Household income, poverty and wealth
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Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

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Empfohlene Zitierung / Suggested Citation:

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Working Paper Series

Working Paper No. 53

Household income, poverty and wealth

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January 2009

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Household income, poverty and wealth

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Abstract

This paper concentrates on official statistics on household income, poverty, and wealth. It characterizes the main research questions in this field, and it presents an overview of the available statistics and Scientific Use Files produced by the four Research Data Centers (RDC) in Germany. (RDC of the Federal Statistical Office; RDC of the Statistical Offices of the German states; RDC of the German Labor Office; RCD of the German Pension Insurance). We support the recommendations of a peer review group for the Federal Statistical Office based on the European Statistics Code of Practice, and suggest peer reviews for all data producing bodies including ministries. We repeat a recommendation of a former Commission to find ways of distributing Scientific Use Files to reliable foreign research institutes. Special recommendations refer to the improvement of survey methods and extended questionnaires of the Income and Consumption Survey (EVS) and the German contribution to the European Statistics on Income and Living Conditions (EU SILC). We also recommend a harmonization of the administrative statistics on the various minimum benefit programs, and the development of a single Scientific Use Files for all minimum benefit recipients.

Keywords: relevant terms to support the research via the Internet Research Data Center, Scientific Use Files, household income, wealth, minimum benefits, EVS, EU SILC.
1. Introduction

Income and wealth of individuals and households strongly influence their well-being. The levels and the distributions of these economic resources and their changes over time within a society are of utmost importance from a scientific as well as from a political point of view. A minimum amount of regular income is also a necessary though not always a sufficient condition to avoid poverty. Strictly speaking, net equivalent income and net wealth are the relevant variables.\(^1\) To calculate these variables, however, one needs information on all sources of income and all components of wealth as well as all kinds of personal taxes and social security contributions.\(^2\)

Comparisons of income and wealth distributions and of the size and composition of the population in poverty have also become indispensable within the European Union\(^3\) and on a worldwide scale.\(^4\) This necessitates comparable definitions of the variables that are recorded by national surveys and administrative data sets.\(^5\)

Income and wealth distributions are anonymous in the sense that distributions do not change if individuals or households change positions pair wise. By looking at the distributions of income and wealth from an individual point of view, however, one also wants to know changes of the relative positions of concrete individuals in the income and wealth hierarchy. This is especially important for the analysis of changes in the composition of the poverty population by rises from and falls into income poverty.\(^6\) If one extends the perspective from a short-run to a long-run view, one also wants to know changes of economic resources of individuals over the entire life course. Part of the life course of an individual may be as a member of a family so that the life courses of other family members and their

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\(^1\) Net equivalent income is a weighted per capita income derived from the net income of the household of which an individual is a member. Net wealth is the difference between all assets of a household and its debts.


\(^3\) The EU has defined the so-called Laeken indicators that have to be calculated regularly by each member state to facilitate comparisons between her members.


\(^5\) Compare Expert Group on Household Income Statistics (The Canberra Group), Final Report and Recommendations, Ottawa 2001. The Luxembourg Income Study (LIS) collects data on income and wealth for about thirty countries and takes great effort to make them comparable based on these recommendations.

\(^6\) A panel of social assistance recipients gave rise to new insights. Compare Leisering, L./Leibfried, S., Time and Poverty in Western Welfare States, United Germany in Perspective, Cambridge/UK 1999. Many studies of income mobility use data from the German Socio-economic Panel (GSOEP), a social science based panel that is located at the Deutsches Institut für Wirtschaftsforschung (DIW) Berlin. Comparative studies of income mobility can be based on the Comparative National Equivalent File (CNEF) that presently comprises national Panels of five countries (Germany; United Kingdom, Canada, Australia, the Netherlands). It is organized and distributed by Cornell University, Ithaka, NY, USA.
interrelationship are also of interest. Moreover, information about private transfers between households and intergenerational transfers of income and wealth (gifts, inheritances) become necessary for a complete picture.

The first step of an analysis in the fields of income, wealth, and income poverty always aims at a description of the situation based on statistics on household income and wealth. More demanding, however, is the analysis of the factors that have caused the existing distributions, and which will cause changes of this distribution, and changes of the relative positions of individuals in the income and wealth hierarchy, and especially in the poverty section. That means we should like to find explanations and to make predictions. Although a comprehensive theory of the personal distribution of income and wealth does not exist, one can say that macroeconomic and demographic trends in combination with institutional arrangements interact with personal characteristics. Social and fiscal policy decisions that change the institutional arrangements work within this general setting. While information on macroeconomic and demographic developments, on institutional arrangements, and on policy decisions has to be provided by other sources, information on relevant personal characteristics of each individual should be part of the same data file from which information on the individual’s or household’s income and wealth is taken. This is necessary in cross-section household surveys as well as in household panel surveys. While simulations of the first round effects of social and fiscal policy changes usually by assumption neglect behavioral responses, the prediction of second and third round effects needs estimates of individual behavioral responses with respect to working time, consumption and savings, and changes in the portfolio structure of wealth holdings. Econometric estimates of these behavioral responses, therefore, should be based on variables that are ascertained in the same data set as the income and wealth variables. Usually, however, one has to ignore repercussions of individual behavioral changes on the macro level due to a lack of a comprehensive micro-macro model.

Given this state of the art, we have to examine which statistics produced by official bodies are available for analyses of income, wealth and poverty. This exercise then leads to recommendations for the improvement of the respective elements of the informational infrastructure in Germany. Cross-section and longitudinal household surveys that are organized by the social sciences themselves are not dealt with.
2. An overview of public data sources and their availability for research in income, wealth, and poverty

Since 2001 when the KVI published its recommendations the German statistical infrastructure for empirical research in the economic and social sciences has greatly improved. For research with respect to the distribution of income and wealth, and income poverty the following Scientific Use Files of public institutions are available via various research data centers (RDC) (Forschungsdatenzentren):

2.1 Research data center (RDC) of the Federal Statistical Office and the Statistical Offices of the German states (Länder)

These data centers offer numerous Scientific Use Files and possibilities to work on site or by remote computing for researchers in many fields. In what follows, only those files are mentioned that refer to income, wealth and poverty.

a. Micro census (1973-2006);
f. Inheritance Tax File (2002);
g. Social Assistance Files (1998-2004)

The data sets a), b), c) are sample surveys while d), e), f) and g) are samples of administrative data sets. All these data sets are relevant for analyses on income, wealth and poverty, but we will only comment on the surveys. The rather new tax files are very promising for distributional analyses. Methodological research on problems of the administrative data sets

9 In addition to the distribution of Scientific Use Files the Research Data Centers also provide work places for guest researchers on site, and a facility for remote computing with all the surveys mentioned.
10 See: www.Forschungsdatenzentrum.de
is still in progress.

2.2 Research Data Center of the German Labor Office (Bundesagentur für Arbeit (BA) operated by the Institute of Labor Market Research (IAB)):

h. IAB-Employee Sample (IAB-Beschäftigtenstichprobe (IABS)) (1975-2004)

i. Cross-section Sample “Living conditions and social protection“ (Querschnittsbefragung „Lebenssituation und Soziale Sicherung (LSS2005))


k. BA-Employee Panel (BA Beschäftigtenpanel (BAP));

l. Sample of Integrated Labor Market Biographies (IEBS).

Data set h) is an administrative data set that is valuable for research on the distribution of labor income of individuals thus contributing to the explanation of the distribution of net equivalent income derived from household net income. In this statistic, however, higher labor incomes of employees are only recorded up to the legal limit for social security contributions. Data set i) is a singular survey that can be used for analyses of income distribution among households but comparability with other surveys is limited. Data sets j) and k) are based on surveys focusing on the long-term unemployed, and thus can contribute to a partial explanation of net household income and of poverty but only for this subgroup of the population. Data set l) is a sample of a longitudinal administrative data survey.

2.3. Research Data Center of the German Pension Insurance (Deutsche Rentenversicherung Bund)

m. Cross-section files for the years 2003, 2004, 2005 and 2006 of the German Pension Insurance on pensions in payment (Rentenbestand), on new pensions awarded (Rentenzugang), on cessation of pension payment (Rentenwegfall), and on actively (currently) insured persons (only 2004 and 2005);

n. Cross-section files on special topics and groups:


n2) Scientific Use File with reduced information on pensions in payment, newly awarded pensions, cessation of pensions (1993-2005)

These various Scientific Use Files can only be used to describe the distribution of pensions by case and to explain their levels that are determined by the pension formulae. Since individuals may receive several pensions from the German Pension Insurance and, additionally, from other Old Age Protection Agencies, these data sets are not sufficient to explain total pension income of the elderly. For this one needs household surveys that record all types of old age income. Although there exist several very good household surveys on income of the elderly and even on pension entitlements accrued for persons over 40 (Alterssicherung in Deutschland (ASID) (1986, 1995, 2003), and Altersvorsorge in Deutschland (AVID) (1996, 2005)) they are not available for independent scientific research but only for research commissioned by the Ministry of Labor and Social Affairs. This is in contradiction to the recommendations of the KVI that all surveys paid for by public money should be available to scientists.

3. Problems of the informational infrastructure for research in income, wealth and poverty provided by public bodies

3.1 Problems mentioned by a report of a European peer review group

The peer review initiated by Eurostat detected some problems with the existing statistics of the German Statistical Offices (Statistisches Bundesamt and Statistische Landesämter) and made recommendations for improvement. This peer review, based on the European Statistics Code of Practice, dealt with the production of official statistics by the German Statistical Offices, with its internal organization, with quality control, and with the distribution of statistics to the public and to scientists. Some of the problems detected are also relevant for the quality of data distributed for scientific research. The recommendations of the report for improvement implicitly show the problems detected. Therefore, we mention some elements of five recommendations:

- Depending on resources available and taking into account the cost-benefit ratio, an internal data quality network should be established to improve


13 Peer review on the implementation of the European Statistics Code of Practice, Country visited: Germany, by Geert Bruinooge (statistics Netherlands, Daniel Defays (Eurostat), Paloma Seoane Spiegelberg (INE, Spain), 10 March 2008 (available at the homepage of www.destatis.de)

14 The Research Data Centers of the Federal Statistical Office and of the Statistical Offices of the Länder were accepted as “best practice”.

15 See Peer review, section 7, principle 4 (Quality commitment), principle 7 (Sound Methodology), principle 11 (Relevance), principle 12 (Accuracy and Reliability) and principle 15 (Accessibility and clarity).
internal quality control and to increase the transparency and comparability of statistics.

- The transparency regarding the application of methodology and procedures in the statistical offices should be improved through suitable documentation measures.
- Implementation of regular customer satisfaction surveys.
- Development of a concept for measurement of errors and error sources from administrative sources.
- Quality reports should be systematically evaluated and standardised with regard to their information value.

We fully support these recommendations but we will not repeat them in the final section of this paper.

Some problems of the informational infrastructure for empirical economic and social research with respect to income, wealth and poverty, however, are not dealt with by this peer review. Obviously, they were not within its focus.

3.2 Additional problems of the German informational infrastructure with respect to scientific research in income, wealth and poverty

Statistics that are relevant for research in problems of income, wealth, and poverty are produced by different public bodies: The German Statistical Offices (Statistisches Bundesamt und Statistische Landesämter), the German Labor Office (Bundesagentur für Arbeit), the German Central Bank (Deutsche Bundesbank), the German Pension System and other Social Security Institutions (Deutsche Rentenversicherung Bund, andere Sozialversicherungszweige), and some Ministries. Either these statistics are ascertained according to special statistics laws, or they are produced along with the main administrative activities of the respective institution, or they are based on surveys commissioned to private market research companies and financed by public money. Regular evaluation processes for these other data collection activities similar to the peer review based on the European Statistics Code of Practice for the German Statistical Office do not exist for all public bodies. This lack of systematic control casts doubts on the reliability of the various data sets.

Up to now, it is not possible to draw a comprehensive picture of the distribution of income, wealth, and income poverty among the population permanently resident in Germany. The
micro census, that is obligatory and that is based on a random sample, in principle, covers the entire resident population, but it does not contain sufficient information on income and wealth. Therefore, only rough analyses of income and poverty are possible.

The Income and Consumption Survey (ICS) record detailed information on income, wealth, consumption and savings, but it does not cover some population groups, namely households with very high incomes, persons living in institutions and the homeless. Additionally, persons with a migration background, especially if they immigrated recently, are grossly underrepresented. Partly, the cause may be that the ISC it is a voluntary survey that is based on a quota sample instead of a random selection of the interviewees. Moreover, it uses questionnaires that are only phrased in German and that are mailed, instead of multilingual questionnaires distributed by interviewers. These gaps cause biased results with respect to the distribution of income, wealth, and income poverty. Moreover, because it is a quota sample it is not possible to calculate confidence intervals. Although it is not possible to analyze annual income mobility with this cross-section surveys carried out every five years, at least one can make pseudo-longitudinal analyses with a series of these surveys.¹⁷

The German contribution to the European Statistics on Income and Living Conditions (EU-SILC) also records income sources and some indicators of the quality of life but it neglects components of wealth, consumption and savings. It is, therefore, only suitable for the analysis of income distributions and income poverty. Each year one forth of the interviewees is selected at random. In its final stage, this survey will be a rotating Panel with each interviewee participating for four consecutive years. Therefore, one will be able to analyze annual income mobility and income poverty lasting longer than one year. There are doubts, however, whether the basis for the random selection of interviewees, the so-called access panel, is itself a random representation of the population resident in Germany. Moreover, the German contribution to EU-SILC is a voluntary mail survey with questionnaires phrased only in German so that various groups are underrepresented and the results, therefore, will be biased.¹⁸¹⁹

¹⁶ The concept of institutions is rather wide. It includes, for example, hospitals, homes for the elderly, nursing and orphans homes, homes for workers, barracks and prisons, homes for asylum seekers, monasteries and similar collective households.


¹⁹ An extensive methodological discussion of the problems of EU-SILC in all member states of the EU can be found in: European Commission (ed.), Comparative EU statistics on Income and Living Conditions: Issues and Challenges, Proceedings of the EU-SILC conference (Helsinki, 6-8 November 2006), Methodological and working papers, 2007 edition
The data sources are based on different income and wealth concepts: current quarterly household net and gross income, annual household gross and net income of the previous year, monthly gross income, and the income of the previous year. Although there may be good reasons for different definitions of the variable "income," it is difficult to combine information from different statistics. Moreover, the grossed-up sums of the various kinds of income do not fully correspond with the same categories in the national accounts. For some income categories, these differences amount to more than 30 percent. The differences are even greater with some wealth categories, especially with financial assets as compared to the sums published by the Deutsche Bundesbank. A second serious gap of the statistics on wealth is the neglect of the value of the ownership rights in unincorporated businesses. Additionally, the value of consumer durables and cars, antiques, jewelry, and the private ownership of precious metals is not recorded. The distribution of wealth of the resident population should include all assets irrespective of whether estates and private businesses are located in Germany or abroad. The available household statistics, however, exclude estates located abroad that are not traded at the stock exchange. These various problems result in a considerable underestimate of the inequality of the distributions of net equivalent income and net household wealth. To explain the distribution of wealth, it would be extremely helpful to know the value of the inheritances and gifts inter vivos accrued up to the time of interview. Unfortunately, the Income and Consumption Surveys record this information only partially.

The IAB Employee Sample (IABS) records administrative data on gross labor income and higher incomes are only registered up to the limit for social security contributions. Higher workers and employees but only up to the limit for social security contributions. Higher incomes are only registered up to the limit for social security contributions. The investigation of the labor income distribution and to construct a complete distribution of income from labor. Minimum benefit regulations, in principle, cover the entire population in case of too low a net household income. More than ten percent of the population residing in Germany live on minimum benefits. The different sources of income are based on different concepts: current quarterly household net and gross income, annual household gross and net income of the previous year, monthly gross income, and the income of the previous year. Although there may be good reasons for different definitions of the variable "income," it is difficult to combine information from different statistics. Moreover, the grossed-up sums of the various kinds of income do not fully correspond with the same categories in the national accounts. For some income categories, these differences amount to more than 30 percent. The differences are even greater with some wealth categories, especially with financial assets as compared to the sums published by the Deutsche Bundesbank. A second serious gap of the statistics on wealth is the neglect of the value of the ownership rights in unincorporated businesses. Additionally, the value of consumer durables and cars, antiques, jewelry, and the private ownership of precious metals is not recorded. The distribution of wealth of the resident population should include all assets irrespective of whether estates and private businesses are located in Germany or abroad. The available household statistics, however, exclude estates located abroad that are not traded at the stock exchange. These various problems result in a considerable underestimate of the inequality of the distributions of net equivalent income and net household wealth. To explain the distribution of wealth, it would be extremely helpful to know the value of the inheritances and gifts inter vivos accrued up to the time of interview. Unfortunately, the Income and Consumption Surveys record this information only partially.
minimum benefits of various kinds that are all on the same level. From a social policy point of view, it seems urgent, to analyze in depth this large segment of poor or near poor people who have to rely on means-tested minimum benefits. There exist administrative statistics of the recipients of minimum benefits according to the Unemployment Assistance Law (Arbeitslosengeld II as defined in Sozialgesetzbuch II) and the Social Assistance Law (Bedarfsorientierte Grundsicherung im Alter und Erwerbsminderung sowie Sozialhilfe according to Sozialgesetzbuch XII). A unified Scientific Use File of minimum income recipients, however, is not available although it would be of utmost interest for research.\textsuperscript{22,23} Only a panel of a sample of the long-term unemployed will become available (PASS as mentioned above). Even the Scientific Use File of the former social assistance recipients is no longer available because in 2003 and 2005 changes were enacted that rearranged the legal framework.

4. **Recommendations**

With respect to the problems described, we suggest several recommendations for the improvement of the informational infrastructure for research on income, wealth and poverty in addition to the aforementioned recommendations of the Peer Review Group.

- To improve the possibility for in depth research on recipients of minimum benefits all statistics on minimum benefits should be harmonized and a single Scientific Use File should be created similar to the former social assistance file.
- To improve the possibility for in depth research on household wealth missing elements of wealth, e.g. the value of ownership of unincorporated businesses and of estates in foreign countries, should be included in the Income and Consumption Survey. It would also be very helpful if a question referring to the value of all inheritances ever received were included in the survey. Additionally, an adequate representation of foreigners should be guaranteed so that special studies on foreigners living in Germany can be undertaken.
- To simplify work with Scientific Use Files quality reports on all household statistics including ex post checks with the Microcensus and various administrative statistics should be made available to the scientific community. These quality reports should also show the differences between survey results and the national accounts and national balance sheets.


\textsuperscript{23} In 2008 the Statistical Offices published tables for the recipients of the various minimum benefits and for the recipients of other means-tested benefits. The necessity of a harmonization of concepts and of the availability of a Scientific Use File of all the recipients of the various minimum benefits becomes obvious from this publication. Compare Statistische Ämter des Bundes und der Länder, Soziale Mindestsicherung, Wiesbaden 2008.
and possible causes. Moreover, the reliability of the income information ascertained by the Microcensus should be evaluated.

- To improve the data for research on income, wealth and poverty methods should be developed to combine household surveys with administrative statistics, especially tax statistics, while safeguarding for confidentiality.
- To cover the entire resident population new statistics on the homeless and persons in institutions at least with standard demographic variables should be developed. Additionally, statistics on all the institutions in which individuals live should be developed.
- The German data of EU-SILC that are handed over to Eurostat should be made available to German researchers via the RDC. The anonymization prepared by Eurostat should be accepted as sufficient for German researchers since it is possible to get the entire data set for all countries in this form from Eurostat but at a considerable cost.
- It should be checked whether methodological improvements of the German contribution to EU-SILC are possible. This is the more important because it will become the main statistic for the German Reports on Poverty and Richness and the National Action Plans for Social Inclusion. In the long-run, this extremely important data set should be improved by using truly random samples, five waves for each quarter of the rotating panel with the first wave only being used as a pre-test, face-to-face interviews with multilingual questionnaires, sole responsibility of the German Federal Statistical Office, and outsourcing the fieldwork to a private market research company with a well-trained and permanent staff of interviewers.
- The IAB Employee Sample (IABS) should be completed by more precise information on labor income above the limit for social security contributions. This could be done by extending the obligation of employers to report the labor income of employees above this limit at least by income brackets.
  - It should be guaranteed that the interviewees of all future household surveys financed by public money, especially participants of the ASID and AVID surveys, give permission in advance to be included in Scientific Use Files derived from these surveys with proper regard to data protection laws. In due course, these data sets should either be made available for scientific research, by transmitting them to the Zentralarchiv in Cologne or by producing and distributing Scientific Use Files organized by one of the research data centers.
  - The problem that for legal reasons it is not possible to transmit Scientific Use Files with
German data to reliable foreign institutions (e.g. universities) should be solved according to the suggestions in the KVI report.24

- To improve the quality of statistics produced by public bodies outside the German Federal Statistical Office, a Code similar to the *European Statistics Code of Practice* should be developed. Additionally, a regular review process for these other bodies should be introduced, especially for those statistics that are published by the German Federal Statistical Office but provided by other institutions.

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