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Poverty Risk Across Population Groups in Austria: Insights from
EU-SILC (2019 and 2023)

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Abstract

The at-risk-of-poverty rate (AROP rate) shows the share of people below a certain income threshold. In the European Union and therefore in Austria, this threshold is 60% of the national median equivalized disposable income. This thesis looks at the AROP rate of different population groups in Austria in 2019 and 2023 and compares them. The population groups are the working age population, women living alone, men living alone, households with children, and single-parent households. Child poverty is descriptively analyzed. With a binary logistic regression, the impact of selected socio-economic variables on poverty risk is evaluated and compared. The data that is used is the European Union Statistics on income and living conditions (EU-SILC) for Austria, provided by Statistics Austria. I find that the AROP rate increases for all subgroups between 2019 and 2023, but to different extents. Single-parent households are the group that has the largest poverty risk and also experience a disproportionate increase in the AROP rate. Women living alone are the subgroup with the second highest poverty risk, but the increase between the years is not comparable with that for single-parent households. The AROP rate for children, but especially for children from single-parent households, is higher than for the entire population and also increases a lot. The socio-economic variables that have the greatest impact on poverty risk in both years are work intensity, a migration background, the level of education, and being a single parent. The extent to which these variables impact people regarding their poverty risk varies between 2019 and 2023. To improve the situation, targeted support policies are needed.

Keywords: AROP Rate, Poverty risk, Austria, logistic regression, EU-SILC, socio-economic factors

Kurzfassung

Die Armutsgefährdungsquote gibt den Anteil der Menschen an, die unter eine bestimmte Einkommensschwelle fallen. In der Europäischen Union und somit auch in Österreich liegt diese Schwelle bei 60 % des nationalen medianen verfügbaren Äquivalenzeinkommen. Diese Arbeit untersucht die AROP-Rate verschiedener Bevölkerungsgruppen in Österreich in den Jahren 2019 und 2023 und vergleicht sie miteinander. Die betrachteten Bevölkerungsgruppen sind die Bevölkerung im erwerbsfähigen Alter, alleinlebende Frauen, alleinlebende Männer, Haushalte mit Kindern und Alleinerziehenden-Haushalte. Zudem wird Kinderarmut deskriptiv analysiert. Mit einer binären logistischen Regression wird der Einfluss ausgewählter sozioökonomischer Variablen auf das Armutsrisiko analysiert und zwischen den beiden Jahren verglichen. Die verwendeten Daten sind die European Union Statistics on Income and Living Conditions (EU-SILC) für Österreich und werden von Statistik Austria bereitgestellt. Die Ergebnisse zeigen, dass die Armutsgefährdungsquote in allen analysierten Bevölkerungsgruppen zwischen 2019 und 2023 gestiegen ist, aber in unterschiedlichem Ausmaß. Alleinerziehenden Haushalte haben mit Abstand das größten Armutsrisiko und auch einen unproportional hohen Anstieg des Armutsrisikos. Alleinlebende Frauen stellen die Gruppe mit dem zweitgrößten Armutsrisiko dar, jedoch ist der Anstieg ihrer Armutsgefährdungsquote zwischen den Jahren nicht mit jenem von Alleinerziehenden Haushalte vergleichbar. Die Armutsgefährdungsquote von Kindern, insbesondere von Kindern aus Alleinerziehenden-Haushalten, ist höher als jene der Gesamtbevölkerung und steigt ebenfalls deutlich an. Die sozioökonomischen Variablen mit dem stärksten Einfluss auf das Armutsrisiko sind in beiden Jahren eine niedrige Erwerbsintensität, ein Migrationshintergrund, ein niedriges Bildungsniveau sowie das Alleinerziehenden Dasein. Der Einfluss dieser Variablen variiert zwischen 2019 und 2023. Um die Situation zu verbessern, sind gezielte sozialpolitische Maßnahmen erforderlich.

Keywords: Armutsgefährdungsquote, Armutsrisiko, Österreich, Logistische Regression, EU-SILC, Sozioökonomische Faktoren

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1. Introduction

"Overcoming poverty is not a gesture of charity, it is an act of justice." This said Nelson Mandela in Johannesburg at the Live 8 Africa Calling event in 2005 (Mandela 2005). He was talking about Africa and extreme poverty rather than poverty risk in the global north, but this sentence highlights the issue of poverty and the importance of poverty reduction. "No poverty" is also Sustainable Development Goal (SDG) 1 of the 17 SDGs formulated by the United Nations. Again, the goal is to eliminate extreme poverty, which is concentrated in sub-Saharan Africa, but this goal highlights the global problem of poverty (Nations 2023).

Reducing poverty also makes economic sense, as growing up in poverty limits a person's potential, which leads to higher healthcare costs, lower productivity, and increased crime (McLaughlin and Rank 2018).

Poverty is one of the most discussed topics in the world. The share of people living in poverty or at risk of poverty differs between countries, but there is no country without it. Poverty has different definitions, and there are different poverty lines across the world. A widely recognized measure of poverty is the extreme poverty line set by the World Bank, which is \$ 2.15 per person per day (World Bank 2024). In the global north, the extreme poverty line is not the one that is usually used to measure poverty, but there are other poverty lines or at-risk-of-poverty thresholds. In Europe, the at-risk-of-poverty rate is an often-used measure and therefore will be used in this thesis and will be abbreviated with *AROP rate* (AROP threshold for the at-risk-of-poverty threshold and AROPE rate for at-risk-of-poverty or social exclusion rate). The AROP rate represents the proportion of individuals whose equalized disposable income falls below 60% of the national median equalized disposable income, which is the AROP threshold (everything after social transfers) (Eurostat 2021b).

Table 1.1 shows the AROP rate for Austria and other selected EU countries and the EU-27 average from 2010 until now. Austria has a lower AROP rate compared to the European Union in both 2019 and 2023. In 2019, the AROP rate was 13.3% in Austria and 16.5% on average in the EU-27 countries. In 2023, it is 14.9% in Austria and 16.2% on average in the EU-27 countries. The EU-27 average is shaped by contrasting trends among member states. Countries such as Romania, Latvia and Lithuania consistently show high AROP rates above or around 20%. This pushes the EU average upward. In contrast, wealthier Western and Northern European countries, such as Germany, Denmark, France, and also Austria, maintain lower AROP rates (around 15%), which pulls the average down. Italy, Spain, and Estonia display fluctuating rates over time but are also at a

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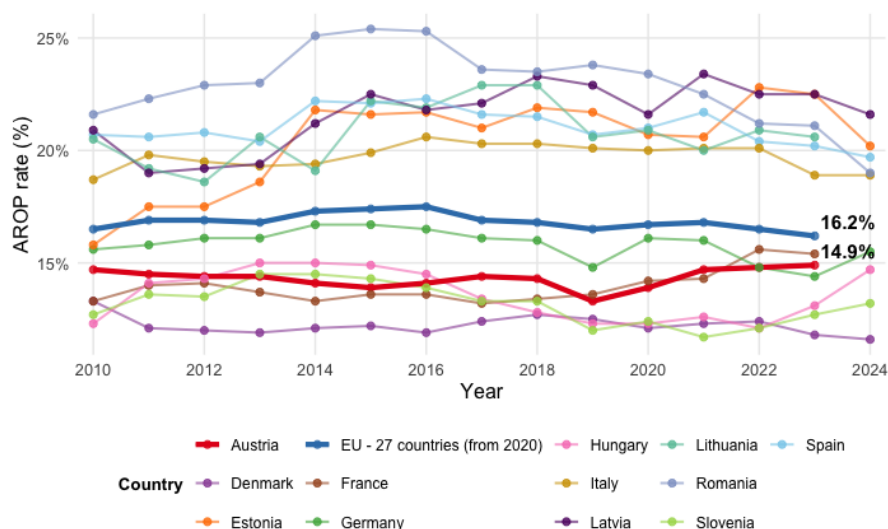


Figure 1.1.: AROP rate in selected EU Countries

higher level than the EU-27 average. This suggests that while some Eastern and Southern European countries continue to face higher poverty risks, wealthier Western and Northern European nations help to stabilize the overall trend. The ongoing disparities between member states highlight the persistent challenges in achieving a more balanced poverty risk reduction across Europe. Austria has more or less followed the EU-27 trend over the years. In 2019, the AROP rate reached its lowest level since 2010, but it has risen again, and by 2024, it is closer to the EU-27 average than at any time since 2010.¹ (Eurostat 2025a).

With 30.9%, the social expenditure-to-GDP ratio reached a peak in Austria in 2023 (Statistics Austria 2025). For comparison, with 30.4% Austria was the EU member with the second highest social expenditure-to-GDP ratio spending after France (34%). The EU average was 28% and the countries with the highest AROP rates, the Baltic states and Romania, had a social expenditure-to-GDP ratio below 20% (Latvia 17.7%, Lithuania 16.6%, Romania 16.4%, Estonia 15.7%). When comparing social expenditure per capita adjusted for differences in price levels, the strong contrast between these countries is also visible. This means the ranking is similar to that of the social expenditure-to-GDP ratio, with the Baltic States and Romania positioned at the lower end of the list (Bundesministerium für Soziales, Gesundheit, Pflege und Konsumentenschutz (BMSGPK) (Hg.) 2024).

Since poverty and poverty risk are such important topics, I want to take a closer look at the situation in Austria. I took inspiration from closely related papers (Heitzmann

¹Source of data (visited on 25.03.2025): Eurostat https://ec.europa.eu/eurostat/databrowser/view/ilc_li02/default/table?lang=en

and Pennerstorfer 2022; Heitzmann and Pennerstorfer 2025) that do similar analyses but for different years. Statistics Austria does an overall analysis of the poverty situation in Austria, but does not provide a detailed regression analysis. I want to compare the current results to understand the current situation better. To do that, I decided to select another year as a comparison. Since there have been many crises in the past years, I chose a year before that (2019).

In this thesis, I analyze the at-risk of poverty situation in Austria for 2019 and 2023 for different population groups. With a binary logistic regression, I want to find out to what extent different socio-economic variables impact poverty risk and how this changed between 2019 and 2023 for the selected population groups, which are the *working age population, women living alone, men living alone, households with children and single-parent households*. I find that the AROP rate increases for all population subgroups and the entire population between 2019 and 2023, but to different degrees. The population group with the highest AROP rate is single-parent households. Children from single-parent households also have a highly increased poverty risk compared to children from other households and the entire population. I also find that the impact of some socio-economic factors on poverty risk differs between the years. Additionally, the output for ordinary least squares (OLS) regression and an unweighted regression can be found in the Appendix, which supports the results. I used the 2019 and 2023 waves of the European Union Statistics on Income and Living Conditions (EU-SILC) for Austria. The EU-SILC is an annual survey which is conducted in all EU countries and some additional countries and contains information on the social situation of a large sample of the population and is used by many institutions and researchers (Statistik Austria 2024b).

To the best of my knowledge, my thesis is the first contribution that analyzes the socio-economic factors contributing to the AROP rate across different population groups in Austria and uses the 2023 and 2019 survey waves of the EU-SILC for Austria. There is a new paper that was published in February 2025 with the title "Kennzahlen zu Lebensbedingungen 2023: Benachteiligte Bevölkerungsgruppen in Österreich: Schwerpunkt: Auswirkungen der Teuerungskrise" by Huber and Heitzmann 2025. As part of the report, the authors also perform a logistic regression with the 2023 survey wave of EU-SILC to find out how socio-economic factors impact poverty risk. In contrast to my work, they do not directly compare 2019 and 2023 since they use the average of the last years, they use different subgroups, and different variables. Their work was published in February 2025, when this thesis was almost finished.

The thesis is structured as follows: Chapter 2 gives an overview of the related literature regarding poverty risk and emphasizes on the situation of women in Austria, since poverty and gender inequality are related. In chapter 3, I describe the data in detail, define the population subgroups, and explain the AROPE threshold and the AROP rate. The results of my descriptive analysis for the population subgroups and children are the core part of this chapter. Chapter 4 covers the empirical analysis. This includes the definition

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of the main variables, the regression analysis, and the results. In chapter 5 the results are discussed and a comparison between the population subgroups in more detail is made. I also discuss policy to reduce the AROP rate and limitations of the AROP rate. Chapter 6 concludes.

2. Related Literature

In this chapter, the related literature of this thesis is discussed to get a general understanding of the overall situation and where this thesis fits in regarding the analysis. At first, I will write about the situation of women and childcare in Austria and briefly discuss how recent crises have affected the situation. I will then discuss the risk of poverty in general and explain why it is important to address it.

Poverty and the risk of poverty are widely studied and analyzed topics, as they have a profound impact on people's lives and are prevalent across societies. Researchers have examined the effects of poverty to a large extent and statistical institutions provide valuable data on the poverty situation in different countries. Given the far-reaching consequences, poverty remains a critical subject of discussion and analysis.

Closely related to the issue of poverty is the problem of gender inequality and the impact of children. If women have their own income, poverty tends to be lower (UN Women 2023). Because of this, the role and the norm understanding of women in Austria is important. I choose to investigate 2019 and 2023 because many things happened between these years. First, the COVID-19 pandemic and second, an inflation crisis. It is therefore necessary to take a closer look at the situation of women and childcare in Austria and to understand some of the direct effects of the COVID-19 pandemic and the inflation crisis on these aspects.

2.1. Women in Austria, childcare and crises

Austria is defined as a conservative welfare state, for example by Hammer and Österle 2001. Parental leave in Austria is relatively long and rarely taken by the fathers. This results in the mother staying at home for a long time after childbirth, and therefore employment for mothers with children below the age of three years is not very high. In Austria, the most common constellation in a couple household with children is that the mother works part-time and takes care of the children while the father works full-time. It is very uncommon that fathers work part-time and therefore, they are seen as the main provider (Schratzentaller 2021). The share of children in institutionalized childcare is low for children below the age of three but high for children above the age of three (Bundeskanzleramt (BKA/FFJI). 2021). Austria's gender pay gap is one of the highest in the European Union. More specific, it was 18.4% compared to the average of the EU-27 countries which was 12.7 % in 2022 (Statistik Austria 2024a). In comparison to men,

2. *Related Literature*

women are also harmed much more financially by divorce or separation as found by many papers in the literature and summarized by (Mortelmans 2020).

Berghammer 2022 investigated how childcare and household work changed for mothers and fathers during the first lockdown in Austria in March 2020. They found that the childcare situation changed a lot. Overall, more childcare was done by the parents, since institutionalized childcare facilities were closed during the lockdown. Fathers were also much more involved in childcare if they worked fewer hours, which was the case for the majority. This meant that new roles were formed that had not existed before, compared to the typical setting with the father working full-time and the mother working part-time and doing much more childcare. Fathers became more involved in childcare if they were unemployed, worked fewer hours, or worked from home. This meant that their role became more similar to the typical situation of mothers. Still, mothers took over more of the additional childcare. The authors also found that household work was shared more evenly between mothers and fathers compared to childcare. The authors also wanted to find out if these changes could be sustainable. They could not completely answer this question, but they claimed that the change could be sustainable and potentially lead to more egalitarian gender roles, but most definitely only to a small extent. They also found that for about one third of parents, childcare tasks were split evenly.

Zinn and Bayer 2021 found that single parents were especially negatively affected by the impact of the COVID-19 lockdown, because they did not have a partner who could help them, and therefore they had to do everything alone. Firstly, more childcare but also homeschooling, which is especially challenging and time-consuming. This study was done for Germany.

The inflation crisis in recent years harmed the population. The greatest negative impact of the high inflation was in 2022 and 2023 in Austria (Budgetdienst 2023). Since I use the EU-SILC wave for 2023, this is reflected in the survey. Austria experienced higher inflation and a greater loss of consumption compared to other EU countries due to several factors. These include the significant role of the tourism sector, inflationary transfers, the reliance on exports, and a higher dependency on Russian oil and gas compared to the broader European area (Felbermayr 2024, pp. 108–111). Rising consumer prices and energy prices have an increasing effect on poverty and social deprivation, as find by Menyhért 2022.

2.2. **Poverty risk**

Reducing poverty benefits society as a whole and is economically reasonable. If a child grows up in poverty, this undermines the person's potential. A person that grows up in poverty has worse health and therefore needs more healthcare, is less productive, which means a loss of economic productivity, and commits more crimes since the payoff is higher. This translates into additional costs for the economy. These findings of McLaughlin and

Rank 2018 suggest that every dollar spent on poverty reduction would save at least seven dollars in economic costs in the United States.

Some researchers examine gender differences in poverty risk by focusing on individual income rather than household income, which is the standard method for calculating the AROP rate. Since household-level income does not allow for an accurate assessment of gender disparities (except in the case of single men and women) individual income measures are needed for evaluating poverty risk differences between men and women. Avram and Popova 2022 find that women have a higher poverty risk compared to men by constructing a measure for an individual disposable income. They also find that taxes and transfers have an impact on decreasing this difference but cannot extinguish the main reason for higher poverty risk of women, which is income inequality. Therefore, the authors emphasize that welfare states must strengthen women's employment since employment is crucial for reducing poverty risk (Avram and Popova 2022).

A similar approach has been done by Knittler and Heuberger 2018. They investigate the situation of working poor individuals, meaning people that are employed but have such a low income that they are still considered to be at risk of poverty. The authors highlight the problem that an individual with a low income may not be classified as being at risk of poverty if they live in a household with someone who has a higher income. They still consider the individual incomes for those living in shared households and therefore different AROP thresholds are the result. One of their key findings is that, when using the newly adjusted individual risk threshold, the rise in the proportion of people at risk of poverty is much greater for women than for men. (Knittler and Heuberger 2018).

The situation of poverty risk would look very different if there were a breakup in the households. Usually, women have a lower income and some would be at risk of poverty if they would live on their own but not in a household with a partner, meaning another income in the household (Knittler and Heuberger 2018, p. 231). To investigate this further would be an interesting and important research topic but is not the purpose of this thesis.

The most closely related paper to my thesis is the work of Heitzmann and Pennerstorfer 2022 with the title "*Armutsgefährdung und soziale Ausgrenzung von Ein-Eltern-Haushalten in Österreich*". In this paper, the author's main analysis is a logistic regression to find out how some socio-economic variables impact the AROP rate and the AROPE rate of the entire population, households with children, and single-parent households. They do a comparison between 2008 and 2019. Their main results are that single-parent households have a disproportionately higher risk of poverty compared to the entire population, and that this is mainly unchanged since 2008. Additionally, having a migration background or a low work intensity has an increasing impact on poverty risk. The paper is closely related to the paper "*Alleinerziehende in Österreich: Lebensbedingungen und Armutsrisiken*" (Zartler, Beham-Rabanser et al. 2011) and leans on the approach of this paper. Zartler, Beham-Rabanser et al. 2011 do their analysis for the year 2008 and Heitzmann and

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Pennerstorfer 2022 reproduce the regression and also do it for 2019 to compare the years.

Zartler, Beham-Rabanser et al. 2011 find that single parents have a disproportionately higher risk of being at risk of poverty since being a single parent puts additional pressure on a person (regarding the time management and financially). They find that being marginally employed could have a worse financial outcome than being unemployed. They highlight the need for extra support of single parents and point out that the majority of them are women. The increased poverty risk of single parents and the higher likelihood of children from single-parent households to be at-risk-of-poverty is also found by (Chzhen and Bradshaw 2012). They perform a multilevel logistic regression and use the 2009 wave of the EU-SILC.

In the recent paper by Heitzmann and Pennerstorfer 2025 with the title "*Large families and poverty in Austria: What explains their disproportionate risk of experiencing income poverty?*", the authors find that large families have a higher risk of being in poverty compared to the entire population, but also compared to small families, and that this is mainly due to a changed family structure. This means that parents with many children are usually less employed. They also find that social transfers, family benefits, and socio-economic factors such as a migration background influence poverty risk to a great extent. Similar results are presented in the paper "*A time of need: Exploring the changing poverty risk facing larger families in the UK*" by Stewart, Patrick and Reeves 2025. In this paper, the authors find that children in large families with a migration background have a higher poverty risk. The authors analyze the poverty risk of large families over time in the United Kingdom. They find that the increased poverty risk in large families is because children in large families have a higher poverty risk. Similar to Heitzmann and Pennerstorfer 2025, they find that poverty risk in large families is highly influenced by the extent of social security support as well as by a migration background. The authors draw a direct link of poverty rates in large families to the political parties in power and their social security support policies (Stewart, Patrick and Reeves 2025).

Both papers by Heitzman and Pennerstorfer (Heitzmann and Pennerstorfer 2022; Heitzmann and Pennerstorfer 2025) are closely related to my work, and I took inspiration from their regression analysis. In contrast to my thesis, they only use data for years before COVID-19 and the inflation crisis, and therefore not the most recent data wave of EU-SILC.

I want to find if and how the situation has changed. While Statistics Austria provides annual descriptive results on the AROP rate, I have not found a study that analyzes the socio-economic factors influencing the AROP rate that uses the most recent EU-SILC data wave and compares it to a similar analysis from before COVID-19 and the recent period of high inflation in Austria ¹.

¹As part of the report "Kennzahlen zu Lebensbedingungen 2023: Benachteiligte Bevölkerungsgruppen in Österreich: Schwerpunkt Kapitel: Auswirkungen der Teuerungskrise", the authors also perform a logistic regression with the 2023 survey wave of EU-SILC to find out which socio-economic factors

My research questions are therefore the following:

- How does the risk of poverty differ between different population groups in Austria?
- Which socio-economic factors have the most significant impact on poverty risk in Austria?
- How did the situation change between 2019 and 2023 in Austria?

impact poverty risk. In contrast to my work, they do not directly compare 2019 and 2023 since they use the average of the last years, they use different subgroups, and different variables. Their work was published in February 2025, when this thesis was almost finished

3. Descriptive analysis

The following chapter describes the data that is used, shows how the population subgroups of interest are defined and how the AROP threshold is defined and calculated. In addition, a separate descriptive analysis on child poverty is carried out.

3.1. Data description

For my analysis, I used the 2019 and 2023 survey waves of the European Union Statistics on Income and Living Conditions (EU-SILC) for Austria. The EU-SILC is a data source that offers comparable information on income, living conditions, and social inclusion of people across European countries over time on an annual basis. This means both cross-sectional and longitudinal microdata are available. The households stay in the survey for four years (rotating panel design). The first wave was conducted in 2004 for a selected group of EU countries and was then expanded to every EU country over the years and some additional countries, such as Turkey, Switzerland, Norway, etc. EU-SILC contains data on the household level as well as on the individual level. The individual-level data is only available for people aged 16 years or older (European Commission 2023, p. 13).

The data is collected to get an overview of the social situation in the EU, and the European Commission uses the data to make annual reports. In Austria, the data collection is carried out by Statistics Austria with specially developed tools, and is financed by the social ministry (since 2008). The data is used by many national and international institutions. For example, by the office of the federal chancellor, political institutions, the Austrian national bank, the European Commission, OECD, the European Central bank, the IWF and many more (Statistik Austria 2024b, pp. 10–12).

In 2023, the sample for Austria includes 12,482 individuals in 6,122 households. 1,989 of the individuals are below the age of 16 and therefore they are not questioned on the individual level (Statistik Austria 2024b, p. 6). In 2019, the sample for Austria includes 12,357 individuals in 5,983 households (2006 of the individuals are children below the age of 16). The Austrian EU-SILC is a representative sample for the Austrian population, and the calculated weights allow a proper weighting. I weighted the sample using the provided weights and ended up with 8,706,348 individuals for 2019 and 8,981,179 individuals for 2023 ¹. Both numbers are lower than the actual population of Austria. This is because

¹Austrian population: 1st of January 2019: 8,858,775 - 1st of January 2023: 9,104,772 (Statistik Austria 2025a) see <https://www.statistik.at/statistiken/bevoelkerung-und-soziales/bevoelkerung/bevoelkerungsstand/bevoelkerung-zu-jahres-/-quartalsanfang>

3. Descriptive analysis

the EU-SILC only includes private households and therefore persons in institutional households, people with no fixed residency or people who live in shared accommodation are not included (Statistik Austria 2024b, p. 14). The standard errors are calculated by using a calibrated bootstrap procedure (Statistik Austria 2024b, p. 63).

Because of the rotational panel character, the sample is split into four rotation groups. Every year, one group leaves the sample while a new one is introduced simultaneously. This way, each quarter of the sample stays in the panel for four years (Statistik Austria 2024b, p. 15). By using the EU-SILC wave from 2019 and 2023, two waves are used that have a difference of five years apart. This means there are no identical households in the waves. The reference period of an EU-SILC wave is the year of the survey, except for the income variables (Statistik Austria 2024b, p. 14). The reference period for the income variables is the year before the survey, and the income information is almost exclusively taken from administrative data sources (Statistik Austria 2024b, p. 7).

3.2. Definition of the subgroups

Five population subgroups are defined to answer the research questions. First, the **working age population**. I define them as individuals aged 18–64 years old. The same age cutoff is used by others in the literature for the working age population, for example by Knittler and Heuberger 2018, p. 228.

Second, the subgroups **women living alone** and **men living alone** to show the effect on individuals living alone, but also to capture the gender difference (at least to a small extent). The anticipation is that income and financial decisions are divided equally between the household members, meaning a couple, but it is known from the literature that this is not always the case (K. Mader et al. 2012). Since household income is used for the AROP rate calculations, it is not possible to measure the gender difference for women and men in general. If we would split women and men into different groups, we would only discover a small difference regarding their poverty risk, and this small difference would only be due to women and men living alone (Statistik Austria 2023, p. 1). This is the reason for the two subgroups, women living alone and men living alone. I did not include an age restriction since no children are living alone. The youngest person in the subset of women living alone is 18 years old in 2023 (19 years in 2019) and the youngest person in the subset of men living alone is 18 years in 2023 (18 years in 2019).

The fourth subgroup consists of **people living in households with children** who are above the age of 16 years. I choose 16 as the age cut off because persons below the age of 16 are not questioned in EU-SILC (Statistik Austria 2024b, p. 15).

The fifth subgroup consists of **individuals living in single-parent households** (again above the age of 16 years) since it is known that single-parent households face an increased risk regarding poverty (Heitzmann and Pennerstorfer 2022; Zartler, Beham-

3.3. At risk of poverty rate and threshold

Rabanser et al. 2011).

I chose these subgroups to represent population groups with different characteristics to investigate their differences regarding their poverty risk. The five subgroups are referred to as follows:

- (1) Working age population (18–64 years old)
- (2) Women living alone
- (3) Men living alone
- (4) Households with children (aged 16 or above)
- (5) Single-parent households (aged 16 or above)

3.3. At risk of poverty rate and threshold

To define the AROP threshold, it is necessary to know the equalized disposable income. The equalized disposable income is a household's entire income (including all kinds of extra income sources such as private intra-household payments and social benefits) after taxes and divided by the sum of the weights of all household members (basically a weighted per capita income). The modified OECD equivalence scale is used to define the weight of the household members. It assigns a base weight of 1 for the first adult, a weight of 0.5 is used for each following adult, and a weight of 0.3 is assigned for children below the age of 14 years ². The household income is then divided by the household weight, and this leads to the equalized disposable income (Eurostat 2025b). It leads to the same outcome if a base weight of 0.5 is assigned to each household and each adult is assigned a weight of 0.5 (also the first adult, since the household already has a base weight of 0.5) (Statistik Austria 2024b, p. 33). In Table 3.1, the household weights for a selection of different household sizes are calculated using the approach that assigns a base weight to each household.

Someone is defined as being at-risk-of poverty if their equalized disposable income is below 60% of the national median equalized disposable income. The share of people below the at-risk-of-poverty threshold is therefore called the at-risk-of-poverty rate (AROP) (Eurostat 2021b).

Table 3.2 shows the national median equalized disposable income and the poverty threshold amount for both 2019 and 2023 for a one-person household. For 2019, the

²This is because it is economically better not to live alone. After all, resources are shared, and therefore less income is needed. Because of that, additional household members are weighted less since not all resources need to be doubled, and therefore, not double the income is needed to provide a second adult or child with the same living standard as the first person (The Office for National Statistics (ONS) 2015).

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Table 3.1.: Example calculation for the household weights

Household Type	Base weight for a household	Added weights for adults	Added weights for children	Sum of the weights
1 adult	0.5	0.5	0.0	1.0
1 adult + 1 child	0.5	0.5	0.3	1.3
1 adult + 2 children	0.5	0.5	0.6	1.6
1 adult + 3 children	0.5	0.5	0.9	1.9
2 adults	0.5	1.0	0.0	1.5
2 adults + 1 child	0.5	1.0	0.3	1.8
2 adults + 2 children	0.5	1.0	0.6	2.1
2 adults + 3 children	0.5	1.0	0.9	2.4

Table 3.2.: At risk of poverty threshold for 2019 and 2023 - one person household

Year	2019	2023
National median equalized disposable income (year)	31,371 €	31,443 €
National median equalized disposable income (month)	2,614 €	2,620 €
Poverty risk threshold = 60% of the above (year)	18,822 €	18,866 €
Poverty risk threshold (month)	1,568 €	1,572 €

national median equalized disposable income is 31,371€ (2,614 € monthly if divided by 12) for a one-person household. The AROP threshold therefore is 18,822€ and 1,568€ monthly (for a one-person household). In 2023, the national median equalized disposable income is 31,433€ (2,620 € monthly if divided by 12) for a one-person household. Therefore, the AROP threshold is 18,866€ and 1,572€ monthly (for a one-person household). To calculate the threshold amount for a household of a different size, the poverty risk threshold amount has to be multiplied by the household weight of the household size, as explained in Table 3.1. The numbers for 2019 are adjusted for inflation. To do that, the consumer price index (CPI) provided by Statistics Austria (index base year 2015) has been used (Statistik Austria 2025b).

The formula to adjust for inflation:

$$\frac{x * 130.1}{106.7} \quad (3.1)$$

106.7 is the CPI for 2019 and 130.1 is the CPI for 2023. x stands for the value that is inflation adjusted. The index base year is 2015. ³

I calculated the AROP rate for my groups of interest as defined before. There are six bars in each bar chart even though only five different subgroups are defined because the

³The numbers are slightly different if calculated with the "Wertsicherungsrechner", a tool provided by Statistics Austria to adjust for inflation. Again, the index base year is 2015 <https://www.statistik.at/Indexrechner/#/vpi/wsr>

3.3. At risk of poverty rate and threshold

first bar shows the result for the entire population.

Figure 3.1 shows the AROP rate 2019 and Figure 3.2 shows the AROP rate for 2023.

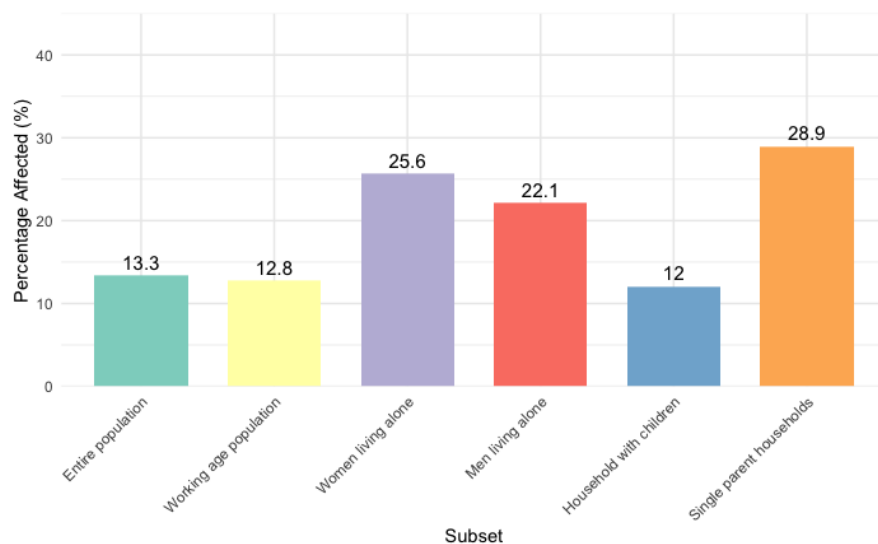


Figure 3.1.: AROP rate - Subsets 2019

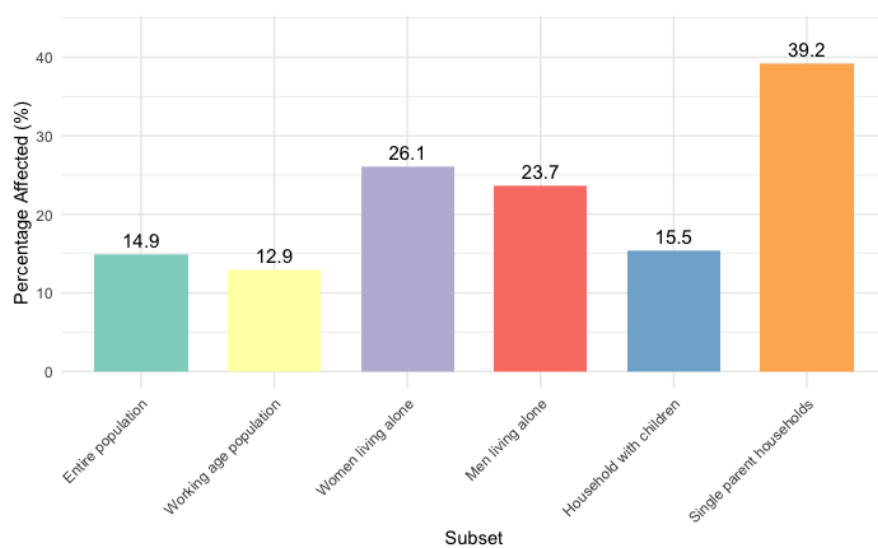


Figure 3.2.: AROP rate - Subsets 2023

The AROP rate for the entire population is 13.3% in 2019 and 14.9% in 2023. This shows that there was an increase of 1.6%. The AROP rate for the working age population

3. Descriptive analysis

is lower in both years and there is almost no change. It is 12.8% in 2019 and 12.9% in 2023. The AROP rate for women living alone and men living alone is higher compared to the entire population. 25.6% for women living alone in 2019 and 26.1% in 2023. 22.1% for men living alone in 2019 and 23.7% in 2023. The increase of the AROP rate between the years for both subgroups is smaller than for the entire population, but there is a constant gap between women and men. Men living alone have a lower risk, but the gap declines between the years. The gap is 3.5 % in 2019 and only 2.4 % in 2023.

The AROP rate for households with children is 12% in 2019 and 15.5% in 2023, which is an increase of 3.5%. The bar that sticks out the highest is the one representing single-parent households. The AROP rate for them is 28.9% in 2019 and 39.2% in 2023. This means individuals in single-parent households are 15.6% more likely to be at risk of poverty in comparison to the entire population in 2019. This difference rises to 24.3% in 2023. This shows that compared to an increase of 1.6% of the AROP rate for the entire population, there is a 10.3% increase of the AROP rate for single-parent households between 2019 and 2023.

The AROP rate is a relative measure and has some limitations. This is discussed in more detail in chapter 5 in section 5.2.

3.3.1. At risk of poverty or social exclusion rate (2023)

A broader measure beyond income is the at-risk-of-poverty or social exclusion (AROPE) rate. Its definition was initially established under the Europe 2020 strategy and later redefined in the European 2030 strategy. The AROPE rate includes individuals that are *"at risk of poverty, or severely materially and socially deprived, or live in a household with a very low work intensity"* (Eurostat 2021a).

Severe material deprivation and social exclusion (SMSD) refers to the share of individuals that cannot afford 7 or more out of 13 specified items (Eurostat 2021a). The specified items are:

Financially Unaffordable for Households

- Covering unexpected expenses of 1,370€
- Going on vacation once a year
- Paying rent, utility bills, or loans on time
- Eating meat, fish, or an equivalent vegetarian meal every other day
- Keeping the home adequately heated
- Replacing worn-out furniture

- Owning a car

Financially Unaffordable for Individuals (16 or older)

- Having a satisfactory internet connection
- Replacing worn-out clothing
- Owning two pairs of suitable shoes
- Setting aside a small amount of money for themselves every week
- Regularly engaging in paid leisure activities
- Inviting friends or family for food/drinks once a month

(Statistik Austria 2024b, pp. 34–35).

Low work intensity: These are households in which people aged 18–64 years old (excluding students aged 18–24) only worked 20% or less of their total work potential during the previous year. A person is included in the AROPE rate only once, even if they belong to multiple categories (Eurostat 2021a).

Figure 3.3 shows the AROPE rates for the subgroups of interest and the entire population for 2023. This figure is only provided for 2023 because this measure was only included as a variable in the 2023 wave of EU-SILC. Even though it would be possible to create a similar measure according to the previous definition for 2019, it would still be different and therefore not exactly comparable. Therefore, only the bar chart for 2023 is shown. As before, the bars represent the entire population and the five subgroups of interest: working age population, women living alone, men living alone, households with children, and single-parent households. The results look similar as in Figure 3.2, but every group has a higher percentage share because deprivation and low work intensity are added. The AROPE rate for the entire population in Austria in 2023 is 17.7% which is higher than for the working age population (16.3%). Again, women living alone (29.5%) and men living alone (28.6%) have an increased risk. The difference between these subgroups is now lower (only 1.1%). Households with children have a similar AROPE rate as the entire population (17.6%). Single-parent households are still the subgroup with the highest share of people at risk (44.9 %), which means that almost half of all single-parent households are at risk.

3.4. Child poverty

Child poverty is an especially critical topic because children are extremely vulnerable and exposed to the effects. Many studies show that poverty has both short- and long-term effects on the well-being and development of children. Children from low-income families often struggle more in school, have more health problems (physical and mental), and

3. Descriptive analysis

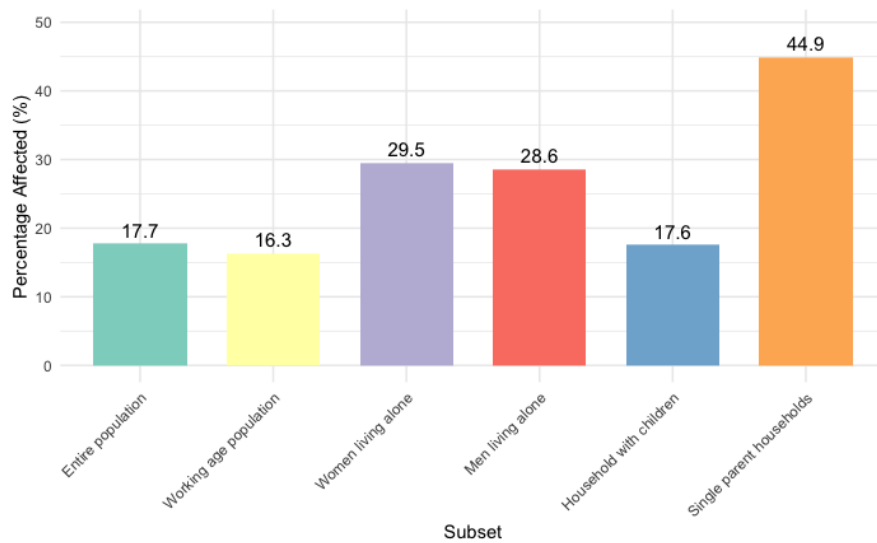


Figure 3.3.: AROPE rate - Subsets 2023

develop behavioral issues more often. Their future careers can also suffer because many skills are learned during childhood. Financial problems are a stress factor for parents (Thévenon et al. 2018, pp. 16–17). An increased level of distress can increase the risk of premature birth (Hedegaard et al. 1993, p. 234). Further, parents in a household with low income may not be able to provide a healthy environment such as good housing, good food, quality education and needed extras (books, a room to study in peace etc.)(Duncan and Magnuson 2013, pp. 13–14).

Chetty and Hendren 2018 find that even the neighborhood affects a child in the long term, since it affects the future income of the child. "Neighborhoods affect children's long-term outcomes through childhood exposure effects: every extra year a child spends growing up in an area where permanent residents' incomes are higher increases his or her income "(Chetty and Hendren 2018, p. 1160).

All this evidence highlights that child poverty is especially problematic, and therefore I calculated the AROP rate for children for both 2019 and 2023. I did this for children aged 0–15 years because this is the age group that is not questioned in EU-SILC. Figure 3.4 shows that in 2019, 15% of all children aged 0 to 15 years are at risk of poverty in Austria. This corresponds to 206,020 children. This number increased a lot to 280,554 which corresponds to 19.8 % of all children. This means that the AROP rate for children is higher compared to the AROP rate for the entire population in both years and the increase between 2019 and 2023 is also much higher compared to the increase for the entire population (4.8% for children versus 1.6% for the entire population).

3.4. Child poverty

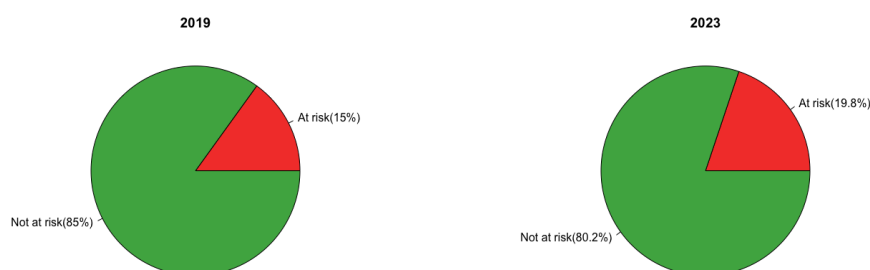


Figure 3.4.: AROP rate of children in 2019 and 2023

If children from single-parent households are excluded, there is a decrease by 1.6 % of the AROP rate in 2019, to 13.4 % and by 1.7 % in 2023, to 18.1 % as shown in figure 3.5.

If children from single-parent households are excluded, this lowers the AROP rate by 1.6 % in 2019 and brings it down to 13.4 % and by 1.7 % in 2023, reducing it to 18.1 % as shown in the figure 3.5.

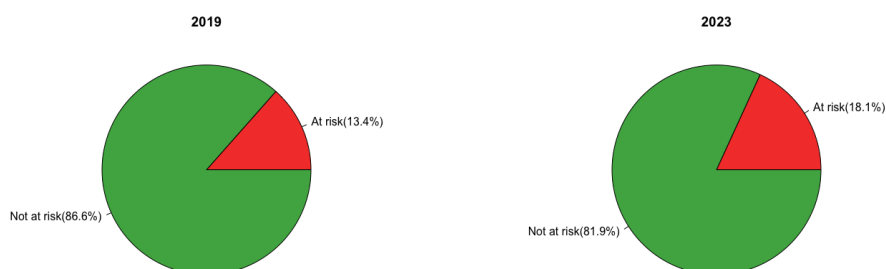


Figure 3.5.: AROP rate of children (no single-parent households) 2019 and 2023

However, if the AROP rate is only calculated for children from single-parent households, the situation changes drastically. For this group, 36,166 children, corresponding to 35.5% are at risk in 2019. In 2023, the AROP rate increases by 9.1% to 44.6%, corresponding to 41,652 children (Figure 3.6). This is a much higher increase compared to the increase of the AROP rate for all children aged 0 to 15 years (Figure 3.4). In conclusion, this means almost half of all children aged 0 to 15 years who live in a single-parent household in 2023 are at risk of poverty.

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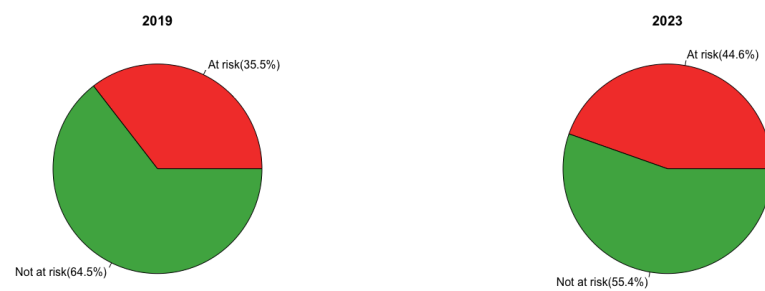


Figure 3.6.: AROP rate of children (only in single-parent households) 2019 and 2023

4. Empirical analysis

This chapter is about the empirical analysis of this thesis, which aims to find out which socio-economic factors contribute to the AROP rate of different population groups and to what extent. First, there will be a definition of the main variables used, this will then be followed by the explanation of the regression analysis for both 2019 and 2023. Afterward, I will present the results of the logistic regressions.

4.1. Definition of the main variables

The EU-SILC contains many variables that could be used for a regression to analyze poverty risk. Therefore, a careful consideration of the variables that will be used is necessary. Since I wanted to ensure that I have not done any p-hacking by trying different models and selecting the variables with the most significant results, I used variables that are also commonly used for similar regressions in the literature. More specifically, I leaned on the models of two very closely related papers that have done similar work but for different years to select fitting variables for my regression. Firstly, the paper "*Armutsgefährdung und soziale Ausgrenzung von Ein-Eltern-Haushalten in Österreich*" by Heitzmann and Pennerstorfer 2022 and second, the paper "*Large families and poverty in Austria: What explains their disproportional risk of experiencing income poverty?*" which is also by Heitzmann and Pennerstorfer 2025.

I chose *single parent* as a binary variable to make the effect of being a single parent visible in every subgroup that contains single parents (zero if not a single parent, one if is a single parent). Further, I selected *age* to control for any age-specific effects. I chose the *migration background* because, as known from the literature, the migration background has an effect on increasing poverty risk. I used the country of birth for that and created a categorical variable: *Austria*, *EU-14 countries* (*EU-15 countries* for 2019 because the United Kingdom was still part of the European Union) and *other* which includes the other EU countries and the rest of the world (Austria is the reference category).

I further chose a variable to look at the *area of residency*. The variable is binary, zero if someone lives in a region with less than 100,000 inhabitants and one if someone lives in a region with 100,000 or more inhabitants (larger city). To control for education, I created the binary variable *only compulsory school*. A value of zero indicates higher education, and a value of one indicates that the individual's highest level of education is only compulsory schooling.

4. Empirical analysis

To include the effect of working, I created a categorical variable for the *work intensity* with three categories: *full-time*, *part-time*, *inactive* (full-time is the reference category). First, I examined each individual's reported work activity for every month (as stated in EU-SILC) and classified them into one of these three categories. Since work activity can change throughout the year, I assigned each person the category that appeared most frequently across all months. To investigate the effect of young children, I included the *number of children below 16 years*.

The dependent variable is *poverty risk*. If someone's equalized disposable income is below the AROP threshold, then this is represented with a one. If someone's equalized disposable income is above the AROP threshold and therefore not at risk of poverty, this individual is represented with a zero.

As mentioned, these variables are used in related papers, but the exact definition differs. This is especially important to know because Heitzmann and Pennerstorfer 2022 also run a logistic regression with very similar variables using data from the 2019 wave of EU-SILC, but the results are not identical. Since they use the same data wave, the differences come from a distinct creation of the variables. Still, I can use their results as a benchmark because the coefficients go in the same direction and are similar by size. In contrast to their paper, I also run a weighted regression (and an OLS regression).

The independent variables:

- Single parent
- Age
- Migration background (Austria, EU15 (2019) and EU14 (2023 without the UK), other)¹
- Area of residency: big city - above 100,000 inhabitants
- Education: low education (only compulsory school)
- Work intensity (part-time and inactive in comparison to full-time)
- Number of children below 16 years

4.2. Regression analysis

To answer the research question "*Which socio-economic factors have the most impact on poverty risk in Austria?*" and "*How did the situation change between 2019 and 2023?*", a

¹Because the United Kingdom left the EU there is a change from EU15 countries to EU14 countries. In this thesis, they are treated as the same.

binary logistic regression is performed.

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \cdots + \beta_k X_k \quad (4.1)$$

p represents the probability of the event and β_0 is the intercept, which corresponds to the log-odds when all independent variables (x) are zero. β_1 to β_k are the coefficients that indicate how each independent variable (x) affects the log-odds of the outcome. X_1 to X_k are the independent variables. These coefficients are estimated with maximum likelihood estimation (MLE) (Newsom 2021; Bruin 2011; Hosmer Jr., Lemeshow and Sturdivant 2013).

Papers that perform a related analysis in this field also use logistic regression for their analysis (Heitzmann and Pennerstorfer 2025; Heitzmann and Pennerstorfer 2022; L. Mader et al. 2017; Rahman 2013). This is the reason I selected this method. After preparing the data, I perform a calibrated bootstrapping procedure to estimate the standard deviation of estimates, the standard errors. For this procedure, Statistics Austria developed an R package. It is called "*surveysd*" (Statistik Austria 2024b, p. 63)². Through 100 replications, I estimate the standard errors (Statistik Austria 2024b, p. 63). Following this, I create the variables of interest as described in section 4.1. After that I run the logistic regressions for my five subgroup of interest, (1) *working age population*, (2) *women living alone*, (3) *men living alone*, (4) *households with children* and (5) *single-parent households* as defined in chapter 3, for both 2019 and 2023.

The logistic regression is done for weighted and unweighted data. Since the authors in the paper I use as a guideline (Heitzmann and Pennerstorfer 2022) run the logistic regression on unweighted data, I also do this for my models for a better comparability. The results can be found in the appendix. I also run an ordinary least square (OLS) regression for all models for both years (4.2). The output can be found in the Appendix.

$$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_k x_k + \epsilon \quad (4.2)$$

4.3. Results

The results of the binary logistic regression for subgroup (1) to (5) with weighted data for 2019 are presented in Table 4.1 (standard errors in parentheses). The results for subgroup (1) for (5) for 2023 are presented in Table 4.2 (standard errors in parentheses).

The results differ between 2019 and 2023, and between the subgroups. I will explain them for each subgroup and compare the changes between 2019 and 2023 in the following

²More information about the R-package and the method: <https://statistikat.github.io/surveysd/index.html>

Table 4.1.: Logistic regression results - At risk of poverty, weighted, Austria, 2019

	<i>Dependent variable: Poverty risk (AROP)</i>				
	(1)	(2)	(3)	(4)	(5)
Single parent	0.590*** (0.007)			0.924*** (0.007)	
Age	−0.008*** (0.0001)	−0.042*** (0.0002)	−0.034*** (0.0002)	−0.005*** (0.0002)	0.029*** (0.001)
Migrant (EU15)	1.046*** (0.005)	0.559*** (0.013)	0.597*** (0.014)	1.345*** (0.008)	0.775*** (0.021)
Migrant (Other)	0.931*** (0.003)	1.292*** (0.009)	0.837*** (0.009)	0.783*** (0.005)	0.433*** (0.017)
Big city	0.580*** (0.003)	−0.678*** (0.007)	0.198*** (0.007)	0.830*** (0.004)	0.886*** (0.015)
Low education	0.332*** (0.003)	0.851*** (0.006)	0.233*** (0.010)	0.184*** (0.005)	0.608*** (0.015)
Work intensity (part-time)	0.636*** (0.004)	1.957*** (0.014)	1.317*** (0.011)	0.366*** (0.006)	1.463*** (0.020)
Work intensity (inactive)	1.482*** (0.003)	3.245*** (0.012)	2.247*** (0.009)	0.860*** (0.005)	2.090*** (0.020)
Number of children below 16	−0.036*** (0.001)			0.166*** (0.002)	0.336*** (0.008)
Constant	−2.880*** (0.005)	−1.343*** (0.014)	−1.096*** (0.011)	−3.218*** (0.008)	−4.533*** (0.032)
Observations	5,638,201	824,559	651,256	2,479,560	150,644

Source: EU-SILC 2019, own calculations, data is weighted

Note: Standard errors in parentheses. * p<0.1; ** p<0.05; *** p<0.01

Table 4.2.: Logistic regression results - At risk of poverty, weighted, Austria, 2023

<i>Dependent variable: Poverty risk (AROP)</i>					
	(1)	(2)	(3)	(4)	(5)
Single parent	1.203*** (0.007)			1.791*** (0.007)	
Age	-0.005*** (0.0001)	-0.035*** (0.0002)	-0.046*** (0.0002)	0.003*** (0.0002)	0.026*** (0.001)
Migrant (EU14)	0.785*** (0.006)	1.132*** (0.011)	1.247*** (0.012)	-0.206*** (0.014)	-0.470*** (0.034)
Migrant (Other)	1.205*** (0.003)	1.020*** (0.008)	1.875*** (0.009)	1.755*** (0.004)	0.938*** (0.013)
Big city	0.697*** (0.003)	-0.097*** (0.006)	0.366*** (0.007)	0.519*** (0.004)	0.696*** (0.012)
Only compulsory school	0.925*** (0.003)	0.886*** (0.006)	1.296*** (0.009)	0.977*** (0.005)	0.974*** (0.014)
Work intensity (part-time)	0.376*** (0.004)	1.190*** (0.012)	1.489*** (0.014)	0.310*** (0.006)	0.956*** (0.017)
Work intensity (inactive)	1.520*** (0.003)	2.479*** (0.011)	2.577*** (0.009)	0.971*** (0.005)	1.605*** (0.017)
Number of children below 16	0.294*** (0.001)			0.556*** (0.002)	0.281*** (0.007)
Constant	-3.448*** (0.006)	-1.188*** (0.013)	-1.113*** (0.012)	-4.348*** (0.009)	-3.467*** (0.029)
Observations	5,719,446	842,205	723,875	2,659,293	160,834

Source: EU-SILC 2023, own calculations, data is weighted

Note: Standard errors in parentheses. * p<0.1; ** p<0.05; *** p<0.01

4. Empirical analysis

subsections. In the output, we see that every independent variable is significantly different from zero. If a sample is large, significance is achieved even for very small effects.

The coefficients in a logistic regression can not be interpreted straightforwardly because they are displayed in log odds. This allows a general interpretation about the direction of the effect, but it is not possible to do a more detailed interpretation about the magnitude of the effect of a coefficient. Therefore, further calculation is needed (Hosmer Jr., Lemeshow and Sturdivant 2013, p. 51) (Newsom 2021).

Below, the derivation of the logistic regression probability formula from the logit function is shown. The use of the derivation allows to interpret the coefficients in more detail.

This is the standard logistic function used in logistic regression.

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k \quad (4.3)$$

Exponentiate both sides

$$\exp(\log\left(\frac{p}{1-p}\right)) = \exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k) \quad (4.4)$$

Since the exponent and logarithm cancel (this is the formula for the odds ratio)

$$\frac{p}{1-p} = \exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k) \quad (4.5)$$

Take the multiplicative inverse of both sides

$$\frac{1-p}{p} = \frac{1}{\exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k)} \quad (4.6)$$

Partial out the fraction on the left-hand side of the equation and add one to both sides

$$\frac{1}{p} = 1 + \frac{1}{\exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k)} \quad (4.7)$$

Change 1 to a common denominator

$$\frac{1}{p} = \frac{\exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k) + 1}{\exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k)} \quad (4.8)$$

Take the multiplicative inverse again to obtain the formula for the probability $P(Y = 1)$

$$p = \frac{\exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k)}{1 + \exp(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k)}. \quad (4.9)$$

This derivation of the logistic regression probability formula from the logit function is shown by Bruin 2011.

Equation 4.5 is the first step. If both sides are exposed, the *odds ratio (OR)* instead of the log odds is obtained. The odds ratio quantifies how much a one-unit increase in an independent variable affects the binary dependent variable (by how many times it increases or decreases). If the deprivation is done further, the probability formula (Equation 4.9) is the result. If the coefficients are put into this formula, the probability to which extent a coefficient impacts the dependent variable is received. This means log odds are transformed into *probabilities* (Bruin 2011).

Odds ratio interpretation:

- $OR = 1 \rightarrow$ No association between the independent variable and the outcome (being at risk of poverty)
- $OR > 1 \rightarrow$ The event (being at risk of poverty) is more likely to occur when the independent variable increases/is one, or when the category of interest is present
- $OR < 1 \rightarrow$ The event (being at risk of poverty) is less likely to occur when the independent variable increases/is one, or when the category of interest is present

For example, if $OR = 2$, the odds of the outcome (being at risk of poverty) happening is twice as high as if the coefficient is zero. If the $OR = 0.5$, the odds of the outcome (being at risk of poverty) happening is only half as likely as if the coefficient is zero (Hosmer Jr., Lemeshow and Sturdivant 2013, p. 52).

I apply the log odds transformation to all coefficients and, for completeness, also include the probability transformation, but my focus is on the odds ratios (OR). To ensure the significance of the odds ratios, I calculate confidence intervals for them³. The confidence intervals show that the odds ratios are statistically significant for all variables across all subgroups. The detailed results, including confidence intervals, are provided in the appendix.

Probability (P) refers to the likelihood of an event occurring on a scale from 0 to 1. The conversion from probability to odds is a "monotonic transformation" (Bruin 2011). Therefore, the probability and the OR increase and decrease simultaneously. An OR of one corresponds to a probability of 0.5 (Bruin 2011).

I will explain the results (odds ratios) for each subgroup in separate tables (both years). A more detailed comparison of the results will follow in chapter 5.

³The confidence interval indicates the range in which the true odds ratio is expected to lie. If a 95% confidence interval includes 1, the result is not significant. If 1 is not included, the result is significant (Adedokun 2008).

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4.3.1. Working age population

The results for subgroup 1 (Working age population) for both 2019 and 2023 are presented in Table 4.3 in more detail. The table includes the log odds as received from Table 4.1 and Table 4.2, the odds ratio (OR) and the probability (P).

Table 4.3.: Log odds, odds ratio, and logit transformation (probabilities) for subgroup (1) Working age population

Coefficient	2019			2023		
	Log Odds	OR	P	Log Odds	OR	P
(Intercept)	-2.880	0.056	0.053	-3.448	0.032	0.031
Single parent	0.590	1.804	0.643	1.203	3.329	0.769
Age	-0.008	0.992	0.498	-0.005	0.995	0.499
Migrant (EU_15)	1.046	2.847	0.740			
Migrant (EU_14)				0.785	2.191	0.687
Migrant (Other)	0.931	2.537	0.717	1.205	3.337	0.769
Big city	0.580	1.786	0.641	0.697	2.007	0.667
Only compulsory school	0.332	1.393	0.582	0.925	2.521	0.716
Work intensity (part-time)	0.636	1.888	0.654	0.376	1.457	0.593
Work intensity (inactive)	1.482	4.401	0.815	1.520	4.574	0.821
Number of children below 16	-0.036	0.964	0.491	0.294	1.342	0.573

The effect of a coefficient, represented by the odds ratio (OR), is always interpreted while holding all other variables constant. This means the OR reflects the isolated impact of a one-unit increase in the independent variable on the odds of the outcome occurring. The *intercept* is negative in both years (log odds), meaning that when all other factors are at zero, the baseline risk of poverty is low.

Being a *single parent* increases the likelihood of poverty in both years, and the effect has grown over time. In 2019, single parents are 1.8 times more likely (OR = 1.804) to be at risk of poverty compared to non-single parents (in the working age population). In 2023, this increases to 3.3 times (OR = 3.329). This indicates that single parents have become even more vulnerable. *Age* slightly reduces the risk, but the effect is minimal, and since the OR is almost one, this means there is almost no effect in either direction.

The impact of the *migration status* varies. In 2019, the risk of poverty is higher for migrants from EU15 countries (OR = 2.847) compared to 2023. Still, in 2023, migrants from EU14 countries (the UK left the EU) have an increased risk (OR = 2.191). Migrants from other countries have a heightened risk in both years. The odds increase from 2.5 times (OR = 2.537) in 2019 to 3.3 times (OR = 3.337) in 2023. This shows that the migration status remains an important factor in determining poverty risk.

Living in a big city (above 100,000 inhabitants) is associated with a higher poverty risk, with an OR of 1.786 in 2019 and 2.007 in 2023. This suggests that urban poverty has slightly worsened over time.

Education also plays an important role. Individuals who only finished compulsory school are more vulnerable. In 2019, their odds of experiencing poverty are 1.4 times higher than for those with higher education (OR = 1.393). By 2023, this effect has increased to 2.5 times (OR = 2.521). This highlights the growing importance of education in preventing poverty.

Employment status has one of the strongest impacts. Part-time workers have an increased risk of being at risk of poverty. The OR is 1.888 in 2019 and 1.457 in 2023, this means the effect has weakened slightly. Being inactive (not working) drastically increases the risk in both years, with OR = 4.401 in 2019 and OR = 4.574 in 2023. This shows that employment remains a crucial factor in avoiding poverty.

The *number of children below 16* has different effects in the two models. In 2019, having more children slightly reduces the risk of poverty (OR = 0.964) (almost one means almost no effect in neither direction), but in 2023, the effect changed direction (OR = 1.342). This means that one more child below the age of 16 years increases poverty risk by 1.3 times.

Overall, the findings indicate that some aspects of poverty risk have remained stable, but certain factors, such as *being a single parent, a migrant, and having low education*, have become an even higher risk factor.

4.3.2. Women living alone

The log odds, the odds ratio and the probabilities for subgroup 2 (Women living alone) for both 2019 and 2023 are presented in Table 4.4. Again the log odds are obtained from Table 4.1 and Table 4.2.

The effect of a coefficient, represented by the odds ratio (OR), is always interpreted while holding all other variables constant. This means the OR reflects the isolated impact of a one-unit increase in the independent variable on the odds of the outcome occurring. The *intercept* is negative in both years (log odds), meaning that when all other factors are set to zero, the baseline risk of poverty is low.

Age has a similar effect on poverty risk in both years, with OR = 0.959 in 2019 and OR = 0.965 in 2023. This indicates nearly no impact on poverty risk in either direction, since the OR is almost one. The *migration status* has a large impact on poverty risk, but there are differences between the years for the migration groups. In 2019, migrants from EU15 countries have a 1.7 times higher poverty risk (OR = 1.749). In 2023, poverty risk for migrants from EU14 (the UK left the EU) countries is 3 times higher (OR = 3.103). This means their risk almost doubled between 2019 and 2023. For migrants

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Table 4.4.: Log odds, odds ratio, and logit transformation (probabilities) for subgroup (2)
Women living alone

Coefficient	2019			2023		
	Log Odds	OR	P	Log Odds	OR	P
(Intercept)	-1.343	0.261	0.207	-1.188	0.305	0.234
Single parent						
Age	-0.042	0.959	0.490	-0.035	0.965	0.491
Migrant (EU_15 2019)	0.559	1.749	0.636			
Migrant (EU_14 2023)				1.132	3.103	0.756
Migrant (Other)	1.292	3.640	0.784	1.020	2.774	0.735
Big city	-0.678	0.508	0.337	-0.097	0.907	0.476
Only compulsory school	0.851	2.343	0.701	0.886	2.426	0.708
Work intensity (part-time)	1.957	7.080	0.876	1.190	3.287	0.767
Work intensity (inactive)	3.245	25.669	0.963	2.479	11.929	0.923
Number of children below 16						

from other countries, poverty risk decreases - the odds ratio decreases from 3.640 in 2019 to 2.774 in 2023. This suggests that while migration status remains an important factor, some migrant groups may have improved their economic situation slightly over time.

Living in a *big city* (an area with more than 100,000 inhabitants) has a protective effect in 2019, with an OR of 0.508, meaning women living alone in urban areas only have 0.5 times the risk of being at risk of poverty compared to those women living alone in smaller towns or rural areas. This is in contrast to all other subgroups. In 2023, this effect diminishes a lot (OR = 0.907). This suggests that the advantage of urban living for women living alone disappears, and now it does not matter where they live regarding their poverty risk. This is still in contrast to all other subgroups.

Having higher *education* remains a key factor to protect against poverty risk. Women living alone who only completed compulsory school have a higher risk of being at risk of poverty, with an OR of 2.343 in 2019, which slightly increases to 2.426 in 2023. This suggests that having low education is even worse regarding poverty risk in 2023 but only to a small extent.

Again, the *employment status* has the strongest effect on poverty risk. Women that live alone and work part-time face an extremely high risk of poverty in 2019, with an OR of around 7.080. This means they are 7 times more likely to be at risk of poverty compared to full-time workers. In 2023, the impact is lower (OR = 3.287), this means that part-time employment is becoming less important but still increases the chance of being at risk of poverty by more than three times compared to full-time employment. Being inactive (not employed) has the most severe impact. Women living alone who are inactive have a 25.7 times (OR = 25.669) higher likelihood of being at risk of poverty in 2019 and an

almost 12 times ($OR = 11.929$) higher chance in 2023. The odds ratio decreases to a great extent, but it is still a strong indicator that not working is the greatest risk factor for poverty risk among women living alone.

Overall, the findings show that among women living alone, not participating in the labor market, being a migrant and having low education continue to be factors that cause a much increased poverty risk. The protective effect of living in a big city almost disappears. Working part-time or being inactive remain the strongest driver of poverty among women living alone, even though the poverty risk-increasing effect weakened to a great extent.

4.3.3. Men living alone

The log odds in combination with the odds ratio and probabilities for subgroup 3 (Men living alone) are presented in Table 4.5. The log odds are again obtained from Table 4.1 and Table 4.2.

Table 4.5.: Log odds, odds ratio, and logit transformation (probabilities) for subgroup (3)
Men living alone

Coefficient	2019			2023		
	Log Odds	OR	P	Log Odds	OR	P
(Intercept)	-1.096	0.334	0.250	-1.113	0.328	0.247
Single parent						
Age	-0.034	0.966	0.491	-0.046	0.955	0.488
Migrant (EU_15 2019)	0.597	1.816	0.645			
Migrant (EU_14 2023)				1.247	3.481	0.777
Migrant (Other)	0.837	2.309	0.698	1.875	6.522	0.867
Big city	0.198	1.219	0.549	0.366	1.441	0.590
Only compulsory school	0.233	1.263	0.558	1.296	3.653	0.785
Work intensity (part-time)	1.317	3.733	0.789	1.489	4.433	0.816
Work intensity (inactive)	2.247	9.456	0.904	2.577	13.152	0.929
Number of children below 16						

The effect of a coefficient, represented by the odds ratio (OR), is always interpreted while holding all other variables constant. This means the OR reflects the isolated impact of a one-unit increase in the independent variable on the odds of the outcome occurring. The *intercept* is negative in both years (log odds). Again, this means that when all other factors are set to zero, the baseline risk of poverty is very low. Since it is most interesting to investigate the differences between women and men living alone, I will especially compare these two subgroups.

The OR for *age* is 0.966 in 2019 and 0.955 in 2023. The values are almost one, which means that there is almost no effect in either direction, and there is not much change

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between the years.

The *migration background* is a factor that increases poverty risk for men living alone. There are differences regarding the countries. In 2019, the OR = 1.816 (EU15) and in 2023 it is 3.481 (EU14). The increased impact of being a migrant from an EU15/EU14 country on the likelihood of being at risk of poverty is similar to the results for women living alone. From a 1.8 times higher risk to an almost 3.5 times higher risk (compared to being from Austria). This is in contrast to subgroup 1 (working age population) in which the impact declined. In contrast to subgroup 2 (women living alone), there is also an increase in the OR for people from other countries (OR = 2.309 in 2019 and OR = 6.522 in 2023). This shows that the poverty risk for migrants from other countries increases to a great extent between 2019 and 2023, from a 2.3 times higher risk to a 6.5 times higher risk. This means, for some reason, having a migration background from these countries is much worse in 2023 compared to 2019 regarding poverty risk. For both years, people from other countries face a higher risk compared to EU15/EU14 countries. This is always in comparison to the reference category (being from Austria).

Living in a *big city* (an area with more than 100,000 inhabitants) increases the probability of being at risk of poverty by 1.2 times (OR = 1.219) in 2019 and by 1.4 times (OR = 1.441) in 2023. This is in contrast to subgroup 2 (women living alone).

The importance of higher *education* as a protective factor against poverty risk for men living alone increases. In 2019, men living alone with only compulsory school were 1.2 times (OR = 1.263) more likely of being at risk of poverty, while in 2023 this number increases to 3.6 times (OR = 3.653). Therefore, higher education as protection against poverty risk is more important for men living alone than women living alone in 2023 (subgroup 2).

As in the other subsets, the *employment status* has the strongest effect against being at risk of poverty. In contrast to subgroup 2, the negative impact of only working part-time instead of full-time increases for men living alone. The OR = 3.733 in 2019 and 4.433 in 2023. The same is true for being inactive. Being inactive increases the risk of poverty by around 9.5 times (OR = 9.456) in 2019 and by 13 times (OR = 13.152) in 2023. This is very interesting because it is very different for women living alone (subgroup 2). Something has reduced the poverty-increasing effect of part-time work and inactivity for women living alone between 2019 and 2023, which makes employment a less impactful protection against poverty risk. However, this is not observed for men living alone. In fact, for men, the effect goes in the opposite direction, but to a smaller extent.

Although there are some differences when compared to women living alone (subgroup 2), the factors with the strongest impact on increasing poverty risk are having a migration background, a low education level, and low labor market participation.

4.3.4. Households with children

The log odds in combination with the odds ratio and the probabilities for subgroup 4 (Households with children) are presented in Table 4.6. The log odds are obtained from Table 4.1 and Table 4.2.

Table 4.6.: Log odds, odds ratio, and logit transformation (probabilities) for model (4)
Households with children

Coefficient	2019			2023		
	Log Odds	OR	P	Log Odds	OR	P
(Intercept)	-3.218	0.040	0.038	-4.348	0.013	0.013
Single parent	0.924	2.518	0.716	1.791	5.994	0.857
Age	-0.005	0.995	0.499	0.003	1.003	0.501
Migrant (EU_15 2019)	1.345	3.837	0.793			
Migrant (EU_14 2023)				-0.206	0.814	0.449
Migrant (Other)	0.783	2.189	0.686	1.755	5.784	0.853
Big city	0.830	2.293	0.696	0.519	1.680	0.627
Only compulsory school	0.184	1.203	0.546	0.977	2.657	0.727
Work intensity (part-time)	0.366	1.442	0.591	0.310	1.363	0.577
Work intensity (inactive)	0.860	2.362	0.703	0.971	2.641	0.725
Number of children < 16	0.166	1.180	0.541	0.556	1.743	0.635

The effect of a coefficient, represented by the odds ratio (OR), is always interpreted while holding all other variables constant. This means the OR reflects the isolated impact of a one-unit increase in the independent variable on the odds of the outcome occurring. The *intercept* is again negative in both years (log odds), meaning that when all other factors are zero, the baseline risk of poverty is low.

Being a *single parent* increases the likelihood of poverty risk, and this effect has also increased. In 2019, single parents were 2.5 times more likely to be at risk of poverty compared to non-single parents (OR = 2.518). In 2023, this risk increases dramatically, with an odds ratio of 5.994, which means they are almost 6 times more likely to be at risk of poverty compared to other people in households with children. *Age* has almost no effect on poverty risk, with OR values close to one in both years as in the other subgroups (OR = 0.995 in 2019 and OR = 1.003 in 2023).

The *migration background* plays an important role, but the direction of the effect shifts for people with a migration background from EU15/EU14 countries. In 2019, migrants from EU15 countries have a high poverty risk (OR = 3.837) but it declines in 2023. In 2023, the OR = 0.814 which indicates that people with a migration background from these countries have a lower poverty risk compared to people from Austria. This is not the case for the previous subgroups, but only very few people from the previous subgroups have a migration background from EU15/EU14 countries, and therefore this result may be

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biased. More about that in Chapter 5. For the other subgroups, there is an increase in the negative impact on poverty risk from having a migration background from EU15/EU14 countries between 2019 and 2023. Migrants from other countries remain vulnerable in both years, and their poverty risk increases from 2.2 times (OR = 2.189) in 2019 to 5.8 times (OR = 5.784) in 2023 compared to being from Austria. This shows that people who have a migration background from these other countries face growing difficulties.

To live in a *big city* (above 100,000 inhabitants) is associated with a 2.3 times higher likelihood of being at risk of poverty in 2019 (OR = 2.293), but in 2023, the likelihood decreases to 1.7 times (OR = 1.680).

The importance of higher *education* as protection against poverty risk increased. In 2019, only completing compulsory school has a relatively small effect (OR = 1.203), but in 2023, this effect grows to OR = 2.657. This shows that people from households with children with low education are much more at risk of poverty compared to people from households with children with higher education.

As in the other subgroups, *work intensity* has the greatest effect on poverty risk. Part-time workers have an increased risk in both years, but this risk decreases slightly from 2019 (OR = 1.442) to 2023 (OR = 1.363). Being inactive (not being employed) compared to working full-time leads to a much higher poverty risk. In 2019, inactive people are 2.4 times more likely to be at risk of poverty (OR = 2.362), and in 2023 this probability increases to 2.6 times (OR = 2.641). Compared to men living alone and especially when compared to women living alone, the impact of work intensity on poverty risk is much lower for people from households with children. This is probably because living with another employed person reduces the risk of poverty because it increases household income. Instead of one person being responsible for generating income, both individuals contribute, and shared expenses (like heating, cooking energy, etc.) which leads to lower living costs per person.

The *number of children below the age of 16 years* in a household also influences poverty risk. Having more children increases the risk slightly (OR = 1.180) in 2019. The effect is much stronger in 2023. One more child below the age of 16 years increases the probability of poverty risk by 1.7 times (OR = 1.743). This indicates that families with more children are struggling more financially in 2023 compared to 2019.

People living in households with children that are single parents, migrants from other countries, have low education, and multiple children below the age of 16 years face an increased poverty risk in 2023 compared to 2019. Higher education and employment remain key protective factors. The increasing difficulties for single parents and large families indicate that raising children is becoming a financial challenge.

4.3.5. Single parent households

The log odds in combination with the odds ratio and the probabilities for subgroup 4 (Households with children) are presented in Table 4.7. Again, then log odds are obtained from Table 4.1 and Table 4.2.

Table 4.7.: Log odds, odds ratio, and logit transformation (probabilities) for model (5)
Single-parent households

Coefficient	2019			2023		
	Log Odds	OR	P	Log Odds	OR	P
(Intercept)	-4.533	0.011	0.011	-3.467	0.031	0.030
Single parent						
Age	0.029	1.030	0.507	0.026	1.027	0.507
Migrant (EU_15 2019)	0.775	2.171	0.685			
Migrant (EU_14 2023)				-0.470	0.625	0.385
Migrant (Other)	0.433	1.543	0.607	0.938	2.555	0.719
Big city	0.886	2.426	0.708	0.696	2.005	0.667
Low education	0.608	1.836	0.647	0.974	2.649	0.726
Work intensity (part-time)	1.463	4.320	0.812	0.956	2.602	0.722
Work intensity (inactive)	2.090	8.088	0.890	1.605	4.976	0.833
Number of children < 16	0.336	1.400	0.583	0.281	1.325	0.570

The effect of a coefficient, represented by the odds ratio (OR), is always interpreted while holding all other variables constant. This means the OR reflects the isolated impact of a one-unit increase in the independent variable on the odds of the outcome occurring. The *intercept* is negative in both years (log odds), meaning that when all other factors are at zero, the baseline risk of poverty is low.

Age has almost no effect with an odds ratio close to one. However, there is a slight trend indicating that as a single parent gets older, the likelihood of being at risk of poverty increases. Although the effect is very small, it contrasts with the trend observed in all other subgroups.

The effect of a *migration background* is similar to that of subgroup 4 (households with children). In 2019, migrants from EU15 countries are 2.2 times (OR = 2.171) more likely to be at risk of poverty. However, in 2023, the odds ratio (OR) drops to 0.607. This indicates that the poverty risk for individuals in single-parent households with a migration background from EU14 countries is about half as high as for those in single-parent households without a migration background (from Austria). This result is probably not very valid since few persons in single-parent households have a migration background from the EU14 countries. The majority is from Austria, and therefore this result may be misleading (more details in Chapter 5). For single parents from other countries, the likelihood of being at risk of poverty increases between 2019 and 2023 (OR = 1.543 in

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2019 and $OR = 2.555$ in 2023). This is a much smaller increase compared to the increase of poverty risk for people with a migration background from other countries in subgroup 4 (households with children).

For people from single-parent households, living in a *big city* (more than 100,000 inhabitants) increases the likelihood of being at risk of poverty by 2.4 times ($OR = 2.426$) compared to living in a place with fewer inhabitants in 2019. This effect declines to $OR = 2.005$ in 2023.

The increasing effect on poverty risk from low *education* grows between 2019 and 2023. In 2019, a person from a single-parent household with only compulsory school has 1.8 times ($OR = 1.836$) higher odds of being at risk of poverty. This increases to a 2.6 times ($OR = 2.649$) higher risk in 2023. This matches the results from the other subgroups and emphasizes the strengthening protective effect of higher education against poverty risk.

Again, as in all the other subgroups, a low *work intensity* has the strongest increasing effect on poverty risk but similar to subgroup 2 (women living alone) the effect weakens in 2023. Only working part-time in 2019 increases the probability of being at risk of poverty by 4.3 times ($OR = 4.320$). In 2023, working part-time only increases the risk by 2.6 times ($OR = 2.602$). The change in the effect of being inactive (not employed) goes in the same direction. In 2019 being inactive is worse regarding poverty risk compared to 2023 ($OR = 8.088$ in 2019 and $OR = 4.976$ in 2023). This similarity to women living alone can be explained since 76.4%, and therefore the majority of single parents, are women in 2023 (74.3% in 2019).

The effect of the *number of children below the age of 16 years* slightly weakens between 2019 and 2023 ($OR = 1.400$ in 2019 and $OR = 1.325$ in 2023). This indicates that having one additional child under 16 increased the likelihood of being at risk of poverty by 1.4 times in 2019, and by 1.3 times in 2023.

Migration background shows mixed trends between 2019 and 2023. While the poverty risk decreases for single-parent households from EU14 countries, it increases for single-parent households from other countries. These results are probably biased since most single parents are from Austria (see Chapter 5. Living in a big city and having low education increases poverty risk, with education becoming even more important over time. Work intensity still has the strongest increasing effect on poverty risk, but the impact weakens between 2019 and 2023. The number of children below 16 also influences poverty risk, though less so in recent years.

5. Discussion

In this chapter, the results of the empirical analysis will be discussed and compared.

In both 2019 and 2023, the likelihood of being at risk of poverty is especially linked to *being a single parent, having a specific migrant status, or having a low work intensity*, meaning working part-time or being inactive. There are variations between 2019 and 2023 and the subgroups, but this is consistent for all individuals throughout both years.

Being a single parent increases the risk of being at risk of poverty and the effect is more serious in 2023 compared to 2019 for all subgroups with this coefficient, which are the working age population and households with children.

Age has a protective effect against the risk of poverty, but the effect is extremely small for all subgroups. This means age has almost no impact in either direction. Nevertheless, the result (like all other coefficients) is significantly different from zero (the confidence intervals are presented in the appendix).

Interestingly, individuals from households with children (over 16 years old) and single-parent households (over 16 years old) with a migration background from EU14 countries have a lower risk of poverty in 2023 compared to those from Austria in the same subgroups. For people from households with children with a migrant background from EU14 countries, the OR is 0.814, meaning they are only 0.8 times as likely to be at risk of poverty as compared to people from Austria from this subgroup in 2023. In 2019, this is different, because they actually had a higher risk of poverty, which is similar to all other subgroups. The same pattern is observed for single-parent households with a migration background from EU15/EU14 countries: in 2019, their OR is 2.171, indicating a higher poverty risk compared to Austrian single parents. But in 2023, their OR dropped to 0.625, meaning they were only 0.6 times as likely to be at risk of poverty compared to Austrian single parents. This is surprising but there is a possible explanation. First, the situation for the group of households with children: In this group, only 3.6% have a migration background from EU14 countries in 2023. In 2019, the figure is similar, 4.4% of the individuals have a migration background from EU15 countries. Since this is an extremely low share, the results may not be very meaningful. In the subgroups of single-parent households, 9.8% have a migration background from EU15 countries in 2019, and 3.82% in 2023. Again, the share is very small, and therefore the results may not be valid. Even though 9.8 % is a small share, it is considerably higher compared to 2023, which is interesting. In all other subgroups, the risk of poverty due to a migration background from an EU15/EU14 country increases in 2023 compared to 2019.

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Living in an area with more than 100,000 inhabitants (a big city) increases the probability of being at risk of poverty. This applies to all subgroups in both years, except for women living alone. In 2019 they have a lower poverty risk if they live in a big city ($OR = 0.508$). Since the poverty risk of women living alone in 2023 does not depend on the place of residence anymore, the advantage of urban living for women living alone disappeared. One possible explanation for this could be the rising cost of housing, which may have affected different groups in different ways.

Having only compulsory schooling as the highest level of education increases the risk of poverty. Education has become increasingly important to avoid the risk of poverty. This applies to all subgroups, but the rise has been less pronounced for women living alone. The effect of low education on poverty risk is highest for this group in 2019. This suggests that the smaller increase in the importance of higher education for reducing poverty risk among women living alone, compared to other subgroups, may be because education was already a key factor for them in 2019. Overall, this underlines that education plays a crucial role in preventing poverty risk. As explained in Chapter 3, children who grow up in poverty tend to have a lower quality of education, and as the regression results show, this can have a strong impact on their risk of poverty in adulthood.

The impact of work intensity on poverty risk varies across the subgroups. In 2023, part-time employment has a smaller effect on poverty risk for individuals in households with children compared to other groups, especially women and men living alone. Additionally, for people in households with children, being inactive (not employed) increases their poverty risk less than it does for those living alone (women and men and single parents). This is likely because individuals who do not live alone are not the sole earners in their household, meaning they can rely on other sources of income. This is supported by the results for the working-age population. While inactivity increases the risk of poverty more for this group than for households with children, the effect in 2023 is smaller than for women living alone, men living alone and single-parent households (again people in these subgroups are solely responsible for generating household income). Although households with children include single-parent households, the percentage of single parents is relatively low compared to two-parent households (6.4% in both 2019 and 2023).

Another notable change in the effect of work intensity is that for single-parent households and women living alone, the protective effect of employment declines by almost half between 2019 and 2023. For women living alone, the risk of poverty is 25 times higher if they are inactive compared to women living alone who work full-time in 2019. In 2023, the odds are only 12 times higher. This highlights the sharp decrease in the effect of work intensity. Despite this decline, women living alone remain the subgroup that is most affected by inactivity in both years. A similar trend is observed for single-parent households ($OR = 8.088$ in 2019 and $OR = 4.976$ in 2023). Since the majority of people in this subgroup are women (74.3% in 2019 and 76.4% in 2023), this explains why the

effect is visible in both groups.

One more child below the age of 16 years increases the risk of poverty in general, except for the working age population in 2019. As explained before, in 2019 the number of children below the age of 16 years slightly reduces the likelihood of being at risk of poverty ($OR = 0.964$). Since the OR is almost one, it is more correct to say that having a child below the age of 16 years has almost no effect in either direction. In 2023, the situation changes, with an odds ratio (OR) of 1.325. This means that having one additional child under the age of 16 increases the risk of poverty by approximately 1.3 times. This is consistent with the results from the other subgroups. (Heitzmann and Pennerstorfer 2022) also have the same results for in their regression 2019, but they do not discuss possible reasons any further.

5.1. Policies to reduce the AROP rate

The gender aspect is not the focus of my thesis because, as explained in Chapter 3, it is not possible to truly account for gender while using the AROP rate or AROPE rate because of the way the income is calculated. Therefore, the only visible gender difference is between the subgroups of women living alone and men living alone. The difference in the AROP rate for women living alone and men living alone is 3.5% in 2019 and 2.4% in 2023. First, it looks like the difference is decreasing, but this cannot be said by only comparing two years, and most importantly, the issue of childcare does not exist for people living alone (since they do not have children). If other measures of poverty risk are used, it can be seen that women do have a much higher poverty risk than men (Knittler and Heuberger 2018). This highlights the need for policies that strengthen the poverty resilience of women, meaning their position in the labor market as well as comprehensive childcare, family-friendly workplaces, and support that women can return to the labor market quickly after childbirth.

Another solution could be to provide financial compensation for childcare within the household. If no funds are available in the household to do that, Austria offers the option of pension splitting. This allows one parent to transfer up to 50% of their pension to the caregiving parent for up to seven years for one child and up to 14 years for multiple children. (Pensionsversicherung 2024). Policies like this need further development and broader social acceptance. The uptake of pension splitting remains low, with only 1,155 cases in 2022 (Bundesministerium Soziales, Gesundheit, Pflege und Konsumentenschutz 2023).

Research, including my own findings, consistently shows that single parents (most of whom are women) are the most vulnerable group regarding poverty risk. Therefore, they are the ones that need extra support. Van Lancker, Ghysels and Cantillon 2015 finds that to reduce poverty risk among single mothers effectively, policies must focus specifically

5. Discussion

on supporting them, rather than solely addressing child poverty or providing general assistance. As explained in Zartler, Beham-Rabanser et al. 2011, pp. 14–15, a major problem is the sole responsibility of single parents for childcare, income-generating, and household work. Good and available childcare is therefore especially important for them, as well as childcare in the event of illness, and flexible and family-friendly working hours. This is also supported by Zartler and Berghammer 2023, pp. 21–22.

Being employed does not always mean people can avoid poverty. If wages are too low to cover basic needs, there should be more other kinds of financial support for both children and adults to help them out of poverty risk. One example is subsidized flats to make living more affordable. Another form of support is professional retraining to get people into higher-paid jobs as suggested in Badelt and Heitzmann 2023, p. 44.

As explained in Chapter 3, many children are at risk of poverty, especially children growing up in single-parent households. The AROP rate of children is higher than that of the entire population. This highlights the need for extra support for children in Austria that would give children equal opportunities and guarantee their well-being. There are already attempts for a "Kindergrundsicherung" (basic child security) that would be an extra support for all children in Austria, with an additional part that would be income dependent to help children from poorer families even more (Volkshilfe Österreich 2025). According to my results, a basic child security, such as proposed by Volkshilfe Österreich, would be important.

To mitigate the increased likelihood of poverty risk for people with a migration background, quality integration policies should be developed to give these people equal opportunities. Therefore, it is necessary to know why people with a migrational background have a higher poverty risk, but this is not the purpose of this thesis.

Policies to reduce the AROP rate are crucial, and they have to be targeted at those who are most vulnerable, which are children and single parents, but also women, and people with a migration background.

5.2. Limitations of the AROP rate

It is important to mention that the AROP rate is a relative measure. As explained by the European Commission 2024 a person may be at risk of poverty in one country, but it could be that this would not be the case in another country because the national median equalized disposable income is lower in the other country. More simply: if everyone in a country were a billionaire, some people would still be considered at risk of poverty.

Another problem with the AROP rate is that it does not allow gender differences to be looked at. This is explained in more detail in section 3.2.

5.2. Limitations of the AROP rate

There are discussions about alternative methods that include more information, for example, by Badelt and Heitzmann 2023. The authors claim that the AROP rate does not have a multidimensional approach. One of their major point of criticism is that the AROP threshold is higher compared to other minimum income thresholds. This means that some people are considered at risk of poverty according to the AROP rate, but to get support,t their income must be even lower (Badelt and Heitzmann 2023, p. 21). The authors also explain why the AROPE rate, despite offering more detailed information, is not that much better. This is because it does not specify which of the three categories (at risk of poverty, low work intensity, or severe material deprivation and social exclusion (SMSD)) applies to a person (Badelt and Heitzmann 2023, p. 29).

Even though Ravallion and Chen 2019 focuses on poverty lines at the international level rather than the national level, the authors argue that the common use of the median and mean to measure poverty or poverty risk on the national level has limitations. The *mean* is influenced by very high incomes, while the *median* ignores the rich entirely. Therefore, the authors propose the Gini-discounted mean as a better relative measure of poverty risk. This method, which they apply globally in their study, reduces the weight of wealthy individuals without excluding them entirely. (Ravallion and Chen 2019, p. 10).

It could also be argued that it would be better to use a fixed poverty threshold, but an important argument against a fixed amount is that fixed poverty thresholds (fixed amount of money) outdate quickly, since living standards change all the time (Victor R. Fuchs 1967, p. 88).

All this should be kept in mind, but the AROP rate is used by many related papers and is also calculated by institutions such as national statistics organizations or Eurostat, and therefore typically used to evaluate the poverty situation in a country (Heitzmann and Pennerstorfer 2022; Heitzmann and Pennerstorfer 2025; Eurostat 2021b; Statistik Austria 2024b). This is why the AROP rate is used in this thesis.

6. Conclusion

In my thesis, I studied how the risk of poverty differs between population groups in Austria and which socio-economic factors have the most significant impact on poverty risk. The subgroups of interest are the working age population, women living alone, men living alone, households with children, single-parent households, and the entire population, but I included the last subgroup only in the descriptive statistics. Since the years between 2019 and 2023 were challenging due to the COVID-19 crisis and high inflation, I chose these years to compare the results. To do that, I used the 2019 and 2023 waves of the European Union Statistics on Income and Living Conditions (EU-SILC) for Austria, provided by Statistics Austria. Since the 2023 survey wave of EU-SILC is the most recent, it was especially important to find the results, since this wave has not yet been used in this way in the literature.¹

At first, I did a descriptive analysis for both years to find the share of people who are at-risk-of-poverty in each of my subgroups of interest and the entire population (the AROP rate). I also did a descriptive analysis for children aged 0–15 years regarding their poverty risk. After that, I run a binary logistic regression on the subgroups of interest to find the impact of selected socio-economic factors on poverty risk. As the independent variables, I chose single parent, age, migration background, area of residency, education, work intensity, and the number of children below the age of 16 years.

This thesis shows that poverty risk in Austria has increased over time (between the years 2019 and 2023), with single parents being the most affected group. Poverty risk for single parents was already higher compared to all other subgroups and the entire population in Austria in 2019, but the increase of their AROP rate was much higher compared to the increase of the AROP rate for all other subgroups. The subgroup with the second-highest AROP rate is women living alone. The majority of single parents are women, and therefore, this makes it crucial to introduce policies specifically targeted to women and single parents.

Children have high poverty rates in both years in Austria, and the increase of their AROP rate is higher than for the entire population between 2019 and 2023. For children from single-parent households, the AROP rate is much higher than for other children, especially in 2023. As known from the literature, poverty is especially dramatic for children since it can even affect their future life through insufficient health, poor education, or a

¹The work from Heitzmann and Alexander Huber 2025 is the only other paper that I am aware of that uses the EU-SILC wave of 2023 for Austria in a similar analysis, but their work was published in February 2025 when this thesis was almost finished.

6. Conclusion

bad neighborhood, which leads to severe long-term consequences. Poverty is therefore often passed down from generation to generation. This highlights how essential child protection measures are.

Several factors influence poverty risk, and these factors have shifted over time. Single parents and especially women living alone were the subgroups most protected from poverty risk through employment. However, this protective effect has weakened a lot. While employment still has the greatest impact on reducing poverty risk for these subgroups, its effect is much less strong than before. This poses a critical question: What has changed, and which factors have become more significant? Therefore, further research in this area is essential. This poses a critical question: What has changed, and which factors have become more important? Therefore, further research in this area is essential.

This shows how important well-designed targeted policies are. Additionally, migration plays a growing role in poverty risk, reflecting the current political situation and the need to deal with this problem carefully. Therefore, policymakers should include findings on poverty risk and design policies that are targeted to decrease the AROP rate in Austria and to eliminate the high difference in poverty risk between different population groups. There have been one-time relief payments to help the population in Austria financially during the crisis, but in the long run, policies with more permanent measures are needed. Even though it has not been the main topic of this thesis, it is known from the literature that poverty risk and gender inequality are closely related, and therefore, this must also be taken into consideration when designing and implementing policies.

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A. Appendix

Table A.1.: Ordinary least square - At risk of poverty, weighted, Austria, 2019

	<i>Dependent variable: Poverty risk</i>				
	(1)	(2)	(3)	(4)	(5)
Single parent	0.098*** (0.001)			0.138*** (0.001)	
Age	−0.001*** (0.00001)	−0.007*** (0.00003)	−0.006*** (0.00003)	−0.0005*** (0.00002)	0.006*** (0.0001)
Migrant (EU_15)	0.128*** (0.001)	0.092*** (0.002)	0.108*** (0.002)	0.173*** (0.001)	0.137*** (0.004)
Migrant (Other)	0.116*** (0.0004)	0.218*** (0.002)	0.146*** (0.001)	0.089*** (0.001)	0.083*** (0.003)
Big city	0.065*** (0.0003)	−0.085*** (0.001)	0.030*** (0.001)	0.095*** (0.0004)	0.145*** (0.002)
Low education	0.040*** (0.0004)	0.163*** (0.001)	0.045*** (0.002)	0.021*** (0.001)	0.111*** (0.003)
Work intensity (part-time)	0.050*** (0.0004)	0.196*** (0.002)	0.195*** (0.002)	0.027*** (0.001)	0.204*** (0.003)
Work intensity (inactive)	0.168*** (0.0003)	0.419*** (0.001)	0.355*** (0.001)	0.088*** (0.0005)	0.344*** (0.003)
Number of children <16	−0.002*** (0.0002)			0.020*** (0.0002)	0.066*** (0.001)
Constant	0.059*** (0.0005)	0.340*** (0.002)	0.310*** (0.002)	0.012*** (0.001)	−0.304*** (0.005)
Observations	5,638,201	824,559	651,256	2,479,560	150,644
Adjusted R ²	0.105	0.163	0.162	0.096	0.175
Residual Std. Error	0.316	0.399	0.380	0.309	0.412
F Statistic	73,580.280***	22,942.590***	18,050.360***	29,159.720***	3,992.639***

Source: EU-SILC 2019, own calculations, data is weighted

Note: Standard errors in parentheses. * p<0.1; ** p<0.05; *** p<0.01

Table A.2.: Ordinary least square - At risk of poverty, weighted, Austria, 2023

	<i>Dependent variable: Poverty risk</i>				
	(1)	(2)	(3)	(4)	(5)
Single parent	0.186*** (0.001)			0.244*** (0.001)	
Age	-0.001*** (0.00001)	-0.006*** (0.00004)	-0.007*** (0.00003)	0.001*** (0.00002)	0.005*** (0.0001)
Migrant (EU_14)	0.070*** (0.001)	0.206*** (0.002)	0.178*** (0.002)	-0.018*** (0.001)	-0.053*** (0.006)
Migrant (Other)	0.153*** (0.0003)	0.185*** (0.001)	0.306*** (0.001)	0.241*** (0.0005)	0.206*** (0.003)
Big city	0.074*** (0.0003)	-0.013*** (0.001)	0.065*** (0.001)	0.060*** (0.0004)	0.134*** (0.002)
Low education	0.132*** (0.0004)	0.177*** (0.001)	0.223*** (0.001)	0.128*** (0.001)	0.192*** (0.003)
Work intensity (part-time)	0.023*** (0.0004)	0.149*** (0.002)	0.192*** (0.002)	0.025*** (0.001)	0.165*** (0.003)
Work intensity (inactive)	0.168*** (0.0003)	0.374*** (0.001)	0.360*** (0.001)	0.112*** (0.0005)	0.299*** (0.003)
Number of children <16	0.035*** (0.0002)			0.063*** (0.0002)	0.052*** (0.001)
Constant	0.012*** (0.0005)	0.312*** (0.002)	0.307*** (0.002)	-0.115*** (0.001)	-0.158*** (0.005)
Observations	5,719,446	842,205	723,875	2,659,293	160,834
Adjusted R ²	0.174	0.129	0.274	0.238	0.198
Residual Std. Error	0.305	0.410	0.362	0.316	0.437
F Statistic	133,637.800***	17,872.310***	39,081.760***	92,317.570***	4,973.042***

Source: EU-SILC 2023, own calculations, data is weighted

Note: Standard errors in parentheses. * p<0.1; ** p<0.05; *** p<0.01

Table A.3.: Logistic regression results - At risk of poverty, unweighted, Austria, 2019

	<i>Dependent variable: Poverty risk</i>				
	(1)	(2)	(3)	(4)	(5)
Single parent	0.797*** (0.151)			1.207*** (0.158)	
Age	−0.010*** (0.003)	−0.043*** (0.006)	−0.039*** (0.006)	−0.003 (0.005)	0.022 (0.014)
Migrant (EU15)	0.888*** (0.166)	0.757*** (0.375)	0.723* (0.419)	1.213*** (0.235)	1.075** (0.483)
Migrant (Other)	0.938*** (0.097)	1.101*** (0.250)	0.987*** (0.264)	0.995*** (0.144)	0.906** (0.387)
Big city	0.537*** (0.082)	−0.748*** (0.163)	0.086 (0.189)	0.663*** (0.129)	0.293 (0.307)
Only compulsory school	0.340*** (0.103)	0.879*** (0.158)	0.422 (0.267)	0.299* (0.154)	0.450 (0.375)
Work intensity (part-time)	0.595*** (0.114)	1.512*** (0.330)	1.455*** (0.340)	0.276 (0.173)	0.918** (0.401)
Work intensity (inactive)	1.559*** (0.089)	2.923*** (0.290)	2.191*** (0.242)	0.960*** (0.147)	2.040*** (0.423)
Number of children below 16	−0.044 (0.045)			0.225*** (0.061)	0.518*** (0.179)
Constant	−2.827*** (0.152)	−0.962*** (0.337)	−0.883*** (0.322)	−3.518*** (0.259)	−3.940*** (0.702)
Observations	7,556	1,374	938	3,203	321

Source: EU-SILC 2019, own calculations, data is unweighted

Note: Standard errors in parentheses. * p<0.1; ** p<0.05; *** p<0.01

Table A.4.: Logistic regression results - At risk of poverty, unweighted, Austria, 2023

<i>Dependent variable: Poverty risk (AROP)</i>					
	(1)	(2)	(3)	(4)	(5)
Single parent	1.098*** (0.158)			1.755*** (0.169)	
Age	-0.011*** (0.003)	-0.036*** (0.006)	-0.050*** (0.006)	0.004 (0.005)	0.039*** (0.014)
Migrant (EU14)	0.614*** (0.187)	0.791** (0.324)	1.184*** (0.383)	-0.181 (0.428)	-0.757 (0.928)
Migrant (Other)	1.126*** (0.099)	0.903*** (0.221)	1.680*** (0.274)	1.685*** (0.140)	1.078*** (0.354)
Big city	0.730*** (0.086)	-0.085 (0.146)	0.420** (0.192)	0.305** (0.135)	0.061 (0.302)
Only compulsory school	0.957*** (0.104)	0.921*** (0.153)	1.111*** (0.259)	1.019*** (0.152)	0.696* (0.396)
Work intensity (part-time)	0.508*** (0.123)	1.345*** (0.306)	1.653*** (0.384)	0.325* (0.176)	0.693* (0.387)
Work intensity (inactive)	1.676*** (0.093)	2.596*** (0.275)	2.719*** (0.270)	1.065*** (0.150)	2.251*** (0.447)
Number of children below 16	0.168*** (0.046)			0.568*** (0.065)	0.639*** (0.185)
Constant	-3.265*** (0.163)	-1.299*** (0.325)	-1.058*** (0.330)	-4.539*** (0.280)	-4.367*** (0.758)
Observations	7,483	1,425	1,016	3,232	306

Source: EU-SILC 2023, own calculations, data is unweighted

Note: Standard errors in parentheses. * p<0.1; ** p<0.05; *** p<0.01

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Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-2.880	0.056	0.056	0.057	0.053
single_parent	0.590	1.804	1.780	1.827	0.643
alter	-0.008	0.992	0.992	0.992	0.498
migrantEU_15	1.046	2.847	2.819	2.876	0.740
migrantOther	0.931	2.537	2.521	2.552	0.717
city_big	0.580	1.786	1.776	1.796	0.641
low_educ	0.332	1.393	1.384	1.402	0.582
work_intensitypart time	0.636	1.888	1.874	1.903	0.654
work_intensityinactive	1.482	4.401	4.375	4.428	0.815
num_child_b_16	-0.036	0.964	0.962	0.967	0.491

Table A.5.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (1) Working age population 2019

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-3.448	0.032	0.031	0.032	0.031
single_parent	1.203	3.329	3.287	3.371	0.769
alter	-0.005	0.995	0.995	0.995	0.499
migrantEU_14	0.785	2.191	2.166	2.217	0.687
migrantOther	1.205	3.337	3.316	3.357	0.769
city_big	0.697	2.007	1.995	2.018	0.667
low_educ	0.925	2.521	2.505	2.538	0.716
work_intensitypart time	0.376	1.457	1.445	1.469	0.593
work_intensityinactive	1.520	4.574	4.546	4.602	0.821
num_child_b_16	0.294	1.342	1.338	1.346	0.573

Table A.6.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (1) Working age population 2023

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-1.343	0.261	0.254	0.268	0.207
single_parent					
alter	-0.042	0.959	0.959	0.960	0.490
migrantEU_15	0.559	1.749	1.704	1.796	0.636
migrantOther	1.292	3.640	3.573	3.707	0.784
city_big	-0.678	0.508	0.501	0.514	0.337
low_educ	0.851	2.343	2.314	2.373	0.701
work_intensitypart time	1.957	7.080	6.894	7.271	0.876
work_intensityinactive	3.245	25.669	25.058	26.295	0.963
num_child_b_16					

Table A.7.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (2) Women living alone 2019

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-1.188	0.305	0.297	0.312	0.234
single_parent					
alter	-0.035	0.965	0.965	0.966	0.491
migrantEU_14	1.132	3.103	3.036	3.172	0.756
migrantOther	1.020	2.774	2.730	2.819	0.735
city_big	-0.097	0.907	0.897	0.918	0.476
low_educ	0.886	2.426	2.397	2.455	0.708
work_intensitypart time	1.190	3.287	3.213	3.364	0.767
work_intensityinactive	2.479	11.929	11.683	12.180	0.923
num_child_b_16					

Table A.8.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (2) Women living alone 2023

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-1.096	0.334	0.327	0.342	0.250
single_parent					
alter	-0.034	0.966	0.966	0.967	0.491
migrantEU_15	0.597	1.816	1.767	1.866	0.645
migrantOther	0.837	2.309	2.269	2.350	0.698
city_big	0.198	1.219	1.203	1.235	0.549
low_educ	0.233	1.263	1.239	1.287	0.558
work_intensitypart time	1.317	3.733	3.650	3.817	0.789
work_intensityinactive	2.247	9.456	9.299	9.617	0.904
num_child_b_16					

Table A.9.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (3) Men living alone 2019

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-1.113	0.328	0.321	0.336	0.247
single_parent					
alter	-0.046	0.955	0.954	0.955	0.488
migrantEU_14	1.247	3.481	3.404	3.561	0.777
migrantOther	1.875	6.522	6.410	6.636	0.867
city_big	0.366	1.441	1.422	1.461	0.590
low_educ	1.296	3.653	3.589	3.719	0.785
work_intensitypart time	1.489	4.433	4.316	4.553	0.816
work_intensityinactive	2.577	13.152	12.912	13.397	0.929
num_child_b_16					

Table A.10.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (3) Men living alone 2023

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Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-3.218	0.040	0.039	0.041	0.038
single_parent	0.924	2.518	2.485	2.551	0.716
alter	-0.005	0.995	0.995	0.995	0.499
migrantEU_15	1.345	3.837	3.779	3.895	0.793
migrantOther	0.783	2.189	2.169	2.209	0.686
city_big	0.830	2.293	2.274	2.312	0.696
low_educ	0.184	1.203	1.191	1.214	0.546
work_intensitypart time	0.366	1.442	1.425	1.460	0.591
work_intensityinactive	0.860	2.362	2.339	2.385	0.703
num_child_b_16	0.166	1.180	1.176	1.184	0.541

Table A.11.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (4) Households with children 2019

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-4.348	0.013	0.013	0.013	0.013
single_parent	1.791	5.994	5.916	6.072	0.857
alter	0.003	1.003	1.003	1.003	0.501
migrantEU_14	-0.206	0.814	0.792	0.836	0.449
migrantOther	1.755	5.784	5.734	5.833	0.853
city_big	0.519	1.680	1.666	1.693	0.627
low_educ	0.977	2.657	2.633	2.681	0.727
work_intensitypart time	0.310	1.363	1.347	1.379	0.577
work_intensityinactive	0.971	2.641	2.617	2.665	0.725
num_child_b_16	0.556	1.743	1.736	1.750	0.635

Table A.12.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (4) Households with children 2023

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-4.533	0.011	0.010	0.011	0.011
single_parent					
alter	0.029	1.030	1.028	1.031	0.507
migrantEU_15	0.775	2.171	2.082	2.263	0.685
migrantOther	0.433	1.543	1.493	1.593	0.607
city_big	0.886	2.426	2.356	2.499	0.708
low_educ	0.608	1.836	1.781	1.892	0.647
work_intensitypart time	1.463	4.320	4.153	4.494	0.812
work_intensityinactive	2.090	8.088	7.780	8.409	0.890
num_child_b_16	0.336	1.400	1.379	1.421	0.583

Table A.13.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (5) Single parent households 2019

Coefficient	Log Odds	OR	CI_Lower	CI_Upper	P
(Intercept)	-3.467	0.031	0.029	0.033	0.030
single_parent					
alter	0.026	1.027	1.026	1.028	0.507
migrantEU_14	-0.470	0.625	0.584	0.668	0.385
migrantOther	0.938	2.555	2.489	2.622	0.719
city_big	0.696	2.005	1.957	2.053	0.667
low_educ	0.974	2.649	2.575	2.724	0.726
work_intensitypart time	0.956	2.602	2.516	2.690	0.722
work_intensityinactive	1.605	4.976	4.811	5.146	0.833
num_child_b_16	0.281	1.325	1.306	1.344	0.570

Table A.14.: Log odds, odds ratio, logit transformation (probabilities) and confidence interval for subgroup (5) Single parent households 2023