

Political Interest and Participation in Germany



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Poor, Unemployed, and Politically Inactive?

by Martin Kroh and Christian Könnecke

People with low incomes and job seekers are less interested and active in politics than people above the at-risk-of-poverty threshold and the working population. Compared to other European democracies, Germany has slightly above-average levels of inequality of political participation. Data from the Socio-Economic Panel Study (SOEP) suggest that this inequality has followed an upward trend over the last three decades. The data also indicate, however, that the unemployed do not reduce their political participation only as a result of losing their job, nor do those affected by poverty do so due to loss of income. Rather, the lower levels of political participation existed prior to these events and can be attributed to the social backgrounds of those affected.

“Democracy’s unresolved dilemma” is how the well-known American political scientist Arendt Lijphart described unequal political participation in many western democracies in the mid-1990s.¹ This interpretation dates back to a long series of empirical findings since the 1920s,² which show that political participation rises with increased education, income, and occupational status, and is also rooted in the democratic idea that the success of democracies can be judged by the equal participation of all social groups.³

Analyses of political participation in different income groups in the German Federal Government’s Report on Poverty and Wealth show that not only do democracy researchers agree that egalitarian participation in the political process is an important indicator of how well a political system is working, but this view also prevails among policy makers and the general public.⁴ In today’s journalistic and political debates, it is occasionally argued that the development of income and wealth inequality in recent years may have increased the differences in participation opportunities in various areas of life—possibly also in political participation.

Political Participation Unequal Across Social Groups

In the following, the degree of inequality of political participation is understood to be the political participation rate in one social group in relation to the participation rate in another social group. For example, if 30 percent

¹ A. Lijphart, “Unequal Participation: Democracy’s Unresolved Dilemma,” *American Political Science Review* 91 (1997): 1–14.

² For earlier studies, see M. Jahoda, P. F. Lazarsfeld, and H. Zeisel, *Die Arbeitslosen von Marienthal. Ein soziographischer Versuch* (Leipzig: 1933); and H. F. Gosnell, *Getting Out the Vote: An Experiment in the Stimulation of Voting* (Chicago: 1927).

³ See C. Pateman, *Participation and Democratic Theory* (Cambridge: 1970).

⁴ *Life Situations in Germany. The German Federal Government’s 4th Report on Poverty and Wealth*, Federal Ministry of Labour and Social Affairs.

Box 1

Data and Methods

Measuring Poverty and Unemployment

In accordance with one common definition of relative income poverty, this study defines poverty as having a disposable income of less than 60 percent of German annual median income. This is referred to as the at-risk-of-poverty threshold, and in 2010, it was approximately 1,000 euros for a single person.¹ Disposable income is calculated as the sum of all incomes and transfers in a household, taking into account the size and composition of that household (new OECD scale).

In the following, the employed are defined as those people who had done at least one hour of paid work in the week prior to the survey date, including people on maternity leave and parental leave and those who were absent due to vacation, illness, or similar. The unemployed are defined as those people who specified that they were registered as unemployed at the employment agency (SOEP) or were not employed or actively looking for work in the week prior to the survey (ESS). Respondents not available to work, such as those in school education or pensioners, were excluded from the comparison of unemployed and employed persons.

Indicators of Political Participation in the SOEP and ESS

The political interest of the respondents ("in more general terms: how interested are you in politics?") is surveyed in both the SOEP and the ESS on a four-point scale from "not at all interested" to "very interested." For the analyses, both the upper and lower categories are summarized so that respondents who reported to be interested or very interested in politics could be compared to those who described their political interest as low or who said they were not at all interested.

Involvement in political organizations is recorded in the SOEP by asking respondents whether they are actively involved in civic initiatives, political parties, or local politics in their leisure time. The ESS had a slightly different basis and the two indicators of political engagement were combined into one. Here, people were considered politically active if they said they had

been actively involved in the work of either a political party or another political organization in the last twelve months.

Analyzed Samples from SOEP

In the Socio-Economic Panel Study (SOEP), all respondents over the age of 16 have been reporting their political interest annually since 1985 and whether they had actively participated in political parties, local politics or civic initiatives approximately every second year since 1984. The trend analysis on income poverty takes into account over 50,000 people (over 450,000 observations) who have answered a question about their political engagement at least once, or those who have answered a question about political engagement at least once and were registered as either employed or unemployed at the time of the survey.

The sibling study includes more than 2,000 SOEP households with at least two siblings who each answered questions about political engagement or life satisfaction at least once. In the comparison of siblings above and below the at-risk-of-poverty threshold, only siblings who lived in different households during at least one survey and therefore had different incomes were considered. The comparison of unemployed and employed siblings also excluded people from the analysis who were not available for work if they were still in education, for example.

Estimates of the effects of unemployment and income poverty on political interest and political participation are the results of multivariate regression models, which also take into account statistics concerning gender, age, east/west differences, immigration background, survey year and, in the case of the sibling analyses, the order of birth. Models 1 and 2 are linear panel fixed effects models,² Model 3 is a linear family fixed effects model and Model 4 is a linear between family effects model.

¹ See M. M. Grabka, J. Goebel, and J. Schupp, "Has Income Inequality Spiked in Germany?," DIW Economic Bulletin, no. 43 (2012).

² See M. Giesselmann and M. Windzio, *Regressionsmodelle zur Analyse von Paneldaten* (Wiesbaden: 2012).

of the employed are interested in politics, but only 20 percent of the unemployed, then the employed are 30 percent / 20 percent = 1.5 or 50 percent more interested in politics than the unemployed. Values greater than one therefore indicate that the employed and/or people above the at-risk-of-poverty threshold have a higher participation rate than the unemployed and/or people below the at-risk-of-poverty threshold. Conversely, values of less than one mean a higher participation rate among the unemployed and/or those affected by poverty.

These figures were calculated based on data from the Socio-Economic Panel Study (SOEP)⁵, collected by the fieldwork organization TNS Infratest Sozialforschung on behalf of DIW Berlin and the European Social Survey (ESS).⁶ The SOEP is a survey of households in Germany conducted annually since 1984 and currently polls approximately 24,000 adults per survey wave. The ESS was a repeated cross-sectional survey conducted biennially between 2002 and 2010 in a total of 34 European countries. The number of respondents in the ESS varied between approximately 1,000 and 3,000 adults per country and survey wave.

Contrary to the SOEP, the ESS does not use a precise definition of income poverty, which is why we restricted the comparison to employed and unemployed people in this case (see Box 1). Since the data bases of the SOEP and ESS are samples, the reported estimates may contain statistical uncertainties. All ratios between participation rates are therefore reported with an upper and lower estimate value based on a 95-percent margin of error.

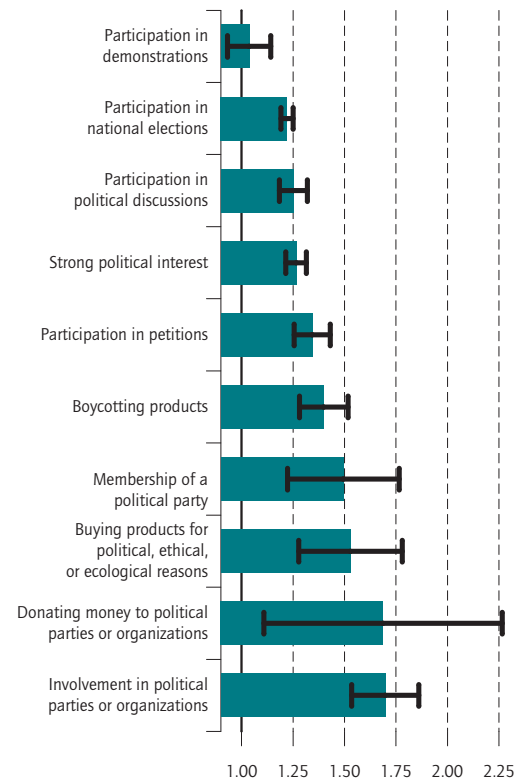
Participation in Political Parties and Organizations Particularly Unequal

One of the features of democracies is that they provide citizens with a variety of opportunities for their interests to be incorporated in the political process. As well as participating in elections, they can, among other things, work for political parties, take part in civic initiatives, sign petitions, boycott certain products for political reasons, participate in demonstrations, donate money to political organizations, take part in civil disobedience, or run for public office. Although many people are not currently actively involved in the political process, they signal their fundamental willingness for po-

Figure 1

Political Participation by Employed and Unemployed in 34 European Countries

Ratio between participation rates (unemployed = 1)



Example: The European average for the proportion of political party members among the employed is 1.5 times higher than among those seeking employment. Sources: European Social Survey 2002-2010, calculations by DIW Berlin.

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The employed are more politically engaged than the unemployed.

litical engagement through their interest in the political process or in political discussions with family and friends. Whether this willingness translates into political activity also depends on external factors, such as mobilization by political issues or the accessibility of opportunities to participate.

The degree of inequality of political participation in Europe varies according to the form of engagement being considered (see Figure 1). While the average election turnout of employed people in Europe is only about 22 percent higher than that of the unemployed, the participation gap when it comes to participation in political parties or other political organizations is 70 percent. Apart from the relatively egalitarian participation in elections, only demonstrations are used equally by the employed and the unemployed as a means of articulating their interests. Unconventional forms of participa-

⁵ G. G. Wagner, G. J. Göbel, P. Krause, R. Pischner, and I. Sieber, "Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland – Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Anwender)," *Allgemeines Statistisches Archiv* 2, no. 4 (2008): 301-328.

⁶ www.europeansocialsurvey.org.

tion,⁷ such as signing petitions or the political boycotting of products, are ranked in the middle among the unequal forms of participation.

The unemployed are not inherently less politically active than the employed, but are characterized by a somewhat different participation profile. The political engagement of the unemployed is characterized less by involvement in political parties and political organizations, and more by participation in demonstrations.

Germany in Upper Mid-Range in Unequal Political Participation

The level of unequal political participation was examined separately in 34 European countries in terms of political interest, a key indicator of basic willingness to engage politically, and also in terms of participation in political parties and political organizations, an important indicator of conventional political activity (see Figure 2). The countries are listed according to the disparity between the unemployed and employed. The figure shows that participation rates between the unemployed and the employed between 2002 and 2010 did not differ in all countries. In 11 of the countries studied⁸ the confidence bands of the estimate include the value of one, which means that, due to the sampling error of the data basis, it cannot be assumed with complete certainty that the percentage of unemployed people interested in politics is lower than that of employed people in the respective countries. The same applies to participation in political parties and political organizations in 17 countries, including the Netherlands, Italy, and Turkey.

In terms of unequal levels of political interest, Germany is mid-table among European countries, and in terms of unequal political participation, it is in the upper mid-table range. Germany has relatively high inequality of political participation compared to its direct neighbors, such as France, Austria, Denmark, and the Netherlands.⁹ For example, the participation rate of employed people involved in political parties or political organizations in Germany is 91 percent more than that of the unemployed. This difference is only more pronounced in some

central and eastern European countries, such as Slovakia and Poland.

Political Interest Gap Widening Slightly

Data from the Socio-Economic Panel Study (SOEP) allow a comparison of the degree of political inequality in Germany with regard to political interest and participation in political organizations since the mid-1980s. In contrast to the ESS, detailed income information in the SOEP allows us to examine the effect of poverty on political participation as well as analyzing unemployment.

Basically, it can be determined for both forms of political engagement that the participation rates of unemployed people and those below the poverty threshold—also allowing for the statistical margin of error—are lower than those of the comparison group in almost all years (see Figure 3). However, there is no clear trend in the development of the degree of unequal political participation, although since the mid-1990s the participation gap for political interest has tended to increase. Since 2000, significantly unequal participation rates have also been observed for involvement in political parties and other political organizations. From 2007/2008 to 2012 (most recent available data), there was a slight decrease in unequal participation for political interest and political participation. The extent to which this is due to declining numbers of registered unemployed and the now no longer significant increase in income inequality in Germany¹⁰ can only be speculated upon here. Since the values shown are relative to participation rates, it cannot be directly concluded that the political engagement of the unemployed and those on low incomes would have decreased further over time. The degree of unequal political participation measured here would still have grown if, for example, political interest among employed people had increased more than among the unemployed. Indeed, it is noticeable that the percentage of employed people who said they were interested or very interested in politics fluctuated over time between 31 percent in 1995 and 43 percent in the year after reunification, but when politically exceptional events, such as reunification, are excluded, interest remains relatively stable.

In contrast, since the mid-2000s, there has been a clear decline in the proportion of unemployed people who are interested in politics from 30 percent in 2006 to approximately 19 percent in 2009, although this figure has increased slightly in recent years. Active partici-

⁷ To distinguish between conventional and non-conventional participation and its determinants, see S. H. Barnes, M. Kaase et al. *Political Action. Mass Participation in Five Western Democracies*, (Beverly Hills, London: 1979).

⁸ Iceland, Romania, Luxembourg, Latvia, Lithuania, Russia, Cyprus, Italy, Finland, the Netherlands, and France.

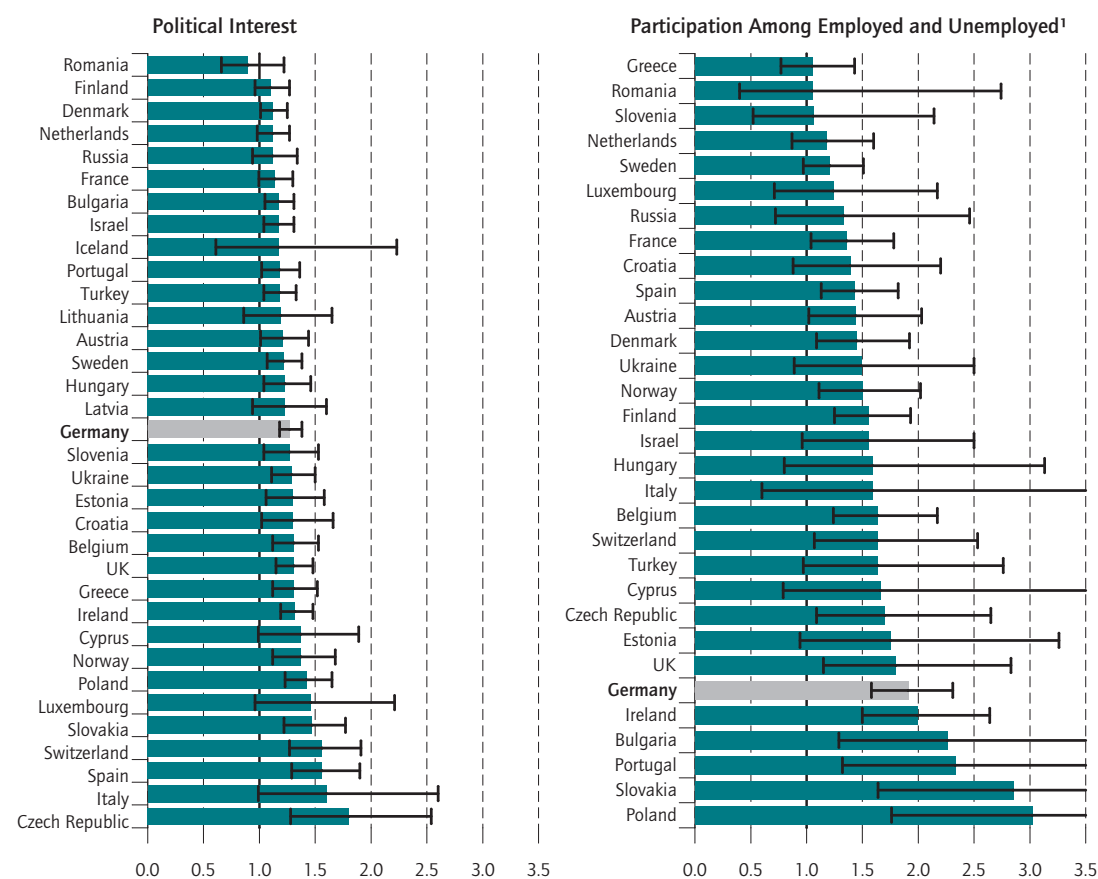
⁹ See also J. Alber and U. Kohler, "The Inequality of Electoral Participation in Europe and America and the Politically Integrative Functions of the Welfare State," in J. Jens Alber and N. Gilbert, eds., "United in Diversity? Comparing Social Models in Europe and America," *International Policy Exchange Series 1* (Oxford, New York: 2010): 62–90.

¹⁰ See M. M. Grabka, J. Goebel, and J. Schupp, "Has Income Inequality Spiked in Germany?," *DIW Economic Bulletin*, no. 43 (2012).

Figure 2

Political Interest and Participation Among Employed and Unemployed in Europe

Ratio between participation rates (unemployed = 1)



¹ Due to low numbers of cases, the values for Iceland, Latvia and Lithuania are not shown separately.

Sources: European Social Survey 2002-2010, calculations by DIW Berlin.

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Political participation among the employed is much higher than among the unemployed in some European countries.

pation in political parties, civic initiatives, or local politics has decreased more significantly among the unemployed and those on low incomes, particularly since 1998, than in the corresponding reference groups. While the proportion of politically engaged persons among the employed and those above the at-risk-of-poverty threshold has fluctuated between an average of ten and eleven percent over the entire period (with peaks of 15 and 13 percent in 1998), in 2007, it decreased for both the unemployed and those on low incomes to four percent, which was the lowest level seen in the period studied, and subsequently, for the unemployed, also remained below the longstanding mean.

Possible Causes of Unequal Political Participation

In recent decades, there have been a variety of explanatory approaches for reduced political engagement among people experiencing job loss and a drop in income (see Box 2). These range from the social and psychological ramifications of loss of employment and income to the lack of access to the political sphere for those individuals with more limited economic resources.

However, the idea that unemployment and poverty inevitably lead to a decline in political engagement is not directly plausible. It could be argued, for example, that, due to their circumstances and their perceived sense of dissatisfaction and injustice, socially disadvantaged in-

Box 2

Theories on the Correlation of Poverty and Unemployment with Political Participation

Among the most prominent theories to explain low levels of political activity among socially disadvantaged persons are the deprivation and resource approaches. While the former focuses on social-psychological mechanisms leading to withdrawal from the public sphere, the resource approach concentrates more on the socioeconomic conditions that encourage or hamper political action. Another approach attributes withdrawal from political engagement to poor and unemployed people having negative experiences in dealing with welfare institutions.

Deprivation

Subjective deprivation is generally defined as the perception of unjustified social disadvantage.¹ This perception can be caused by substantive problems, but also by the stigmatization of certain social groups so that opportunities for social participation are curtailed. The deprivation approach has a long tradition in unemployment research. One of the pioneering social scientific studies on the subject² describes the social processes that can lead to growing isolation.³ Essentially, these negative consequences are attributed to psychological

processes that are expressed in reduced self-esteem and feelings of helplessness.

The Marienthal study describes, as an example, how resignation and apathy spread throughout the Austrian village, which had been hit hard in the 1920s by mass unemployment because of the Great Depression, and the social life of many of those affected became increasingly limited to their close family. In general, the deprivation approach emphasizes the role of feelings of shame which can be the cause of this withdrawal from social networks and ultimately from public life. The loss of work or descent into poverty causes those affected to perceive an asymmetry in their social relationships and to have the feeling of no longer being able to keep up for financial reasons, for example.⁴ In addition, financial distress can lead to a shifting and narrowing of time perspectives. Those affected focus strongly on their individual circumstances: their immediate problems, and efforts to resolve them quickly, such as actively looking for a job, have the highest priority in their daily lives.⁵ The perceived benefits of political engagement, which rarely materialize in the short term, are pushed into the background in the face of practical challenges.

Resources

In contrast, the resource approach assumes that unequal participation in political processes is a direct result of the different socioeconomic positions of individuals as this essentially determines the availability and scope of resources required for

¹ See W.G. Runciman, *Relative Deprivation and Social Justice* (Aldershot: 1993).

² See M. Jahoda, P. F. Lazarsfeld, and H. Zeisel, *Die Arbeitslosen von Marienthal. Ein soziographischer Versuch* (Leipzig: 1933).

³ It is worth noting here that this is a strand of deprivation research that tries to explain the empirical link repeatedly found between unemployment or poverty and low levels of participation in political life. In contrast, a differing viewpoint was particularly popular in the 1970s which assumed that the inherent feelings of dissatisfaction and frustration caused by deprivation would lead those affected to try and change their circumstances through political activities. See also T. Gurr, *Why Men Rebel?* (Princeton: 1970).

⁴ M. Kronauer, *Exklusion. Die Gefährdung des Sozialen im hoch entwickelten Kapitalismus* (Frankfurt, New York: 2010), 173.

⁵ S. J. Rosenstone, "Economic Adversity and Voter Turnout," *American Journal of Political Science* 26, no. 1 (1982): 25–46.

dividuals may be especially motivated to become politically active. After all, electoral participation, involvement in political parties, and other ways of influencing politics provide people with potential opportunities to contribute to social change, help shape social policy and, in the best-case scenario, even to improve their own circumstances in the process.

Job Loss and Decline into Poverty: Life-Changing Events, But Not For Political Engagement

If the often-held view that inequality of participation in political activities is due to income poverty and unemployment causing a decline in political engagement and interest is true, it would need to be empirically proven, over time, that individuals who lose their jobs or whose income drops below the at-risk-of-poverty threshold subsequently reduce their political engagement and show less interest in politics than previously.

political engagement.⁶ The socioeconomic position is, in turn, largely dependent on educational level, occupational status, and disposable income. The ability to pay membership fees for political parties, associations, or other organizations, and also support political players with donations is obviously severely limited for people on very low incomes.⁷

The resource approach assigns educational level an even more important role than financial opportunities. Here the assumption is that the achievement of a higher level of education fosters the development of civic skills enabling people to function in political contexts.⁸ These include not only the development of an understanding of sometimes very complex political processes, but also communications and organizational capacities which facilitate the articulation of political interests through direct contact with decision-makers, for example. Further, it is not only formal educational institutions, such as schools and universities, that allow for the acquisition of such skills; the various requirements and profiles of different activities and tasks at work also enable, to varying degrees, the further development of civic skills. People who frequently have to carry out organizational or communication activities at work, for example, can also apply these competences in the context of political engagement. In addition, the workplace is occasionally also the location of

political discussion (works councils' activities or trade union membership, for example), which can lead to integration into political recruitment networks. The links assumed by the resource approach therefore imply that the loss of employment and/or decline into poverty is accompanied by a reduction in relevant resources which, in turn, means that people are not (able to be) as politically active.

Political Learning

A less prominent approach, also worth expanding on here, focuses on people's experiences of interacting with welfare institutions. According to this political learning perspective⁹, the specific organization of government social programs and the way in which the granting authorities interact with those claiming social benefits may contribute to a negative perception of state institutions in general. Thus, social benefits linked to regular means testing, which requires more stringent monitoring of the person affected and significant sanctions if the legal requirements are not fulfilled, may result in the interaction with the government authorities being perceived as biased and repressive. Those affected project these experiences via what is known as a spillover effect onto the functioning of the entire political system and no longer perceive the democratic process as accessible and open to influence since they no longer trust government institutions to listen to their interests and respond appropriately.

6 S. Verba, K. Lehman Schlozman, and H. E. Brady, *Voice and Equality: Civic Voluntarism in American Politics* (Cambridge, London: Harvard University Press, 2002); S. Verba and N. H. Nie, *Participation in America: Political Democracy and Social Equality* (New York: Harper & Row, 1972).

7 E. Priller and J. Schupp, "Wer spendet was – und wieviel?" *Wochenbericht des DIW Berlin*, no. 29 (2011).

8 H. A. Brady, S. Verba, and K. Lehman Schlozman, "Beyond SES: A Resource Model of Political Participation," *American Political Science Review* 89, no. 2 (1995): 271–294.

9 J. Soss, "Lessons of Welfare: Policy Design, Political Learning, and Political Action," *American Political Science Review* 93, no. 2 (1999): 363–380.

As part of the longitudinal Socio-Economic Panel Study (SOEP), the same individuals were surveyed annually over a long period of time—in some cases up to three decades. Therefore, data is available on the political engagement of a large number of respondents, both before and after becoming unemployed and/or poor. Figure 4 shows the development over time of respondents' political interest and involvement in political parties and in other political organizations during the four years preceding job loss (t-4, t-3, t-2, and t-1), during unemployment (t0), and in the four years following reentry into the labor market (t+1, t+2, t+3, and t+4). The analyses of the onset of poverty were carried out using a simi-

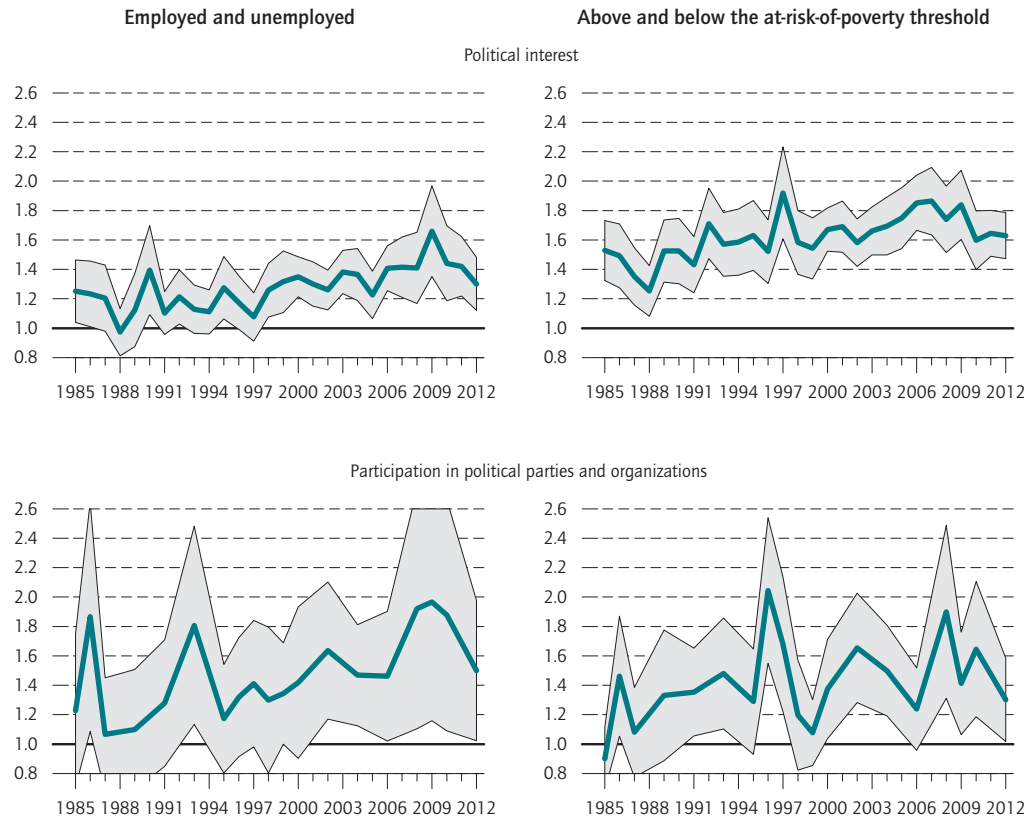
lar methodology.¹¹ The duration of unemployment and/or poverty for the data on which the figures are based is one year. This means that at t+1, the respondents had

11 The analysis does not include people whose household income was only marginally above the poverty line before slipping below the threshold value. The basis for this is the consideration that people who at t-1 have a household income that is only, for example, ten euros above the statistically calculated at-risk-of-poverty threshold will barely notice a dip below this threshold in the following year as their financial situation was already precarious beforehand. Accordingly, the analysis only takes into account those respondents whose income at t-1 was at least ten percent above the critical threshold and was at least ten percent below that value in the following year so that a tangible deterioration in financial opportunities can be assumed.

Figure 3

Political Interest and Participation in Germany

Ratio between participation rates (unemployed = 1)



Sources: Socio-Economic Panel Study (v29), calculations by DIW Berlin.

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Inequality of political interest increased slightly between 1990 and 2008.

already returned to gainful employment or their household income was above the at-risk-of-poverty threshold.

The graphs show that job loss and/or a dip below the at-risk-of-poverty threshold did not result in a significant negative change in either political interest or involvement in political parties or organizations. In the years surveyed, the proportion of individuals with a strong political interest remained constant at around the 27-percent mark, and the proportion active in political parties, local politics, and civic initiatives hovered around nine percent.¹²

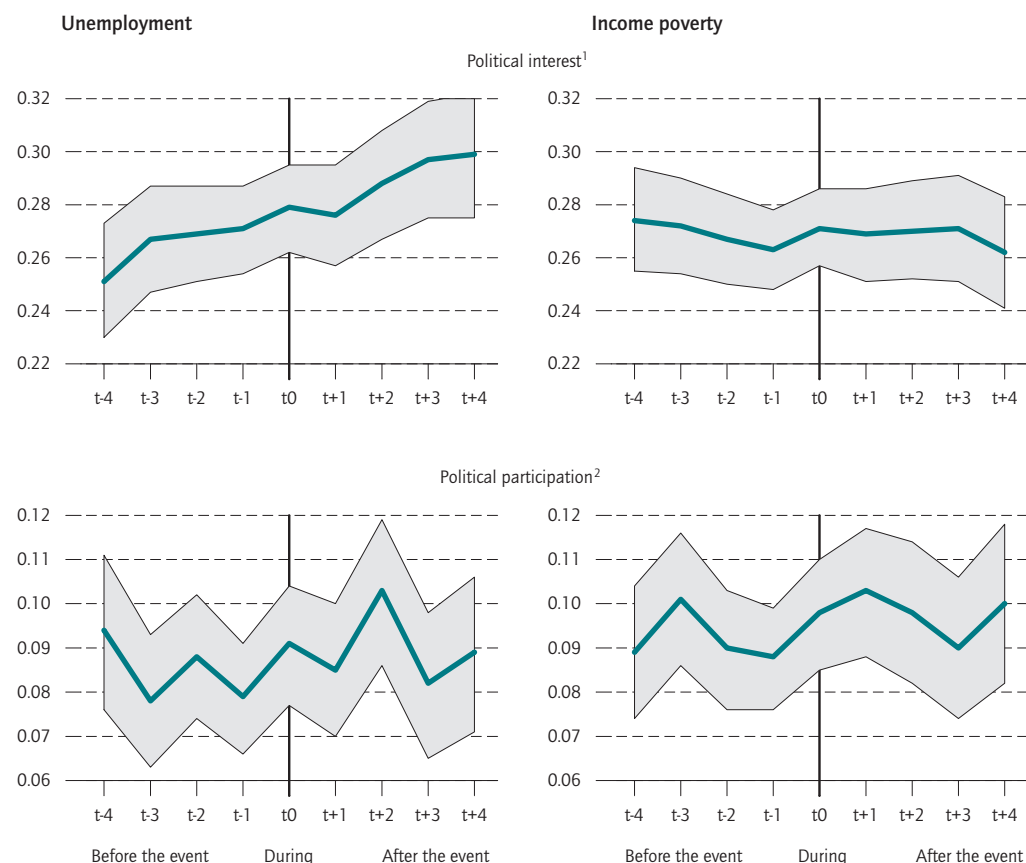
¹² The analysis only includes people who were registered as unemployed and/or whose income was below the at-risk-of-poverty threshold at a given point in time. If all SOEP respondents over the age of 16 are taken as a basis, the proportion of people with a strong interest in politics is approximately 35 percent, and the proportion of people who are active in political parties, local politics, or civic initiatives is roughly ten percent.

The findings clearly demonstrate that those affected already exhibited only limited political interest and a low level of political participation before they became unemployed or poor. The notion that withdrawal from political engagement is a consequence of this situation, as is frequently surmised by explanatory theories addressing the issue of unequal political participation, is not substantiated by this empirical evaluation. In fact, unemployment more frequently appears to be accompanied by a slight increase in political interest. The estimated proportion of people reporting strong political interest increased from approximately 26 to 30 percent, although this change falls within the statistical margin of error for this sample.¹³

¹³ If the analyses are repeated for those who are unemployed or poor for longer than one year (two to three years), the results are very similar and are therefore not presented in separate figures. Thus, no long-term reduction in

Figure 4

Political Interest and Activity During Periods of Unemployment or Poverty



¹ Strong political interest

² People who are active in political parties, local politics, and civic initiatives.

Sources: Socio-Economic Panel Study (v29), calculations by DIW Berlin.

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Political engagement does not decline with unemployment or poverty.

In order to illustrate that unemployment and/or poverty can have a definite impact on other areas of the lives of those affected, we compared the development of life satisfaction before, during, and after the period of unemployment and poverty (see Figure 5).¹⁴ This analysis shows the proportion of respondents who reported high life satisfaction (values of eight or more on an 11-point scale from zero to ten). In contrast to political interest and participation in political parties and organizations, a clear and statistically significant effect of loss of em-

ployment and/or a decline in income to below the at-risk-of-poverty threshold is evident. If over 40 percent of those affected reported high life satisfaction before becoming unemployed or poor, this figure dropped to 25 percent during unemployment and approximately 37 percent during poverty.

Even for those who returned to employment the following year, life satisfaction did not increase to quite the same level as before unemployment. Similarly, the life satisfaction of people who were affected by poverty for a one-year period subsequently remained permanently lower than before their experience of poverty.

The analyses indicate that many of those affected perceive unemployment and poverty as life-changing experiences that, to some extent, also extend beyond the events

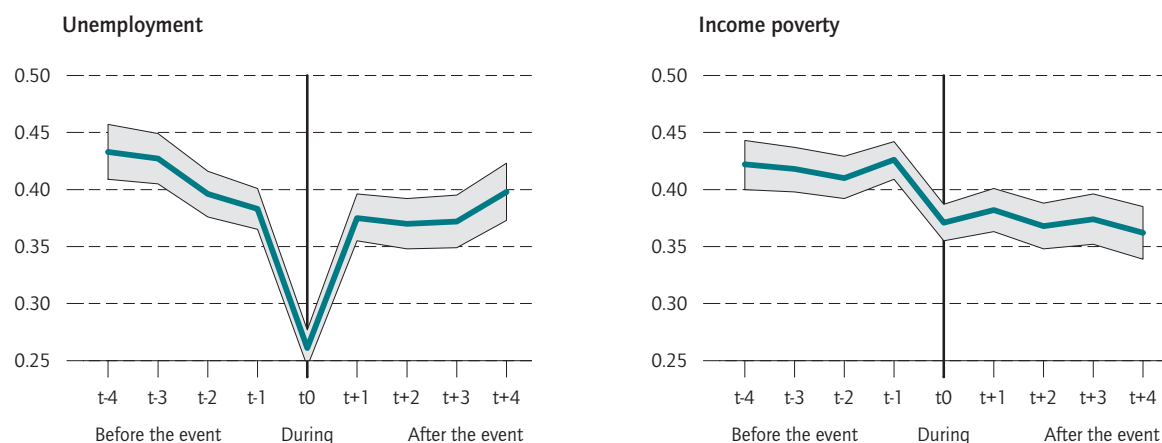
political engagement or decline in political interest is observed, even during longer periods of unemployment or poverty.

¹⁴ L. Winkelmann, and R. Winkelmann, "Why are the unemployed so unhappy? Evidence from panel data," *Economica* 65, no. 257 (1998): 1-15; and also a recent study by C. von Scheve, F. Esche, and J. Schupp, "The Emotional Timeline of Unemployment: Anticipation, Reaction, and Adaption," SOEPpaper, no. 593 (2013).

Figure 5

Life Satisfaction During Periods of Unemployment or Poverty

Proportions of high life satisfaction



Sources: Socio-Economic Panel Study (v29), calculations by DIW Berlin.

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Unemployment and poverty have a significant impact on life satisfaction.

themselves. However, the findings also show that there is no lasting impact on political participation. If there is no evidence that loss of employment and income results in a significant decline in the level of individual participation, this begs the question as to why unemployed people and those below the at-risk-of-poverty threshold are less politically interested and active, even before experiencing job loss and/or a decline in income, than those in employment and not affected by income poverty.

Social Background and Unequal Political Participation

An alternative way of interpreting the correlation between unemployment and poverty on the one hand and below average political participation on the other is to look at the possibility of common causes. Insofar as, for example, social background influences both the likelihood of unemployment and of social participation, a statistical correlation of this kind may result between the two phenomena without it being causal.

A hitherto little-used but particularly robust method of empirically estimating the significance of social background for the correlation between unemployment and poverty on the one hand and political participation on the other is the use of a sibling study design: the analysis examines a sample of over 2,000 families based on the SOEP, although the study only draws on the 4,500

siblings in these families (at least two siblings per family). If the unemployed and/or low-income respondents are less politically active than their own siblings who are in employment and/or not affected by poverty, this would suggest a correlation between individual experiences of unemployment and poverty and the level of political participation. However, if there are no statistically significant differences between employed and unemployed siblings with regard to their political participation despite evidence of such a correlation among the general population, this would indicate that social background leads to disadvantages in terms of the risk of unemployment and poverty and also results in political inactivity.

The table presents four statistical analyses each for political interest and participation and, for comparison purposes, also for life satisfaction. The first analysis (Model 1) of 50,000 SOEP respondents compares the level of individual political engagement and life satisfaction during the years in which the respondents were unemployed and/or poor with the level during the years in which they were employed and/or had household incomes above the at-risk-of-poverty threshold. The analysis does not indicate any effect of unemployment on political activity. Also, poverty neither results in declining political interest nor in a reduction in active participati-

on.¹⁵ Periods of unemployment even lead to a slight increase in political interest (the proportion of people with a strong interest in politics increases by an estimated one percentage point).

Model 2 repeats the analysis based on a reduced sample of approximately 4,500 siblings. There is no change in the findings due to the smaller sample size. The siblings' responses to unemployment and poverty were very similar to that of the overall sample, which also included only children and had a significantly higher average age.

Model 3 does not compare individuals' phases of employment and unemployment or their income periods above and below the at-risk-of-poverty threshold, but rather compares the employed (or those not on low incomes) with the unemployed (or low-income) siblings in one family in terms of their political engagement and life satisfaction. Here, too, unemployment and poverty appear to have no negative effect on political engagement, i.e., unemployed and/or low-income people are no less interested in politics and no less politically active than their employed siblings and/or siblings with incomes above the at-risk-of-poverty threshold.

However, all three models show significant negative effects of unemployment and poverty on the life satisfaction of those affected: people are less satisfied with their lives when they lose their jobs or have lower incomes, and they are less satisfied than their employed, higher-income siblings. The different models predict a decline in the proportion of those reporting high satisfaction of approximately 15 percentage points during unemployment and roughly six percentage points in the case of poverty.

Lastly, Model 4 reports the statistical correlation between the mean number of politically engaged siblings in families with the mean number of unemployed and/or income-poor siblings per family. This is the only analysis that reveals strong negative effects of unemployment and poverty on political interest, i.e., the level of political interest of the siblings is higher, on average, in families where siblings are less frequently unemployed or poor, and vice versa. If a family comprised only of unemployed siblings is compared with a family comprised only

¹⁵ The finding that job loss and a drop in income do not result in a long-term change in individual political engagement is based on German data from the last three decades. However, there remains a possibility that, in certain situations, unemployed people or those affected by poverty may significantly reduce or increase their political participation as a result of these circumstances. Recent examples of a precarious social situation having a mobilizing effect are the protests by young people in the French suburbs or the protests against youth unemployment in Mediterranean countries hit by the financial crisis.

Table

Effects of Unemployment and Poverty on Political Engagement and Life Satisfaction

Parameters of model estimates

	Model 1	Model 2	Model 3	Model 4
	Population	Siblings		
	Temporary deviation from individual mean value		Individual deviation from family mean value	Difference between families
Political interest				
Unemployment	0.01 ***	0.02 ***	0.02 **	-0.11 ***
Poverty	0.00	0.00	0.00	-0.09 ***
Political activity				
Unemployment	0.01	0.01	0.00	-0.02
Poverty	0.00	0.00	0.01	0.01
Life satisfaction				
Unemployment	-0.11 ***	-0.14 ***	-0.17 ***	-0.31 ***
Poverty	-0.05 ***	-0.06 ***	-0.07 ***	-0.11 ***

***, ** indicate significance at the 1- or 5-percent level.

Sources: Socio-Economic Panel Study (v29), calculations by DIW Berlin.

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In terms of political engagement, barely any difference is observed between unemployed and employed siblings.

of employed siblings, then statistically, the proportion of siblings with a strong political interest is 11 percentage points lower in the former case than in the latter (see Model 4). The simultaneous absence of unemployment- and poverty-related differences between siblings in one family (see Model 3) can be interpreted as an indication of the strong social background effects on unemployment and/or poverty, on one hand, and on political interest, on the other.¹⁶

Conclusion

The analyses demonstrate—as have a long series of previous empirical studies¹⁷—that political participation in democracies is not distributed equally but is often particularly low among people in precarious economic circumstances. The analyses also indicate that there has

¹⁶ The analysis of the reported probability of voter turnout, conducted as part of the SOEP in the run-up to the German parliamentary elections in 2005 and 2009, produces a very similar pattern of findings to the examination of political interest: no appreciable effects of unemployment and poverty are observed in Models 1 to 3 but there are significantly lower voting intentions in families that are frequently affected by poverty and unemployment (Model 4).

¹⁷ See L. R. Jacobs and T. Skocpol, eds., *Inequality and American democracy. What we know and what we need to learn* (New York: Russell Sage Foundation, 2005); and on Germany, P. Böhnke, "Ungleiche Verteilung politischer und zivilgesellschaftlicher Partizipation," in *Aus Politik und Zeitgeschichte*, supplement to the weekly newspaper *Das Parlament*, no. 1/2, (2011): 18–25.

been no evidence of a narrowing of the political participation gap in Germany in the last 30 years and that the degree of inequality is actually higher than in many comparable European democracies.

A prerequisite for effective political measures to promote political participation of the unemployed and those on low incomes is an understanding of the exact causes of the statistical correlation. The findings of this report indicate that, on average, a lower level of political participation had already been observed before unemployment and/or loss of income, and that political interest is determined, in the long term, by social background. With this in mind, measures to create equal opportunities at an early stage could make an effective contribution to reducing inequality in political participation. Above all, this includes reducing background-related differences in educational attainment, but also better education about democracy in schools.

The empirical finding of this study that the statistical correlation between unemployment and/or poverty and political engagement is probably not due, in the long term, to the experience of unemployment itself, but rather to an individual's social background, does not, however, allow us to conclude the reverse, namely that the problem of unequal political participation is less relevant in terms of democratic theory. On the contrary, given that life opportunities, including individual political participation, are not only influenced by individual experiences and behavior, but are also largely formed by social background, it is the government's responsibility to counteract these background effects as early as possible, for example in schools, to reduce the inequality of conditions for democratic participation and involvement.

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JEL: D72, I32, J64

Keywords: Political participation, inequality, poverty, unemployment, SOEP



Prof. Dr. Martin Kroh, Deputy Head of the Socio-Economic Panel Study at DIW Berlin

SEVEN QUESTIONS TO MARTIN KROH

»The Poor and Unemployed Show Less Political Interest«

1. Professor Kroh, you have studied the inequality of political participation in Germany. Which groups are more and which are less politically engaged? Our focus was on people in economically precarious circumstances. So we therefore compared those affected by poverty with those in employment or above the at-risk-of-poverty threshold. We discovered that the unemployed and people affected by poverty are less interested and active in politics than the rest of the population. This is consistent with findings from many western countries in previous decades.
2. How big is this effect? If one assumes that, according to our measurement of political participation, an average of ten percent of the population participates in political parties, civic initiatives, or local politics, the corresponding figure among the unemployed and those affected by poverty is approximately six percent. At least a third of the population is very interested in politics. Among the unemployed and those affected by poverty, it is roughly one-quarter.
3. How can this be explained? There are a number of theoretical explanatory approaches to explain this correlation. Some consider the causes to be limited economic resources and accessibility of political participation or recruitment networks, for example, from which unemployed people tend to be excluded. Of course, if you are unemployed you are less likely to encounter works councils and trade unions. Another group of explanatory approaches focuses more on the socio-psychological consequences. The theory is that people who are affected by unemployment withdraw from social networks.
4. Is this lack of political interest a direct result of poverty or unemployment, or is it rather due to social background? According to our findings, there is some doubt about the theories and explanatory approaches I mentioned previously because they all imply that engagement should decrease as soon as people become unemployed or poor. However, if you base the analysis on repeated surveys, you find that the level of political participation among these individuals is very consistent. They do not reduce their political engagement when they become unemployed. That, in turn, suggests that the reasons for this statistical correlation may be found in causes dating from before these events, such as social background, for example.
5. How has the degree of inequality of political participation developed in recent years? There has been no linear trend. It has increased slightly since reunification, but stagnated somewhat in the last two or three years.
6. How does Germany compare to other countries? Germany is mid-table compared to other European countries. However, if we compare Germany with its direct neighbors, such as the Netherlands or France, the level of inequality in Germany is relatively high.
7. What steps could be taken to increase political participation among the unemployed or those on low incomes? If one argues, based on our results, that the main reason for this statistical correlation is social background, then of course it makes sense to implement measures that take effect in families and in school education. The education gap should be reduced so that people who are affected by poverty or unemployment do not withdraw from society, but actively participate in the political process.

Interview by Erich Wittenberg.

Reduction in Income Inequality Faltering

by Markus M. Grabka and Jan Goebel

Inequality of disposable incomes in Germany has decreased slightly since its peak in 2005. However, this trend did not continue in 2011. The most important reasons for this were the inequality in market incomes, including capital incomes, which had increased again. Besides this finding, the updated analyses of personal income distribution based on the Socio-Economic Panel Study (SOEP) show that the risk of poverty did not rise further after a long period of upward movement. Income mobility over time is equally important in terms of social policy, i.e., the upward or downward movement of individual groups of people in the income hierarchy. Here, the most recent analyses confirm the trend of significantly decreasing income mobility since German reunification. For example, the odds of exiting the risk of poverty within a period of four years has dropped by ten percentage points to 46 percent in recent years.

This study updates previous research by DIW Berlin on income inequality in Germany up to 2011 and includes analyses of individual income mobility over time.¹ Data from the long-term Socio-Economic Panel Study (SOEP) gathered by DIW Berlin in collaboration with the field-work organization TNS Infratest Sozialforschung form the empirical basis.² Since the data is collected annually, it is possible to analyze consistent time series on the development of personal income distribution and to calculate individual upward or downward movements within that distribution.³

2005–2011: Increasing Incomes ...

Average equivalized⁴ and inflation-adjusted market incomes of individuals in households remained virtually constant from 1991 to 1998 (see Figure 1 and Box 1). They initially increased significantly during the economic boom in the late 1990s, but then decreased steadily through 2005. It is likely that this development was

¹ See most recently: M. M. Grabka, J. Goebel, and J. Schupp. "Has Income Inequality Spiked in Germany?," DIW Economic Bulletin, No. 12 (2012).

² The SOEP is a representative, annually repeated panel survey of households which has been conducted in western Germany since 1984 and in eastern Germany as well since 1990; see G. G. Wagner, J. Goebel, P. Krause, R. Pischner, and I. Sieber, "Das Sozio-oekonomische Panel (SOEP): Multi-disziplinäres 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.

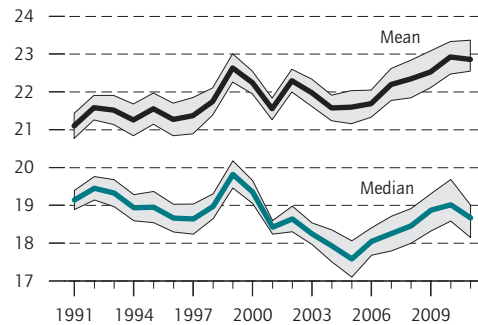
³ In accordance with the German Federal Government's Report on Poverty and Wealth (Federal Ministry of Labour and Social Affairs 2013: Life Situations in Germany) and the reports of the German Council of Economic Experts (most recently Annual Report 2012/2013: Stable Architecture for Europe – Need for Action in Germany), this report indicates the income year. The SOEP surveys annual incomes retrospectively for the previous calendar year, but weights them according to the population structure at the time of data collection. In other words, the data presented here for 2011 were collected in the survey wave 2012.

⁴ On needs weighting of household incomes see also the term "Äquivalenzeinkommen" in the German-language DIW Glossary, www.diw.de/de/diw_01.c.411605.de/presse_glossar/diw_glossar/aequivalenzeinkommen.html.

Figure 1

Market Income in Real Terms¹

In thousands of euros per annum



¹ Incomes of individuals in households at 2005 prices. Surveyed the following year, market income including a fictitious employer's contribution for civil servants, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

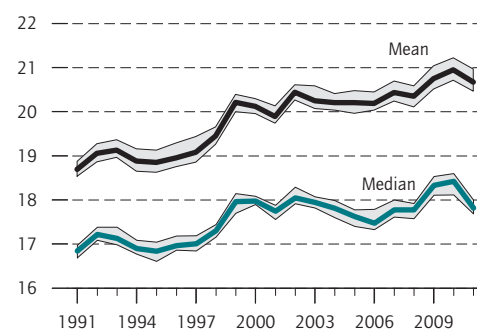
Source: SOEP v29, calculations by DIW Berlin.

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Figure 2

Disposable Income in Real Terms¹

In thousands of euros per annum



¹ Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

Sources: SOEP v29, calculations by DIW Berlin.

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Box 1

Income Types for Households

Market income
 Earned income
 Capital income
 + Pensions
 + State transfer payments
 - Taxes and social insurance contributions
 = Disposable income

Notes: According to the commonly used international standards for measuring income, market incomes also include private transfer payments received, the rental value of owner-occupied housing, and private pensions. In the case of the earned income of civil servants (Beamte), fictitious employers' social insurance contributions are taken into account (see Box 2 for a detailed description).

driven primarily by the high unemployment at that time (see Box 2).

The significant decline in unemployment observed since then was accompanied by a trend reversal in income development. Since 2005, market incomes of households have increased markedly, but they have not yet significantly ex-

ceeded the 1999 level. The median of market incomes⁵ in 2011 was still lower than in 1991. One of the reasons for this development is the demographic transformation of recent years. For example, the share of people of retirement age has been increasing for years in Germany, and as a result, the share of people with no or only low market incomes is also increasing.⁶ Besides demographic effects, changes in wages and capital incomes also affect market incomes. Increases in negotiated wages were lower than the general inflation rate from 2006 to 2011.⁷

The development is somewhat more positive when it comes to disposable household incomes (see Figure 2).⁸ Equivalized and inflation-adjusted net household incomes increased markedly in the second half of the 1990s and from 2008 to 2010. Although the data for

⁵ The median of the income distribution is the value that separates the richer half of the population from the poorer half. See also the term "Medianeinkommen" in the German-language DIW Glossary, www.diw.de/de/diw_01.c.413351.de/presse_glossar/diw_glossar/medianeinkommen.html.

⁶ For example, the percentage of individuals aged 65 or more years increased from 16.6 percent to 20.6 percent between 2000 and 2010, see Federal Statistical Office. Statistical Yearbook 2013. Wiesbaden, 2013.

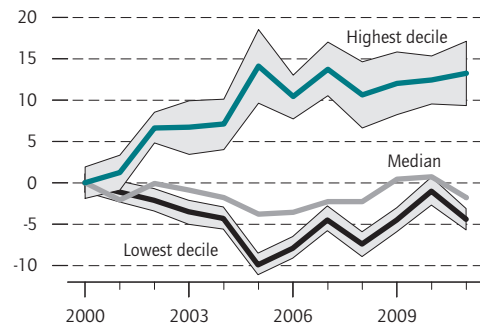
⁷ R. Bispinck, "Tarifpolitischer Jahresbericht 2011: Höhere Abschlüsse – Konflikte um Tarifstandards," WSI-Mitteilungen No. 2 (2012): 131-140. See also K. Brenke and M. M. Grabka, "Schwache Lohnentwicklung im letzten Jahrzehnt," Wochenbericht des DIW Berlin, no. 45 (2011). According to the official national accounts, however, effective gross incomes per employed person were 9.5 percent higher in 2011 than in 2006. In light of consumer price increases of 8.7 percent during the same period, this amounts to a marginal increase in real wages. It cannot be ruled out that the figures for wages will also be adjusted in the course of the major revision of the national accounts data due next year.

⁸ Disposable household incomes consist of market incomes, statutory pensions as well as state transfer payments such as child benefits, housing assistance, and unemployment benefits, minus direct taxes and social security contributions.

Figure 3

Disposable Income¹ in Selected Deciles

Changes in mean values compared to 2000
in percent



1 Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

Sources: SOEP v29, calculations by DIW Berlin.

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2011 do show a slight decline, it is within the confidence band and thus does not represent a statistically significant change. As measured by the arithmetic mean, households had higher real incomes at their disposal in 2011 than ten years previously. In terms of the median, however, no significant change can be determined over the course of this period.⁹

The discrepancy in the development of the arithmetic mean and the median suggest that disposable household incomes have developed differently in various parts of the income hierarchy. If the population is divided into deciles¹⁰ and the mean income per decile is indexed to the year 2000, it is evident that the highest income earners (top decile) in particular achieved above-average increases in real income (see Figure 3), which came to approximately 13 percent 2011. The eighth and ninth deciles also achieved slight increases in income of three to four percent. Incomes in the fifth to seventh deciles stagnated, while decreases in income of up to five percent, compared with the year 2000, were evident for the first through fourth deciles. The expansion of the

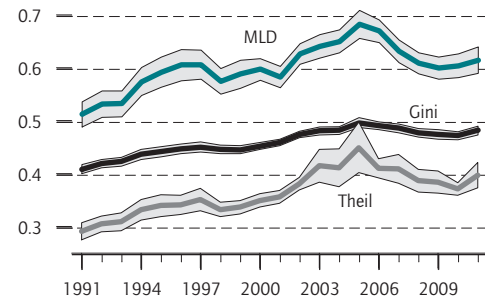
⁹ One reason for stagnating real incomes is the weak development of pensions in the statutory pension insurance scheme. For example, pensions were not increased at all in 2010 and rose by only 0.99 percent in 2011, resulting in losses of income in real terms.

¹⁰ To obtain deciles, the population is sorted according to level of income and then divided into ten groups of the same size. The lowest (highest) decile represents the income situation of the poorest (richest) ten percent of the population. It should be noted that individuals can change their income positions over time because of income mobility and should not be assigned to the same decile every time.

Figure 4

Inequality of Market Incomes¹

Coefficients²



1 Incomes of individuals in households at 2005 prices. Surveyed the following year, market income including a fictitious employer's contribution for civil servants, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

2 The measures of inequality used here were the Gini coefficient, the mean log deviation (MLD), and the Theil index. Cases with zero income were excluded when calculating the MLD and the Theil coefficient.

Sources: SOEP v29, calculations by DIW Berlin.

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low-wage labor market¹¹ and the weak development of retirement incomes, among other factors, appear to be relevant for income losses in the lowest income groups. Increases in the incomes of those in the highest decile, however, were caused by escalating incomes from capital investments and from self-employment.¹²

... With Diminished Income Inequality ...

The Gini coefficient is a standard measure of income inequality.¹³ It can have values between 0 and 1. The higher the value, the greater the inequality. According to this measure, inequality in market incomes in Germany increased almost continuously—from 0.41 to 0.5—from reunification in 1990 to 2005 (see Figure 4). In the following years, inequality declined; however, this trend has not continued recently—there was no evidence of it in 2011. Alternative measures of distribution from the group of generalized measures of entropy, such as the Theil index and the mean log deviation,

¹¹ T. Kalina and C. Weinkopf (2013): Niedriglohnbeschäftigung 2011. Weiterhin arbeitet fast ein Viertel der Beschäftigten in Deutschland für einen Niedriglohn. IAQ Report 01-2013, Universität Duisburg Essen; and K. Brenke, "Long Hours for Low Pay," DIW Economic Bulletin, no. 9 (2012).

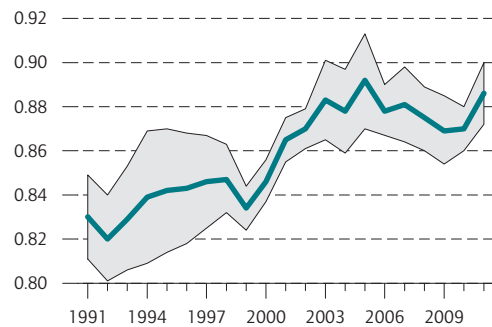
¹² For example, according to the national accounts, the percentage of incomes from capital investments and entrepreneurial activity relative to the entire national income has become relatively more important. However, these types of income are concentrated mainly in the highest decile of income recipients.

¹³ See also the term "Gini-Koeffizient" in the German-language DIW Glossary, www.diw.de/de/diw_01.c.413334.de/presse_glossar/diw_glossar/gini_koeffizient.html.

Figure 5

Inequality of Capital Incomes¹

Gini coefficient



1 Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

Sources: SOEP v29, calculations by DIW Berlin.

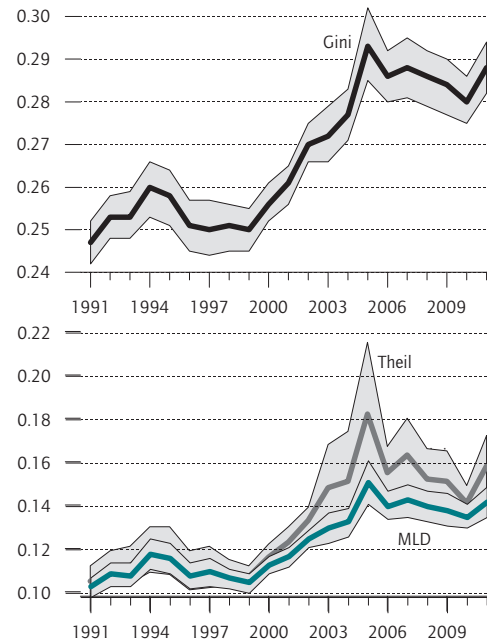
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tion (MLD)—which is particularly sensitive to changes at the lower end of the income hierarchy—confirm the picture portrayed by the Gini coefficient, even if the MLD coefficient for 2011 remains significantly lower than its historical peak in 2005. Apparently, the main reason for the decline in inequality of market incomes since 2005 was the marked improvement of the situation on the labor market.¹⁴

The slight increase in inequality of market incomes in 2011 can be ascribed to the inequality of capital incomes, which is increasing again, as well as to rising inequality in earned incomes. Profit withdrawals and dividends have increased considerably, and stock markets have recovered markedly since 2009.¹⁵ In 2011, the Gini coefficient of capital incomes almost reached its historical peak of 2005 again (see Figure 5).

The trend of increasing income inequality up to 2005 is also apparent in disposable household incomes (see Figure 6), as shown by the Gini coefficient, which rose from just under 0.25 in 1991 to 0.29 in 2005. The decrease from then until 2010 was statistically significant only at the 90-percent confidence level, and the decline ended again in 2011. The reasons for this are the same as those in the analysis of market incomes. The additional components of disposable income (public trans-

Figure 6

Inequality of Disposable Incomes¹Coefficients²

1 Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

2 The measures of inequality used here were the Gini coefficient, the mean log deviation (MLD), and the Theil index. Cases with zero income were excluded when calculating the MLD and the Theil coefficient.

Sources: SOEP v29, calculations by DIW Berlin.

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fer payments, such as child benefits and means-tested unemployment benefit (unemployment benefit II, *Arbeitslosengeld II*), social security pensions as well as direct taxes and social security contributions) barely lessened the effects of the recent increase in inequality of market incomes on disposable incomes.

Even though the decline in income inequality was not very pronounced from 2006 onwards, and slowed in 2011, it does seem remarkable compared with other countries: analyses by the Organisation for Economic Co-operation and Development (OECD) reveal a trend of increasing inequality of disposable incomes—as measured by the Gini coefficient—for the majority of OECD member states (see Figure 7). The development is most striking in the Scandinavian countries and France.

... But Increasing Income Polarization

The concept of income polarization was originally introduced to analyze the shrinking middle-income class

¹⁴ For example, the working population increased by 2.6 million to 41.2 million from January 2005 to January 2012, Federal Statistical Office 2013: www.destatis.de/DE/ZahlenFakten/Indikatoren/Konjunkturindikatoren/Arbeitsmarkt/karb811.html.

¹⁵ For example, the value of the German share price index DAX was 3,666 points and more than doubled to 7,527 by May 2, 2011.

Box 2

Definitions, Methods, and Assumptions for Measuring Income

The analyses presented in this report are based on data from the longitudinal household survey, Socio-Economic Panel Study (SOEP) and primarily founded on annual incomes. In the survey year (t), all the income components affecting a surveyed household as a whole, and all the individual gross incomes of the current members of the surveyed household are added together (market income from the sum of capital income and earned income, including private transfer payments and private pensions), all of these referring to the previous calendar year (t-1). In addition, income from statutory pensions as well as social transfer payments (income support, housing assistance, child benefits, unemployment benefits, and others) are taken into account, and finally, annual net incomes are calculated employing a simulation of taxes and social security contributions—including one-off special payments such as a 13th or 14th month's salary for a given year, a Christmas bonus, and a vacation bonus. The calculation of the annual burden of income taxes and social security contributions is based on a micro-simulation model¹ which generates a tax assessment incorporating all types of income in accordance with the Income Tax Act as well as tax exemptions, income-related expenses, and extraordinary expenses. Since this model cannot simulate all the complexity of German tax law because of its numerous special provisions, income inequality measured in the SOEP is assumed to be an underestimate.

Following the international literature,² fictitious (net) income components from owner-occupied housing (imputed rent) are added to income. In addition, non-monetary income components from subsidized rental housing (government-subsidized housing, housing with rents reduced by private owners or employers, households that do not pay rent) are taken into account in the following—as required by the EU Commission for EU-wide income distribution calculations based on EU-SILC as well.

The income situations of households of different sizes and compositions are made comparable by converting a house-

hold's entire income into equivalent incomes (per capita incomes modified according to needs) in accordance with international standards. Household incomes are thereby converted employing a scale proposed by the Organisation for Economic Co-operation and Development (OECD) and generally accepted in Europe. The calculated equivalent income is allocated to each household member on the assumption that all household members benefit from the joint income equally. The head of household is given a needs weighting of 1; additional adults each have a weighting of 0.5, and children up to 14 years of age weightings of 0.3.³ In other words, cost degression is assumed in larger households. That means, for example, that household income for a four-person household (parents, a 16-year-old, and a 13-year-old) is not divided by four as is the case in a per-capita calculation ($=1+1+1+1$), but by 2.3 ($=1+0.5+0.5+0.3$).

In all population surveys, a particular challenge is how to take missing values for individual people surveyed into account appropriately, in particular concerning questions considered sensitive, such as those about income. The incidence of missing values is often selective, with households with incomes far above or below the average refusing to respond.

In the SOEP data analyzed here, missing values are replaced using an elaborate imputation procedure that is both cross-sectional and longitudinal.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, a multi-stage statistical procedure is applied to six individual gross income components (earned income, pensions and transfer payments in case of unemployment, vocational training/tertiary-level study, maternity benefits/child-raising allowance/parental leave benefits, and private transfer payments).⁵ For each new data collection, all missing values are always imputed again retros-

¹ See J. Schwarze, "Simulating German income and social security tax payments using the GSOEP: Cross-national studies in aging," Program project paper no. 19, (Syracuse University, USA, 1995).

² See J. R. Frick, J. Goebel, and M. M. Grabka, "Assessing the distributional impact of "imputed rent" and "non-cash employee income" in micro-data," in European Communities, ed., Comparative EU statistics on Income and Living Conditions: Issues and Challenges. Proceedings of the EU-SILC conference, Helsinki, November 6-8, 2006, EUROSTAT 2006: 116-142.

³ See B. Buhmann, L. Rainwater, G. Schmaus, and T. Smeeding, "Equivalence Scales, Well-being, Inequality and Poverty," Review of Income and Wealth 34 (1998): 115-142.

⁴ J. R. Frick and M. M. Grabka, "Item Non-response on Income Questions in Panel Surveys: Incidence, Imputation and the Impact on Inequality and Mobility," Allgemeines Statistisches Archiv 89, no. 1 (2005): 49-61.

⁵ J. R. Frick, M. M. Grabka, and O. Groh-Samberg, "Dealing with incomplete household panel data in inequality research," Sociological Methods and Research 41, no. 1 (2012): 89-123.

pectively, which can result in changes compared with earlier evaluations. As a rule, however, these changes are minor.

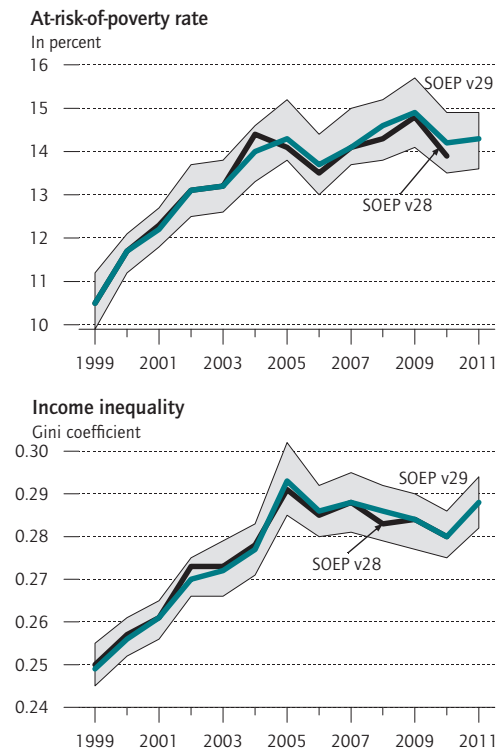
In order to avoid methods-based effects in the time series of calculated indicators, the first survey wave of the individual SOEP samples was excluded from the calculations. Studies show that there are more changes in response behavior which cannot be attributed to differences in willingness to participate in the survey.⁶

After taking weighting factors into account, the SOEP micro-data on which these analyses are based (version v29 on the basis of the 29th survey wave in 2012) show a representative picture of the population in households and thus permit inferences about the entire population. The weighting factors allow for differences in the sampling designs of the various SOEP samples as well as in the respondents' participation behavior. Populations living in institutions (for example in retirement homes) are generally not taken into account.

Besides updates in the context of adjusted imputation of missing values for income in the previous year, a targeted revision of weighting factors was carried out. In order to increase compatibility with official statistics, these factors are adjusted to currently available framework data from the official microcensus. Subsample J (first surveyed in 2011) of data version SOEPv29 was adjusted to the microcensus⁷ in terms of the number of households receiving means-tested unemployment benefit. In addition, for all new samples since 1998, there was a change in the adjustments made to the data for households with non-German household members, which no longer involved only the head of household, but all household members. For the income years 1999 to 2010, this revision had only minor effects on measured income inequality and the at-risk-of-poverty rate (see figure). The differences in the results are not statistically significant; in other words, they

Figure

Effects of Data Revision on At-Risk-of-Poverty Rate¹ and Income Inequality



¹ Individuals with less than 60 percent of median income are at risk of poverty. Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region
Sources: SOEP v28 and v29, calculations by DIW Berlin.

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⁶ J. R. Frick, J. Goebel, E. Schechtman, G. G., Wagner, and S. Yitzhaki, "Using Analysis of Gini (ANOI) for Detecting Whether Two Subsamples Represent the Same Universe. The German Socio-Economic Panel Study (SOEP) Experience," *Sociological Methods Research* 34, no. 4 (2006): 427-468, doi: 10.1177/0049124105283109.

⁷ The microcensus is also a sample survey which is extrapolated using benchmark data from the official statistics. Since the recently published census results show that the previous forward projection of population figures provides insufficient results due to the long gap in between censuses, the extrapolation scheme will have to be revised. Above all, a lower figure will have to be used for total population. Extrapolation of SOEP data will then have to be adjusted accordingly as well.

are within the margin of statistical random error which would need to be taken into account in any case when interpreting the findings.

Box 3

Income Polarization

The concept of polarization is not always clearly differentiated from that of inequality in empirical studies. Classical indices of inequality measure the distance between incomes within a society. Polarization, in contrast, focuses not only on the distance between incomes, but also on possible groupings of these incomes along the income dimension, for example on the numbers of people with low or high incomes relative to those in the middle income segment.

In other words, when measuring income polarization, two dimensions must be differentiated as a matter of principle, namely homogeneity within the groups and heterogeneity between the groups. Since publication of the paper by Esteban and Ray in 1994,¹ efforts have been made to combine the two dimensions of polarization in a single index. Fundamental to these indices is the reference system of identification and alienation. The idea behind it is relatively simple: Polarization occurs when the different (income) groups become alienated from one another and at the same time, the people within one (income) group identify with it.

Polarization and growing inequality do not necessarily occur at the same time. It is even possible for inequality to decrease despite increasing polarization. For example, the differences within the groups at the margins of the distribution may decline while the income gap between the groups increases.

¹ J.-M. Esteban and D. Ray, "On the measurement of polarization," *Economica*, 62, no. 4 (1994): 819–851.

(see Box 3). This concept allows us to determine whether the gap between different income classes has grown larger or smaller over time. Polarization increases in particular if the margins of the income distribution (the poor and the rich) grow larger while the middle section dominating the income distribution loses significance.

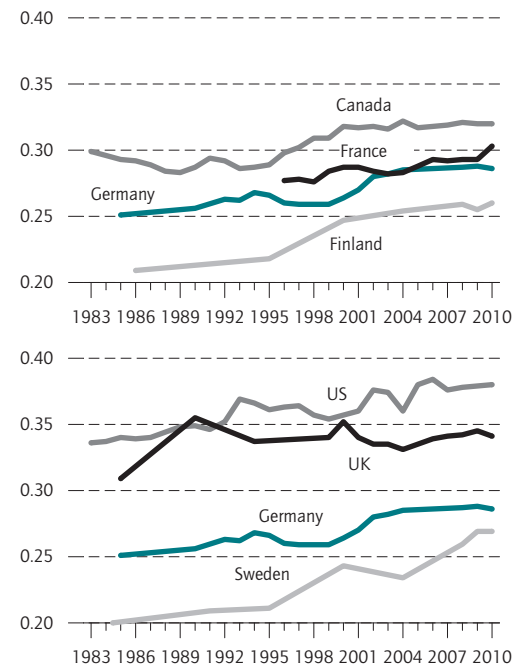
In the following, two alternative measures of polarization are used, one based on the work of Duclos, Esteban, and Ray, the other on Foster and Wolfson (see Figure 8).¹⁶ Both indices show a progression similar to that

¹⁶ J.-Y. Duclos, J. Esteban, and D. Ray, "Polarization: Concepts, Measurement, Estimation," *Econometrica* 72 no. 6 (2004): 1737–1772; and J. E. Foster and M. C. Wolfson, "Polarization and the decline of the middle class: Canada and the U.S.," *Journal of Economic Inequality* 8, no. 2 (2010): 247–273.

Figure 7

Inequality of Disposable Incomes in Selected OECD Countries

Gini coefficients



Source: OECD.

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of the indices for measuring the inequality of disposable household incomes. In the 1990s, income polarization stagnated, only to increase significantly from the turn of the millennium to 2005. Since then, both indices have remained high, even though polarization has recently been increasing again slightly.¹⁷

At-Risk-of-Poverty Rate Stagnating At High Level

The concept of relative income poverty defines a person as at risk of poverty¹⁸ if he or she has less than 60 per cent of the median of the total population's net household income available. According to that, the at-risk-of-poverty threshold in 2011, based on the SOEP sample,

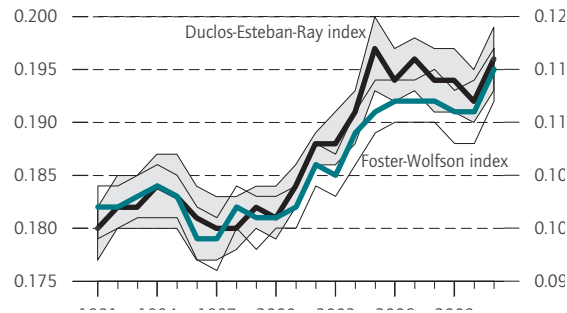
¹⁷ On the trend of increasing polarization in Germany see J. Goebel, M. Gornig, and H. Häußermann, "Polarisierung der Einkommen: Die Mittelschicht verliert," *Wochenbericht des DIW Berlin*, no. 24 (2010).

¹⁸ See also the term "Armuts" in the German-language DIW Glossary, www.diw.de/de/diw_01.c.411565.de/presse_glossar/diw_glossar/armut.html.

Figure 8

Indices of Polarization of Disposable Incomes¹

Koeffizienten



¹ Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region
Sources: SOEP v29, calculations by DIW Berlin.

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was approximately 980 euros per month for a single-person household.¹⁹

In recent years, the poverty risk has largely developed in parallel to the progression of income inequality and income polarization (see Figure 9). Up until the mid-1990s, the poverty risk in Germany was roughly 12 percent—with the rate higher overall in eastern Germany than in western Germany. In the years preceding the turn of the millennium, poverty risk declined slightly to 10.5 percent. Since then, it has risen—with minor fluctuations—to a peak of 15 percent in 2009. One of the causes is presumably short-time work, which was widespread during the economic crisis at that time.²⁰ In the last two years of the study (2010 and 2011), the at-risk-of-poverty rate in Germany initially declined slightly, but has remained at a constantly high level since then—and is lower than the European Union average.²¹

Income Mobility Declining Since Reunification

It is not only the development of the at-risk-of-poverty rate which is relevant from a social-policy point of view.

¹⁹ Compared to social reporting by the Federal Statistical Office based on the microcensus (see www.amtliche-sozialberichterstattung.de), a higher at-risk-of-poverty threshold is given here, as the rental value of owner-occupied housing, among other things, is included in measuring income. On further methodological differences to official social reporting, see M. Grabka, J. Goebel, and J. Schupp, (2012), "Has Income Inequality Spiked in Germany?," DIW Economic Bulletin, No. 12.

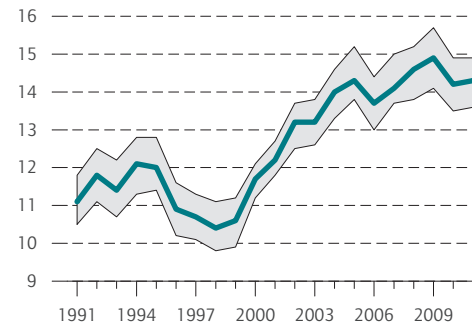
²⁰ For example, the number of workers on short time averaged 1.1 million in 2009, see Federal Employment Agency: Der Arbeits- und Ausbildungsmarkt in Deutschland. Mai 2012. Monatsbericht, 2012.

²¹ See Eurostat (2013): In 2011, 24% of the population was at risk of poverty or social exclusion. Newsrelease 171/2012.

Figure 9

At-Risk-of-Poverty Rate¹

In percent



¹ Individuals with less than 60 percent of median income are at risk of poverty. Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region
Source: SOEP v29, calculations by DIW Berlin.

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After all, the question whether people on low incomes have only short-term poverty-risk experiences or remain in the low-income range for a longer period of time is of no lesser importance. To answer such questions, mobility matrices are frequently employed to compare relative income positions at the beginning and end of a four-year period.^{22,23} The relative positioning within the income hierarchy is subdivided here into seven groups.²⁴

It is evident that mobility at the margins of the income distribution was greater in the mid-1990s than in the 2000s. For example, 44 percent of those individuals on low incomes in 1994 (with less than 60 percent of median income) were still in the same position in 1997 (see table).²⁵ From 2008 to 2011, the corresponding share in-

²² Using a window of four survey waves corresponds to the procedure for determining the fourth Laeken indicator (persistent at-risk-of-poverty rate). See A.-C. Guio, The Laeken Indicators: Some Results and Methodological Issues in Accessing and Candidate Countries. Background paper prepared for the workshop "Aligning the EU Social Inclusion Process and the Millennium Development Goals," April 26-27, 2004, Vilnius, Lithuania.

²³ These analyses refer to intragenerational mobility. Current findings on intergenerational mobility are to be found, for example, in D. D. Schnitzlein, "Wenig Chancengleichheit in Deutschland: Familienhintergrund prägt eigenen ökonomischen Erfolg," Wochenbericht des DIW Berlin, no. 4 (2013).

²⁴ The first group represents people with relative income poverty (less than 60 percent of median income). The second and third groups comprise people below the median income (60 to less than 80 percent and 80 to less than 100 percent of the median, respectively). The upper half of the income hierarchy is divided into four groups (100 to less than 120 percent, 120 to less than 150 percent, 150 to less than 200 percent, and 200 percent or more of the median). Changes in relative income position within the time period observed are disregarded here, i.e., only the income positions of the first and last years are compared.

²⁵ This corresponds to 4.8 percent of the total population.

Table

Income Mobility¹

In percent of the median

	Relative income position in the final year							
Relative income position in the initial year	0- <60	60- <80	80- <100	100- <120	120- <150	150- <200	≥ 200	Population in percent
1994-1997								
0- <60	44	32	12	4	5	2	0	12.1
60- <80	15	40	30	11	2	1	0	17.8
80- <100	5	18	42	24	8	3	1	20.1
100- <120	3	6	26	35	21	7	2	16.6
120- <150	2	3	12	22	39	19	4	15.8
150- <200	2	2	7	8	27	42	12	11.0
≥ 200	1	2	2	4	7	26	59	6.6
1998-2001								
0- <60	46	31	12	6	3	2	0	10.4
60- <80	16	40	28	9	4	2	1	18.4
80- <100	5	19	39	22	11	4	1	21.2
100- <120	3	5	20	34	26	9	2	16.0
120- <150	3	5	9	17	38	23	5	16.1
150- <200	2	2	3	8	24	43	19	11.7
≥ 200	1	1	1	3	7	23	64	6.2
2004-2007								
0- <60	54	26	12	4	3	1	0	14.0
60- <80	21	46	23	5	4	1	0	16.6
80- <100	9	25	33	21	10	2	0	19.5
100- <120	3	8	27	36	20	6	1	16.3
120- <150	2	4	10	23	40	17	3	15.5
150- <200	2	1	5	8	24	41	19	11.0
≥ 200	1	1	2	2	9	20	65	7.3
2008-2011								
0- <60	54	29	8	5	1	2	0	14.5
60- <80	16	41	31	8	4	1	0	16.8
80- <100	6	19	42	21	9	2	1	18.6
100- <120	5	8	24	33	23	7	1	15.7
120- <150	3	2	7	21	42	22	3	15.2
150- <200	1	1	5	8	24	40	21	11.3
≥ 200	1	1	3	2	7	20	65	7.8

¹ Relative income positions based on the median of needs-weighted net household incomes of the total population. Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale.
Sources: SOEP v29, calculations by DIW Berlin.

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creased to 54 percent. Mobility also decreased at the upper end of the income hierarchy. Between 1994 and 1997, only 59 percent of people with an income of 200 percent or more of the median remained in their income class; since 2004, this figure has grown to 65 percent.

Overall, the probability of belonging to the same income group at the end of a four-year period as at the beginning remained virtually constant for individuals at risk of poverty in the 1990s (see Figure 10). At the turn of the millennium, however, it rose sharply and has been at roughly 55 to 60 percent since then. In the case of people in the highest income group, development has

been steadier, with the rate of people remaining in their group increasing most recently to 65 percent.

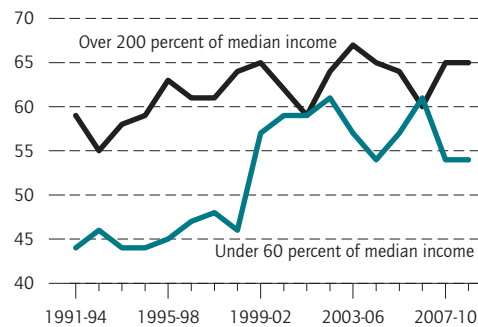
Mobility between the middle-income groups is considerably more pronounced overall, as movements are possible in both directions. The Shorrocks-Prais²⁶ index and

²⁶ This index focuses on the concentration relative to the principle diagonal and indicates the share of people changing their income group over time. See A. Shorrocks, "Income Inequality and Income Mobility," *Journal of Economic Theory* 19 (1978): 376-393. One disadvantage of this measure of mobility is that it measures only mobility between income groups, not mobility within the various income groups. For a general introduction to the measurement of (income) mobility, see G. S. Fields, "Does income mobility equalize longer-term

Figure 10

Individuals Remaining In Their Income Groups¹

Shares in percent



¹ Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

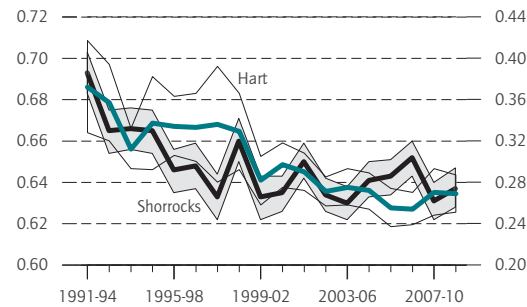
Sources: SOEP v29, calculations by DIW Berlin.

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Figure 11

Income Mobility¹

Indices



¹ Incomes of individuals in households at 2005 prices. Surveyed the following year, needs-weighted using the modified OECD equivalence scale. Gray area = 95-percent confidence region

Sources: SOEP v29, calculations by DIW Berlin.

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the Hart index²⁷ were used to summarize the income mobility of all groups. Both indices point to a significant decrease in income mobility in the 1990s since German reunification (see Figure 11). Since then, income mobility has remained low. It has declined considerably in eastern Germany in particular.²⁸ There are also marked differences in income mobility between men and women.²⁹ The finding of declining income mobility is confirmed both when studying a larger number of income classes and when taking other measures of mobility into account.³⁰ There has been very little research into its causes and mechanisms to date, merely indications that increasing (wage) inequality is associated with the trend toward lower (wage) mobility.³¹

incomes? New measures of an old concept," *Journal of Economic Inequality* 8 (2010): 409–427.

²⁷ This index considers the correlation of the difference in logarithmized incomes. See P. E. Hart, "The Statics and Dynamics of income Distributions: A Survey," in: N. A. Klevmarken and J. A. Lybeck, eds., *The Statics and Dynamics of Income*. Tieto, Clevedon. 1981 108-125.

²⁸ See R. Riphahn and D. Schnitzlein, "Wage Mobility in East and West Germany," IZA DP No. 6246, 2011.

²⁹ See B. Aretz, "Gender differences in German wage mobility," ZEW Discussion paper, 2013-003, Mannheim, 2013.

³⁰ This is the case, for example, when using the Shorrocks measure, see A. Shorrocks (1978), "Income Inequality and Income Mobility," as well as the average jump measure, see A. B. Atkinson, F. Bourguignon, C. Morrisson, eds., *Empirical studies of earnings mobility*. Chur (CH): Harwood Academic Publishers GmbH, 1992.

³¹ See M. Buchinsky, J. Hunt, "Wage Mobility in the United States." *Review of Economics and Statistics* 81 (1999): 351-368.

Conclusion

Inequality of disposable household incomes remains at a high level overall. Although the latest results from DIW Berlin based on data from the Socio-Economic Panel Study (SOEP) show declining income inequality from 2006 to 2010, triggered above all by declining unemployment, the positive trend in the development of income inequality did not continue in 2011.

Following a long phase of upward movement, the risk of poverty has not increased further since 2009. From a social-policy perspective, the development of income mobility is important, above and beyond simply observing the at-risk-of-poverty rate, which was approximately 14 percent in 2011, slightly lower than its peak of 15 percent in 2009. Income mobility has declined since German reunification, meaning that individual movements to higher or lower income groups are taking place less and less frequently. In particular at the margins of the income hierarchy, in the very low and very high income groups, there is a pronounced tendency to remain in the same group. The odds of exiting from poverty risk and thus of an income of less than 60 percent of median income within a four-year period have dropped to less than 50 percent in recent years. At the same time, the share of people below the at-risk-of-poverty threshold has increased; thus, more people in absolute numbers remain at risk of poverty.

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JEL: D31, I31, I32

Keywords: Income inequality, income mobility, SOEP

Leisure Behavior of Young People: Education-Oriented Activities Becoming Increasingly Prevalent

by Adrian Hille, Annegret Arnold, and Jürgen Schupp

Young people's leisure activities are significantly different today than they were ten years ago. The obvious use of communication and entertainment electronics, such as cell phones, computers, and games consoles is only one aspect—there are also less visible changes: informal activities such as meeting with friends are being increasingly sidelined by education-oriented activities like extra-curricular music lessons or sports. These are the findings of a study conducted by DIW Berlin based on longitudinal data from the statistically representative Socio-Economic Panel Study (SOEP). It shows that education-oriented leisure activities feature in the lives of over 60 percent of all 16-year-olds. Ten years ago, this only applied to 48 percent of all young people of this age. The demand for education-oriented activities has increased across all social classes. Nevertheless, clearly identifiable social differences still remain. Young people from socially underprivileged households are therefore at a double disadvantage, since less favorable conditions at home are compounded in school and during leisure time. Policy-makers have already recognized the need to act here and are attempting to reduce persisting inequalities in leisure activities, for example, by expanding all-day schooling and promoting education-oriented leisure activities specifically for children from low-income families.

Not only does the constant use of cell phones with Internet access appear to have dramatically changed the daily lives of children and adolescents over the past few years, they also face growing demands both in school and in their leisure time. This has been subject of public debate for some time now.¹ In a country like Germany, with its ageing society and finite natural resources, there is growing hope that, above all, investment in a good education, and thus in the human capital of children and adolescents, will guarantee the future competitiveness of the German economy.² At the same time, an increasing “instrumentalization and economization of young people's reality”³ has been observed and warnings against too much parental care voiced. The latest controversial concept of “helicopter parents” implies the existence of a new generation of parents who constantly hover over their children in a similar manner to a surveillance drone.⁴ The alleged negative impact of this monitoring and cosseting is the subject of extensive and controversial public debate.⁵ This discussion leads to the conclusion that, from the perspective of children and adolescents, there are “excessive demands during childhood”⁶ since there has been increased pressure on children and schools alike.

¹ “Druck auf Kinder und Schulen wird größer,” Frankfurter Allgemeine Zeitung, June 30, 2013. www.faz.net/aktuell/rhein-main/interview-mit-waldorfpae-dagoge-druck-auf-kinder-und-schulen-wird-groesser-12265125.html.

² C. K. Spieß, “Investments in Education: The Early Years Offer Great Potential,” DIW Economic Bulletin, no. 10 (2013): 3–14.

³ Eigenständige Jugendpolitik – Selbstbestimmt durch Freiheit, Gerechtigkeit, Demokratie und Emanzipation. Proposal by the parliamentary group Alliance 90/The Greens (Allianz 90/Die Grünen). Bundestag printed paper 17/11376, November 7, 2012. <http://dip21.bundestag.de/dip21/btd/17/113/1711376.pdf>.

⁴ J. Kraus, Helikopter-Eltern: Schluss mit Förderwahn und Verwöhnung (Rowohlt, 2013).

⁵ For example, “Kampfauftrag Kind,” the cover story in SPIEGEL 33, 2013; and I. Klopfer, „Lob der Helikopter-Eltern,” Frankfurter Allgemeine Sonntagszeitung, August 18, 2013, 24. www.faz.net/aktuell/wirtschaft/schluss-mit-dem-eltern-bashing-lob-der-helikopter-eltern-12536105-b1.html.

⁶ N. Minkmar, “Die Überforderung der Kindheit,” Frankfurter Allgemeine Zeitung, July 10, 2013. www.faz.net/aktuell/feuilleton/lebensprojekt-kind-die-ueberforderung-der-kindheit-12277772.html.

Box 1

Data

The Socio-Economic Panel Study (SOEP)¹ serves as the data basis for the present analysis. This longitudinal study, comprising an annual representative sample of private households in Germany, has been conducted by the fieldwork organization TNS Infratest Sozialforschung on behalf of DIW Berlin since 1984. Currently, approximately 30,000 people in around 15,000 households participate in the survey.

Since the year 2000, young people who have reached the age of 16 have been surveyed using a separate questionnaire in which they provide retrospective information on events from their childhood, youth, school years, their relationship with their family, future education and career goals, and also current leisure activities.² Over 4,000 young people took part in the survey between the years 2000 and 2012. This makes the SOEP the most wide-ranging study of the life circumstances of 16- and 17-year-olds in Germany. The present study is based on survey data for the years from 2001 to 2012.

In order to provide a statistically sound picture of the trends in leisure activities over the past ten years, three periods have been created, each representing four birth years, and the findings reported accordingly. The oldest cohort consists of respondents born between 1984 and 1987; in each case, 16- and 17-year-olds are questioned in the survey years from

2001 to 2004. For the second cohort, the survey years from 2005 to 2008 are combined (birth years 1988 to 1991).

The youngest cohort reflects the leisure behavior of 16- and 17-year-olds during the survey years from 2009 to 2012 (birth years 1992 to 1995).

As well as allowing us to analyze changes over this period, as a household survey, the SOEP also provides us with the opportunity to merge the youth data with information obtained directly from the parents in various survey years. Thus, in this study, the multivariate models for every young person use household information from childhood: household income, number of books in the household,³ and also level of education, and maternal migration background. If the latter information is unavailable for the mother, it is substituted with the equivalent information for the father. If available, all the aforementioned information on the household and parents is collected when the young person is five, or, at the latest, when the family enters the SOEP. Questions on school type, parental contact with the school, and educational aspirations are asked directly to the young people in the relevant survey year.

The empirical analyses are based on data from a total of 3,551 young people born between 1984 and 1995. For 3,134 of these respondents, all the above-mentioned information on leisure and demographic background is available. Survey weights enable us to weight the data so that it is representative and can be generalized for 16- and 17-year-olds in Germany from the three birth cohorts.

¹ On the SOEP, see G. G. Wagner, J. Göbel, P. Krause, R. Pischner, and I. Sieber, "Das Sozio-ökonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland – Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Anwender)," in *ASTA Wirtschafts- und Sozialstatistisches Archiv*, no. 2 (2008).

² J. Schupp, C. K. Spieß, and G. G. Wagner, "Die verhaltenswissenschaftliche Weiterentwicklung des Erhebungsprogramms des SOEP," *Vierteiljahrshefte zur Wirtschaftsforschung* 77, no. 3 (2008): 63–76.

³ The degree of cultural capital that is widely used as a measure in empirical social and education research.

The economics of education is increasingly focusing on the question of how important informal learning outside of school is for children's subsequent success in school and in their careers.⁷ Numerous studies also attempt to substantiate the impact of music or sport on child development.⁸

Nevertheless, the interplay between extra-curricular activities and success in school has still not been adequately explored to date.⁹ Even the possibility of children experiencing adverse psychological effects as a result

⁷ The skill production model was formalized by F. Cunha and J. Heckman, "The Technology of Skill Formation," *American Economic Review* 97, no. 2 (2007): 31–47; and F. Cunha, J. Heckman, and H. Schennach, "Estimating the technology of cognitive and non-cognitive skill formation," *Econometrica* 78, no. 3 (2010): 883–931.

⁸ In the field of music, the Bastian study in particular has been the subject of extensive public debate; see also H. G. Bastian, *Musik(erziehung) und ihre*

Wirkung: eine Langzeitstudie an Berliner Grundschulern (2000). An overview of the research to date is provided by A. Hille and J. Schupp, "How learning a musical instrument affects the development of skills," *SOEPpaper* 591 (2013). There are now a number of studies on the subject of sport which have found evidence of its positive effect. C. Felfe, M. Lechner, and A. Steinmayr, "Sports and child development," *IZA Discussion Paper* 6105 (2011).

⁹ H. Solga and R. Dombrowski, "Soziale Ungleichheiten in schulischer und außerschulischer Bildung. Stand der Forschung und Forschungsbedarf," *Arbeitspapier* 171 (Hans-Böckler-Stiftung, 2009): 40.

of intensive early learning cannot be ruled out.¹⁰ These include, for instance, less stamina in difficult situations or problems dealing with bullying by fellow students.¹¹

Are popular parenting trends—as also suggested by the media—reflected in the development of young people's leisure behavior? There are a number of youth studies on this subject.¹² However, the wide-ranging data from the Socio-Economic Panel Study, comprising of an annual survey of around 30,000 people in 15,000 households conducted by the fieldwork organization TNS Infratest Sozialforschung enables us to describe changes in leisure behavior in more detail than using surveys conducted specifically on this subject (see Box 1).

The Younger the Cohort, the More Education-Oriented their Leisure Activities

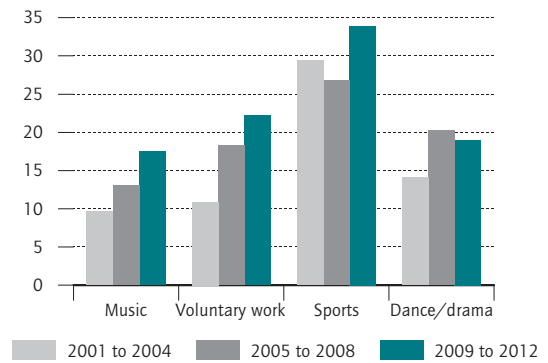
In the past ten years, there has been a significant increase in demand for education-oriented leisure activities such as extra-curricular music lessons or sports (see Figure 1). While only around ten percent of 16- and 17-year-olds in the oldest cohorts analyzed (born between 1984 and 1987, surveyed from 2001 to 2004) were involved in musical activities, the corresponding figure in the youngest cohorts (born between 1992 and 1995, surveyed from 2009 to 2012) was just under 18 percent. A particularly sharp increase in voluntary work was recorded (from 11 to 22 percent). But there was also a considerable rise in the proportion of adolescents involved in sports, dance, or drama during the observation period.

The increased demand for music, sports, dance, and voluntary work is not consistent with the widely held view that young people have considerably less leisure time as a result of the introduction of all-day schooling and the reduction in the number of years spent at Gymnasium (academic-track) schools in almost all German Länder from nine to eight years (G8).¹³ The project “Media, Culture, and Sport for Young People” (MediKuS)¹⁴ run by

Figure 1

Development of Participation in Music, Voluntary Work, Sports, and Dance/Drama¹

From 2001 to 2012, data in percent



1 Precise definitions: music once a week + extra-curricular music lessons; voluntary work once a week; sports once a week + participation in competitions; dance/drama once a week. Separate data for three cohorts for the survey years 2001 to 2004 (born between 1984 and 1987), 2005 to 2008 (born between 1988 and 1991), and 2009 to 2012 (born between 1992 and 1995). The differences are statistically significant.

Sources: SOEP v29 (preliminary), 17-year-olds, weighted, $n = 3\,134$; calculations by DIW Berlin.

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There has been a sharp increase in the prevalence of music, voluntary work, sports, and dance and drama in young people's leisure time.

the German Youth Institute (Deutsches Jugendinstitut; DJI) also indicates that attending all-day school limits participation in sporting activities. This apparent contradiction of the SOEP trends can be at least partially explained as a process of shifting away from informal towards education-oriented activities. Indeed, the probability of participating in at least one education-oriented leisure activity a week is higher, the younger the cohort studied, while the probability of participating in at least two informal activities a day, such as meeting with friends, is lower (see Figure 2). In the youngest cohorts, the ratio has even reversed for the first time in favor of education-oriented activities. These developments can be observed among both boys and girls.

The downward trend of informal leisure activities among young people has primarily resulted from a decline in social activities. For instance, there is a decrease in the proportion who go out with their best friend on a daily basis, from 40 percent in the oldest cohort to 25 percent in the youngest cohort.

The Leisure Time Monitor 2013 (Freizeit-Monitor 2013) published by the Foundation for Future Studies (Stiftung für Zukunftsfragen) also records particularly substanti-

¹⁰ J. Otto, “Meines kann schon mehr. Englisch für Babies. Ökonomie für Vierjährige. Wenn Eltern dem Förderwahn verfallen,” *Die Zeit*, no. 37, September 6, 2007.

¹¹ Kraus, *Helikopter-Eltern* (2013).

¹² For example, Shell Deutschland, ed., *Jugend 2010 – Eine pragmatische Generation behauptet sich* (Frankfurt a.M.: 2010); and German Youth Institute, *Medien, Kultur und Sport bei jungen Menschen* (2013).

¹³ See, for example, T. Schultz, “Unterricht, der krank macht,” *Süddeutsche Zeitung*, May 10, 2010. www.sueddeutsche.de/karriere/stress-durch-ganztags-schulen-unterricht-der-krank-macht-1.942372.

¹⁴ German Youth Institute, *Medien, Kultur und Sport bei jungen Menschen* (2013). www.dji.de/cgi-bin/projekte/output.php?projekt=1080.

al drops in time available for informal leisure activities such as meeting friends for the youngest age group included in that report (14- to 17-year-olds).¹⁵ On the basis of SOEP analyses, it is not possible to determine whether the time young people have left for these activities has decreased to an extent that affects development because no detailed time budget diaries have been collected, only information on the frequency of young people's typical activities (see Box 2 on leisure behavior today).

Participation in Education-Oriented Activities Heavily Dependent on Parental Home

Publications such as the study on children by the World Vision Institute or the Shell Youth Study describe the strong social differences in the participation of children from different social backgrounds in education-oriented leisure activities.¹⁶ The SOEP analyses also show that young people from higher social classes participate in these type of activities considerably more frequently. In particular, the parents' education is a major factor determining whether their child takes music lessons or joins a sports club. The findings of the present study also show that these differences have not decreased in the last ten years. This seriously undermines the objective of equal opportunities for each child because inequalities in school, at home, and in recreational activities are all mutually reinforcing.

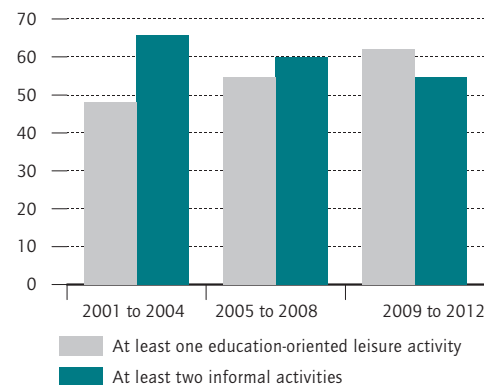
Maternal Education has Major Impact

The data confirms that children from higher social backgrounds more frequently pursue education-oriented leisure activities: 73 percent of children born between 1992 and 1995 (survey years 2009 to 2012) whose mothers have an Abitur (school-leaving certificate that serves as a qualification for German university entrance) or a university degree were involved in activities related to music, dance, drama, or sports, or carry out voluntary work (see Table 1, column 3). For young people whose mothers do not have an Abitur, the corresponding figure was only 54 percent. Similar differences are revealed if the social class is defined by household income, a possible migration background, or cultural

Figure 2

Development of Participation in Education-Oriented and Informal Leisure Activities

From 2001 to 2012, data in percent



Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. Informally active describes those who practice at least two of the following activities on a daily basis: watching television, playing computer games, "hanging out", spending time with their best friend or group of friends. Separate data for three cohorts for the survey years 2001 to 2004 (born between 1984 and 1987), 2005 to 2008 (born between 1988 and 1991), and 2009 to 2012 (born between 1992 and 1995). The differences are statistically significant.

Sources: SOEP v29 (preliminary), 17-year-olds, weighted, $n = 3,134$; calculations by DIW Berlin.

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Education-oriented leisure activities are increasingly replacing informal activities.

capital.¹⁷ When different school types are considered, it becomes evident that young students at Gymnasium schools participate in education-oriented activities considerably more frequently than those attending Haupt- and Realschulen (low- and intermediate-track schools). The findings are similar when a distinction is drawn between young people who aim to go to university and those who plan to train as apprentices.

Along with the parents' social background, the school type also determines opportunities for education-oriented leisure activities. There are often better leisure activities on offer in Gymnasium schools than in Real- and Hauptschulen.¹⁸ Irrespective of the social class, it is not surprising, therefore, if students at Gymnasium schools are more frequently involved in musical or sporting activities.

¹⁵ U. Reinhardt, Freizeit-Monitor 2013 (Hamburg: Stiftung für Zukunftsfragen, 2013). www.stiftungfuerzukunftsfragen.de/uploads/media/Forschung-Aktuell-249-Freizeit-Monitor-2013.pdf.

¹⁶ See the summary of these studies discussed by D. Engels and C. Thielebein, Zusammenhang von sozialer Schicht und Teilnahme an Kultur, Bildungs- und Freizeitangeboten für Kinder und Jugendliche. Documentation commissioned by the Federal Ministry of Labour and Social Affairs, Institute for Social Research and Social Policy, Cologne.

¹⁷ Here, cultural capital is measured by the number of books in the parental household, a measurement used widely in inequality research.

¹⁸ Solga and Dombrowski, „Soziale Ungleichheiten“ (2009): 36.

Box 2

Leisure Behavior of Young People Today

What do young people do in their leisure time nowadays? An evaluation of data from the Socio-Economic Panel Study (SOEP) provides detailed responses to this question: 87 percent of young people born between 1992 and 1995, surveyed in the years from 2009 to 2012, said that they listened to music every day, making this the most common daily leisure activity (see figure). Currently, 75 percent of young people watch television on a daily basis and 65 percent surf or chat on the Internet every day.¹ The most popular weekly leisure activities include sports, doing nothing or "hanging out", and going out with a best friend or group of friends. Approximately half of all young people surveyed said that they never engaged in any activities in the fields of dance and drama, music or voluntary work.

The Shell Youth Study² (2010) produced similar findings. In this study, young people were given a list of 18 different activities and asked to select the five which they most often engage in during the course of a week. The most frequently cited activities included surfing the Internet, listening to music, watching television, and meeting with friends. However, due to its survey methodology, the Shell Study was unable to draw any conclusions about the extent of time use for each activity.

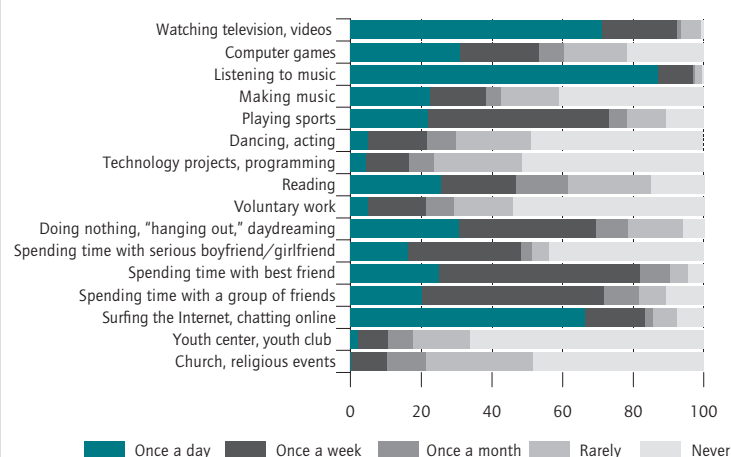
The present study by DIW Berlin uses a factor analysis to determine regular correlations in the response behavior to questions about leisure activities and breaks the information down into different types. A comparison between the three birth cohorts can be used to identify trends in leisure time use. The correlations between the responses to the various questions are analyzed in dimensions that

are independent from one another. Each dimension explains a proportion of the data variance. By definition, the first dimension explains the largest proportion of data variance and this proportion declines with each successive dimension used as a basis for the analysis. Finally, the study analyzes the significance of the role played by each leisure activity (each variable) for the corresponding dimension (correlates with the corresponding dimension). If a series of variables strongly correlate with one dimension, this typically means that the response behavior strongly correlates between these variables.

Figure

Overview of Leisure Behavior

Birth cohorts 1992 to 1995, data in percent



Survey years 2009 to 2012.

Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 858; calculations by DIW Berlin.

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Television, listening to music, and surfing the Internet are particularly popular leisure activities among young people.

The factor analysis of the data on the leisure activities of young people described above takes the responses from the years between 2009 and 2012 into account (see table). The item "hanging out with a girl/boyfriend" is excluded as this question does not apply to a large number of study partici-

¹ The activities Internet, youth center, and church have only been measured since 2006.

² See Shell Deutschland, ed., Jugend 2010 – Eine pragmatische Generation behauptet sich (Frankfurt a. M.: 2010).

pants who do not currently have a girl/boyfriend. Further, questions which were only included in the survey from 2006 are also excluded from this analysis (Internet, church, and youth center).

Four factors describe the typical pattern of leisure behavior. The coefficients in the table show the correlation between the leisure activity and the relevant factor. Only values of over 0.3 are shown. The first factor describes young people interested in social/cultural activities, i.e., those who play music and dance, act, or regularly do voluntary work. The correlation in response behavior with regard to the informal leisure activities is consolidated in the second factor. This type is categorized as relaxed or sociable as they like to listen to music, read, and "hang out", but also like to meet with friends and play sports. A further leisure type could be categorized as "technology enthusiast". The "technology enthusiast" is characterized by the fact that they primarily enjoy playing computer games and programming. Finally, there is the individual leisure type who likes playing on the computer, watching television, and "hanging out".

The lower half of the table first illustrates the stability of these factors over time. For each of the three cohorts, the table shows, on average, how closely the response behavior of the young person corresponds with the relevant leisure type. It is noticeable that, over the past ten years, the prevalence of young people interested in social/cultural activities and also the "technology enthusiast" has strongly increased. The significance of "relaxed-sociable" leisure behavior has decreased slightly.³

The distinction made in the report between the education-oriented and informal leisure activities of young people is defined as follows: young people who tend towards education-oriented leisure activities are those who are engaged in activities in the fields of music, sports, dance, and drama or who do voluntary work at least once a week. In the case of music and sport, an additional prerequisite is that the young person attends an extra-curricular music lesson or takes part in sports competitions.⁴ Young people are deemed to be involved in informal leisure activities if they participate in at least two of

³ This is in line with the finding that changes are more likely to occur across birth cohorts than over a life cycle. S. Stadtmüller, A. Klocke, and G. Lipsmeier, "Lebensstile im Lebensverlauf – Eine Längsschnittanalyse des Freizeitverhaltens verschiedener Geburtskohorten im SOEP," *Zeitschrift für Soziologie* 42, no. 4 (2013): 262–290.

⁴ This type of quality indicator cannot be created for dance and drama as this information is missing in the SOEP.

Table

Factor Analysis: Leisure Behavior Response Pattern

Birth cohorts 1992 to 1995

	Cultural/ social	Sociable	Technology enthusiast	Individual
Playing music	0.55			
Dance, drama	0.55			
Voluntary work	0.51			
Listening to music		0.36		
Playing sports		0.37		–0.46
With best friend		0.43		
With group of friends		0.41	–0.35	
Computer games			0.45	0.49
Working with technology			0.64	
Watching television				0.46
"Hanging out"				0.3
Reading				–0.45
Explained variance in percent	15.5	13.5	10.6	10.5
Correlation with cohorts				
Birth cohorts 1984 to 1987	–0.48	0.11	–0.11	0.12
Birth cohorts 1988 to 1991	0.06	–0.02	–0.12	0.12
Birth cohorts 1992 to 1995	0	0	0	0
Correlation with types of leisure activity				
Education-oriented leisure activities	0.36	0.19	0.02	–0.14
Informal leisure activities	–0.15	0.46	–0.2	0.4

Survey years 2009 to 2012.

The upper part of the table shows which leisure activities are correlated with the relevant types. Only correlations of over 0.3 are shown.

Sources: SOEP v29 (preliminary), 17-years-old, unweighted, $n = 858$; calculations by DIW Berlin.

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The leisure behavior of young people can be categorized according to four types: those interested in cultural/social activities, sociable, technology enthusiasts, and individualists. In the past ten years, the proportion of young people interested in cultural/social activities has increased sharply.

the following activities on a daily basis: watching television, playing computer games, "hanging out" with their best friend, or going out with a group of friends. The lower part of the table shows that these leisure types correspond with the types from the factor analysis: an above-average proportion of those young people who participate in education-oriented leisure activities often belong to the leisure type interested in cultural/social activities, while those engaged in informal activities are more likely to be categorized as a sociable type.

Table 1

Social Differences in Participation in at Least One Education-Oriented Leisure Activity¹

Distinction according to socio-economic status, school type, parental contact with school, and educational aspirations, 2001 to 2012, data in percent

	2001 to 2004	2005 to 2008	2009 to 2012
Total	48	55	62
Distinction according to socio-economic status			
Mother has no Abitur or university degree	44	49	54
Mother has an Abitur or university degree	56	67	73
Lower income quintile	39	46	48
Second income quintile	50	54	54
Third income quintile	39	48	69
Fourth income quintile	47	51	64
Upper income quintile	62	73	80
Mother with migration background	40	58	58
Mother without migration background	50	54	63
Fewer than 50 books in household	35	47	47
50 to 200 books in household	48	57	63
Over 200 books in household	63	62	75
Distinction according to type of school attended			
Haupt- or Realschule	45	49	55
Gymnasium	66	68	80
Distinction according to parental contact with school			
Parents take an interest in school performance	51	59	73
Parents participate regularly in parents' evenings	51	57	65
Parents do not participate regularly in parents' evenings	40	50	55
Distinction according to educational aspirations			
Young person plans to complete an apprenticeship	41	49	51
Young person aims to go to university	67	65	77

¹ Proportion of young people who participate in at least one education-oriented leisure activity. Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. Separate data for three cohorts for the survey years 2001 to 2004 (born between 1984 and 1987), 2005 to 2008 (born between 1988 and 1991), and 2009 to 2012 (born between 1992 and 1995). The differences are statistically significant. Sources: SOEP v29 (preliminary), 17-year-olds, weighted, $n = 3,134$; calculations by DIW Berlin.

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Social differences in participation in education-oriented leisure activities have remained constant since 2001.

It can be assumed that the choice of and participation in leisure activities is not only a result of young people's motivation. The social science literature also refers to other influences, stating that parents from higher social backgrounds increasingly often take it for granted that their children will participate in education-oriented leisure activities. They see enrolling them for music lessons or at a sports club as part of their duties as parents, leading the American sociologist Annette Lareau to coin the term "concerted cultivation".¹⁹ Against this background, increased efforts by parents to improve the relative starting position of their own children compared to others by encouraging them to engage in extra-curricular educational activities are also plausible. A successful child is widely viewed as a status symbol, which is in turn indicati-

ve of belonging to the upper class.²⁰ According to Lareau, although the parents of working class children are also prepared to invest in their offsprings' future, unlike parents of other social classes they trust that their children know themselves what activities best suit their needs.²¹

No Reduction in Social Inequality in Leisure Activities

The SOEP data go beyond previous findings and allow us to examine change in social inequality with regard to

¹⁹ A. Lareau, *Unequal Childhoods: Class, Race and Family Life*, 2nd ed. (University of California Press, 2011).

²⁰ A debate which is regularly quoted in the press: L. Herzog, "Die neue Klassengesellschaft: Gleiche Chancen?," FAZ, August 4, 2013; and A. Steinle, "Das Baby-Projekt," Manager Magazin, August 1, 2007. From a sociological point of view, the objective of these parents is to transfer their own status to the next generation; on this, see P. Bourdieu and J.-C. Passeron, *Reproduction in education, society and culture*, vol 4. (SAGE Publications Limited, 1990).

²¹ Lareau, *Unequal Childhoods* (2011).

Table 2

Regression of Determinants of Education-Oriented Activities¹

Marginal effects of probit estimate, 2001 to 2012

Dependent variable: participation in at least one education-oriented leisure activity	Coefficient	Standard error
Mother with no Abitur/university degree	-0.205***	0.052
Birth cohort 1984 to 1987 * Mother with no Abitur/university degree	0.084	0.065
Birth cohort 1988 to 1991 * Mother with no Abitur/university degree	0.069	0.07
Cohorts (reference group: birth cohort 1992 to 1995)		
Birth cohort 1984 to 1987	-0.17***	0.053
Birth cohort 1988 to 1991	-0.094	0.058
Mother with migration background	-0.026	0.042
Household income (reference group: middle quintile)		
Lower income quintile	-0.064	0.041
Second income quintile	0.008	0.04
Fourth income quintile	-0.008	0.039
Upper income quintile	0.141***	0.041

1 Explanatory model for participation in at least one education-oriented leisure activity. Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. The following characteristics were kept constant but not shown in the table: sex, number of brothers and sisters, birth order (first-born), number of rooms in the household, region type (rural), federal state. *** Significant (1% level), ** significant (5% level), * significant (10% level). Sources: SOEP v29 (preliminary), 17-year-olds, weighted, $n = 3\,134$; calculations by DIW Berlin.

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Parental education has a greater impact on participation in education-oriented leisure activities than any other characteristic.

education-oriented leisure activities during the last ten years.

The proportion of young people who participate in at least one education-oriented leisure activity has continually increased in all subgroups (level of education and maternal migration background, household income, cultural capital, school type, parental contact with the school, and young people's educational aspirations), for young people both from privileged and disadvantaged families (see Table 1). However, the social inequality has not decreased: in 2012, the socio-economic differences in leisure behavior were the same as ten years previously. This development is particularly evident for maternal education. Here, the gap between privileged and disadvantaged families was even wider.

Further Analyses Confirm Significance of Parental Education

An examination of the different patterns of participation behavior in education-oriented leisure activities using a multivariate regression model²² also confirms that of all

socio-demographic factors affecting young people's leisure behavior, the parents' level of education stands out as an influential factor. Even if the effects of household income, migration background, household composition, and region of residence are taken into account and kept constant, parental education largely determines whether or not young people pursue education-oriented leisure activities. The probability of participating in at least one of these activities is over 20 percentage points lower for young people whose mothers have neither an Abitur nor a university degree than for other young people (see Table 2). Over time, the significance of parental education has increased even further. The maternal migration background and level of household income play a considerably less important role with regard to pursuing an education-oriented leisure activity.

The results of the multivariate regression model also confirm that the above-mentioned fundamental increase in participation in education-oriented leisure activities in all social classes over time is indeed statistically significant. Even after education, household income, migration background, and household composition are all taken into account, the proportion of those who are actively involved in music, sports, drama or voluntary work rose by 17 percentage points. Therefore, no change in the average household characteristics over time has been observed, but an actual increase in participation in these activities.

22 The aim of the model is to calculate what characteristics determine participation in at least one education-oriented leisure activity. Marginal effects of a probit model are represented for each variable. These indicate by how many percentage points the probability of participation in music, sport, drama, dance, or voluntary work varies if the corresponding sociodemographic characteristic applies. Each coefficient indicates this change, assuming that all other characteristics remain constant.

Table 3

Regression for the Determinants of Life Satisfaction¹

Change on a scale from 0 to 10, 2001 to 2012

Dependent variable: satisfaction	Coefficient	Standard error
Participation in education-related leisure activities (reference group: no participation in education-related leisure activities)		
Participation in exactly one education-related leisure activity	0.249***	0.067
Participation in at least two education-related leisure activities	0.589***	0.084

1 Explanatory model for life satisfaction (OLS regression). Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. The following characteristics were kept constant but not shown in the table: gender, maternal education and migration background, household income, number of siblings, birth order (first-born), number of rooms in the household, region type (rural), Land. *** Significant (1% level), ** significant (5% level), * significant (10% level).

Sources: SOEP v29 (preliminary), 17-year-olds, weighted, $n = 3,134$; calculations by DIW Berlin.

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Young people who participate in education-oriented leisure activities are happier on average.

Interplay between School, Family, and Leisure Time

The social differences in participation in education-oriented leisure activities show no evidence of decreasing across different age groups and exacerbate the existing inequality of educational opportunities. Young people from less privileged social classes are at a double disadvantage: not only do they lack the stimulus for extra-curricular education initiated by more education-oriented parents but they also have fewer opportunities to make use of the indirect educational effects of music, sports, dance, drama, and voluntary work. Educational economists also refer to the interplay between different skills.²³ For instance, early investments in education increase the productivity of later developments. In other words, those who learn at an early age learn better later in life. Particularly if early learning is not encouraged by parents, significantly greater effort is needed to compensate for the resulting deficits later. Moreover, modern forms of schooling increasingly expect students to have competences acquired in extra-curricular activities.²⁴ Since they are also unable to benefit to the same extent from extra-curricular acquisition of skills as young people from more well-to-do families, this amplifies the problems and challenges for young people who already have greater difficulties in school due to their social background.

Irrespective of the potential benefits of education-oriented leisure activities, there is currently a debate on whether these can have adverse effects on children and adolescents. With regard to this issue, information on young people's subjective life satisfaction was consulted and,

again using multivariate regression models, the determinants of young people's life satisfaction were examined. The results show a significant positive coefficient, also taking into account further socio-demographic characteristics. This proves that young people who pursue an education-oriented leisure activity report a higher level of life satisfaction in the survey on average (see Table 3). Young people who participate in two or more of these activities show even higher levels of satisfaction.

Policy-Makers Have Recognized the Need to Act

The first PISA study in 2000 showed that educational attainment in Germany is closely linked to social background—to a greater extent than in most other OECD countries.²⁵ The findings of the study were the subject of extensive public debate and led to a number of school reforms. For example, almost all German Länder introduced the shorter eight-year Gymnasium program (G8) and also expanded all-day schooling. But the government recognized that there was a need to act not only with regard to school learning but also learning from extra-curricular activities. In its 12th Child and Youth Report dated 2005, the German government stressed the need for effective political intervention to reduce social inequality in extra-curricular activities.²⁶ Only recently did the German Bundestag address a proposal by the parliamentary group Alliance 90/The Greens focu-

²³ On what is known as the skill complementarity, see Heckman, "The Technology of Skill Formation" (2007); and Heckman and Schennach, "Estimating the technology" (2010).

²⁴ Solga and Dombrowski, "Soziale Ungleichheiten" (2009).

²⁵ See, for example, Max Planck Institute for Human Development, PISA 2000: Die Studie im Überblick: Grundlagen. Methoden und Ergebnisse (2002), 13.

²⁶ Solga and Dombrowski, "Soziale Ungleichheiten" (2009): 37 and Federal Ministry of Family Affairs, Senior Citizens, Women and Youth, Zwölfter Kinder und Jugendbericht. Bericht über die Lebenssituation junger Menschen und die Leistungen der Kinder- und Jugendhilfe in Deutschland (2005). www.bmfsfj.de/doku/Publikationen/kjb/data/download/kjb_060228_ak3.pdf.

sing on the increasing economization of young people's everyday lives as well as social inequality in extra-curricular learning.²⁷ Thus, the inequality in extra-curricular activities has now become part of the political agenda. But what courses of action are even open to a government that will have a lasting impact on young people's leisure time?

Expansion of All-Day Schooling

The German government supported the expansion of all-day schooling through its four-billion-euro investment program "The Future of Education and Care" in 2003. One of the objectives of all-day schooling is to shift leisure activities to the school sector and thus disassociate them from parental resources. There are two forms of all-day schooling. In "obligatory all-day schooling," children are supervised throughout the whole day, alternating between lessons and leisure activities. In an open all-day school, classes only take place in the mornings. In the afternoons, children can choose from a range of extra-curricular activities on a voluntary basis. According to the Bertelsmann Stiftung, in the 2011/2012 school year, around 14 percent of students in primary school (elementary school) and lower secondary school (Haupt- and Realschule as well as Gymnasium schools up until the tenth grade) attended an obligatory all-day school. Around 17 percent of students were in open all-day schools. In this type of school, however, there is a risk of social selection. Children from higher social classes might not participate in the afternoon activities because their parents hope that extra-curricular activities outside of school will be more stimulating for their children. Therefore, the Bertelsmann Stiftung is critical that the majority of funding from the investment program "The Future of Education and Care" is being spent on expanding open all-day schooling. It claims that the program has not achieved its full potential with regard to equal opportunities.²⁸

There has been insufficient research to date on whether all-day schooling will be able to reduce social inequalities in leisure activities. It is clear, however, that children from lower social classes gain better access to leisure activities through all-day schooling.²⁹

SOEP-based studies show an increase in the number of all-day schools, particularly elementary schools.³⁰ But a sharp rise in all-day schooling can also be observed among adolescents. While 14 percent of young people attended an all-day school in 2006, this share had increased to 22 percent by 2012. The level of voluntary participation among young people within the school community is also rising. While 65 percent of adolescents participating in SOEP reported active participation in at least one after-school club in 2001, the corresponding figure in 2012 was 77 percent. This indicates that leisure activities have indeed shifted to schools as a result of the expansion of all-day schooling.

Funding of School and Extra-Curricular Leisure Activities

Education-oriented leisure activities are increasingly funded by the state in order to allow more children from socially underprivileged households to participate. The "education and participation package" (Bildungs- und Teilhabepaket) introduced in 2011 subsidizes school trips, for example, as well as the acquisition of school supplies, and provides funding for members of clubs or associations or for music lessons. While the first two options have a high take-up, only around 15 percent of households entitled to apply for a grant for other education-oriented leisure activities in fact did so in the first year the program existed.³¹ However, 78 percent of children and adolescents from these households were actually already members of the relevant club or association. Only 22 percent of those who made use of the funding joined a club thanks to the education and participation package.³² This equates to 3.3 percent of all eligible children and adolescents. Possible reasons for this may be that the subsidy of ten euros per month is too low or that there are considerable bureaucratic hurdles to overcome during the application process.

Another example is the program "An Instrument for Every Child" (JeKi) which enables children to have free musical instrument lessons in school for a year. The lessons can subsequently be continued at a reduced cost.³³ JeKi was introduced in North Rhine-Westphalia in 2007 by the local government there and has now been taken

²⁷ Alliance 90/The Greens, *Eigenständige Jugendpolitik* (2012).

²⁸ K. Klemm, *Ganztagschulen in Deutschland – eine bildungsstatistische Analyse* (2013). Commissioned by the Bertelsmann Stiftung. www.bertelsmann-stiftung.de/cps/rde/xbcr/SID-9659BBB8-1B622031/bst/xcms_bst_dms_38554_38555_2.pdf.

²⁹ E. Klieme, H. Holtappels, T. Rauschenbach, and L. Stecher, "Ganztagschule in Deutschland. Bilanz und Perspektiven," in H. Holtappels, et al., ed., *Ganztagschule in Deutschland. Ergebnisse der Ausgangserhebung der "Studie zur Entwicklung von Ganztagschulen" (StEG)* (Weinheim: 2007), 353–382.

³⁰ J. Marcus, J. Nemitz, and C. K. Spieß, "Ausbau der Ganztagschule: Kinder aus einkommensschwachen Haushalten im Westen nutzen Angebote verstärkt," *Wochenbericht des DIW Berlin*, no. 27 (2013): 11.

³¹ H. Apel and D. Engels, *Bildung und Teilhabe von Kindern und Jugendlichen im unteren Einkommensbereich* (2012). A study on the implementation phase of the education and participation package commissioned by the Federal Ministry of Labour and Social Affairs.

³² Apel and Engels, *Bildung und Teilhabe* (2012).

³³ This is 20 euros per month in North Rhine-Westphalia.

up throughout Germany. Researchers at the University of Bielefeld have found that socio-economic status does not play a major role in whether or not the lessons are continued.³⁴ Here, it has apparently been possible to successfully disassociate participation in an education-oriented leisure activity from social background.

Conclusion and Outlook

Participation in education-oriented leisure activities such as music or sports lessons has increased considerably over the past ten years: While only 48 percent of all 16- and 17-year-olds participated in at least one of these activities in 2001, the corresponding figure in 2012 was 62 percent. This trend was observed across all social classes. However, there has been no reduction in socio-economic differences with regard to participation in education-oriented activities: Young people from socially underprivileged households still participate in such activities less frequently than those from well-off families.

Political projects such as all-day schooling or funding of extra-curricular leisure activities are indeed heading in the right direction and able to provide young people from socially underprivileged families with the opportunity for non-formal learning in the absence of suitable support and encouragement from home. But a lot more could still be done. Social inequality in extra-curricular activities is also reaching a significant level, which is all the more serious because this and inequality in school are mutually reinforcing. Policy-makers need to ensure fair starting opportunities for young people from an educationally underprivileged family background, too.

There has been insufficient research to date on the impact of the use of leisure time on skills development, as well as on young people's choice of career and course of study. For instance, there are only a small number of empirically sound studies or field experiments on the effect of specific leisure activities.³⁵ Transfer effects of the program "An Instrument for Every Child" are currently being examined in the parallel research program for this project.³⁶

In view of such uncertainties and gaps in the research, it also still remains to be seen to what extent "helicop-

ter parents" in fact manage to achieve their goal of optimum advancement of their children by enrolling them in education-oriented leisure activities. At least for the moment, the findings of the present study also serve to show that fears that young people are increasingly stressed and unhappy are unfounded: young people who participate in education-oriented leisure activities show a significantly higher level of life satisfaction on average than young people who spend their leisure time pursuing alternative activities.

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JEL: I21, J13, Z11

Keywords: Youth, time use, SOEP

³⁴ T. Busch and U. Kranefeld, "Wer nimmt an JeKi teil und warum? Programmteilnahme und musikalische Selbstkonzepte," in Koordinierungsstelle, ed., JeKi-Forschungsschwerpunkt (brochure) (Bielefeld: 2013), 46–49.

³⁵ For an overview, see, for example, OECD, Arts for art's sake: The impact of arts education (Paris: OECD, 2013) and the review in Hille and Schupp (2013).

³⁶ JeKi parallel research program. www.jeki-forschungsprogramm.de/.