



A data set of  
**over-indebted  
households**  
in Germany

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY

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## **Abstract:**

This paper introduces a unique Germany-wide data set of micro-level data of more than 100,000 over-indebted persons from 1994 to 2017 to the literature. It contains postal codes and can thus be connected to other spatial data sets. It is based on the data collected by debt advisors all over Germany and covers household data such as the income, household members, education and work of the indebted. Furthermore, it informs about the number, the sums and the structure of the outstanding debts.

## **1 INTRODUCTION**

Up to now, at a micro-level there is no data set accessible to researchers provided for by German statistical offices.<sup>3</sup> There is not even an official statistic about the number of the overindebted in Germany. Non-official data that are published by the credit reference agency Creditreform at an annual frequency show, however, that a considerable percentage of Germans is overindebted. By considering a person as overindebted when the agency registers severe payment defaults for that person in 2017, Creditreform counted 6,85 million over-indebted adult Germans.

Over-indebtedness can lead to illness (see, e.g., Belázquez Cuesta and Budría 2015.). It stops people from saving for old-age to supplement their state pensions. This will cause enormous costs to a society that relies on a pay-as-you-go pension system that will be strained by an aging society very soon. Moreover, German society is drifting apart as those that inherit their parents' houses and savings accumulated during Germany's Wirtschaftswunder or the well-educated that benefit from the recent decade-

long economic up-swing, leave the over-indebted people behind (Amtliche Sozialberichterstattung 2017). Inequality destabilizes democracies. To learn more about the characteristics and drivers of over-indebtedness is a prerequisite for designing meaningful preventive policies.

In Germany, many debt advisors specify the drivers behind the financial situation of their clients at the early stages of their counselling sessions (hereby referred to as 'advice'). In the majority of cases, the drivers stated are unexpected adverse events such as illness, unemployment or divorce. According to this data, for only a small minority of the overindebted are consumption based factors responsible for their financial situation, either directly through overspending or the conduct of illicit activities or indirectly through their lack of financial education. Still, there are some doubts about the reliability and use of this information. For advisors that tend to be underfunded for their work, such data collection does not typically belong within the scope of their core activities and little time is dedicated to uncovering the causes of over-indebtedness. When it comes to the

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<sup>3</sup> The information on micro-data is only provided for in an aggregated way by the German Statistical Agency (Destatis) on an annual basis ((Statistisches Bundesamt 2017). However, Destatis does not give access to the individual data sets.

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individual seeking help with their debts (the person advised, hereafter 'advisee'), shame might refrain them from admitting their share of responsibility for their predicament. Furthermore, some of the reasons currently being stated by the advisors may actually be under-reporting external causes as the result of an underlying factor. E.g., if payment of the installment of a housing loan are not insured against unemployment or illness (i.e. no credit insurance policy was taken out with the loan), one could argue that the real reason for over indebtedness is rather a lack of financial education or lack of good financial advice by the providers.

To shed light on the underlying factors leading to financial strains, micro level data on the overindebted is dearly needed. Only in this way can biases resulting from unobserved variables or endogeneity be overcome. The data set presented here contains postal codes of the advisee allowing for a spatial analysis that can make use of ever more and richer data sets freely available in regional aggregates. This is a major advantage over Destatis (the German statistics office) that only publishes aggregated data.

This paper introduces a new data set of micro-level data of the overindebted in Germany comprising more than 100,000 households and spanning over more than 30 years to the literature. It is based on the data collected by debt advisors all over Germany. As it contains postal codes it can be linked to other data and be used for spatial analysis. It covers household data such as the income, household members, education and work of the indebted. Furthermore, it informs about the number, the sums and the structure of the outstanding debts.

The paper is structured as follows. The second section describes the data, the third section presents the tables and variables and gives descriptive statistics, the fourth section analyses the completeness of the data, the fifth section discusses strengths and

weaknesses and the last section concludes.

## 2 THE DATA

The data cover people seeking advice in 38 debt counselling agencies ('agencies') around Germany that use the software package CAWIN which is the leading software package for processing data during debt counselling in Germany.<sup>4</sup> Table 16 gives details on the agencies providing data. The aim of the advice is either to counsel on debts or debt discharge through insolvency procedures. Insolvency procedures covered here are either for consumers or the self-employed. Both insolvency procedures follow a simplified procedure (for a brief overview of German insolvency statutes see, e.g., König 2016).

In total, there are 104,075 sets of household data available. The number of households covered by each advisory ranges from 270 (H-Team e.V., Munich) to 9,212 (Diakonische Werk Hamburg). The data is anonymized and does not contain any information that can be linked to the advisee such as the name or address.

There are agencies providing data in each of the 16 German Länder (Ger.: federal states, see Table 15). However, the distribution of households for each State does not fully reflect the relative shares of population of those States. Bavaria and Berlin are underrepresented while Hamburg, Saarland and Saxony-Anhalt are overrepresented.

Figure 1 shows the spatial distribution of the household data on a county-level (German: Kreisebene). The more the color turns from white (no household) to yellow and then into red, the higher the number of households in the respective county. In general, the North and North-East of Germany have a better coverage than the West and the South. Coverage is particularly poor in Bavaria and in the West of North Rhine-Westphalia.

<sup>4</sup> See <http://www.cawin.de/> for more details.

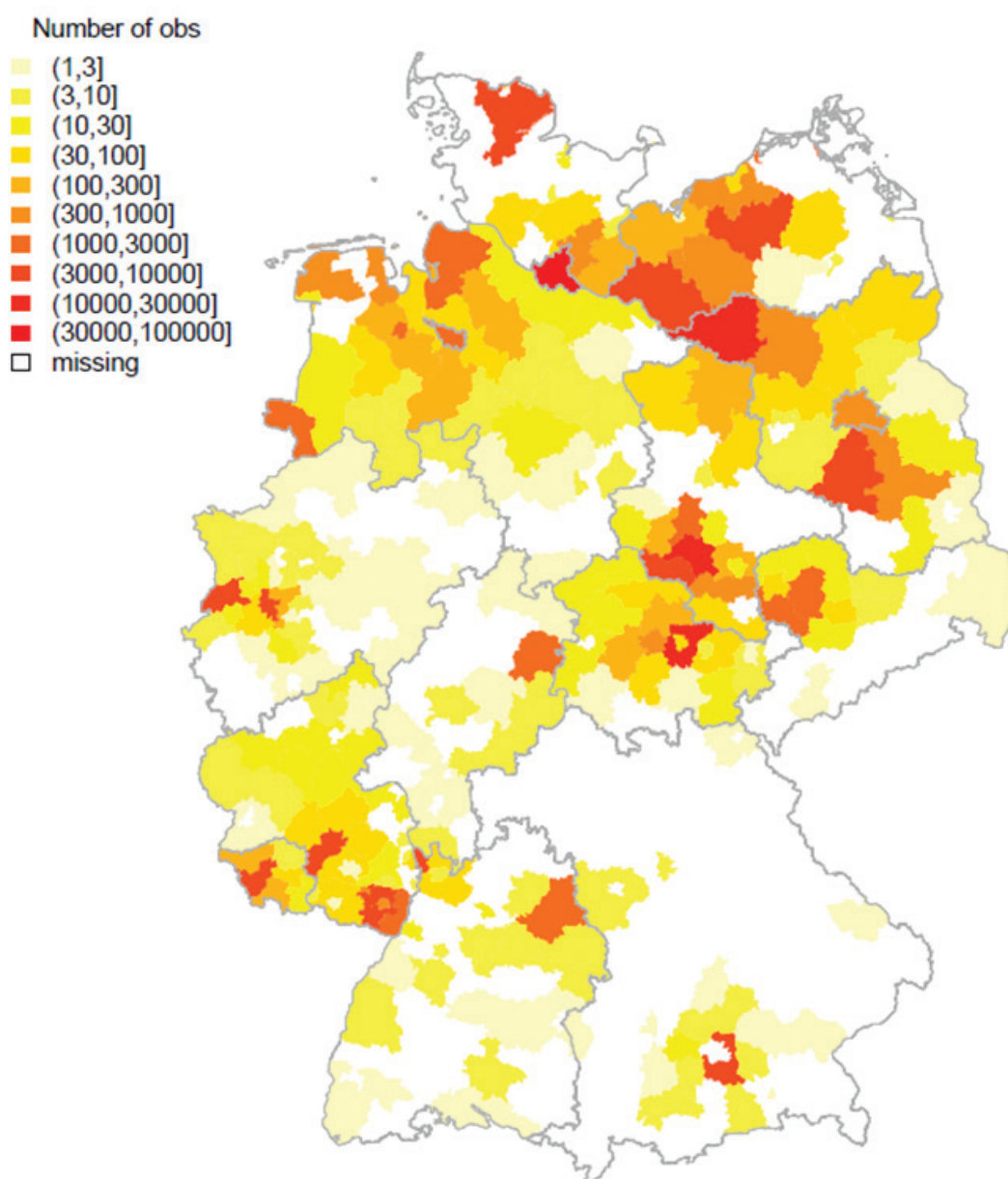
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Table 17 shows the number of cases for which data are available from 2007 to 2017. Before 2007 the Germany-wide coverage is not given as some of the agencies providing data have not been in existence before that year. Between 2007 and 2017 the number of cases shows an increasing trend. For 2017,

only part of the agencies had already delivered data. Consequently, there are considerably less household data available than for 2016.

*Figure 1: Spatial Distribution of households*



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## 3 TABLES

The data set contains 40 variables split into five tables, Household, Person, Income, Spending and Debt. Table 18 describes the variables. The data are organized around households that are identified through a unique household identifier which is contained in each table. 25 variables are categorical, eleven are continuous and four are date variables (Table 1). Date variables can be considered categorical, too, but are considered a type of its own here. Household is containing most variables, that is, 17 of which nine are categorical, four are continuous and two show dates. Debt contains nine variables, three categorical, five continuous and one date variable. Income and Person both contain six variables, of which five are categorical each. Income additionally contains one continuous whereas Person contains a date variable.

	categorical	continuous	date	total	# rows
income	5	1	0	6	155,343
household	11	4	2	17	104,075
debt	3	5	1	9	959,231
person	5	0	1	6	216,157
spending	1	1	0	2	259,273
total	25	11	4	40	

Table 1 Overview of the tables

There are 104,075 households recorded in the data set in which 216,157 people live (Table 2); 155,343 income streams and 259,273 regular spending are contained in the data, as well as information on 959,231 debts.

	# rows
income	155,343
household	104,075
debt	959,231
person	216,157
spending	259,273

Table 2 Number of rows for each table

## 3.1 HOUSEHOLD

Some statistics of Household date variables are given in Table 3. Start denotes the beginning of an advice session. The first advice sessions documented started on the 20th of January 1994, the last recorded in the current version started on the 21st of September 2017. The second variable End denotes the end of an advice session. The first sessions ended on the 30th of April 1996 and the most recent ending of a session was recorded the 20th of September 2017.

Variable	Min	Max	Na
Start	20.01.1994	21.09.2017	8516
End	30.04.1996	20.09.2017	26512

Note: Total number of rows is 104,075; Min=Minimum, Max=Maximum, Na=Number of not available data.

Table 3 Household, date variables

Table 4 shows descriptive statistics of four continuous variables of Household. The variables show the income, both for the whole household (HouseholdIncome) and of the debtor of the household (TotalIncomeHeadHousehold), the sum of debts of the advisees (TotalSpending) and the total household spending (TotalSpending). The reference period is the beginning of the debt counselling also contained in the household table recorded in Start.

There are many empty data points and zeros. Zeros are not plausible here for none of the variables. Data completeness is poorest for spending, followed by income of the head of household, household income and total debts, with percentages of 37%, 30%, 26% and 25% respectively.

There are some huge outliers in the upper part of the distribution of all four variables. This biases the standard deviation. The average is thus a biased indicator. A more representative value of the data and the variation is thus given by the median and the first and third quartile. The median of the income, spend-

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ing, debts and income of head of household are 935 Euro, 400 Euro, 16,675 Euro and 812 Euro respectively. Spending is comparatively low and mostly contains spending on housing related expenditures. Other spending types are not properly represented.

Variable	Min	1st Q.	Median	3rd Q.	Max	Stdv	Na	Zeros	Na/Zeros
HousholdIncome	0	582	935	1,423	683,692	2,564	18,766	8,751	27,517
TotalSpending	0	-	400	625	470,95	1,644	16,540	22,470	39,010
TotalDebts	0	7,101	16,675	34,803	31,155,525	189,116	24,991	547	25,538
TotalIncome-HeadHousehold	0	462	812	1,2	683,692	2,534	18,766	12,568	31,334

Note: Total number of rows is 104,075; Min=Minimum, 1st Q.= first Quartile, 3rd Q.=third Quartile, Max=Maximum, Stdv=Standard deviation, Na=Number of not available data, Total=Total number of rows.

Table 4 Household, continuous variables description

Table 5 shows the nine categorical variables, the number of levels of the variables and the number of classes of the levels in alphabetical order. The frequency and relative frequency of the levels are presented in Table 19 in the Annex.

BankAccount displays if the advisee has a “Credit-based account”, “No account”, “Normal checking account”, “Account of third person without power of attorney” and “Account of third person with power of attorney”. For about 46 percent of the rows there is no data for BankAccount available. The most frequent observation with 30 percent frequency is the credit-based account and only 18 percent of the advisee have a normal checking account.

There are 19 different causes for overindebtedness the advisor can choose from when first conducting the advice session. These can be classified by the researchers into “Event”, “Avoidable behaviour” and “Other causes”. Events are considered unavoidable and comprise e.g. illness, unemployment, divorce. Among avoidable behavioural causes are “Criminality” or “Consumption patterns”. For Cause, 36 percent of the rows are empty (Na), the most frequent cause is “Unemployment, reduced work” followed by “Failed self-employment” and “Consumption pat-

terns” with 18, 7 and 7 percent respectively.

Education is categorised into “High school graduation” (16 percent), “Secondary modern school leaving certificate” (9 percent), “No school leaving certificate” (5 percent) and “General Certificate of

Secondary Education” (3 percent). In about two-thirds of the cases there is no information for Education available.

Employment is classified into “Working” and “Not Working” and contains 11 categories. The most frequent one being “Employee” (11 percent). Here, in 80 percent of the cases there is no information available.

GarnishProt shows whether the bank account has a “Garnishment Protection” (20 percent), “Garnishment Protection after intervention of advisor” (13 percent) or if there has been a “Rejection of Garnishment Protection” (2 percent). AdvisoryId is given for all entries.

Male indicates if the debtor/advisee is male or female. With about 53 percent of the cases comprising male debtors, they are slightly overrepresented.

Outcome shows how the advice ended at the date specified as “End” in Table 3. It ranges from successful advice and/or completion of debt discharge to abort by either the advisee or the advisor. The most frequent level being registered in about a third of the cases is “Transition to insolvency procedure”. For about 27 percent of the cases there is no information available.



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The vast majority of 91 percent of the advised persons is not self-employed, whereby the status of self-employment refers to the time directly before or while being advised.

VocForm shows the vocational formation in five categories, "Completed degree", "Completed apprenticeship", "No vocational training", "Formerly self-employed", "Other" and "In training". About 38 percent of the advisee have completed an apprenticeship and 32 percent did not receive any vocational training. For about a quarter of the advisee there is no information on their vocational formation available.

Variable	levels	classes
BankAccount	5	none
Cause	19	3
Education	4	none
Employment	11	2
GarnishProt	3	none
IdAdvisory	38	none
Male	2	none
Outcome	13	none
SelfEmployed	2	none
VocForm	6	none
Zip	2826	none

Table 5 Household, categorical variables

## 3.2 DEBT

The date variable in Debts shows the date when the sum of the debts were recorded (Table 6). The first record is for the 29th of September 1954 and the most recent is 1st of October 2017. This shows, that there are some variables that are entered erroneously. However, most of the dates are entered at or after the start of the advice and are more reliable.

Variable	Min	Max	Na
DebtDate	29.09.1954	01.10.2017	199

Note: Total number of rows is 959,231; Min=Minimum, Max=Maximum, Na=Number of not available data.

Table 6 Debts, date variable

Table 7 presents the continuous variables of Debts. Balance is the sum of the principal claim (PrincipClaim), the interest balance (InterestBalance), the cost balance (CostBalance) and the balance of the cost without interest (CostNoInterest). There are no empty data points, however, there are many zero entries. Most of them refer to interest and costs. In most cases the data set contains at least the balance or a statement of the principal claim, only in 3,094 rows is this not the case.

The median principal claim is 322.68 Euro and the median of the overall balance is 423.12 Euro, whereas the median interest, cost and cost without interest balances are all zero. There are extreme outliers for each of the variables, e.g. the maximum principal claim recorded is 11,829,437 Euro.

Variable	Min	1st Q.	Median	3rd Q.	Max	Stdv	Na	Zeros
PrincipClaim	0	89.03	322.68	1080.00	11,829,437	30,463	0	85,138
InterestBalance	0	0	0	11.57	8,809,899	10,739	0	647,248
CostBalance	0	0	0	38.00	1,501,000	2,43	0	667,163
CostNoInterest	0	0	0	0.00	16,092,014	16,531	0	836,345
Balance	0	129.39	423.12	1306.09	20,472,521	40,624	0	82,415

Note: Total number of rows is 959,231; Min=Minimum, 1st Q.= first Quartile, 3rd Q.=third Quartile, Max=Maximum, Stdv=Standard deviation, Na=Number of not available data, Zeros=Number of zeros.

Table 7 Debts, continuous variables

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Table 8 shows the categorical variables of Debts. The DebtType gives the type of debts where "Other private debt" shows for 15 percent of the cases. "Other liabilities due to public creditors", "Trade debt" and "Telecommunications debt" are each registered in slightly above 10 percent of the cases.

DebtorCat contains the creditor type to whom debts are due, the most frequent being "Other commercial creditors" (21 percent) and "Public corporation" (13 percent). Sphere indicates if it is a private (93 percent) or commercial debt (four percent). In three percent of the cases there is no categorization accordingly available.

	levels
DebtType	39
DebtorCat	10
Sphere	3

Table 8 Debts, categorical variables

## 3.3 INCOME

Table 9 presents the only continuous variable in Income which is the monthly income. The median income is about 400 Euros, the maximum is 683,098 Euros. There are no empty data points but there are 3,152 zeros which is implausible.

Variable	Min	1st Q.	Median	3rd Q.	Max	Stdv	Na	Zeros
IncomeMon	0	184	399	801	683,098	1,887	0	3,152

Note: Total number of rows is 155,343; Min=Minimum, 1st Q.= first Quartile, 3rd Q.=third Quartile, Max=Maximum, Stdv=Standard deviation, Na=Number of not available data, Zeros=Number of zeros.

Table 9 Income, continuous variable

Table 10 shows the categorical variables of Income. HeadHousehold, Seizable and Seized are dichotomous indicating if the income is received by the head of the household (75 percent of the cases), if the income is seizable (12 percent) or if it is already seized (one percent). For those variables there are no empty data fields.

Incometype gives 35 categories of income, the most frequent being "Unemployment benefit (ALG II)" and "Child benefit". Again, there is data for all cases. IncomeCat differentiates these levels further between "Independent activity", "Dependent work", "Pension", "Subsistence" and "Other" and Recipient between "Advisee", "Spouse", "Partner" and "Child".

Variable	levels
HeadHousehold	2
IncomeCat	3
IncomeType	35
Recipient	4
Seizable	2
Seized	2

Table 10 Income, categorical variables

## 3.4 PERSON

Table 11 shows the date variable BirthDate in table Person. The oldest person is born on the 1st of January 1900 and the youngest is born on the 1st of January 2000.

Variable	Min	Max	Na
BirthDate	01.01.1900	01.01.2000	62,695

Table 11 Person, date variable

Table 12 presents the categorical variables. Male gives the sex of the person (51 percent), Alimony if the advisee must pay alimonies monthly (46 percent of the cases), InHousehold shows if the person receiving alimony/dependent is living together with the advisee (89 percent) and Child-Benefit indicates if the advisee receives child benefit for the person (13 percent). Status indicates the social relation to the advisee, categorizing the respective person into "Child", "Advised", "Spouse", "Partner", "Grandchild", "Cohabitant", "Parent", "Brother or sister", "Foster Child" and "Grandparent". Most



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of the persons (48 percent) are the advisee and more than a third are their children.

Variable	levels
Alimony	2
ChildBenefit	2
InHousehold	2
Male	2
Status	10

Table 12 Person, categorical variables

## 3.5 SPENDING

Table 13 shows the continuous variable of table Spending which contains information on the monthly spending. The median spending is 52 Euros. There are 6,024 zeros.

Variable	Min	1st Q.	Median	3rd Q.	Max	Stdv	Na	Zeros
SpendingMon	0	22	52	194.29	470,71	944.56	0	6,024

Note: Total number of rows is 259,273; Min=Minimum, 1st Q.= first Quartile, 3rd Q.=third Quartile, Max=Maximum, Stdv=Standard deviation, Na=Number of not available data, Zeros=Number of zeros

Table 13 Spending, continuous variable

Table 14 shows the categories of monthly spending. There is a total of 52 types of spending which are grouped into "Company costs", "Obligatory social security contributions", "Fixed costs" and "Housing" in the variable SpendingCat. The most frequent SpendingType are "Apartment rent (excl. service)" (24 percent of the cases).

	levels	classes
SpendingType	52	4

Table 14 Spending, categorical variable

## 4 DATA COMPLETENESS

Figure 2 presents the proportion of incomplete data for Household, the central table of the data set. The data is considered complete, if it neither contains

fields where no data is available (Nas) nor does it contain zeros where this is implausible. It compares the numbers for the last complete year, 2016, with the numbers of the preceding years. The time dimension is taken from the variable Begin. The data proportion of incomplete data has shrunk for the variables on bank account, BankAccount and GarnishProt, from about 60 to 25 percent, and from 80 to 30 percent, respectively. It has declined somewhat for VocForm and Education. However, against this trend of greater completeness, the variable Outcome has worsened considerably, the proportion rising from 20 to about 40 Percent.

Figure 3 shows the development the proportion of incomplete data over time. The figure depicts the proportion of incomplete data of the variables in a

fuzzy cloud around the median for each year. The darker the graph the more variables of the table have the same proportion of incomplete data fields. Thus, the fuzzy cloud indicates the dispersion.<sup>5</sup> The median variable indicates a high proportion of incomplete data in the early years and a large dispersion. In 1996 the median itself is exactly one, that is, half of the variables do not contain any entries. In 1998 incompleteness declined sharply to below ten percent. It subsequently remained below a third and only recently, it rose close to 40 percent. At the same time, dispersion reduced considerably such that the median can be considered a good indicator of overall completeness. However, since 2010, the worst proportion of incomplete data fell to about 80 percent and remained at this level.

<sup>5</sup> If all fields from 0 to 1 where of the same color, the representativeness of the median would be very low. In contrast, if the median is closely surrounded by black fields, the median is very representative of the proportion of incomplete data.

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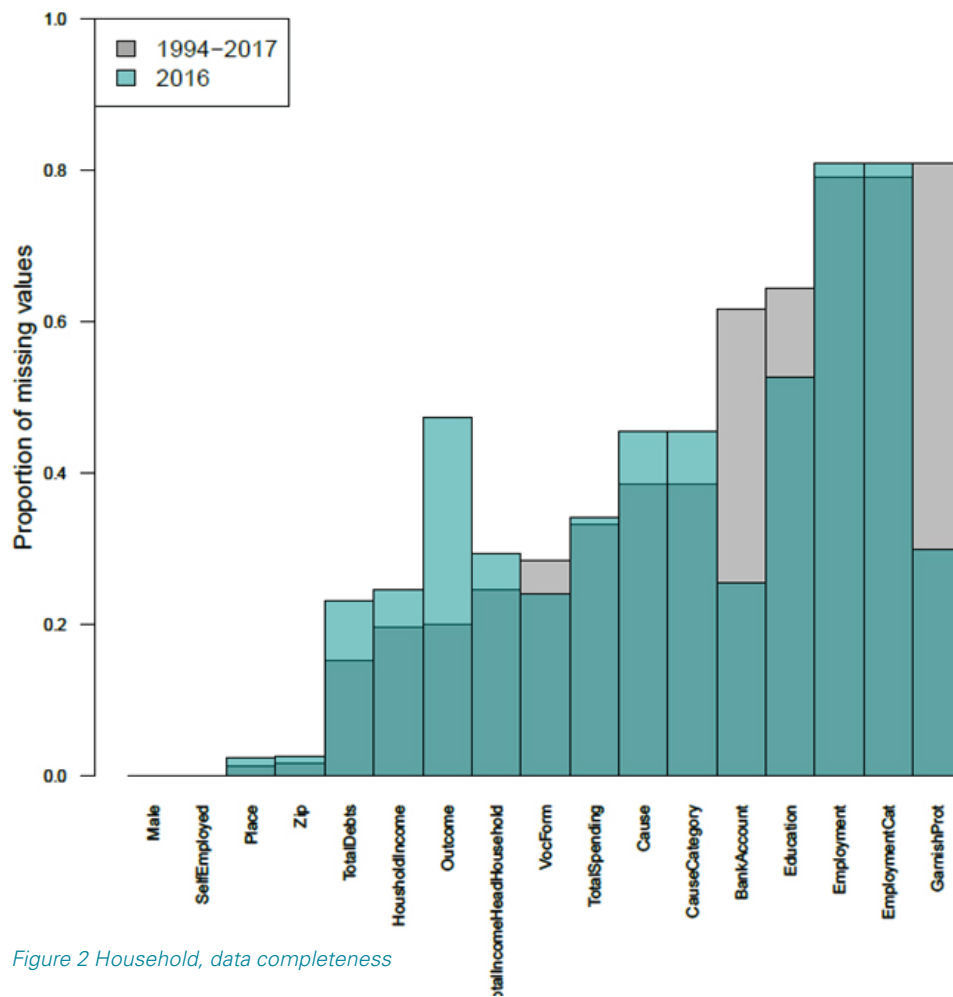


Figure 2 Household, data completeness

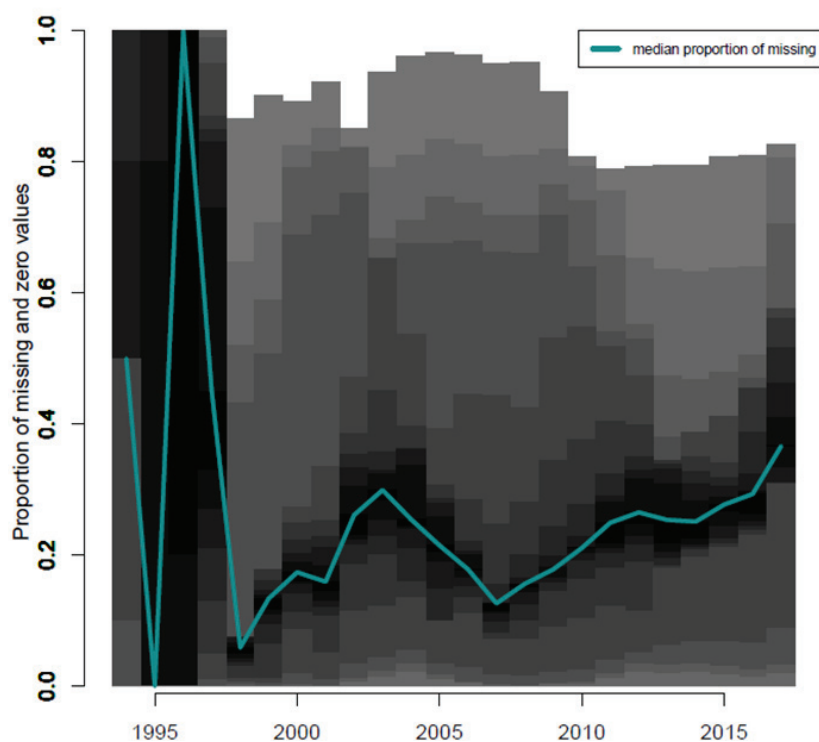


Figure 3 Household, data completeness over time

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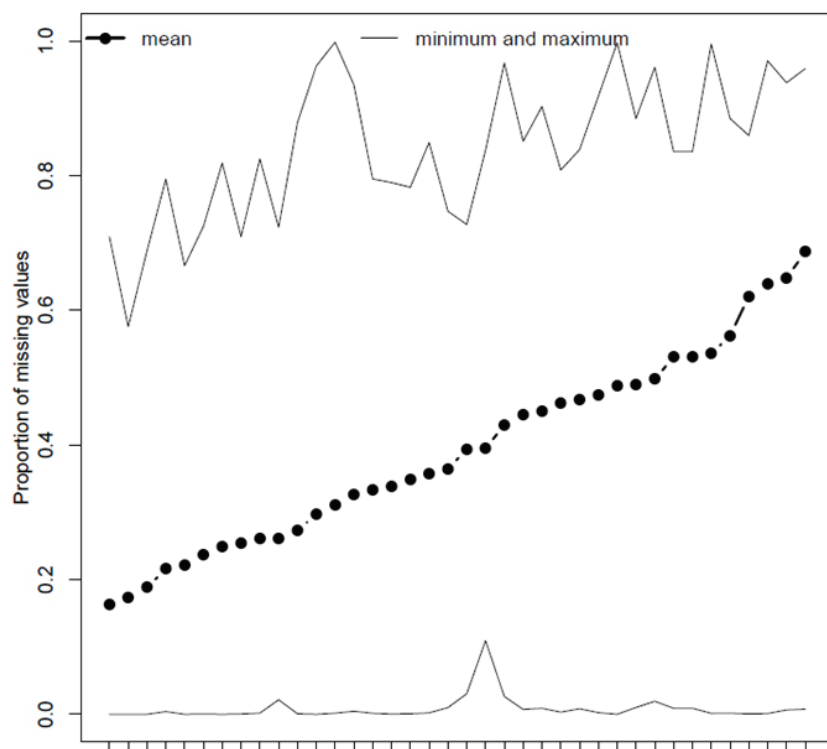


Figure 4 Household, data completeness by agency

Figure 4 presents the mean, the minimum and the maximum share of incomplete data by agency. The data are arranged according to the mean values in a rising way. Again, table Household is considered here. The proportion varies drastically between below 20 percent for the agency with the most complete data set to nearly 70 percent for the agency with the least complete data set.

## 5 DISCUSSION

The regional coverage of the data, particularly in the West and South of Germany is still to be improved. In Bavaria and North Rhine-Westphalia there are some large blind spots. Furthermore, completeness of the data is heterogenous. This can be partially attributed to the generally poor funding of the debt advice agencies by state ministries where money is paid out either on a fixed or on a per case basis. Data collection tasks are thus kept to a minimum. Low levels of completeness apply to some variables and to single agencies with particularly constrained ad-

visor time. Moreover, completeness is varying over time, too. Thus, usage of the data must carefully take account of where and when and for what purposes the data can be properly used. While this means a considerable disadvantage when trying to construct a representative picture for Germany as a whole, the possibility to enrich the analyses linking the data set to other data

## 6 CONCLUSION

The data set introduced here makes micro-data of over 100,000 over-indebted people all over Germany spanning a period of more than 35 years available to the literature. As it contains zip codes the data can easily be merged with the rising number of existing spatial data sets. This and the rich information given in 40 variables covering socioeconomic data and information on the debts enable research to control for missing variables and endogeneity issues and will thus help gain better insights into the causes of over-indebtedness.

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## ANNEX

Table 15 Households per Land

Land	Number of agencies	Number of households	Inhabitants (thsd.)	Share of households	Share of inhabitants
Brandenburg	2	2617	2484,83	2,5%	3,1%
Berlin	1	394	3520,03	0,4%	4,5%
Baden-Württemberg	2	9007	10879,62	8,7%	13,8%
Bavaria	3	5152	12843,51	5,0%	16,2%
Bremen	1	4720	671,49	4,5%	0,8%
Hesse	1	1425	6176,17	1,4%	7,8%
Hamburg	3	20871	1787,41	20,1%	2,3%
Mecklenburg Western Pomerania	4	6268	1612,36	6,0%	2,0%
Lower Saxony	4	10331	7926,6	9,9%	10,0%
North Rhine-Westphalia	3	16933	17865,52	16,3%	22,6%
Rhineland Palatinate	2	9150	4052,8	8,8%	5,1%
Schleswig Holstein	2	2602	2858,71	2,5%	3,6%
Saarland	2	4486	995,6	4,3%	1,3%
Saxony	2	3452	2245,47	3,3%	2,8%
Saxony-Anhalt	4	4267	995,6	4,1%	1,3%
Thuringia	2	2400	2170,71	2,3%	2,7%

Table 16 Overview of the debt agencies providing data

Name	State	City	N
Insolvenzhilfverein e. V. Wilhelmshaven	NI	Wilhelmshaven	6378
Diakonisches Werk Hamburg	HH	Hamburg	9212
Verbraucherzentrale Hamburg	HH	Hamburg	5355
Arbeitslosenverband Bützow	MV	Bützow	2179
/Stralsund	MV	Stralsund	1745
Arbeiterwohlfahrt Südpfalz e.V.	RP	Landau in der Pfalz	7930
Kontakt in Krisen e.V.	TH	Erfurt	776
Hamburger Schuldner- und Insolvenzberatung (HSI)	HH	Hamburg	6304
AWO KV München-Stadt e.V.	BY	München	1953
IHP-Insolvenzhilfe Prignitz e. V.	BB	Perleberg	2015
ASS Mannheim gGmbH	BW	Mannheim	5832
SVK e. V. (Bremen)	HB	Bremen	4720
Diakonisches Werk Rendsburg-Eckernförde	SH	Rendsburg	1321
Arbeits- und Bildungsinitiative e. V. (IB Sangerhausen)	ST	Sangerhausen	700
Arbeits- und Bildungsinitiative e. V. (SB Sangerhausen)	ST	Sangerhausen	968
Arbeits- und Bildungsinitiative e. V.	ST	Sangerhausen	2496

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Arbeits- und Bildungsinitiative e. V. (SB Hettstedt)	ST	Sangerhausen	103
Diakonisches Werk Leipziger Land	SN	Geithain	1811
Diakonisches Werk Leipziger Land	SN	Geithain	1641
AWO KV Hersfeld-Rotenburg e. V.	HE	Bad Hersfeld	1425
Julateg Finsolv Köpenick/Treptow	BE	Berlin	394
AWO Familienglobus gGmbH	NW	Düsseldorf	3671
Evangelische Schuldnerberatung Düsseldorf	NW	Düsseldorf	7561
AWO Saarlouis e.V.	SL	Saarlouis	2243
Evangelisches Hilfswerk München gGmbH	BY	München	2929
AWO KV Ludwigslust/Hagenow e.V.	MV	Ludwigslust	1151
CV für den Landkreis Grafschaft Bentheim	NI	Nordhorn	1625
CV für die Region Kempen-Viersen e.V.	NW	Viersen	5701
DW Apolda gGmbH	TH	Apolda	1624
DW Norden	NI	Norden	375
DRK KV Bremerhaven e.V.	NI	Bremerhaven	1953
DRK KV Kusel e.V.	RP	Kusel	1220
Freier Betreuungsverein Teltow-Fläming e.V.	BB	Zossen	602
Landratsamt Schwäbisch Hall	BW	Schwäbisch Hall	3175
Sozial-Forum e.V. Kappeln	SH	Kappeln	1281
Verein zur Förderung der Bewährungs- und Jugendgerichtshilfe im Saarland e.V.	SL	Saarbrücken	2243
Volkssolidarität LV MV	MV	Schwerin	1193
H-TEAM e.V.	BY	München	270

Table 17 Number of cases in time

Year	Number	Share
2007	4.915	5,9%
2008	5.583	6,7%
2009	7.340	8,8%
2010	7.532	9,1%
2011	8.175	9,8%
2012	8.735	10,5%
2013	8.438	10,2%
2014	8.914	10,7%
2015	8.826	10,6%
2016	9.461	11,4%
2017*	5.134	6,2%
Sum	83.053	100,0%

\* Not for complete year.

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



Table 18 List of variables and description

Table	Variable	Type	Categorical	Description
debt	Id	Numerical	Categorical	Unique household identifier
debt	DebtDate	Date	Categorical	Date of inserting debt
debt	DebtYear	Numerical	Categorical	Year of inserting debt
debt	PrincipClaim	Numerical	no	Principal claim
debt	InterestBalance	Numerical	no	Interest balance
debt	CostBalance	Numerical	no	Cost Balance
debt	CostNoInterest	Numerical	no	Cost without interest
debt	Balance	Numerical	no	Balance
debt	IdDebtor	Numerical	Categorical	Unique debtor identifier
debt	DebtorCat	Alphanumeric	Categorical	Category of debtor
debt	DebtType	Alphanumeric	Categorical	Type of debt
debt	Commercial	Alphanumeric	Categorical	Commercial or private debt
household	Id	Numerical	Categorical	Unique household identifier
household	Begin	Date	no	Begin of advise
household	IdAdvisory	Numerical	Categorical	Unique agency identifier
household	End	Date	no	End of advise
household	Zip	Numerical	no	Zip of household
household	Place	Alphanumeric	no	Place of residence of advisee
household	Male	Numerical	Dichotomal	Indicates if advisee is male
household	Cause	Alphanumeric	Categorical	Cause for seeking advice
household	CauseCat	Alphanumeric	Categorical	Category of cause for seeking advice
household	Outcome	Alphanumeric	Categorical	Outcome of advice
household	Education	Alphanumeric	Categorical	Education of advisee
household	VocForm	Alphanumeric	Categorical	Vocational formation of the advisee
household	Employment	Alphanumeric	Categorical	Type of employment of advisee
household	SelfEmployed	Alphanumeric	Dichotomal	Self-employed directly before or while being advised
household	BankAccount	Alphanumeric	Categorical	Type of bank account of the advisee
household	GarnishProt	Alphanumeric	Categorical	The bank account of the advisee is a garnishment protection account
household	HouseholdIncome	Numerical	no	Total sum of monthly household income
household	TotalSpending	Numerical	no	Total sum of monthly household spending excluding household money
household	TotalDebts	Numerical	no	Total sum of outstanding debts
household	TotalIncomeHead-Household	Numerical	no	Total sum of monthly household income of head of household
income	Id	Numerical	Categorical	Unique household identifier
income	Recipient	Alphanumeric	Categorical	Person receiving the respective sum
income	HeadHousehold	Numerical	Dichotomal	Indicates if the person is head of the household



# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



income	IncomeMon	Numerical	no	Amount of monthly income
income	Seizable	Numerical	Dichotomal	Indicates if the income is seizable
income	Seized	Numerical	Dichotomal	Indicates if the income is being seized
income	IncomeType	Alphanumerical	Categorical	Type of income
income	IncomeCat	Alphanumerical	Categorical	Broader Category of income
person	Id	Numerical	Categorical	Unique household identifier
person	BirthDate	Date	Categorical	Date of birth
person	BirhtYear	Numerical	Categorical	Year of birth
person	Alimony	Numerical	Dichotomal	Indicates if advisee pays alimonies to the person
person	ChildBenefit	Numerical	Dichotomal	Indicates if advisee receives child benefit for the person
person	InHousehold	Numerical	Dichotomal	Indicates if person lives with the advisee in a household
person	Male	Numerical	Dichotomal	Indicates if person is male
person	Status	Alphanumerical	Categorical	Indicates family status
spending	Id	Numerical	Categorical	Unique household identifier
spending	SpendingType	Alphanumerical	Categorical	Type of Spending
spending	SpendingCat	Alphanumerical	Categorical	Category of spending
spending	SpendingMon	Numerical	no	Amount of monthly spending

Table 19 Levels of categorical variables and their (relative) frequencies

Table	Variable	Class	Level	Freq	Percent- age of Total
debt	DebtorCat	none	Other commercial creditors	198774	20,72%
debt	DebtorCat	none	Public corporation	126162	13,15%
debt	DebtorCat	none	Debt collection agencies or lawyers	119507	12,46%
debt	DebtorCat	none	Bank	109821	11,45%
debt	DebtorCat	none	Telecommunications	100679	10,50%
debt	DebtorCat	none	Landlord and utility	85767	8,94%
debt	DebtorCat	none	Mail order business	72625	7,57%
debt	DebtorCat	none	Insurer	50394	5,25%
debt	DebtorCat	none	NA	48062	5,01%
debt	DebtorCat	none	Entitled dependants and other private creditors	40557	4,23%
debt	DebtorCat	none	Court	6883	0,72%
debt	DebtType	none	Other private debt	140188	14,61%
debt	DebtType	none	Other liabilities due to public creditors	104569	10,90%
debt	DebtType	none	Trade debt	102009	10,63%
debt	DebtType	none	Telecommunications debt	98572	10,28%
debt	DebtType	none	Mail-order company debts	83087	8,66%

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



debt	DebtType	none	Outstanding private insurance premium	62884	6,56%
debt	DebtType	none	Installment credit	53898	5,62%
debt	DebtType	none	Energy debts	35165	3,67%
debt	DebtType	none	NA	30469	3,18%
debt	DebtType	none	Private rent debts	29403	3,07%
debt	DebtType	none	Overdraft facility	28732	3,00%
debt	DebtType	none	Mobile phone debt	23242	2,42%
debt	DebtType	none	Other operating liabilities	16003	1,67%
debt	DebtType	none	Court costs	14555	1,52%
debt	DebtType	none	Other credit	12826	1,34%
debt	DebtType	none	Debts for freelance professions	12154	1,27%
debt	DebtType	none	Fine	12056	1,26%
debt	DebtType	none	ALG I-/ALG II reclaim	11970	1,25%
debt	DebtType	none	Attorney's fees	11195	1,17%
debt	DebtType	none	Credit card loan	10768	1,12%
debt	DebtType	none	Other provider liabilities	10643	1,11%
debt	DebtType	none	Maintenance arrears	10309	1,07%
debt	DebtType	none	Compensation liabilities	7177	0,75%
debt	DebtType	none	Tax liabilities (private)	6902	0,72%
debt	DebtType	none	Mortgage credit	6061	0,63%
debt	DebtType	none	Personal loan	5172	0,54%
debt	DebtType	none	Trade payables	4735	0,49%
debt	DebtType	none	Tax liabilities (operational)	4289	0,45%
debt	DebtType	none	Backward social security contributions	2342	0,24%
debt	DebtType	none	Arrears of operating insurance premiums	1936	0,20%
debt	DebtType	none	Vurrent account credit	1664	0,17%
debt	DebtType	none	Commercial rent liabilities	1231	0,13%
debt	DebtType	none	Leasing fees	752	0,08%
debt	DebtType	none	Other operating loan	568	0,06%
debt	DebtType	none	Operating loan	430	0,04%
debt	DebtType	none	Employer loans	410	0,04%
debt	DebtType	none	Variable loan	352	0,04%
debt	DebtType	none	Wages and salaries in arrears	309	0,03%
debt	DebtType	none	Start-up loan	169	0,02%
debt	DebtType	none	Shareholder loan	35	0,00%
debt	Sphere	none	Private	894299	93,23%
debt	Sphere	none	Commercial	34463	3,59%
debt	Sphere	none	NA	30469	3,18%
household	BankAccount	none	NA	47502	45,64%
household	BankAccount	none	Credit-based account	31124	29,91%

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



household	BankAccount	none	Normal checking account	18369	17,65%
household	BankAccount	none	No account	5396	5,18%
household	BankAccount	none	Account of third person without power of attorney	1470	1,41%
household	BankAccount	none	Account of third person with power of attorney	214	0,21%
household	Cause	NA	NA	37751	36,27%
household	Cause	Event	Unemployment, reduced work	18925	18,18%
household	Cause	Other causes	Failed self-employment	7661	7,36%
household	Cause	Avoidable behavior	Consumption patterns	7464	7,17%
household	Cause	Event	Divorce, separation	7393	7,10%
household	Cause	Event	Affliction	5237	5,03%
household	Cause	Other causes	Income poverty	4067	3,91%
household	Cause	Other causes	Other reasons	2936	2,82%
household	Cause	Other causes	Addiction	2509	2,41%
household	Cause	Avoidable behavior	Lack of financial literacy	1746	1,68%
household	Cause	Avoidable behavior	Uneconomical financial management	1639	1,57%
household	Cause	Other causes	Failed real estate financing	1546	1,49%
household	Cause	Avoidable behavior	Criminality	1180	1,13%
household	Cause	Other causes	Payment obligation under guarantee/joint liability	1137	1,09%
household	Cause	Other causes	Household establishment / birth of a child	936	0,90%
household	Cause	Event	Death of the partner	792	0,76%
household	Cause	Other causes	Insufficient credit or guarantee advice	664	0,64%
household	Cause	Avoidable behavior	Non-utilization of social benefits	251	0,24%
household	Cause	Event	Accident	122	0,12%
household	Cause	Avoidable behavior	Damages for tort	119	0,11%
household	Education	none	NA	70369	67,61%
household	Education	none	Secondary modern school leaving certificate	16418	15,78%
household	Education	none	General Certificate of Secondary Education	8946	8,60%
household	Education	none	No school leaving certificate	5156	4,95%
household	Education	none	High school graduation	3186	3,06%
household	Employment	NA	NA	82613	79,38%
household	Employment	Working	Employee	11669	11,21%
household	Employment	Working	Worker	6578	6,32%
household	Employment	Working	Temporary	1693	1,63%
household	Employment	Working	Other employed	1300	1,25%
household	Employment	Working	Civil servant	222	0,21%

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



household	GarnishProt	none	NA	67999	65,34%
household	GarnishProt	none	Garnish Protection	21197	20,37%
household	GarnishProt	none	No Garnish Protection	13227	12,71%
household	GarnishProt	none	Garnish Protection after intervention of advisor	1623	1,56%
household	GarnishProt	none	Rejection of Garnish Protection	29	0,03%
household	Male	none	1	54929	52,78%
household	Male	none	0	49146	47,22%
household	Outcome	none	Transition to insolvency procedure	34945	33,58%
household	Outcome	none	NA	27793	26,70%
household	Outcome	none	Only debt counseling	10705	10,29%
household	Outcome	none	Successful overall regulation	7431	7,14%
household	Outcome	none	Abort by client	7419	7,13%
household	Outcome	none	Successful partial regulation	3593	3,45%
household	Outcome	none	Abort by the debt counselling	3368	3,24%
household	Outcome	none	Other reasons	2666	2,56%
household	Outcome	none	Accompanying advise insolvency procedure	1822	1,75%
household	Outcome	none	Not completed	1290	1,24%
household	Outcome	none	Transfer	1198	1,15%
household	Outcome	none	Successful partial regulation and transition insolvency procedure	1187	1,14%
household	Outcome	none	Transfer and insolvency procedure	516	0,50%
household	Outcome	none	Successful partial regulation and transfer	142	0,14%
household	SelfEmployed	none	0	94770	91,06%
household	SelfEmployed	none	1	9305	8,94%
household	VocForm	none	Completed apprenticeship	39770	38,21%
household	VocForm	none	No vocational training	33413	32,10%
household	VocForm	none	NA	26035	25,02%
household	VocForm	none	Completed degree	2372	2,28%
household	VocForm	none	In training	1360	1,31%
household	VocForm	none	Other	904	0,87%
household	VocForm	none	Formerly self-employed	221	0,21%
income	HeadHousehold	none	1	115836	74,57%
income	HeadHousehold	none	0	39507	25,43%
income	IncomeType	Subsistence	Unemployment benefit (ALG II)	37020	23,83%
income	IncomeType	Subsistence	Child benefit	36550	23,53%
income	IncomeType	Dependent Work	Salary (employee)	15733	10,13%
income	IncomeType	Dependent Work	Wage (worker/skilled worker)	7566	4,87%
income	IncomeType	Dependent Work	Wage (low employment)	5322	3,43%

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



income	IncomeType	Pension	Old-age pension (employee, worker)	5083	3,27%
income	IncomeType	Subsistence	Housing allowance	4965	3,20%
income	IncomeType	Subsistence	Unemployment benefit (ALG I)	4868	3,13%
income	IncomeType	Pension	Occupational disability pension	4595	2,96%
income	IncomeType	Subsistence	Social security (SGB XII)	4069	2,62%
income	IncomeType	Subsistence	Maintenance	4005	2,58%
income	IncomeType	Subsistence	Advance maintenance payments (UVG)	3503	2,26%
income	IncomeType	Dependent Work	Wage (unskilled labour)	2930	1,89%
income	IncomeType	Subsistence	Child raising benefit	2195	1,41%
income	IncomeType	Dependent Work	Wage from secondary employment	2082	1,34%
income	IncomeType	Pension	Other pensions	2067	1,33%
income	IncomeType	Other	Other Income	2009	1,29%
income	IncomeType	Pension	Widow' s/widower's pension	1956	1,26%
income	IncomeType	Dependent Work	Training allowance	1771	1,14%
income	IncomeType	Subsistence	Sick pay	1506	0,97%
income	IncomeType	Subsistence	Transitional / maintenance allowance (SGB III)	890	0,57%
income	IncomeType	Other	Household, pocket and inmates' money	795	0,51%
income	IncomeType	Subsistence	Social welfare	739	0,48%
income	IncomeType	Pension	(Half) orphan's pension	697	0,45%
income	IncomeType	Subsistence	Unemployment assistance	482	0,31%
income	IncomeType	Other	Rental and leasing income	363	0,23%
income	IncomeType	Independent activity	Sales from business activities	356	0,23%
income	IncomeType	Dependent Work	Civil servant pay	299	0,19%
income	IncomeType	Subsistence	child allowance supplement	265	0,17%
income	IncomeType	Independent activity	Revenues from freelance work	232	0,15%
income	IncomeType	Pension	Civil servant pension	172	0,11%
income	IncomeType	Independent activity	Other revenues from self-employed activities	125	0,08%
income	IncomeType	Dependent Work	Royalties, commissions	119	0,08%
income	IncomeType	Other	Capital income	11	0,01%
income	IncomeType	Independent activity	Revenues from agricultural and forestry activities	3	0,00%
income	Recipient	none	Advisee	115835	74,57%
income	Recipient	none	Child	25655	16,52%
income	Recipient	none	Spouse	9997	6,44%
income	Recipient	none	Partner	3856	2,48%

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



income	Seizable	none	0	135887	87,48%
income	Seizable	none	1	19456	12,52%
income	Seized	none	0	153780	98,99%
income	Seized	none	1	1563	1,01%
person	Alimony	none	0	116920	54,09%
person	Alimony	none	1	99237	45,91%
person	ChildBenefit	none	0	188030	86,99%
person	ChildBenefit	none	1	28127	13,01%
person	InHousehold	none	1	191946	88,80%
person	InHousehold	none	0	24211	11,20%
person	Male	none	1	110909	51,31%
person	Male	none	0	105248	48,69%
person	Status	none	Advisee	104073	48,15%
person	Status	none	Child	81078	37,51%
person	Status	none	Spouse	15431	7,14%
person	Status	none	Partner	14040	6,50%
person	Status	none	Parent	637	0,29%
person	Status	none	Cohabitant	318	0,15%
person	Status	none	Brother or sister	225	0,10%
person	Status	none	Grandchild	153	0,07%
person	Status	none	NA	121	0,06%
person	Status	none	Foster Child	69	0,03%
person	Status	none	Grandparent	12	0,01%
spending	SpendingType	Housing	Apartment rent (excl. Service)	61044	23,54%
spending	SpendingType	Housing	Power/gas	36316	14,01%
spending	SpendingType	Fixed costs	Other fixed costs	23297	8,99%
spending	SpendingType	Fixed costs	Telecommunications	16005	6,17%
spending	SpendingType	Housing	Other ancillary rent cost	14201	5,48%
spending	SpendingType	Fixed costs	Travel expense	11889	4,59%
spending	SpendingType	Fixed costs	Cell phone	11461	4,42%
spending	SpendingType	Housing	Heating	9835	3,79%
spending	SpendingType	Fixed costs	TV/Radio	9619	3,71%
spending	SpendingType	Insurance	Vehicle insurance	7796	3,01%
spending	SpendingType	Insurance	Personal liability insurance	7155	2,76%
spending	SpendingType	Housing	(Waste)water	6546	2,52%
spending	SpendingType	Fixed costs	Vehicle tax	6496	2,51%
spending	SpendingType	Insurance	Household insurance	5123	1,98%
spending	SpendingType	Insurance	Other insurance	4631	1,79%
spending	SpendingType	Fixed costs	Membership fee	3837	1,48%
spending	SpendingType	Fixed costs	alimony	3343	1,29%



# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



spending	SpendingType	Insurance	Accident/vocational disability insurance	3088	1,19%
spending	SpendingType	Fixed costs	Kindergarden	2848	1,10%
spending	SpendingType	Insurance	Legal protection insurance	2136	0,82%
spending	SpendingType	Fixed costs	Subscription	1780	0,69%
spending	SpendingType	Housing	Other housing cost	1737	0,67%
spending	SpendingType	Fixed costs	Internet	1689	0,65%
spending	SpendingType	Housing	Waste disposal charges	1423	0,55%
spending	SpendingType	Insurance	Private old-age provision	1284	0,50%
spending	SpendingType	Insurance	Supplementary health insurance	1129	0,44%
spending	SpendingType	Insurance	Endowment insurance	1059	0,41%
spending	SpendingType	Insurance	Term life insurance	826	0,32%
spending	SpendingType	Housing	Garage, other outbuilding	679	0,26%
spending	SpendingType	Obligatory social security contributions	Compulsory contribution health and elderly care (SGB)	314	0,12%
spending	SpendingType	Insurance	Hospital daily benefit insurance	198	0,08%
spending	SpendingType	Company costs	Other fixed costs	60	0,02%
spending	SpendingType	Company costs	Commercial rent (excl. Service)	45	0,02%
spending	SpendingType	Company costs	Leasing	43	0,02%
spending	SpendingType	Company costs	Telecommunications	41	0,02%
spending	SpendingType	Company costs	Contribution to professional association	35	0,01%
spending	SpendingType	Company costs	Tax advisory	27	0,01%
spending	SpendingType	Company costs	Transport	26	0,01%
spending	SpendingType	Company costs	Advance tax payments (VAT)	24	0,01%
spending	SpendingType	Company costs	Commercial ancillary rent cost	23	0,01%
spending	SpendingType	Company costs	Liability insurance	23	0,01%
spending	SpendingType	Company costs	Other contributions, fees, charges	23	0,01%
spending	SpendingType	Company costs	Social security contributions	18	0,01%
spending	SpendingType	Company costs	Advance tax payments (Income tax)	16	0,01%
spending	SpendingType	Obligatory social security contributions	Compulsory contribution pension (SGB)	16	0,01%

# A DATA SET OF OVER-INDEBTED HOUSEHOLDS IN GERMANY



spending	SpendingType	Company costs	Other tax	13	0,01%
spending	SpendingType	Company costs	External accounting costs	12	0,00%
spending	SpendingType	Company costs	Office cost	12	0,00%
spending	SpendingType	Company costs	Office supplies	11	0,00%
spending	SpendingType	Company costs	Salary/Wage	10	0,00%
spending	SpendingType	Company costs	Other maintainance costs	9	0,00%
spending	SpendingType	Company costs	Maintainance contract	2	0,00%

## Literaturverzeichnis

Amtliche Sozialberichterstattung: Armutsgefährdungsquoten. Onlineinformation. Online verfügbar unter <http://www.amtliche-sozialberichterstattung.de/A1armutsgefaehrdungsquoten.html>.

Belázquez Cuesta, Maite; Budría, Santiago (2015): The effects of over-indebtedness on individual health. IZA Discussion Papers.

König, Nadja (2016): Personal insolvency dynamics in Germany and the UK. A SUR-TAR approach. DEP (SocioEconomics) Discussion Papers, Macroeconomics and Finance Series.

Statistisches Bundesamt (2017): Statistik zur Überschuldung privater Personen 2016, Fachserie 15 Reihe 5 – 2016.