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AT A GLANCE

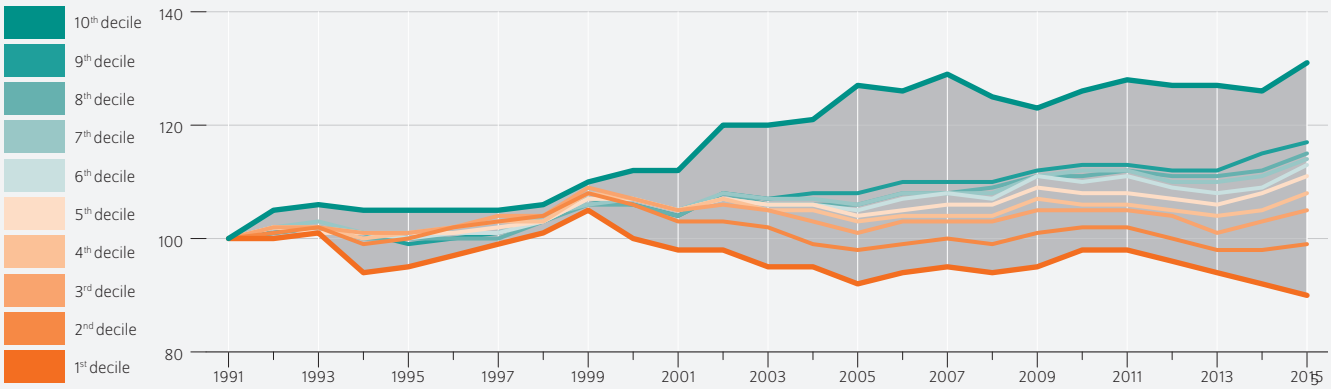
# Income distribution in Germany: Real income on the rise since 1991 but more people with low incomes

By Markus M. Grabka and Jan Goebel

- Most income groups have benefited from average 15-percent rise of real disposable incomes between 1991 and 2005 – two lowest deciles have not
- In 2015 16.8 percent of the population were at risk of poverty, markedly up from 11 percent in the 1990s
- Immigration is one reason for the rise, because new migrants have low incomes in the first years
- Strong rise of risk-of-poverty rates for home renters, rate is way lower and stable for home owners
- More targeted supports of newly arrived migrants and more social housing policy called for

**The income groups at the bottom of the distribution have experienced a decline in income since 1991**

Disposable income of private households in Germany by decile since 1991 (change in percent, 1991 = 100)




Source: SOEPv33.1.

Note: Real income in 2010 prices. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the OECD scale. The shaded areas indicate the 95 percent confidence band.



## FROM THE AUTHORS

*"Far from all people in Germany have benefited from the average growth of real incomes, originating mainly in a booming economy and the decline of unemployment".*

*— Markus Grabka, study author —*

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# Income distribution in Germany: Real income on the rise since 1991 but more people with low incomes

By Markus M. Grabka and Jan Goebel


## ABSTRACT

Between 1991 and 2015, the real disposable, needs-adjusted income of persons in private households in Germany rose by 15 percent on average. The majority of the population has benefited from the growth in real income, but the groups at the lower end of the income distribution have not. Inequality in both market and disposable needs-adjusted household income has remained high. These are the findings of the present study based on data from the Socio-Economic Panel (SOEP) study. The risk-of-poverty rate was 16.8 percent in 2015, in comparison to around 11 percent in the mid-1990s. The risk-of-poverty rate among the population without a migration background was 13 percent. At 29 percent, it was more than twice as high for persons with a direct migration background—those who were born in a foreign country and then migrated to Germany. The increase in the risk-of-poverty rate is mainly the result of the higher proportion of migrants. Differentiating by housing status yields a constant low risk-of-poverty rate for homeowner households, while tenant households must confront a significant increase in the risk of poverty.


The present study updates previous studies of the German Institute for Economic Research (DIW Berlin) on personal income inequality and the risk of poverty in Germany from 1991 to 2015—the first year after reunification and the most recently available disposable income year, respectively (Box 1).[1] The empirical analysis is based on Socio-Economic Panel (SOEP) data collected by DIW Berlin in partnership with Kantar Public.[2] Because the SOEP survey has been repeated every year for the past 30 years, it can be used to analyze trends in income over time.[3]

## Increase in both real household market income ...

The average needs- and inflation-adjusted annual household market income[4] of all persons living in private households rose slightly between 1991 and 2005 (Figure 1). Between 2005 and 2011, the increase was sharp, followed by a two-year phase with slightly falling real income. Most recently, a sharp increase was again apparent between 2014 and 2015—primarily due to above-average growth in wages,[5] quantitatively the most important income component of private households. The significant growth in employment in Germany—by

1 See most recently: Markus M. Grabka and Jan Goebel, "Real incomes rose between 1991 and 2014 on average—first indication of return to increased income inequality," *DIW Economic Bulletin* no. 5 (2017): 47–57 (available online, accessed May 3, 2018; This applies to all other online sources in this report unless stated otherwise).

2 SOEP is a recurring annual representative survey of private households. It began in West Germany in 1984 and expanded its scope to include the new federal states in 1990; see Gert G. Wagner et al., "Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland – Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Anwender)," *AStA Wirtschafts- und Sozialstatistisches Archiv 2* no. 4 (2008): 301–328.

3 The respective income year is identified in this study in accordance with the conventions in the German federal government's *Report on Poverty and Wealth* (see Federal Ministry of Labour and Social Affairs, "Lebenslagen in Deutschland," report in German only, 2017, available online) and the appraisal of the German Council of Economic Experts. The SOEP collects annual income information in retrospect—for the previous calendar year—but weighted according to the population structure at the time of the survey. Hence the data for 2015 presented here were collected in the 2016 survey wave.

4 Market income equals the sum of capital and earned income, including private transfers and private pensions, before taxes, social security contributions, and monetary social benefits. The income of persons without market income has been included in the calculation as a value of zero.

5 At +0.5 percent and –0.1 percent respectively, growth in the real wage index was weak between 2012 and 2013 but rose significantly in 2014 (+1.9 percent) and 2015 (+2.4 percent). See German Federal Statistical Office, "Reallohnindex im Jahr 2017 um 0,8 Prozent gestiegen," press release, March 23, 2018 (available online).

around 3.8 million employed persons[6] in the 2005 to 2015 period—also helped boost the real average household market income by just below ten percent in the same period.

The long-term trend for median[7] household market income was slightly U-shaped in the period between 1991 and 2015. Between 1991 and 2005, the median fell by nine percent and in the following decade, rose again by 11 percent. By 2015, the real median was again equal to its value at the turn of the millennium. This is partially due to the rising proportion of older persons, many of whom have very little or no market income.[8]

## ... and disposable household income

In total, average needs- and inflation-adjusted disposable household income[9] increased by around 15 percent between 1991 and 2015, showing approximately the same trend as average market income. But here as well, the trend was not perfectly linear. The years 2012 and 2013 were below average in comparison to the long-term trend.

Observing the median, at 12 percent the rise in disposable household income was somewhat weaker than that of the average. Here, the weak growth in pensions from the statutory pension fund is initially a major factor: in the 2000s, they were only partially adjusted for inflation.[10] And the number of foreigners living in Germany increased by one-third to 9.1 million in 2015.[11] It can be assumed that most newly arrived migrants earn income in the lower half of the income distribution in their first years in Germany, which primarily has a dampening effect on the median.

Since 2013, median disposable household income has again risen. The real five percent increase between 2013 and 2015 was somewhat stronger than for the average value of three percent.

## Income rose for most income groups

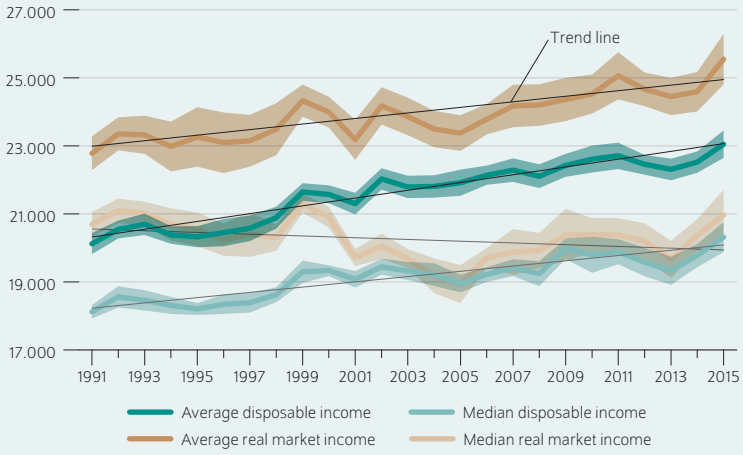
Average disposable household income did rise more sharply than the median (15 and 12 percent respectively), indicating that not all income groups were able to achieve the same high increase in income. Dividing the income groups into deciles[12] and indexing the mean income of each decile to 1991 showed that incomes in the upper range of the distribution experienced the largest growth (Figure 2). The disposable income of the highest income group (10th decile) rose by 30 percent between 1991 and 2015.[13] For eight of the deciles, real income increased between 1991 and 2005—by just below five percent for the third decile to over 16 percent in the ninth decile.[14]

In the second decile, at the end of the period real income rose after a longer downturn, almost attaining the level it had in 1991. The trend was different in the first decile. Between 1991 and 1994, real income dropped, primarily due to the migration of ethnic Germans. This drop was most significant in 1994. However, the database also played a role here: in 1994–95 the SOEP added a random sample of ethnic Germans having migrated from the former Soviet Union and Eastern European countries to its survey, and the group has been

Figure 1

**Real household market income and disposable income in Germany since 1991**

Average and median in euros




Note: Real income in 2010 prices. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale. Market household income includes a fictive employer's contribution for civil servants. The shaded areas indicate the 95-percent confidence band.

Source: SOEPv33.1.



On average, household income has risen in Germany since 1991.

6 See German Federal Statistical Office, "Employment," 2018 (available online).

7 The median is the value that separates the richer half from the poorer half of the population.

8 The proportion of the population over 60 rose significantly between 1991 (20.4 percent) and 2015 (27.4 percent). See German Federal Statistical Office, "Population by age groups," 2018 (available online).

9 Disposable household income is defined as household market income plus public pensions and state monetary transfers, minus direct tax and social security contributions, but the rental value of owner-occupied homes is included.

10 For example, between 2004 and 2006 and in 2010, pensions did not rise at all. When adjusted for inflation, these years are marked by income losses. Starting in 2011, the statutory pension fund raises its pensions at regular intervals.

11 See German Federal Statistical Office, "Foreign population increased by 5.8 percent in 2017," press release no. 133, April 12, 2018 (available online). The IAB-BAMF-SOEP Survey of Refugees is not included in the information for 2015 shown here, and therefore the high migration levels starting in mid-2015 are not reflected.

12 Sorting the population by income level and dividing the results into ten groups of equal size results in ten deciles. The lowest decile indicates the income situation of the poorest ten percent of the population and the top decile, the richest.

13 Top income-earners are underrepresented in SOEP surveys, such that the actual development in these incomes is very likely underestimated here (see Stefan Bach, Giacomo Corneo, and Viktor Steiner, "From Bottom to Top: The entire income distribution in Germany, 1992–2003," *Review of Income and Wealth* 55 (2009): 303–330.)

14 Since people can change their income position over time, we expressly did not measure individual income mobility in the analysis. Instead, we compared the relevant population as a whole in the different deciles at different times.

Box 1

## Definitions, methodology, and assumptions for income measurement

The evaluations presented in this study are based on the currently available survey wave of the longitudinal Socio-Economic Panel (SOEP) study and rely on annual income data. In each survey year (*t*), all income components that affect the responding household as a whole and all individual gross incomes of the persons currently surveyed in the household (market income derived from the sum of all capital and earned income, including private transfers and private pensions), were added together for the prior calendar year (*t-1*). Further, income from statutory pensions and social transfers (welfare, housing allowance, child benefit, support from the employment office, etc.) was taken into account and ultimately, with the help of a simulation of tax and social security payments, net annual income could be calculated. It also included one-time special payments (13th or 14th monthly wage, Christmas bonus, vacation bonus, etc.).

The annual burden of income taxes and social security payments was based on a microsimulation model[1] used to run a tax assessment that takes into account all types of income included in the income tax laws plus professional expenses, exemptions, and special expenses. Because German tax law is highly complex, the model could not be used to simulate all special tax regulations, and hence we assume that the income inequality measured in the SOEP is underestimated.

In the spirit of the international literature,[22] fictive (net) income components related to owner-occupied homes (imputed rent) were also added to income. The EU Commission specifies that EU-wide income distribution calculations must be based on the European Union Statistics on Income and Living Conditions (EU-SILC), including non-monetary income components from low-cost rental units (social housing, low-cost private or company housing, households without rental payments), and we adopted this approach in the present study as well.

In line with international standards, the income situations of households of different sizes and compositions are made comparable by converting the total income of households into an equivalent income (per capita income modified by needs-related aspects). We converted household incomes using a scale generally accepted in Europe and recommended by the OECD. Every household member was assigned an equivalent income calculated in this manner, under the assumption that all household members benefit from their shared income equally. In the process, the head of household received a weight of one; the other adults in the household and children 14 and over a weight of 0.5. Children under 14 receive a weight of 0.3.[3] We thus assumed a cost degression in larger households, meaning for example that the household income for a

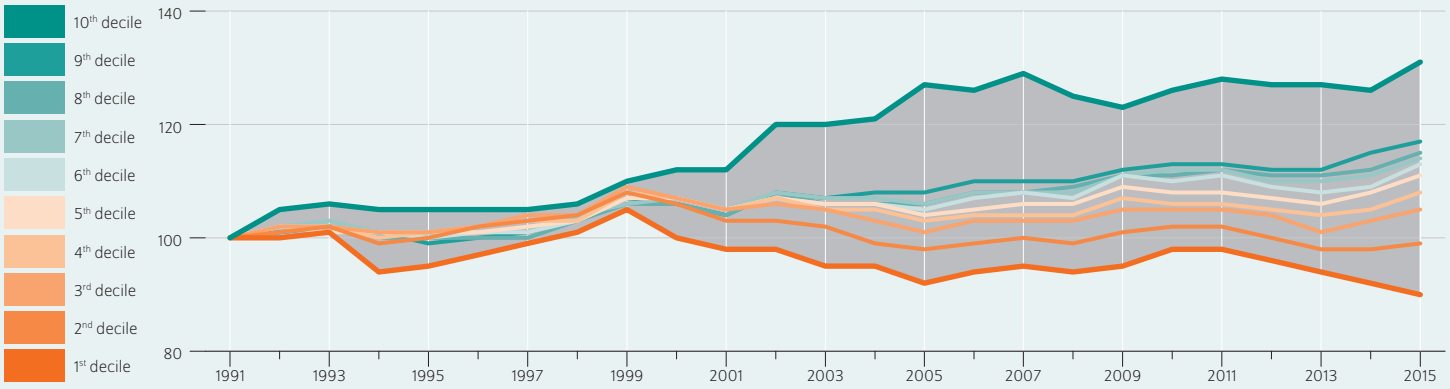
1 See Johannes Schwarze, "Simulating German income and social security tax payments using the GSOEP. Cross-national studies in aging," Syracuse University Program Project Paper no. 19 (1995).

2 See Joachim R. Frick, Jan Goebel, and Markus M. Grabka, "Assessing the distributional impact of "imputed rent" and "non-cash employee income" in micro-data," in *Comparative EU statistics on Income and Living Conditions: Issues and Challenges*, ed. European Communities (Luxembourg: Office for Official Publications of the European Communities, 2007).

3 See Brigitte Buhmann et al., "Equivalence Scales, Well-being, Inequality and Poverty," *Review of Income and Wealth* 34 (1998): 115–142.

Figure 2

**Disposable household income in Germany by decile since 1991**
Change in percent, 1991 = 100




Note: Real income in 2010 prices. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale. The shaded areas indicate the 95-percent confidence band.

Source: SOEPv33.1.



The two lowest deciles now have less disposable income than they did in 1991.

four-person household (parents and two children ages 16 and 13) is not divided by four (1+1+1+1) to arrive at the per capita amount. Instead, the divisor is 2.3 (1+0.5+0.5+0.3).

In all population surveys, taking missing information from individual respondents into consideration properly presents a specific challenge; particularly in the case of highly sensitive questions such as those involving income. And households with above- or below-average incomes frequently refuse to answer.

In the SOEP data analyzed here, missing information is replaced using elaborate, cross-sectional, and longitudinal imputation methods.[4] This also applies to missing values for individual household members refusing to answer any questions in households otherwise willing to participate in the survey. In these cases, we applied a multi-stage statistical method to six individual gross income components (earned income, pensions, and transfer benefits in the case of unemployment, training/university, maternity leave/parental allowance/parental benefit and private transfers).[5] The process included newly imputing all missing values in retrospect after each new data collection period, since new information from surveys can be used to add the data missing from prior years. This can lead to changes in earlier analyses. But as a rule, the changes are minor.

To avoid method effects in the times series for the indicators calculated, the first survey wave of each SOEP sample was excluded from the calculations. Studies show that multiple adjustments in survey behavior occur during the first two survey waves, and they are not due to varying willingness to participate.[6]

Upon consideration of extrapolation and weighting factors, the underlying SOEP microdata (version v33.1 based on the 33rd survey wave in 2016), our analyses present a representative picture of the population in private households. They thus allow for conclusions about the overall population in 2016. In order to do justice to the increased migration of recent years, separate random samples of these population groups were taken in 2013, 2015, and 2016. However, the distribution analyses only included information from the first IAB-SOEP migration sample (M1)[7] and immigration sample (M2) from 2013 and 2015. They do not contain the IAB-BAMF-SOEP Survey of Refugees in Germany from 2016. The weighting factors correct the differences in sampling design among the various SOEP random samples and among respondents' participation behavior. In order to raise the compatibility level with official statistics, the factors are adjusted to the currently available framework data of the microcensus of official statistics. The institutionalized population (those living in nursing homes, for example) was excluded from the calculations.

**4** Joachim R. Frick and Markus M. Grabka, "Item Non-response on Income Questions in Panel Surveys: Incidence, Imputation and the Impact on Inequality and Mobility," *Allgemeines Statistisches Archiv*, 89(1) (2005): 49–61.

**5** Joachim R. Frick, Markus M. Grabka, and Olaf Groh-Samberg, "Dealing with incomplete household panel data in inequality research," *Sociological Methods and Research* 41(1) (2012): 89–123.

**6** Joachim R. Frick et al., "Using Analysis of Gini (ANOGI) for Detecting Whether Two Subsamples Represent the Same Universe. The German Socio-Economic Panel Study (SOEP) Experience," *Sociological Methods Research* vol. 34 no. 4 (2006): 427–468.

**7** Herbert Brücker et al., "Neue Muster der Migration," *DIW Wochenbericht* no. 42 (2014): 1126–1135 (available online).

represented in the SOEP ever since.[15] Between 1994 and 1999, the real income of the lowest decile rose significantly. All income groups benefited from a generally positive economic climate. Hand in hand with rising unemployment, which peaked at almost 12 percent in 2005, real income in the first decile fell again between 2000 and 2005. Given the strong growth in annual GDP of around three percent at the time, income in the first decile rose thereafter until 2011—except in 2009, which was impacted by the economic and financial crisis. Since 2012, real income in the first decile has dropped, although the German economy is healthy and unemployment has fallen significantly.

Migration provides an explanation for the recent weak income trends in the first and second deciles. Since 2007, migration has considerably increased and most new migrants need some time before they find a foothold in the labor market. In the first months and years after their arrival, they have a high unemployment rate and therefore, earn low incomes. The proportion of persons with a direct migration background[16] and a low income is increasing. In 2015, they constituted 27 percent of the first and 25 percent of the second income decile. Ten years earlier, the proportion was around 20 percent in both deciles.[17]

Alongside demographic explanations, a few other aspects can explain the weak growth in the lower income deciles, e.g., the expansion of the low-income sector[18] until 2015, the

**15** For an overview of the various sub-samples in the SOEP, see Martin Kroh et al., "SOEP-Core—Documentation of Sample Sizes and Panel Attrition (1984 until 2016)," *SOEP Survey Papers* no. 480 (2018) (available online).

**16** A direct migration background is one where the person was born in a foreign country and migrated to Germany. An indirect migration background is defined as one where the person was born in Germany and can also be a German citizen, but at least one parent was born in a foreign country.

**17** The trend in real income is likely to be too positive in the SOEP—in particular in the first and second income deciles before 2011, when the survey began systematically questioning people with a migration background. Panel studies such as the SOEP confront the problem of only being able to survey migration in existing households unless an additional random sample is taken, targeted at new migrants/households. In the 2000s, migration was below average and sometimes even negative, therefore the SOEP did not consider taking random samples of migrants. This type of sample was not taken again until 2013.

**18** Thorsten Kalina and Claudia Weinkopf, "Niedriglohnbeschäftigung 2012 und was ein gesetzlicher Mindestlohn von 8,50 Euro verändern könnte," *IAQ Report* 2014-02 (2014) (available online). However, various effects must be taken into consideration. After all, an expansion of the low wage sector can create additional employment but it can also trigger displacement processes if, for example, full-time positions are converted into several low-wage jobs.

incomplete adjustment of social security benefits to inflation,[19] and the weak growth of old-age income.

## Household income inequality remains high

The Gini index is a standard measure of income inequality. It can have a value of 0 to 1. The higher the value, the higher the measured inequality. In the period between 1991 and 2005, the Gini index of household market income in Germany rose significantly and then fell until 2009[20] (Figure 3). Since then, inequality in market incomes has increased again: in 2015 it was approximately at the same level as it was in the mid-2000s.

In contrast, the Gini index of disposable household income remained virtually the same between 1991 and 1999, then rose from 0.25 in 1999 to 0.29 in 2005. Unlike inequality in market income, inequality in disposable household income regressed only slightly between 2005 and 2009. Since 2009, inequality has been on the rise again in general.

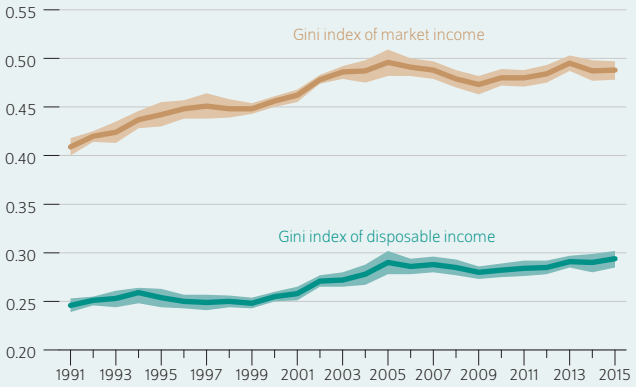
In international comparison, Germany exhibited a below-average level of income inequality (Figure 4).

**19** For example, between 2010 and 2014 the child benefit was not raised, leading to a loss in real value of more than six percent.

**20** In this period, capital income had less of an influence on inequality in general. See Markus M. Grabka, "Income and Wealth inequality after the financial crisis-the case of Germany," *Empirica—Journal of European Economics* 42 (2) (2015): 371–390.

Figure 3

**Income inequality in Germany since 1991**
Gini index of household real market income and disposable income




Note: Real income in 2010 prices. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale. Household market income includes a fictive employer's contribution for civil servants. The shaded areas indicate the 95-percent confidence band.

Source: SOEPv33.1.



Inequality has risen since 1991.

Figure 4

**Gini index of equivalized disposable household income in OECD countries, 2007 and 2014**

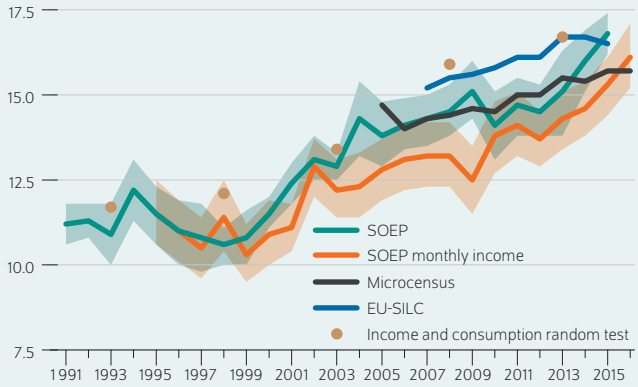

Source: OECD Income Distribution Database (available online); authors' own calculations.



In comparison with other OECD countries, Germany's Gini index is low.

Figure 5

**Risk-of-poverty rate in Germany since 1991 according to different data sources**
In percent




Note: The risk-of-poverty rate describes the proportion of the population living in households with less than 60 percent of the median net disposable household income. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale. The shaded areas indicate the 95-percent confidence band.

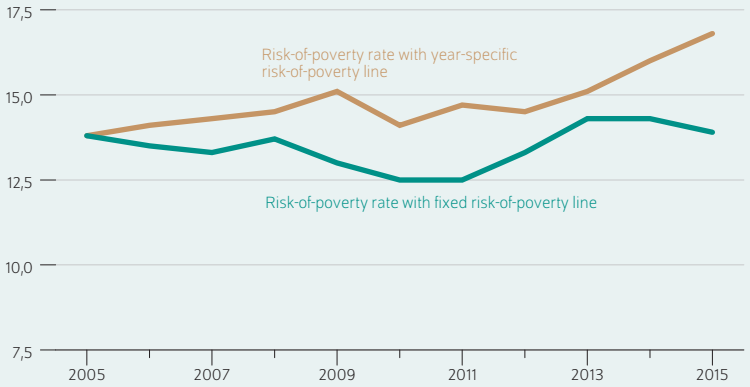
Source: SOEPv33.1.



The risk-of-poverty rate varies by source, but all sources indicate an increase since 2005.

Figure 6

**Risk-of-poverty rate for year-specific and fixed poverty line since 2005**
In percent




Note: The risk-of-poverty rate describes the proportion of the population living in households with less than 60 percent of the median net disposable household income. Calculations of the risk-of-poverty rate with a fixed poverty line are based on the poverty threshold of 2005. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale.

Source: SOEP v33.1.



Using a fixed poverty line, the risk-of-poverty rate in 2015 is the same than 2005.

## Risk of poverty on upswing in the long term

People living at risk of poverty are those whose income is less than 60 percent of the median net household income. Their population share can be understood as the low-income rate.[21] In the literature, this threshold value is also called the "risk-of-poverty rate." Based on the SOEP sample, the poverty line for a one-person household was around 1,090 euros per month in 2015.[22]

In Germany, 16.8 percent of the population were at risk of poverty in 2015. In the 1990s, the proportion was 11 percent (Figure 5).

The most recent findings based on the Microcensus or data from the German Federal Statistical Office's *European Union Statistics on Income and Living Conditions* (EU-SILC) study indicated a somewhat lower rate.[23] The Statistical Office's Sample Survey of Income and Expenditure (*Einkommens- und Verbrauchsstichprobe*, EVS) is another data source but is only conducted every five years. The last available data point for 2013 shows a risk-of-poverty rate of 16.7 percent, the highest rate of all the data sources at that time.

The SOEP also provides an alternative indicator for measuring the risk-of-poverty rate. It is the current net household income captured in the survey month. This income concept is virtually identical to that of the Microcensus. Since income components that are earned sporadically during the year tend to be underestimated and the rental value of owner-occupied homes is not taken into consideration, the poverty line for monthly income in the SOEP and Microcensus is typically lower than it is for annual income. At the current monthly income in the SOEP, a risk-of-poverty rate of 16.1 percent was reported in 2016. In a long-term comparison, both income concepts showed a higher risk-of-poverty rate than before the turn of the millennium.

Both concepts calculate the risk-of-poverty rate based on a poverty line of 60 percent of the median income. It should be noted that the poverty line can change over time. As previously explained, the median real disposable household income in Germany rose by 12 percent between 1991 and 2015 (see Figure 1). In order to take the effect of a rising level of prosperity into account when calculating the risk-of-poverty rate, the poverty line can be indexed to a specific year—2005 here. The result is a rate that has fluctuated between 12.5 and 14.3 percent since 2005 and was 13.9 percent in 2015 (Figure 6). This means that relative to the real level of prosperity in 2005, the risk-of-poverty rate was at the same level in 2015 as it was ten years previously (Box 2).

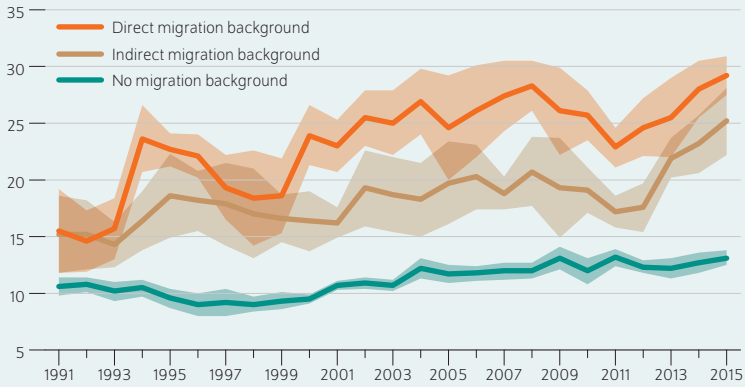
**21** For a critical analysis of the term "poverty," see Karl Brenke's work. Instead of risk-of-poverty rate, he prefers the term "weak income" (*Einkommensschwache*). Another term is "low income rate" (*Niedrigeinkommensquote*), following the term "persons with low-paying jobs" (*Niedriglohnbeschäftigte*) established in labor market research. See Karl Brenke, "Armut: vom Elend eines Begriffs," *Wirtschaftsdienst* 4 (2018): 260–266.

**22** In comparison to the German Federal Statistical Office's system of social reporting in official statistics based on the microcensus (see www.amtliche-sozialberichterstattung.de/index_en), the risk-of-poverty threshold we use here is higher. As per international convention, we include the rental value of rental property used by owners as income in our income calculation.

**23** See www.amtliche-sozialberichterstattung.de.

Figure 7

**Risk-of-poverty rate since 1991 for persons and without a migration background**
In percent




Note: The risk-of-poverty rate describes the proportion of the population living in households with less than 60 percent of the median net disposable household income. Real income in 2010 prices. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale. The shaded areas indicate the 95-percent confidence band.

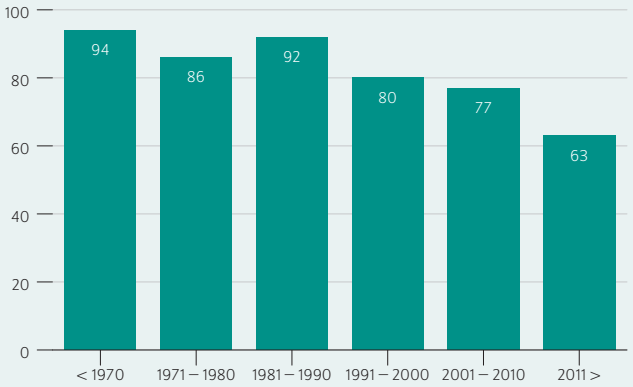
Source: SOEP v33.1.



Persons with a migration background have a higher risk-of-poverty rate than those without a migration background.

Figure 8

**Relative income of persons with a direct migration background in 2015 by year of arrival**
Average disposable income = 100




Note: Real income in 2010 prices. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale.

Source: SOEP v33.1.



The shorter the time migrants have lived in Germany, the lower their income relative to the average.

## Risk of poverty among population without migration background holding steady

In the last two decades, Germany has experienced significant migration.[24] In 2016, the proportion of people with a migration background (both direct and indirect) was 22.5 percent.[25] In the long-term trend, the risk-of-poverty rate for people without a migration background was nine to ten percent in the 1990s (Figure 7) and in 2015, it was 13 percent. People with an indirect migration background have a consistently higher risk-of-poverty rate than the native population. The rate is one-quarter at the current tail, making it twice as high as that of the population without a migration background. Among people who migrated to Germany themselves—those with a direct migration background—the rate is 29 percent.[26] Both migrant groups show fluctuations over time, but these should be interpreted with care. We can assume that during specific phases (e.g., 1995-1999, 2008-2011), the risk-of-poverty rate among migrants was underestimated because during those periods there was no special sample of migrants in the SOEP. And when more recent samples are used for projections, the relevant migration year has not been adjusted for the current time series. In specific years, new arrivals in particular were underrepresented.

## The longer migrants live in Germany, the better their income position

Upon arrival, many migrants cannot speak the language or lack a social network—two factors that make finding a job difficult. The longer they are in Germany, the lower the hurdles. This is apparent in a relative income position that improves over time (Figure 8). The relative income position of direct migrants in comparison to the total population rises with the length of the time they have spent in Germany. People who came to Germany after 2010 had somewhat more than 60 percent of the average needs-adjusted disposable household income in 2015. At the same point in time, people who migrated to Germany between 2001 and 2010 had a disposable income that was over 75 percent of the average. The relative income position of those who came to Germany more than 25 years earlier (1981 to 1990) rose to over 90 percent of the average.[27]

Alongside the duration of stay, educational and qualification levels factor into the relative income position of migrants. In recent years, compared to earlier waves of migration, more highly qualified people have come to Germany. Among the migrants who moved to Germany after 2000, the proportion with a university degree is approximately 30 percent, while the proportion among the native population is only 22 percent.

**24** For more on the migration trend, see Federal Office for Migration and Refugees, *The 2015 Migration Report*, (2015): 128. Also see footnote 12.

**25** See German Federal Statistical Office, "Bevölkerung mit Migrationshintergrund um 8,5 Prozent gestiegen," press release no. 261, August 1, 2017 (available online).

**26** It should be noted that the financial situation of the respective new migrants has basically not changed over time. Instead, the larger proportion of the population is relevant to the rise of the general population's risk of poverty.

**27** Also see Joachim R. Frick et al., "Alterssicherung von Personen mit Migrationshintergrund. Endbericht zum Auftrag des Bundesministeriums für Arbeit und Soziales," *Research Report* no. 398 (2009); and Ingrid Tucci, Philipp Eisnecker, and Herbert Brücker, "Wie zufrieden sind Migranten mit ihrem Leben?" *DIW Wochenbericht* no. 43 (2014): 1152–1158 (available online).

## Homeowners have a significantly lower risk-of–poverty rate than renters

The proportion of people who live in housing they own rose by five percentage points to 49 percent between 1995 and 2015.

People in owner-occupied homes have a risk-of-poverty rate of only around four percent—a figure that has virtually remained the same since 1991. Homeowners who live in completely debt-free housing do not have any monthly rental or mortgage payments. In 2010, the nationwide average monthly gross rental payment, excluding heating costs, was 440 euros, which equals a rent burden of around 28 percent of net household income.[28] The savings this represents is included as a fictive income advantage in the net household income analyzed here.

Until 2000, taking the rental value of owner-occupied homes into account actually had no influence on the risk-of-poverty rate for the total population. However, this factor has boosted the risk-of-poverty rate since 2010, the year in which rents began to rise sharply in most of Germany. In both 2014 and 2015, the increase was 0.7 percentage points.

Tenants are excluded from this advantage and in general, are financially worse off than homeowners. The risk-of-poverty rate among tenants has risen significantly since 1991. Around 16 percent at the beginning of the 1990s, the risk-of-poverty rate in this group was just under 29 percent by 2015 (Figure 9). This trend has hit young adults under 35 who rent their homes the hardest.[29] Their risk-of-poverty rate has risen by 15 percentage points since 2000.

Given the environment of sharply increasing rents,[30] this finding indicates that it is increasingly difficult for many tenants to pay their housing costs.

## Conclusion: Promote a more targeted integration of migrants and support social housing construction

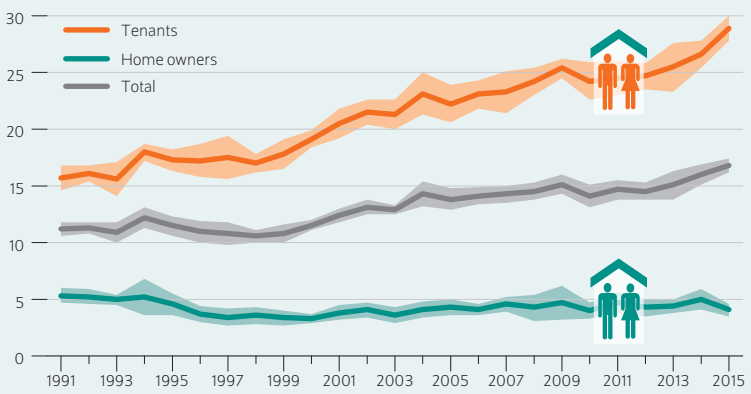
Since 2010, Germany has experienced an economic upswing, which has translated into rising real income for most parts of the population. However, low income groups have not benefited from this trend—partially as a result of the high level of migration in recent years. Upon arrival, during their first years in particular, migrants earn low incomes. Around 40 percent of people with a migration background now make up the 20 percent of the population with the lowest income. Accordingly, the risk-of-poverty rate for people with a direct migration background was 29 percent in 2015, while it was only 13 percent for the population without a migration background.

The data show that the longer they live in Germany, migrants' financial situation gradually equals that of the native population. The task for society as a whole, and for policy makers in particular, is to support newcomers quickly and systematically in their effort to learn the language and integrate into the labor market, so they are on par with natives and can earn higher incomes earlier on in the integration process.

There is also a need for action in other areas. The increasing polarization in the housing market is a challenge for housing and urban policy.[31] In comparison to homeowners, tenants have a higher risk-of-poverty rate that continues its upward spiral. Given that rent is rising in many cities, the issue becomes how people with low incomes will be able to pay their rent without making sacrifices in other areas of expenditure. Policy makers should make the construction of affordable (social) housing—an increasingly scarce commodity—a much higher priority.[32]

Figure 9

**Risk-of-poverty rate according to housing status**
In percent




Note: The risk-of-poverty rate describes the proportion of the population living in households with less than 60 percent of the median net disposable household income. Population: Persons living in private households. Needs-adjusted annual income surveyed the following year, adjusted using the modified OECD scale. The shaded areas indicate the 95-percent confidence band.

Source: SOEP v33.1.



The risk-of-poverty rate of tenants has steadily increased since the 1990s, but remained stable for homeowners.

**28** See Kristina Kott et al., "Wohnen," *Statistisches Bundesamt Datenreport 2016*, (2016): 269–273 (available online).

**29** At around 75 percent, the proportion of people in tenant households in the 25–34 age group is the highest.

**30** See Konstantin Kholodilin, Andreas Mense, and Claus Michelsen, "Die Mietpreisbremse wirkt bisher nicht," *DIW Wochenbericht* no. 22 (2016): 491–499 (available online).

**31** See Konstantin Kholodilin, Andreas Mense, and Claus Michelsen, "Mietpreisbremse ist besser als ihr Ruf, aber nicht die Lösung des Wohnungsmarktproblems," *DIW Wochenbericht* no. 7 (2018): 108-117 (available online).

**32** The number of people living in social housing dropped from 3.5 million in 1995 to 1.3 million in 2011. See Gerlinde Verbist and Markus M. Grabka, "Distributive and poverty-reducing effects of in-kind housing benefits in Europe: with a case study for Germany," *Journal of Housing and the Built Environment*, 32(2) (2017): 289–312 and Andrej Holm et al., "Wie viele und welche Wohnungen fehlen in deutschen Großstädten? Die soziale Versorgungslücke nach Einkommen und Wohnungsgröße," *Hans-Böckler Stiftung Working Paper Forschungsförderung*, no. 63 (2018).

**Markus M. Grabka** is a senior researcher at the German Socio-Economic Panel study at DIW Berlin | mgrabka@diw.de

**Jan Goebel** is a board member of the German Socio-Economic Panel study at DIW Berlin | jgoebel@diw.de

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DIW Berlin — Deutsches Institut für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
**www.diw.de**
Phone: +49 30 897 89–0 Fax: –200
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leserservice@diw.de
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