)	-0.065 (0.068)	-0.074 (0.060)	-0.168*** (0.060)	-0.195*** (0.062)	-0.239*** (0.069)	-0.131 (0.081)
Germany	-0.016 (0.042)	-0.016 (0.042)	-0.103* (0.058)	-0.111** (0.046)	-0.092* (0.051)	-0.205*** (0.075)	-0.220*** (0.085)	-0.214*** (0.078)	-0.108 (0.067)
Greece	-0.138* (0.073)	-0.119* (0.052)	-0.051 (0.049)	-0.051 (0.034)	-0.051 (0.034)	-0.090* (0.055)	-0.207*** (0.093)	-0.449*** (0.101)	-0.981*** (0.138)
Hungary	-0.088* (0.039)	-0.131*** (0.035)	-0.203*** (0.048)	-0.267*** (0.051)	-0.282*** (0.054)	-0.371*** (0.079)	-0.315*** (0.076)	-0.252*** (0.071)	-0.180** (0.083)
Latvia	-0.174*** (0.065)	-0.170* (0.091)	-0.150* (0.074)	-0.137* (0.082)	-0.188 (0.120)	-0.312** (0.127)	-0.195* (0.100)	-0.193** (0.084)	-0.290*** (0.082)
Lithuania	0.040 (0.177)	-0.048 (0.122)	0.071 (0.130)	0.127 (0.143)	-0.033 (0.135)	-0.156 (0.115)	-0.172 (0.106)	-0.218** (0.100)	-0.158 (0.105)
Netherlands	-0.124** (0.055)	-0.119* (0.072)	-0.082* (0.049)	-0.029 (0.049)	-0.098 (0.061)	-0.134 (0.083)	-0.140 (0.136)	-0.337** (0.154)	-0.450*** (0.141)
Norway	-0.117** (0.056)	-0.114*** (0.033)	-0.007 (0.041)	0.019 (0.052)	-0.002 (0.082)	0.057 (0.114)	0.040 (0.088)	0.001 (0.067)	-0.010 (0.053)
Poland	-0.284*** (0.087)	-0.311*** (0.083)	-0.269*** (0.095)	-0.252*** (0.096)	-0.273*** (0.103)	-0.289*** (0.109)	-0.477*** (0.119)	-0.440*** (0.090)	-0.296*** (0.087)
Portugal	-0.001 (0.155)	0.027 (0.107)	0.034 (0.081)	-0.016 (0.065)	-0.089 (0.065)	-0.112 (0.078)	-0.213* (0.109)	-0.162* (0.095)	-0.168** (0.073)
Romania	-0.095 (0.067)	-0.169** (0.071)	-0.063* (0.037)	-0.063 (0.038)	-0.104* (0.060)	-0.180*** (0.053)	-0.164*** (0.051)	-0.317** (0.129)	-0.706*** (0.250)
Serbia	-0.020** (0.010)	-0.014 (0.013)	-0.028** (0.013)	-0.025* (0.014)	-0.034** (0.016)	-0.055* (0.021)	-0.056** (0.024)	-0.041 (0.025)	-0.047 (0.043)
Slovakia	-0.070 (0.052)	-0.082** (0.039)	-0.082** (0.039)	-0.109* (0.047)	-0.115** (0.047)	-0.144** (0.065)	-0.402*** (0.115)	-0.460*** (0.078)	-0.410*** (0.065)
Slovenia	-0.075 (0.061)	-0.088* (0.046)	-0.045 (0.043)	-0.089** (0.043)	-0.114** (0.046)	-0.116** (0.050)	-0.109** (0.047)	-0.139** (0.038)	-0.147*** (0.048)
Spain	0.332** (0.161)	0.124 (0.078)	0.081 (0.085)	0.138** (0.070)	0.110* (0.060)	0.065 (0.056)	0.054 (0.058)	0.012 (0.065)	-0.128** (0.065)
Sweden	-0.026 (0.109)	-0.020 (0.081)	-0.007 (0.070)	-0.014 (0.069)	-0.001 (0.067)	-0.052 (0.064)	-0.110* (0.058)	-0.068 (0.049)	-0.091** (0.043)
UK	-0.049 (0.038)	-0.049 (0.038)	-0.135*** (0.050)	-0.135*** (0.050)	-0.206*** (0.064)	-0.818*** (0.171)	-0.592*** (0.137)	-0.646*** (0.121)	-0.537*** (0.113)
					Unexplained				
Austria	0.122 (0.120)	0.189 (0.121)	0.277*** (0.107)	0.297*** (0.102)	0.342*** (0.111)	0.365*** (0.112)	0.421*** (0.115)	0.514*** (0.131)	0.596*** (0.162)
Belgium	0.214*** (0.059)	0.125 (0.112)	0.180** (0.084)	0.066 (0.079)	0.102 (0.084)	0.091 (0.105)	0.074 (0.110)	0.008 (0.123)	-0.008 (0.116)
Bulgaria	0.332* (0.147)	0.189 (0.123)	0.110 (0.117)	0.139 (0.114)	0.232** (0.103)	0.342*** (0.113)	0.498*** (0.137)	0.385*** (0.115)	0.095 (0.111)
Croatia	0.015 (0.154)	-0.007 (0.157)	0.085 (0.127)	0.174 (0.134)	0.288** (0.127)	0.137 (0.121)	0.141 (0.120)	0.180 (0.134)	0.346** (0.159)
Czechia	0.759*** (0.130)	0.970*** (0.181)	0.969*** (0.211)	0.667*** (0.144)	0.408*** (0.098)	0.360*** (0.091)	0.397*** (0.089)	0.569*** (0.112)	0.647*** (0.149)
Denmark	-0.156*** (0.029)	0.824*** (0.195)	0.041 (0.079)	0.137** (0.070)	-0.024 (0.077)	-0.366*** (0.113)	-0.121 (0.131)	0.124 (0.101)	-0.398*** (0.093)
Estonia	-0.210* (0.125)	-0.247** (0.112)	-0.041 (0.086)	-0.106 (0.089)	-0.073 (0.111)	0.168 (0.123)	0.300*** (0.116)	0.308*** (0.107)	0.049 (0.091)
Finland	0.524*** (0.104)	0.174*** (0.059)	0.022 (0.070)	0.150* (0.082)	0.168** (0.075)	0.041 (0.062)	0.049 (0.058)	0.106* (0.058)	-0.038 (0.062)
France	-0.037 (0.081)	0.082 (0.066)	0.089 (0.078)	0.048 (0.089)	0.088 (0.077)	0.149** (0.074)	0.193*** (0.075)	0.207** (0.082)	0.154* (0.090)
Germany	-0.063 (0.047)	-0.054 (0.047)	-0.089 (0.066)	0.061 (0.053)	0.089 (0.060)	0.163* (0.092)	0.192* (0.102)	0.142 (0.098)	-0.028 (0.086)
Greece	-0.097 (0.085)	0.100 (0.066)	-0.250*** (0.063)	0.003 (0.046)	0.360*** (0.047)	0.086 (0.072)	0.217* (0.120)	0.410*** (0.127)	1.191*** (0.171)
Hungary	0.026 (0.046)	0.102** (0.045)	0.101 (0.063)	0.198*** (0.062)	0.255*** (0.063)	0.293*** (0.090)	0.244*** (0.090)	0.187** (0.089)	0.079 (0.106)
Latvia	0.015 (0.073)	0.008 (0.116)	0.080 (0.097)	-0.146 (0.105)	0.018 (0.137)	0.199 (0.144)	0.195* (0.118)	0.191* (0.105)	0.263** (0.117)
Lithuania	0.047 (0.250)	0.157 (0.192)	-0.044 (0.197)	-0.196 (0.199)	0.063 (0.188)	0.128 (0.163)	0.125 (0.147)	0.234 (0.151)	0.118 (0.160)
Netherlands	-0.002 (0.061)	-0.179** (0.084)	0.099* (0.059)	-0.034 (0.059)	-0.013 (0.070)	-0.015 (0.096)	-0.073 (0.165)	0.032 (0.186)	0.343* (0.182)
Norway	-0.247*** (0.077)	-0.028 (0.046)	-0.425*** (0.059)	-0.293*** (0.070)	-0.393*** (0.102)	-0.459*** (0.135)	-0.310*** (0.107)	-0.195** (0.083)	-0.139* (0.072)
Poland	0.139 (0.109)	0.296*** (0.112)	0.207 (0.128)	0.138 (0.124)	0.206 (0.127)	0.289** (0.134)	0.561*** (0.148)	0.583*** (0.115)	0.346*** (0.115)
Portugal	-0.362 (0.266)	-0.340** (0.156)	-0.154 (0.127)	-0.011 (0.102)	-0.017 (0.098)	0.137 (0.116)	0.227 (0.167)	0.217 (0.153)	0.250** (0.125)
Romania	-0.161* (0.085)	-0.095 (0.086)	0.109** (0.050)	0.138** (0.054)	0.037 (0.084)	0.112 (0.073)	0.113 (0.069)	0.264 (0.161)	0.612*** (0.301)
Serbia	-0.002 (0.047)	0.002 (0.064)	0.017 (0.063)	0.043 (0.062)	0.067 (0.066)	0.031 (0.069)	0.030 (0.084)	-0.041 (0.112)	-0.247 (0.269)
Slovakia	-0.083 (0.066)	-0.028 (0.048)	0.307*** (0.056)	-0.008 (0.062)	0.043 (0.062)	-0.003 (0.085)	0.335** (0.134)	0.422*** (0.094)	0.324*** (0.084)
Slovenia	-0.126 (0.095)	-0.129* (0.072)	-0.097 (0.067)	-0.062 (0.064)	-0.021 (0.064)	-0.027 (0.069)	-0.029 (0.065)	0.015 (0.062)	0.016 (0.076)
Spain	-0.340 (0.248)	-0.060 (0.127)	0.019 (0.132)	-0.070 (0.107)	-0.027 (0.089)	-0.021 (0.080)	0.040 (0.079)	0.027 (0.087)	0.194* (0.102)
Sweden	-0.124 (0.162)	0.007 (0.109)	-0.083 (0.094)	-0.175* (0.090)	-0.238*** (0.088)	-0.193** (0.084)	-0.119 (0.078)	-0.051 (0.068)	-0.043 (0.067)
UK	-0.010 (0.044)	-0.057 (0.044)	0.018 (0.062)	-0.008 (0.062)	-0.114 (0.094)	0.219 (0.201)	0.144 (0.166)	0.030 (0.145)	0.103 (0.140)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.21: Public transfers gap decomposition for the age group 45-65

Country	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Quantile:				
					Explained				
Austria	-0.022 (0.111)	-0.078 (0.086)	-0.188** (0.092)	-0.308*** (0.092)	-0.445*** (0.113)	-0.828*** (0.160)	-0.629*** (0.114)	-0.248*** (0.073)	-0.133** (0.059)
Belgium	-0.246*** (0.069)	-0.272*** (0.091)	-0.227*** (0.082)	-0.264** (0.105)	-0.484*** (0.131)	-0.131 (0.085)	-0.014 (0.056)	0.006 (0.043)	-0.049 (0.037)
Bulgaria	-0.131** (0.061)	-0.087 (0.077)	-0.145 (0.090)	-0.190** (0.092)	-0.056 (0.052)	-0.034 (0.043)	0.015 (0.039)	-0.015 (0.037)	0.004 (0.035)
Croatia	-0.444*** (0.118)	-0.677*** (0.124)	-0.468*** (0.099)	-0.158*** (0.057)	-0.046 (0.039)	0.018 (0.034)	0.063** (0.031)	0.075** (0.031)	0.056* (0.030)
Czechia	-0.515*** (0.098)	-1.000*** (0.174)	-0.802*** (0.109)	-0.373*** (0.060)	-0.201*** (0.045)	-0.083** (0.035)	-0.049* (0.029)	-0.024 (0.026)	0.005 (0.025)
Denmark	-0.027* (0.016)	-0.027* (0.016)	-0.136 (0.160)	-0.125 (0.084)	-0.200*** (0.076)	-0.259*** (0.083)	-0.993*** (0.231)	-0.447*** (0.097)	-0.206*** (0.065)
Estonia	-0.222*** (0.040)	-0.175*** (0.049)	-0.363*** (0.076)	-0.521*** (0.115)	-0.232*** (0.076)	-0.157*** (0.051)	-0.059 (0.039)	-0.046 (0.036)	-0.031 (0.031)
Finland	0.130** (0.051)	0.118* (0.063)	0.089 (0.077)	0.065 (0.126)	-0.040 (0.054)	-0.063 (0.043)	-0.056 (0.039)	-0.010 (0.033)	-0.018 (0.030)
France	-0.194*** (0.055)	-0.250*** (0.061)	-0.500*** (0.084)	-0.620*** (0.100)	-0.465*** (0.087)	-0.204*** (0.057)	-0.083* (0.043)	-0.017 (0.036)	-0.016 (0.034)
Germany	-0.084** (0.038)	-0.060** (0.027)	-0.227*** (0.056)	-0.249*** (0.048)	-0.373*** (0.049)	-0.775*** (0.099)	-0.340*** (0.055)	-0.128*** (0.039)	-0.104** (0.044)
Greece	-0.147*** (0.042)	-0.263*** (0.049)	-0.423*** (0.052)	-0.894*** (0.091)	-1.908*** (0.174)	-0.670*** (0.088)	-0.243*** (0.038)	-0.148*** (0.025)	-0.066*** (0.019)
Hungary	-0.034 (0.033)	-0.124*** (0.036)	-0.321*** (0.055)	-0.629*** (0.084)	-0.466*** (0.061)	-0.424*** (0.056)	-0.324*** (0.050)	-0.234*** (0.040)	-0.223*** (0.040)
Latvia	-0.072 (0.093)	-0.323*** (0.097)	-0.515*** (0.122)	-0.404*** (0.105)	-0.307*** (0.079)	-0.229*** (0.073)	-0.203*** (0.065)	-0.101* (0.059)	-0.070 (0.067)
Lithuania	-0.208** (0.097)	-0.187* (0.102)	-0.310*** (0.101)	-0.209*** (0.081)	-0.190*** (0.073)	-0.144* (0.070)	-0.124** (0.062)	-0.130** (0.053)	-0.132** (0.054)
Netherlands	-0.243*** (0.040)	-0.367*** (0.049)	-0.407*** (0.047)	-0.505*** (0.054)	-0.876*** (0.090)	-1.441*** (0.152)	-0.632*** (0.071)	-0.256*** (0.051)	-0.119*** (0.040)
Norway	-0.006 (0.049)	-0.109** (0.051)	-0.172*** (0.053)	-0.285*** (0.063)	-0.696*** (0.146)	-0.868*** (0.165)	-0.310*** (0.077)	-0.194*** (0.057)	-0.147*** (0.051)
Poland	-0.726*** (0.113)	-0.863*** (0.124)	-0.572*** (0.085)	-0.220*** (0.040)	-0.164*** (0.035)	-0.106*** (0.037)	-0.071* (0.041)	-0.029 (0.040)	0.047 (0.038)
Portugal	-0.168 (0.180)	-0.171 (0.109)	-0.235* (0.126)	-0.416*** (0.150)	0.004 (0.073)	0.053 (0.058)	0.010 (0.051)	-0.038 (0.050)	-0.041 (0.055)
Romania	-0.167*** (0.049)	-0.240*** (0.049)	-0.406*** (0.057)	-0.854*** (0.094)	-1.436*** (0.125)	-2.049*** (0.224)	-0.561*** (0.081)	-0.339*** (0.061)	-0.217*** (0.055)
Serbia	-0.069*** (0.014)	-0.100*** (0.016)	-0.131*** (0.019)	-0.188*** (0.022)	-0.245*** (0.026)	-0.369*** (0.033)	-0.693*** (0.049)	-3.313*** (0.236)	-0.529*** (0.055)
Slovakia	-0.129*** (0.039)	-0.194*** (0.048)	-0.278*** (0.070)	-0.375*** (0.081)	-1.217*** (0.175)	-0.814*** (0.116)	-0.278*** (0.055)	-0.147*** (0.041)	-0.154*** (0.036)
Slovenia	-0.089** (0.043)	-0.206*** (0.052)	-0.297*** (0.057)	-0.270*** (0.054)	-0.222*** (0.045)	-0.147*** (0.034)	-0.108*** (0.025)	-0.098*** (0.021)	-0.100*** (0.022)
Spain	-0.088 (0.072)	-0.037 (0.057)	-0.040 (0.046)	0.020 (0.038)	0.020 (0.035)	0.021 (0.044)	0.052 (0.041)	0.044 (0.041)	-0.027 (0.042)
Sweden	-0.155* (0.080)	-0.212*** (0.074)	-0.249*** (0.073)	-0.337*** (0.084)	-0.461*** (0.108)	-0.427*** (0.140)	-0.231** (0.100)	-0.076 (0.068)	0.030 (0.058)
UK	-0.198*** (0.053)	-0.230*** (0.052)	-0.397*** (0.066)	-0.763*** (0.117)	-0.773*** (0.105)	-0.439*** (0.066)	-0.292*** (0.053)	-0.222*** (0.046)	-0.143*** (0.046)
					Unexplained				
Austria	0.090 (0.137)	0.115 (0.104)	0.215** (0.107)	0.310*** (0.102)	0.414*** (0.119)	0.758*** (0.153)	0.740*** (0.115)	0.425*** (0.081)	0.366*** (0.076)
Belgium	0.140 (0.091)	0.247** (0.118)	0.190* (0.101)	0.188 (0.116)	0.343*** (0.127)	0.185** (0.089)	0.182*** (0.066)	0.182*** (0.054)	0.224*** (0.054)
Bulgaria	0.438*** (0.115)	0.411*** (0.123)	0.323** (0.133)	0.440*** (0.120)	0.253*** (0.068)	0.306*** (0.058)	0.316*** (0.058)	0.416*** (0.059)	0.509*** (0.060)
Croatia	0.685*** (0.145)	0.831*** (0.145)	0.555*** (0.105)	0.374*** (0.061)	0.260*** (0.048)	0.236*** (0.046)	0.284*** (0.043)	0.353*** (0.046)	0.218*** (0.051)
Czechia	0.502*** (0.133)	0.673*** (0.183)	0.506*** (0.111)	0.215*** (0.064)	0.063 (0.049)	0.071* (0.041)	0.059* (0.036)	0.168*** (0.034)	0.143*** (0.034)
Denmark	0.056*** (0.017)	0.113*** (0.017)	1.072*** (0.196)	0.194 (0.124)	0.114 (0.109)	-0.270** (0.138)	0.318 (0.265)	0.226* (0.120)	0.185** (0.092)
Estonia	0.280*** (0.071)	0.197*** (0.075)	0.389*** (0.111)	0.438*** (0.153)	0.228*** (0.098)	0.161** (0.069)	0.013 (0.054)	0.049 (0.052)	0.054 (0.047)
Finland	-0.086 (0.078)	-0.158* (0.088)	-0.182* (0.096)	0.005 (0.129)	0.284*** (0.062)	0.211*** (0.052)	0.170*** (0.050)	0.161*** (0.045)	0.200*** (0.045)
France	0.230*** (0.079)	0.291*** (0.084)	0.461*** (0.115)	0.697*** (0.118)	0.718*** (0.100)	0.495*** (0.068)	0.375*** (0.057)	0.252*** (0.051)	0.203*** (0.050)
Germany	-0.058 (0.048)	0.071** (0.035)	0.179*** (0.069)	0.224*** (0.058)	0.074 (0.069)	0.718*** (0.106)	0.328*** (0.061)	0.189*** (0.048)	0.352*** (0.061)
Greece	0.295*** (0.063)	0.506*** (0.069)	0.164** (0.077)	0.250* (0.140)	1.102*** (0.152)	0.728*** (0.083)	0.426*** (0.043)	0.387*** (0.037)	0.229*** (0.033)
Hungary	-0.007 (0.051)	-0.030 (0.059)	-0.078 (0.078)	0.154* (0.087)	0.116* (0.066)	0.101 (0.062)	0.121** (0.060)	0.058 (0.055)	0.172*** (0.063)
Latvia	-0.094 (0.134)	0.134 (0.138)	0.305* (0.163)	0.258** (0.127)	0.258*** (0.096)	0.223** (0.091)	0.276*** (0.083)	0.173** (0.080)	0.299*** (0.092)
Lithuania	0.483*** (0.139)	0.252* (0.137)	0.451*** (0.139)	0.324*** (0.115)	0.208** (0.100)	0.097 (0.095)	0.170* (0.087)	0.202*** (0.078)	0.257*** (0.084)
Netherlands	0.278*** (0.052)	0.436*** (0.064)	0.322*** (0.062)	0.338*** (0.073)	0.502*** (0.116)	1.392*** (0.165)	0.797*** (0.093)	0.345*** (0.072)	0.386*** (0.060)
Norway	-0.115 (0.076)	-0.311*** (0.079)	-0.193*** (0.088)	-0.650*** (0.105)	-0.432*** (0.157)	0.415** (0.170)	0.245*** (0.084)	0.266*** (0.070)	0.274*** (0.072)
Poland	0.450*** (0.129)	0.530*** (0.139)	0.344*** (0.091)	0.123** (0.048)	0.146*** (0.045)	0.140*** (0.047)	0.212*** (0.053)	0.288*** (0.051)	0.340*** (0.047)
Portugal	0.132 (0.277)	0.233 (0.153)	0.298* (0.159)	0.807*** (0.177)	0.411*** (0.091)	0.252*** (0.072)	0.301*** (0.066)	0.475*** (0.067)	0.634*** (0.090)
Romania	0.228*** (0.075)	0.194*** (0.072)	0.284*** (0.090)	0.518*** (0.154)	-0.128 (0.129)	1.624*** (0.235)	0.554*** (0.096)	0.427*** (0.083)	0.500*** (0.079)
Serbia	0.054** (0.022)	0.069*** (0.025)	0.075*** (0.028)	0.135*** (0.031)	0.173*** (0.036)	0.173*** (0.049)	-0.548*** (0.104)	2.776*** (0.238)	0.529*** (0.078)
Slovakia	0.047 (0.063)	0.038 (0.079)	-0.321*** (0.113)	-0.180 (0.139)	0.222 (0.161)	0.366*** (0.101)	0.265*** (0.059)	0.215*** (0.055)	0.264*** (0.053)
Slovenia	0.239*** (0.078)	0.289*** (0.081)	0.263*** (0.081)	0.111 (0.070)	-0.031 (0.052)	0.018 (0.038)	0.119*** (0.034)	0.114*** (0.033)	0.106*** (0.039)
Spain	0.353*** (0.116)	0.245*** (0.088)	0.231*** (0.069)	0.191*** (0.061)	0.074 (0.050)	0.212*** (0.056)	0.204*** (0.052)	0.253*** (0.055)	0.419*** (0.065)
Sweden	0.062 (0.111)	0.050 (0.109)	0.211* (0.108)	-0.047 (0.125)	-0.056 (0.137)	-0.051 (0.161)	0.014 (0.119)	0.008 (0.089)	-0.022 (0.080)
UK	0.047 (0.076)	0.272*** (0.082)	0.374*** (0.097)	0.303** (0.137)	0.653*** (0.123)	0.412*** (0.083)	0.390*** (0.072)	0.347*** (0.068)	0.316*** (0.071)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

TABLE A.22: Public transfers gap decomposition for the age group >65

Country					Quantile:				
	10th	20th	30th	40th	50th	60th	70th	80th	90th
					Explained				
Austria	0.113** (0.057)	0.172*** (0.042)	0.128*** (0.032)	0.111*** (0.029)	0.116*** (0.025)	0.092*** (0.022)	0.074*** (0.021)	0.084*** (0.022)	0.137*** (0.033)
Belgium	0.062 (0.041)	0.081*** (0.029)	0.076*** (0.024)	0.057*** (0.022)	0.057*** (0.021)	0.063*** (0.023)	0.101*** (0.018)	0.103*** (0.020)	0.119*** (0.030)
Bulgaria	0.086*** (0.022)	0.066*** (0.018)	0.049*** (0.014)	0.048*** (0.014)	0.049*** (0.015)	0.046*** (0.016)	0.057*** (0.017)	0.060*** (0.022)	0.026 (0.028)
Croatia	0.784*** (0.150)	0.291*** (0.050)	0.285*** (0.033)	0.260*** (0.026)	0.237*** (0.027)	0.145*** (0.023)	0.127*** (0.022)	0.078*** (0.028)	0.068 (0.053)
Czechia	0.016** (0.008)	0.014** (0.006)	0.013* (0.008)	0.015 (0.012)	0.007 (0.007)	0.006 (0.006)	-0.004 (0.007)	-0.002 (0.010)	-0.007 (0.009)
Denmark	-0.118*** (0.017)	-0.098*** (0.012)	-0.102*** (0.011)	-0.099*** (0.012)	-0.090*** (0.015)	-0.091*** (0.017)	-0.098*** (0.023)	-0.052** (0.026)	0.013 (0.020)
Estonia	0.080*** (0.029)	0.044** (0.020)	0.018* (0.011)	0.012 (0.009)	0.002 (0.008)	-0.001 (0.009)	-0.006 (0.009)	-0.015 (0.015)	-0.016 (0.021)
Finland	0.005 (0.021)	0.020 (0.022)	0.012 (0.021)	0.048** (0.021)	0.055*** (0.021)	0.072*** (0.021)	0.084*** (0.019)	0.122*** (0.019)	0.117*** (0.020)
France	0.044 (0.027)	0.019 (0.021)	0.017 (0.018)	-0.003 (0.016)	0.012 (0.017)	0.042** (0.018)	0.036* (0.020)	0.043* (0.024)	0.096*** (0.026)
Germany	0.158*** (0.048)	0.101*** (0.027)	0.055** (0.022)	0.030 (0.019)	0.038** (0.016)	0.040*** (0.015)	0.053*** (0.016)	0.080*** (0.022)	0.127*** (0.028)
Greece	0.118*** (0.022)	0.199*** (0.024)	0.206*** (0.043)	0.262*** (0.036)	0.243*** (0.028)	0.222*** (0.029)	0.157*** (0.028)	0.144*** (0.015)	0.099*** (0.011)
Hungary	0.019 (0.042)	0.004 (0.027)	0.035 (0.022)	0.018 (0.022)	0.036* (0.022)	0.054*** (0.021)	0.065*** (0.022)	0.072*** (0.027)	0.091*** (0.027)
Latvia	0.079** (0.034)	0.027 (0.018)	0.032* (0.017)	0.032** (0.016)	0.022 (0.017)	0.039** (0.019)	0.061** (0.024)	0.112*** (0.035)	0.101** (0.041)
Lithuania	0.048 (0.042)	0.054* (0.030)	0.055** (0.026)	0.062*** (0.024)	0.031 (0.023)	0.029 (0.022)	0.029 (0.025)	0.035 (0.034)	0.052 (0.037)
Netherlands	0.083** (0.042)	0.091*** (0.027)	0.110*** (0.025)	0.135*** (0.025)	0.185*** (0.026)	0.195*** (0.021)	0.185*** (0.018)	0.205*** (0.018)	0.212*** (0.023)
Norway	-0.039 (0.028)	-0.020 (0.022)	0.002 (0.023)	-0.002 (0.023)	0.029 (0.020)	0.030 (0.019)	0.042** (0.017)	0.058*** (0.017)	0.050** (0.022)
Poland	0.038 (0.028)	0.046* (0.026)	0.069*** (0.023)	0.080*** (0.021)	0.048*** (0.019)	0.036* (0.018)	0.047*** (0.018)	0.041** (0.020)	0.022 (0.027)
Portugal	0.025 (0.020)	0.122*** (0.022)	0.129*** (0.022)	0.152*** (0.025)	0.197*** (0.028)	0.235*** (0.032)	0.284*** (0.037)	0.221*** (0.034)	0.142*** (0.036)
Romania	0.159*** (0.035)	0.300*** (0.033)	0.269*** (0.025)	0.191*** (0.020)	0.164*** (0.019)	0.180*** (0.017)	0.162*** (0.019)	0.119*** (0.016)	0.085*** (0.019)
Serbia	0.597*** (0.085)	0.796*** (0.077)	0.414*** (0.036)	0.282*** (0.030)	0.262*** (0.023)	0.203*** (0.021)	0.165*** (0.020)	0.121*** (0.022)	0.115*** (0.028)
Slovakia	0.023 (0.018)	0.028* (0.015)	0.007 (0.013)	-0.011 (0.013)	-0.021 (0.016)	-0.021 (0.017)	-0.031* (0.017)	-0.030 (0.019)	-0.009 (0.020)
Slovenia	0.125*** (0.027)	0.135*** (0.021)	0.098*** (0.018)	0.090*** (0.015)	0.079*** (0.016)	0.072*** (0.017)	0.064*** (0.021)	0.083*** (0.030)	0.087*** (0.026)
Spain	0.237*** (0.050)	0.273*** (0.018)	0.267*** (0.022)	0.232*** (0.028)	0.264*** (0.032)	0.254*** (0.025)	0.206*** (0.023)	0.187*** (0.022)	0.085*** (0.015)
Sweden	-0.061** (0.029)	0.019 (0.026)	0.031 (0.020)	0.037* (0.017)	0.057*** (0.014)	0.054*** (0.013)	0.066*** (0.014)	0.062*** (0.020)	0.089*** (0.029)
UK	-0.056*** (0.021)	-0.053*** (0.019)	-0.042** (0.020)	-0.057*** (0.019)	-0.044** (0.020)	-0.030 (0.022)	-0.021 (0.025)	0.008 (0.026)	0.067*** (0.024)
					Unexplained				
Austria	0.701*** (0.082)	0.540*** (0.062)	0.500*** (0.044)	0.476*** (0.038)	0.457*** (0.035)	0.419*** (0.032)	0.367*** (0.031)	0.299*** (0.032)	0.202*** (0.041)
Belgium	0.882*** (0.138)	0.243*** (0.051)	0.178*** (0.032)	0.197*** (0.028)	0.210*** (0.027)	0.213*** (0.029)	0.164*** (0.024)	0.166*** (0.026)	0.135*** (0.039)
Bulgaria	0.051 (0.032)	0.158*** (0.027)	0.199*** (0.021)	0.192*** (0.021)	0.212*** (0.022)	0.246*** (0.023)	0.281*** (0.025)	0.331*** (0.031)	0.426*** (0.041)
Croatia	-0.460*** (0.166)	0.027 (0.057)	-0.082** (0.038)	0.016 (0.030)	0.082*** (0.031)	0.178*** (0.028)	0.161*** (0.027)	0.130*** (0.032)	0.230*** (0.056)
Czechia	0.155*** (0.011)	0.150*** (0.008)	0.103*** (0.011)	0.082*** (0.014)	0.137*** (0.008)	0.142*** (0.008)	0.091*** (0.010)	0.121*** (0.012)	0.035** (0.014)
Denmark	0.123*** (0.020)	0.130*** (0.017)	0.097*** (0.017)	0.078*** (0.019)	0.046** (0.023)	0.064** (0.027)	0.135*** (0.035)	0.175*** (0.040)	0.123*** (0.037)
Estonia	-0.180*** (0.039)	-0.092*** (0.026)	-0.018 (0.014)	-0.001 (0.011)	0.021* (0.011)	0.025** (0.012)	0.038*** (0.013)	0.086*** (0.020)	0.123*** (0.028)
Finland	0.126*** (0.029)	0.100*** (0.028)	0.152*** (0.027)	0.132*** (0.026)	0.128*** (0.027)	0.114*** (0.026)	0.134*** (0.024)	0.127*** (0.024)	0.213*** (0.026)
France	0.843*** (0.066)	0.493*** (0.035)	0.428*** (0.028)	0.363*** (0.025)	0.292*** (0.024)	0.247*** (0.025)	0.216*** (0.027)	0.239*** (0.032)	0.230*** (0.034)
Germany	0.947*** (0.068)	0.737*** (0.047)	0.580*** (0.034)	0.526*** (0.028)	0.463*** (0.024)	0.392*** (0.024)	0.325*** (0.024)	0.284*** (0.030)	0.299*** (0.035)
Greece	0.025 (0.028)	0.124*** (0.028)	0.216*** (0.045)	0.128*** (0.038)	0.156*** (0.030)	0.146*** (0.030)	0.267*** (0.029)	0.226*** (0.018)	0.196*** (0.018)
Hungary	0.117* (0.060)	0.092*** (0.035)	0.074** (0.029)	0.093*** (0.028)	0.078*** (0.026)	0.101*** (0.025)	0.108*** (0.026)	0.125*** (0.033)	0.128*** (0.032)
Latvia	-0.098** (0.047)	-0.004 (0.024)	0.027 (0.022)	0.049** (0.020)	0.080*** (0.021)	0.077*** (0.024)	0.094*** (0.030)	0.094*** (0.042)	0.155*** (0.051)
Lithuania	0.090* (0.055)	0.117*** (0.040)	0.120*** (0.036)	0.113*** (0.033)	0.137*** (0.031)	0.119*** (0.029)	0.133*** (0.033)	0.147*** (0.043)	0.125** (0.050)
Netherlands	0.193*** (0.052)	0.294*** (0.035)	0.459*** (0.032)	0.438*** (0.034)	0.325*** (0.036)	0.315*** (0.027)	0.343*** (0.023)	0.336*** (0.023)	0.366*** (0.029)
Norway	0.440*** (0.037)	0.362*** (0.031)	0.302*** (0.030)	0.306*** (0.030)	0.251*** (0.028)	0.217*** (0.026)	0.184*** (0.024)	0.156*** (0.024)	0.153*** (0.032)
Poland	0.048 (0.035)	0.106*** (0.033)	0.125*** (0.029)	0.140*** (0.026)	0.195*** (0.023)	0.216*** (0.022)	0.203*** (0.022)	0.223*** (0.024)	0.259*** (0.035)
Portugal	0.157*** (0.026)	0.142*** (0.027)	0.155*** (0.029)	0.157*** (0.033)	0.157*** (0.034)	0.183*** (0.037)	0.272*** (0.042)	0.387*** (0.043)	0.314*** (0.047)
Romania	0.011 (0.044)	0.067* (0.038)	0.135*** (0.029)	0.205*** (0.025)	0.089*** (0.022)	0.101*** (0.018)	0.213*** (0.020)	0.313*** (0.020)	0.107*** (0.027)
Serbia	1.022*** (0.154)	-0.412*** (0.088)	0.078* (0.043)	0.166*** (0.037)	0.132*** (0.032)	0.168*** (0.030)	0.143*** (0.029)	0.124*** (0.031)	0.147*** (0.041)
Slovakia	0.099*** (0.024)	0.078*** (0.021)	0.064*** (0.018)	0.062*** (0.017)	0.073*** (0.021)	0.070*** (0.022)	0.072*** (0.023)	0.086*** (0.026)	0.084*** (0.029)
Slovenia	0.083** (0.039)	0.042 (0.028)	0.102*** (0.024)	0.105*** (0.020)	0.085*** (0.021)	0.083*** (0.022)	0.109*** (0.027)	0.155*** (0.038)	0.188*** (0.039)
Spain	0.212*** (0.052)	-0.153*** (0.023)	-0.027 (0.025)	0.044 (0.030)	0.199*** (0.034)	0.264*** (0.028)	0.315*** (0.030)	0.314*** (0.029)	0.361*** (0.032)
Sweden	0.317*** (0.038)	0.226*** (0.035)	0.205*** (0.026)	0.202*** (0.022)	0.209*** (0.018)	0.200*** (0.017)	0.186*** (0.018)	0.234*** (0.025)	0.286*** (0.038)
UK	0.565*** (0.030)	0.508*** (0.037)	0.425*** (0.032)	0.395*** (0.030)	0.368*** (0.032)	0.311*** (0.034)	0.340*** (0.037)	0.354*** (0.038)	0.302*** (0.042)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
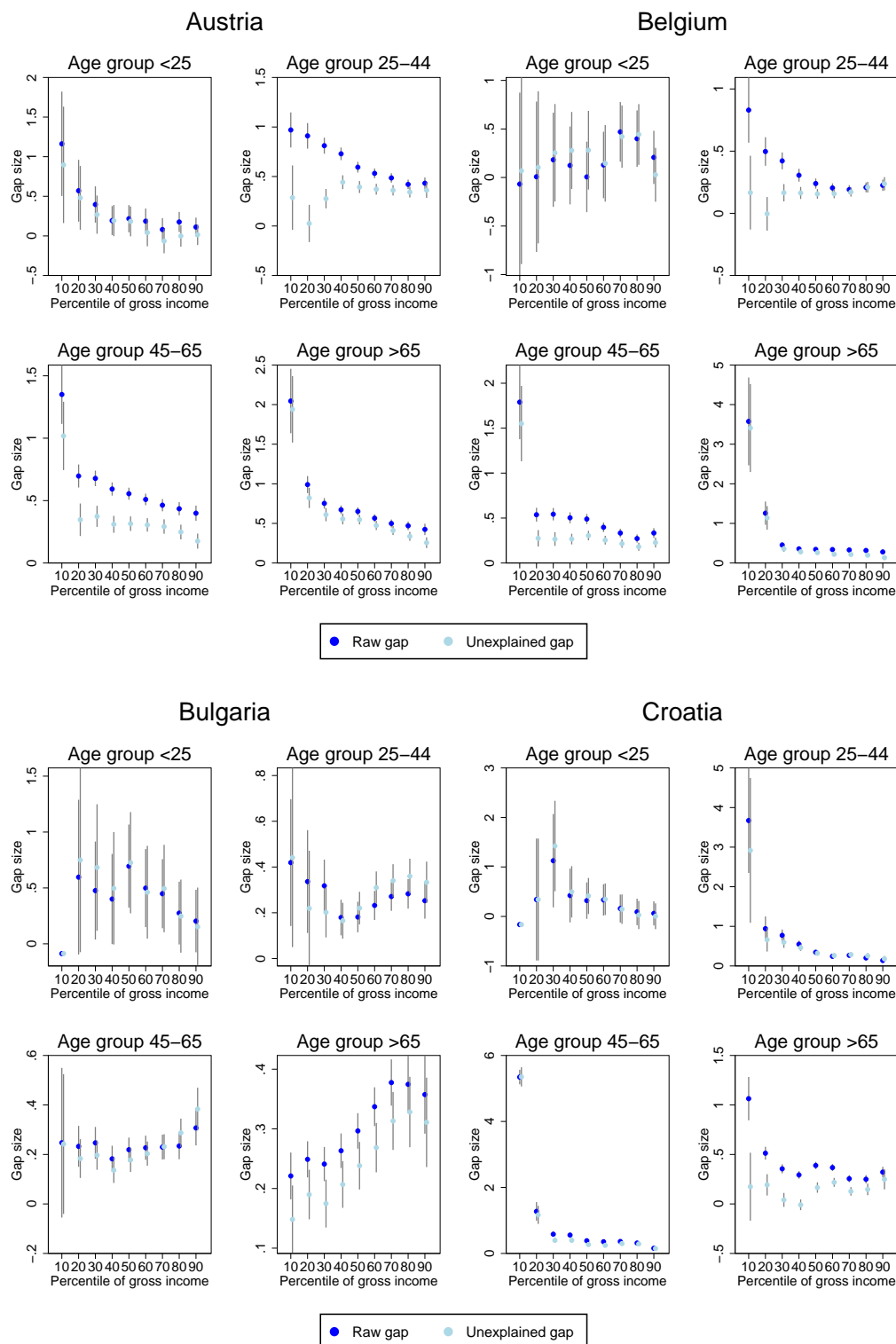Standard errors in parenthesis.
Source: author's calculations from EU-SILC 2016 data.

Appendix B

FIGURE B.1: Decomposition of the income gap
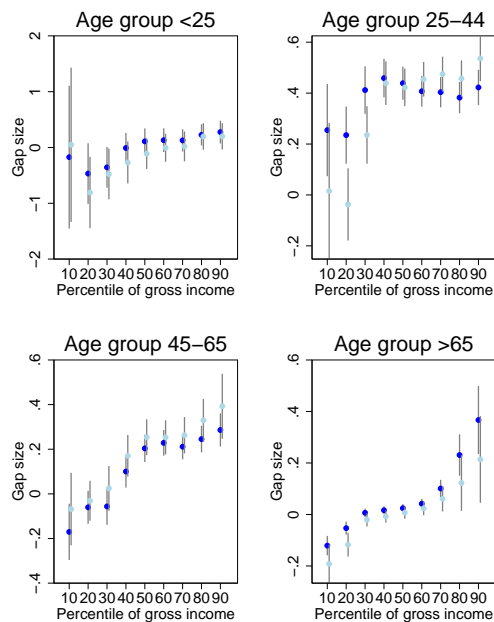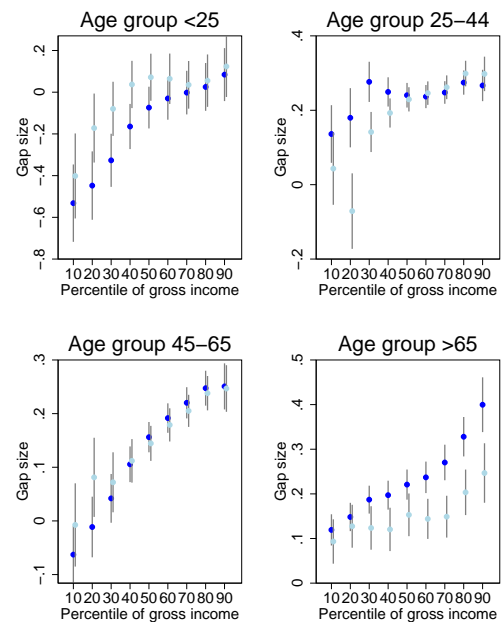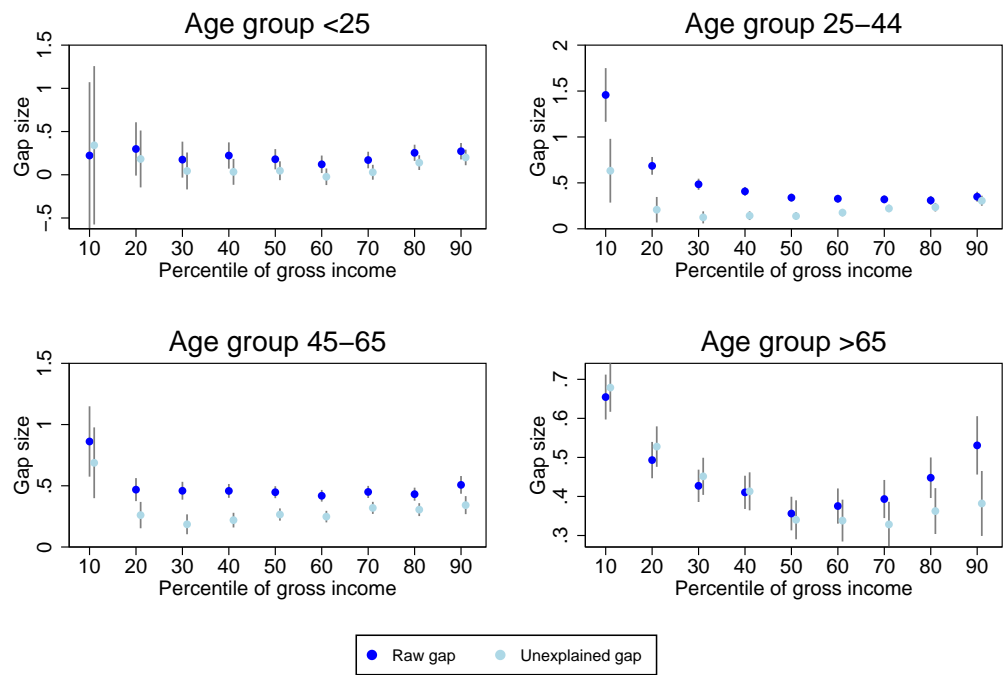
Austria

Age group <25
Gap size / Percentile of gross income

Age group 25–44
Gap size / Percentile of gross income

Age group 45–65
Gap size / Percentile of gross income

Age group >65
Gap size / Percentile of gross income

Belgium

Age group <25
Gap size / Percentile of gross income

Age group 25–44
Gap size / Percentile of gross income

Age group 45–65
Gap size / Percentile of gross income

Age group >65
Gap size / Percentile of gross income

● Raw gap   ● Unexplained gap

Bulgaria

Age group <25
Gap size / Percentile of gross income

Age group 25–44
Gap size / Percentile of gross income

Age group 45–65
Gap size / Percentile of gross income

Age group >65
Gap size / Percentile of gross income

Croatia

Age group <25
Gap size / Percentile of gross income

Age group 25–44
Gap size / Percentile of gross income

Age group 45–65
Gap size / Percentile of gross income

Age group >65
Gap size / Percentile of gross income

● Raw gap   ● Unexplained gap

Czechia

Age group <25

Age group 25–44

Age group 45–65

Age group >65

● Raw gap   ● Unexplained gap

Estonia
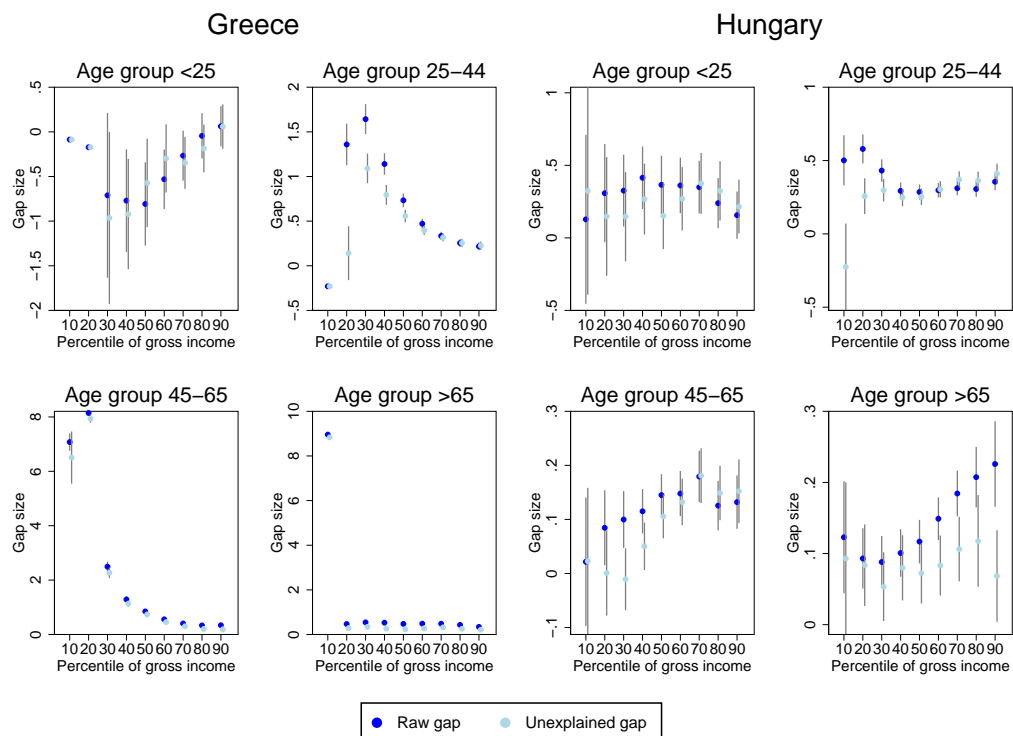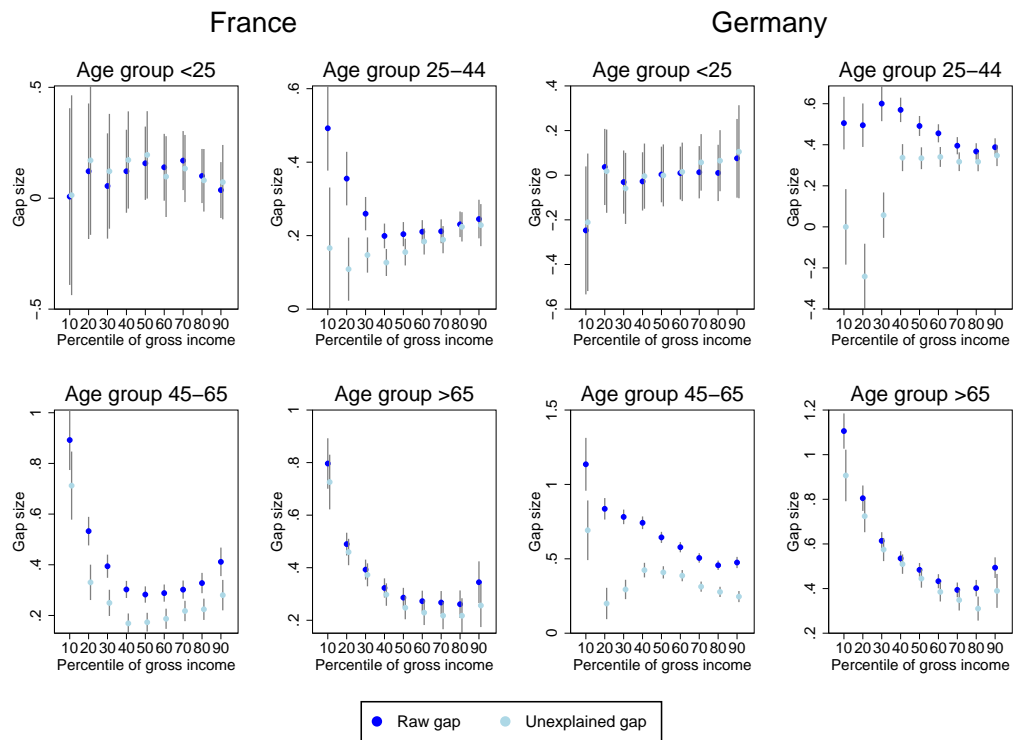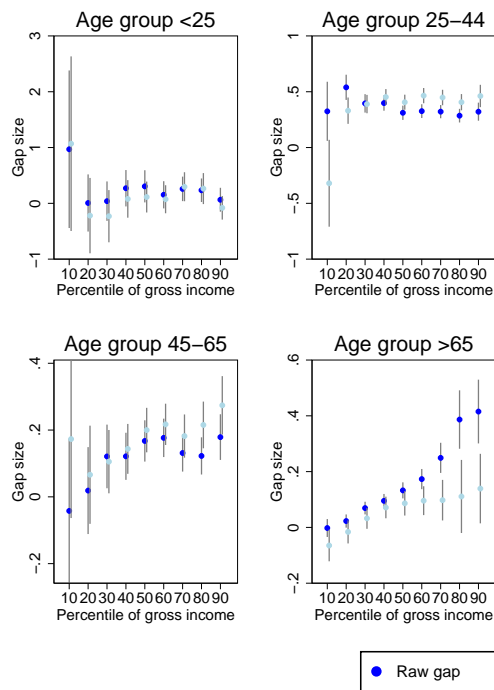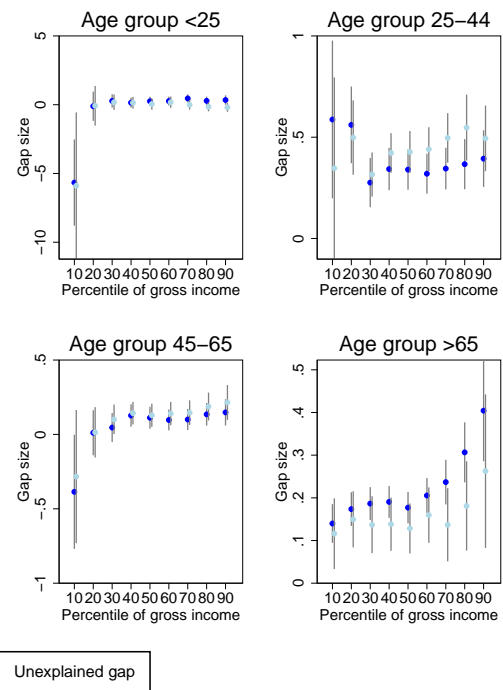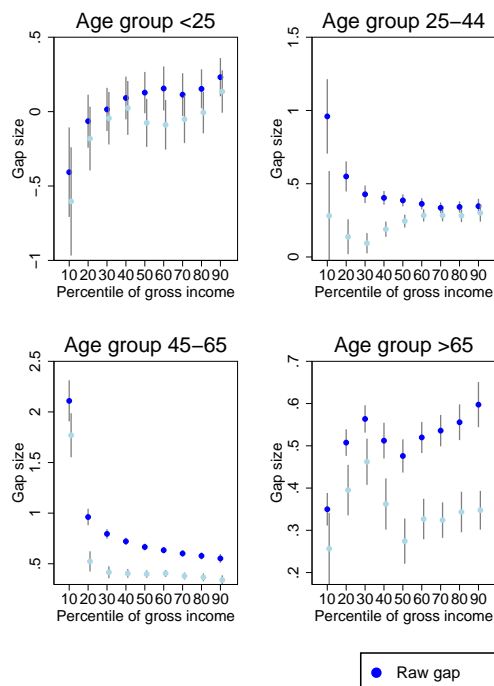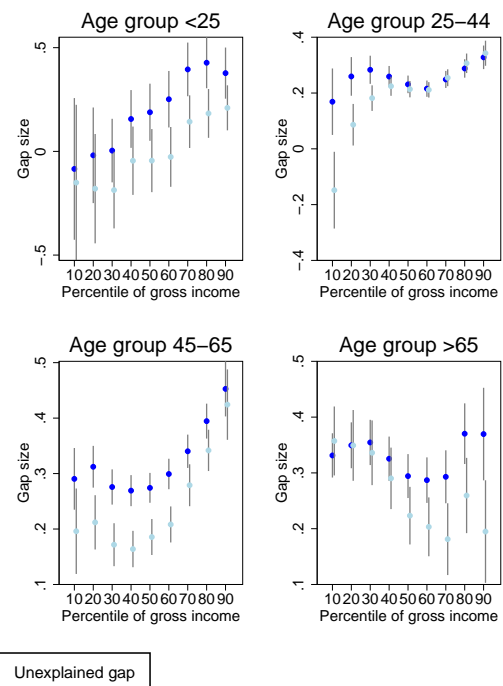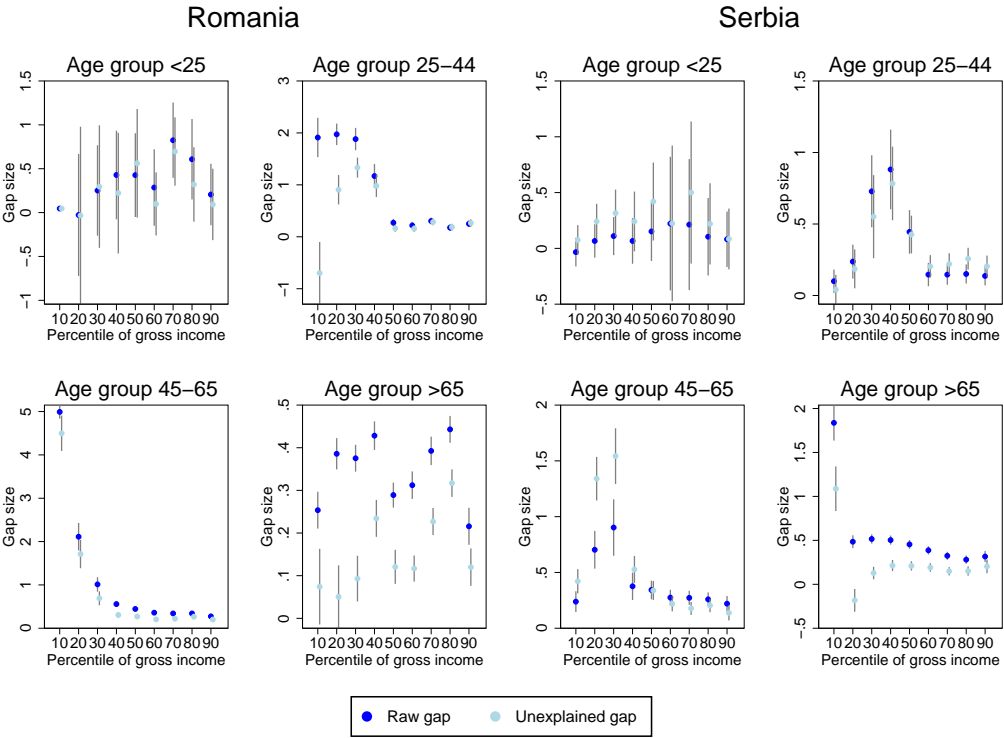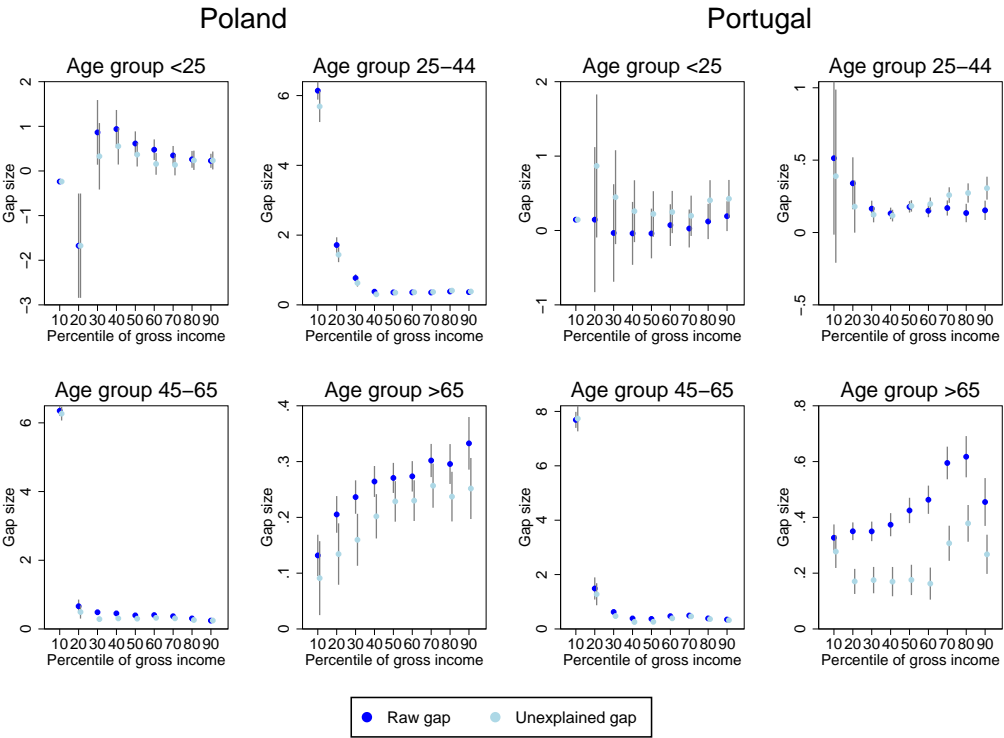
Age group <25

Age group 25–44

Age group 45–65

Age group >65

Denmark

Age group <25

Age group 25–44

Age group 45–65

Age group >65

Finland

Age group <25

Age group 25–44

Age group 45–65

Age group >65

● Raw gap   ● Unexplained gap
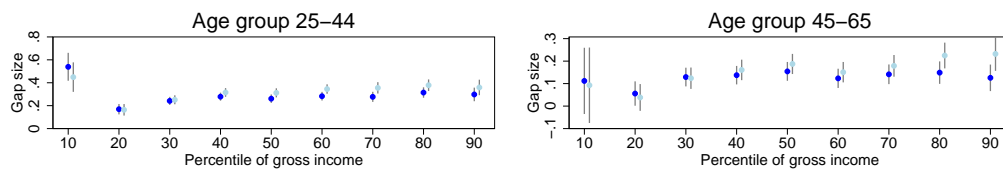
France

Germany

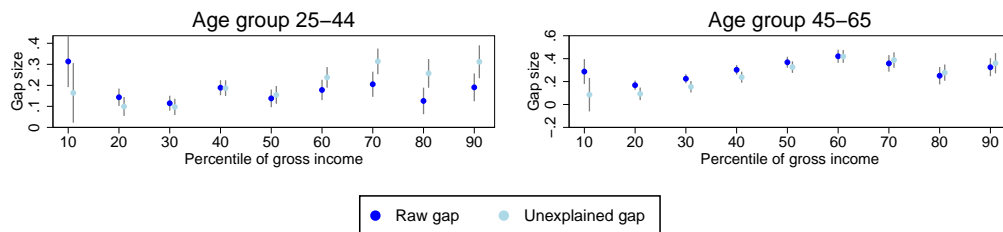Greece

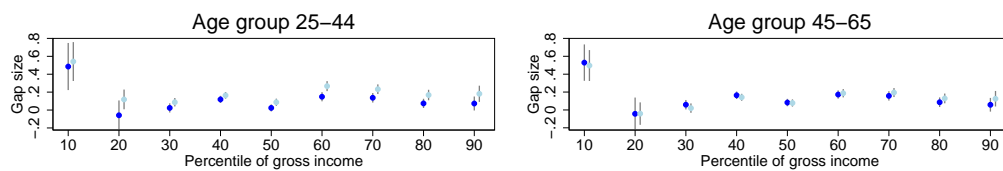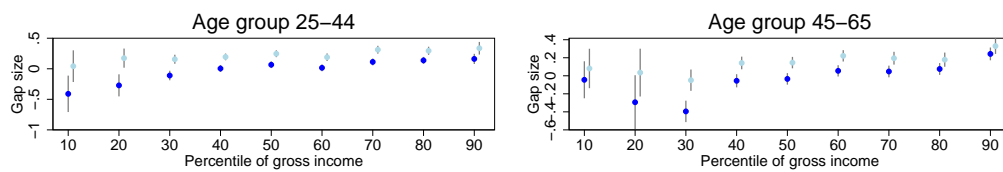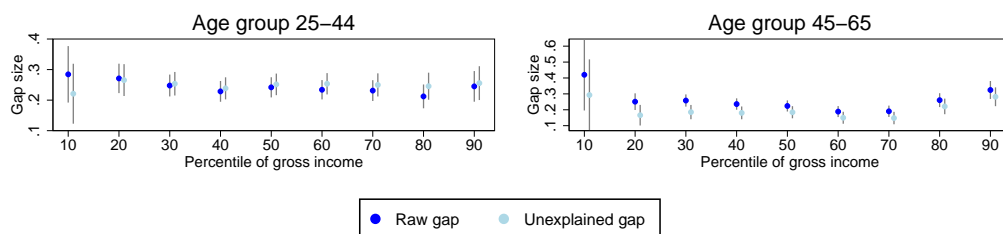Hungary

Latvia

Lithuania

Netherlands

Norway

Poland

Portugal

Romania

Serbia

Slovakia

Age group <25

Age group 25–44

Age group 45–65

Age group >65

● Raw gap   ● Unexplained gap

Slovenia

Age group <25

Age group 25–44

Age group 45–65

Age group >65

Spain

Age group <25

Age group 25–44

Age group 45–65

Age group >65

● Raw gap   ● Unexplained gap

Sweden

Age group <25

Age group 25–44

Age group 45–65

Age group >65
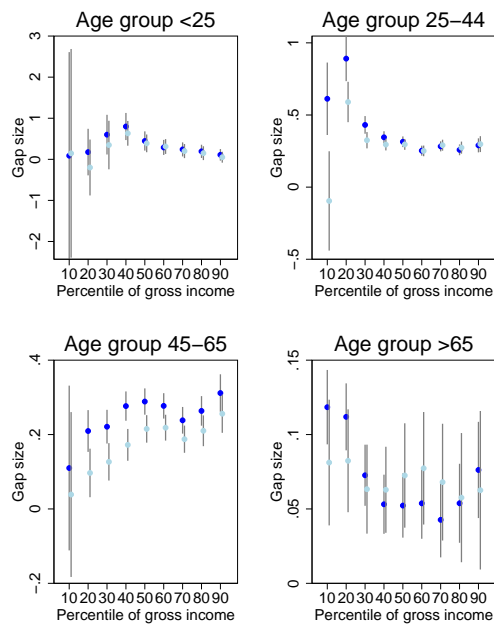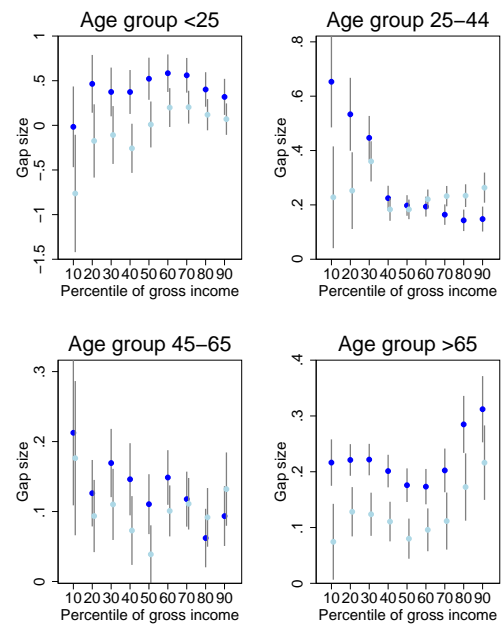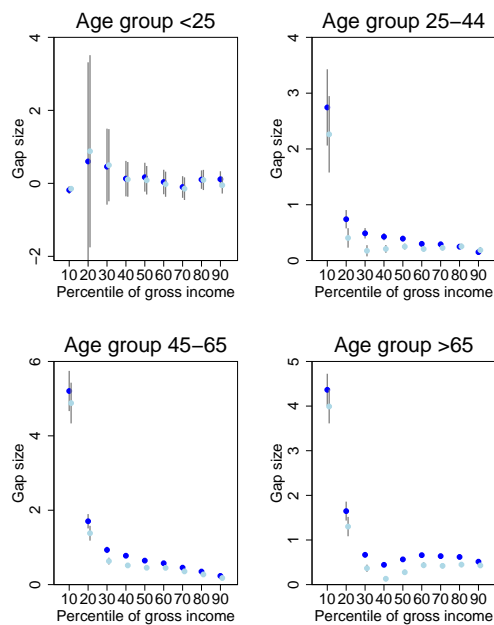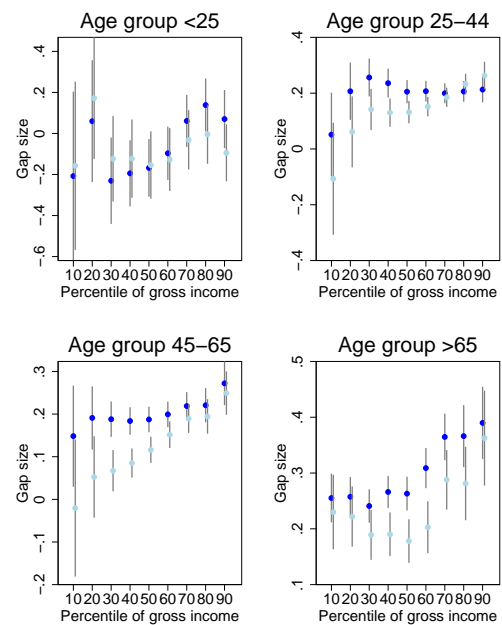
UK

FIGURE B.2: Decomposition of the employment income gap

Austria
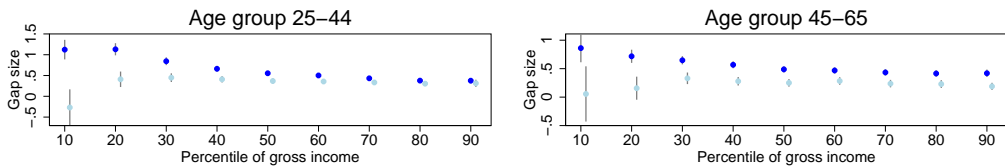
Belgium
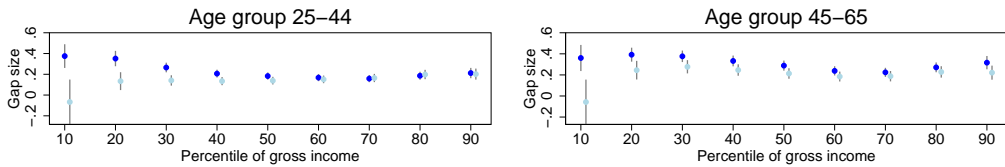
Bulgaria
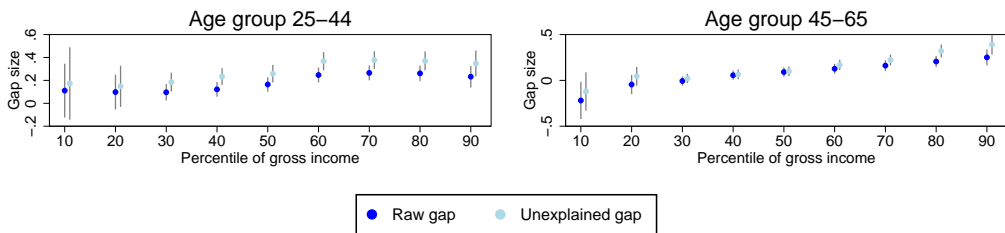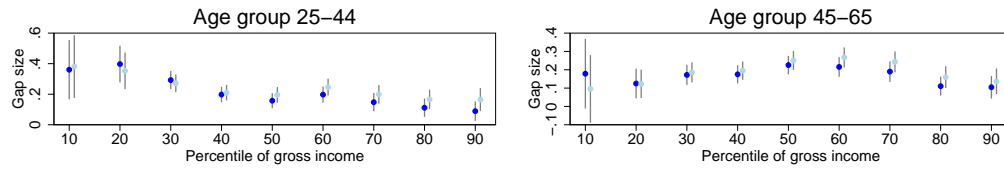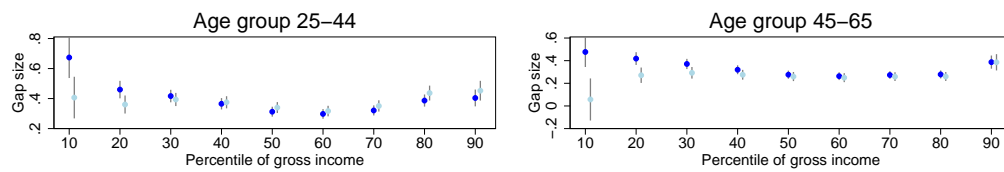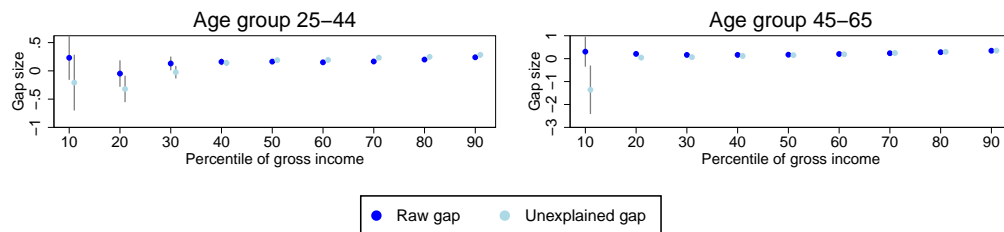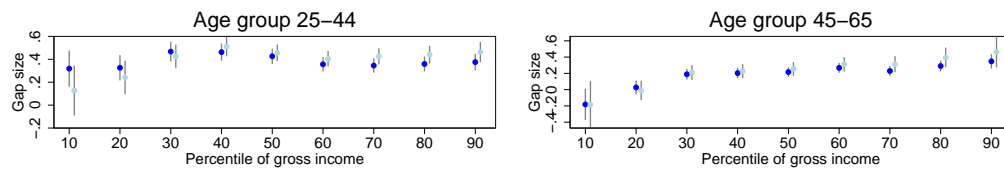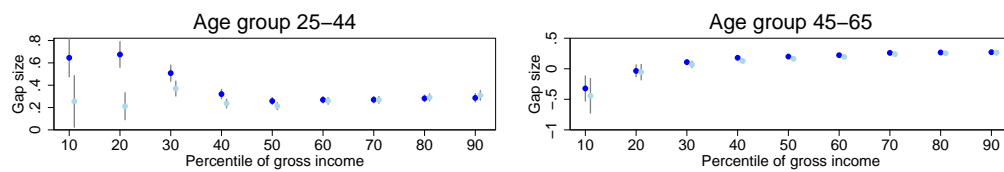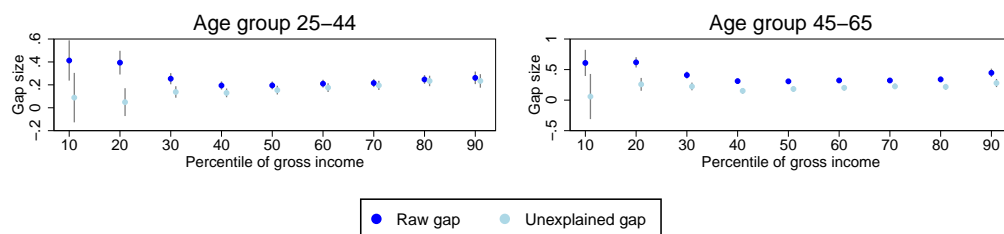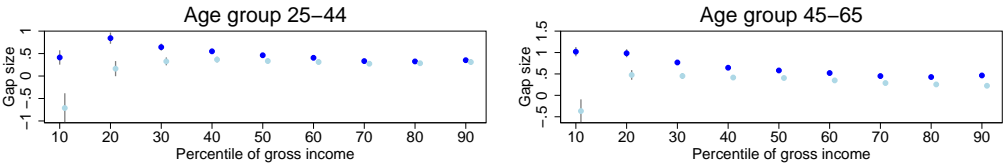
Croatia

Czechia

Denmark

Estonia

Finland

France

Germany

Greece

Hungary

Latvia

Lithuania

Netherlands

Norway

Age group 25–44

Age group 45–65

Poland

Age group 25–44

Age group 45–65

Portugal

Age group 25–44

Age group 45–65

● Raw gap ● Unexplained gap

Romania

Age group 25–44

Age group 45–65

Serbia

Age group 25–44

Age group 45–65

Slovakia

Age group 25–44

Age group 45–65

● Raw gap ● Unexplained gap

Slovenia

Age group 25–44

Age group 45–65

Spain

Age group 25–44

Age group 45–65

Sweden

Age group 25–44

Age group 45–65

● Raw gap   ● Unexplained gap

UK

Age group 25–44

Age group 45–65

● Raw gap   ● Unexplained gap
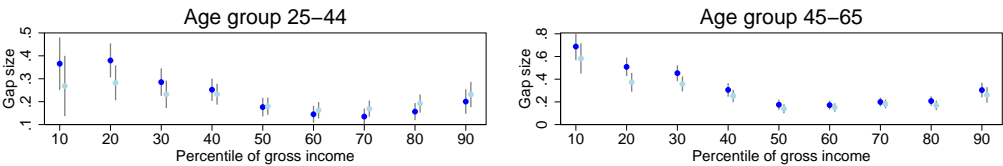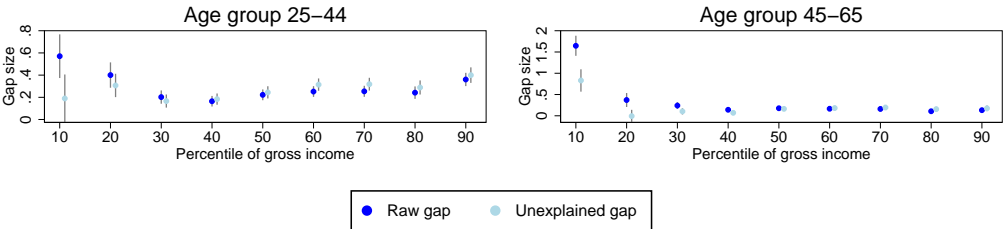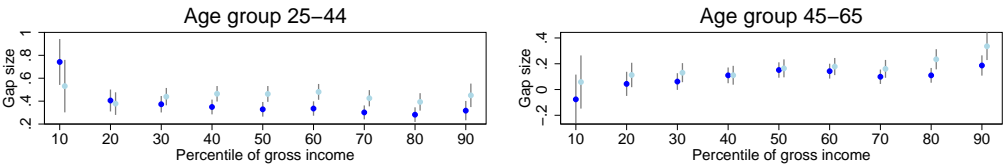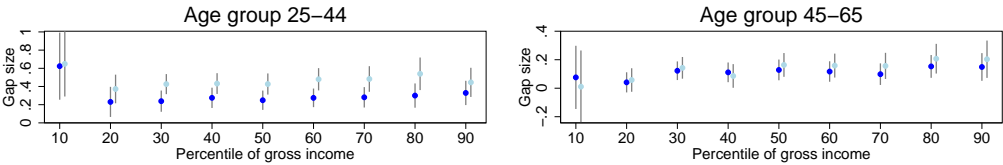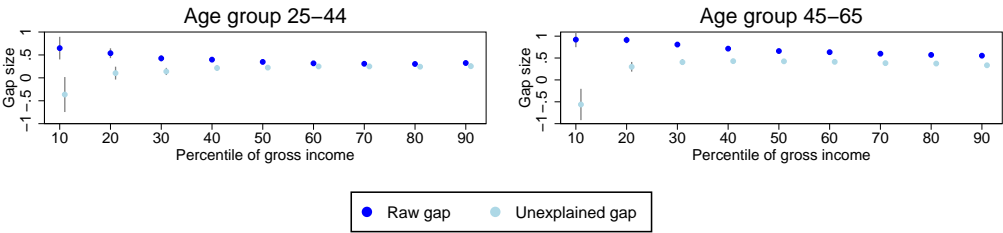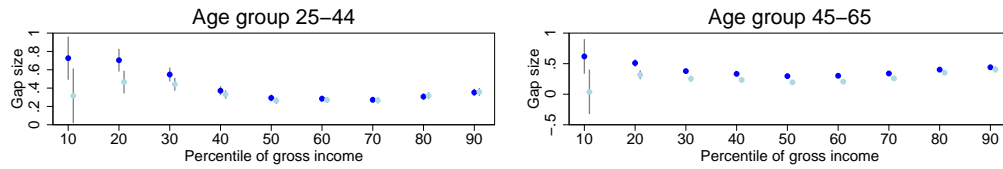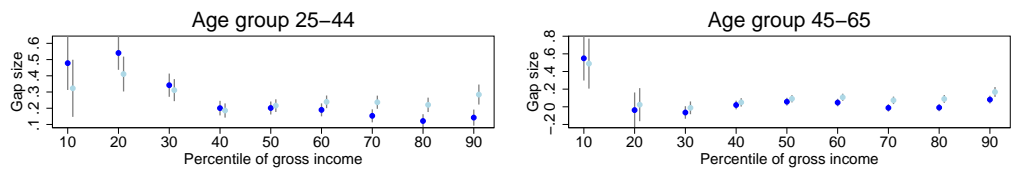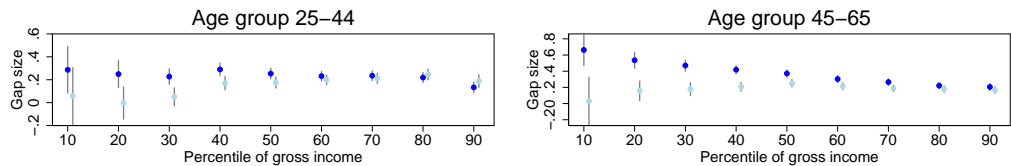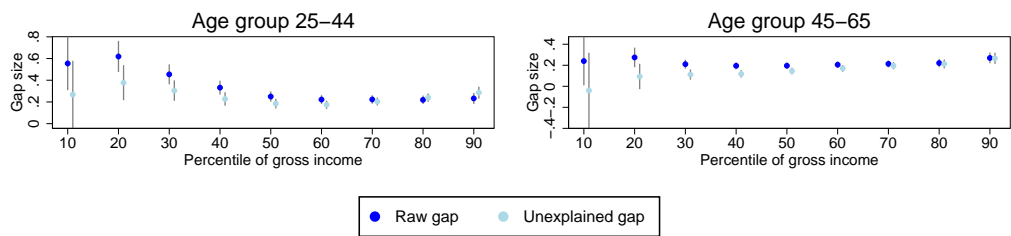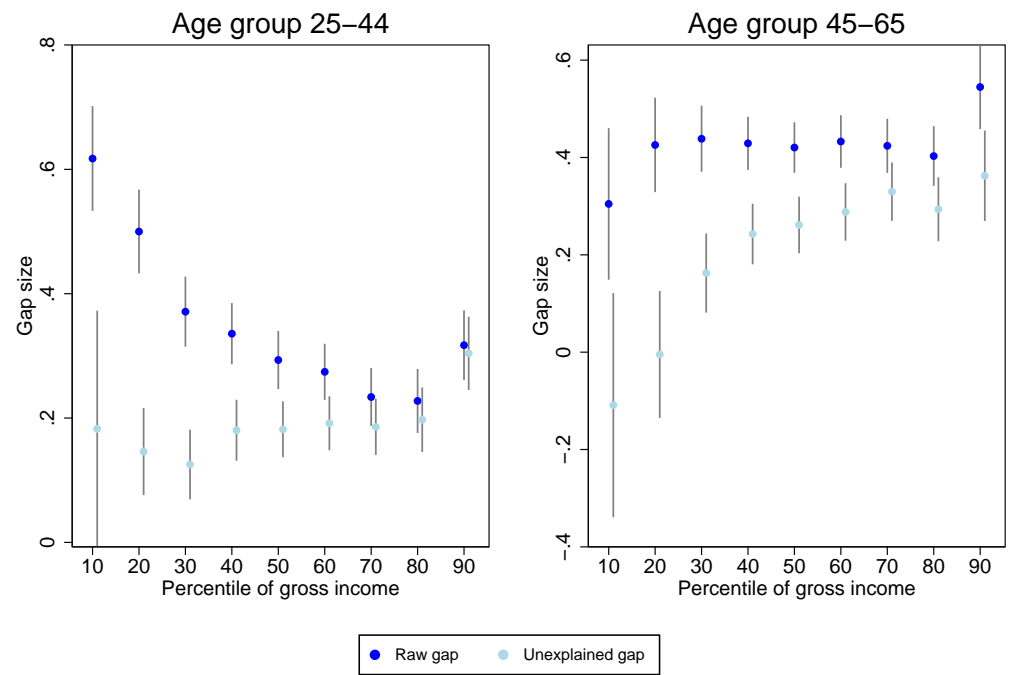
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