

Hayo, Bernd; Neuenkirch, Edith

Working Paper

Survey on Germans' attitudes towards and knowledge of monetary policy issues: Documentation of survey methodology and descriptive results

MAGKS Joint Discussion Paper Series in Economics, No. 21-2018

Provided in Cooperation with:

Faculty of Business Administration and Economics, University of Marburg

Suggested Citation: Hayo, Bernd; Neuenkirch, Edith (2018) : Survey on Germans' attitudes towards and knowledge of monetary policy issues: Documentation of survey methodology and descriptive results, MAGKS Joint Discussion Paper Series in Economics, No. 21-2018, Philipps-University Marburg, School of Business and Economics, Marburg

This Version is available at:

<https://hdl.handle.net/10419/200677>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



No. 21-2018

Bernd Hayo and Edith Neuenkirch

**Survey on Germans' Attitudes Towards and Knowledge of
Monetary Policy Issues: Documentation of Survey
Methodology and Descriptive Results**

This paper can be downloaded from
<http://www.uni-marburg.de/fb02/makro/forschung/magkspapers>

Coordination: Bernd Hayo • Philipps-University Marburg
School of Business and Economics • Universitätsstraße 24, D-35032 Marburg
Tel: +49-6421-2823091, Fax: +49-6421-2823088, e-mail: hayo@wiwi.uni-marburg.de

Survey on Germans' Attitudes Towards and Knowledge of Monetary Policy Issues: Documentation of Survey Methodology and Descriptive Results

**Bernd Hayo and Edith Neuenkirch
University of Marburg**

This version: 14 June 2018

Corresponding author:

Bernd Hayo
Marburg Centre for Institutional Economics (MACIE)
School of Business and Economics
University of Marburg
D-35032 Marburg
Germany
Phone: +49-6421-2823091
Email: hayo@wiwi.uni-marburg.de

Survey on Germans' Attitudes Towards and Knowledge of Monetary Policy

Issues:

Documentation of Survey Methodology and Descriptive Results

Abstract This paper provides background information, questionnaires, and basic descriptive statistics for a representative survey of the German population conducted on our behalf by GfK in 2011. Our aim is to discover the German public's knowledge about the ECB specifically, and monetary policy in general. We also examine our respondents' self-perception of their knowledge and how they use media relating to the topic. A detailed descriptive analysis reveals that the German public's factual knowledge is far from perfect, and their self-perception of this knowledge is equally poor. The general public is reasonably interested in information about the ECB and mainly watches TV or reads newspapers to keep informed. We discover significant differences in knowledge and media use across socio-demographic subgroups. On average, male respondents and those with higher levels of education or income are more interested in the ECB, more knowledgeable about it, and more confident in their own knowledge.

JEL Classification: A20 · E52 · E58

Keywords: Household survey · Germany · Monetary policy · European Central Bank · Public preferences · Economic literacy

1. Introduction

This paper provides background information and basic descriptive statistics for a representative survey of the German population conducted on our behalf by Gesellschaft für Konsumforschung (GfK) in July and October 2011. The survey addresses important monetary issues, including citizens' monitoring of and reaction to inflation and their inflation expectation formation, their trust in economic institutions, and indicators for monetary policy literacy, that is, objective and subjective knowledge about variables and institutions relevant for monetary policy. To date, the survey data have been used in two research papers (Hayo and Neuenkirch 2014, 2018) to study trust in the European Central Bank (ECB) and how laypersons acquire information about monetary policy issues. The purpose of the present paper is to provide full documentation of the survey.

In light of the need to increase the public's economic knowledge, and observing an increased public awareness of the ECB and its actions, we developed a substantial household survey dealing with ordinary people's knowledge about the ECB itself and monetary policy in general. The questionnaire contains multiple-choice questions on: (i) the ECB's mandate, (ii) the ECB's independence in setting interest rates, and (iii) the interplay between inflation and key interest rates. In addition, we ask for respondents' own perceptions of their knowledge, about their desire to be informed about the ECB, about their trust in the ECB, and their media use relating to the topic.

To our knowledge, our survey is the first to provide insight into the German public's monetary policy knowledge and its subjective evaluation of this knowledge, as well as into media use relating to the ECB. Our results reveal that laypersons' knowledge about the ECB and monetary policy is far from perfect, and that people's own perception of their knowledge is equally poor. The general public is reasonably interested in the ECB and mainly reads newspapers or watches TV to keep informed. On average, male respondents and those with higher levels of education or income are more interested in the ECB, more knowledgeable about it, and more confident in their own knowledge.

We describe the idea behind, and the structure and implementation of, the survey in Section 2. Section 3 briefly describes the various questions asked and provides absolute and relative answer frequencies for the core questions. We provide a detailed descriptive analysis in Section 4, touching on the relationship between subjective and objective monetary policy knowledge, information desire and media use, trust in the ECB, and political preferences. Section 5 concludes. Appendix A contains the English translation of the questionnaire and Appendix B the original German questionnaire.

2. The Survey Methodology

2.1 Design

We faced two challenges when designing our questionnaire. The first was to identify the type of knowledge about the ECB and monetary policy that is of economic relevance. The second challenge was to draft survey questions that the general public might be able to answer. Some

of the first drafts of the survey contained questions that would no doubt have been of interest to an economist, for instance, questions on the level of key interest rates or price development. However, when we asked economics students to fill out the questionnaire, they either did not understand the questions, or struggled to answer them correctly. On the other hand, questions that were easy to understand and answer correctly (e.g., the name of the head of the ECB) did not provide us with information about the type of knowledge that is economically relevant.

Table 1 shows the three objective knowledge questions on which we finally settled.¹

Table 1: Objective ECB Knowledge

Knowledge about the ECB Mandate	
Which of the following do you think is the <u>main</u> objective of the ECB? The main objective of the ECB is to ...	
<input type="checkbox"/>	... promote growth in the euro area
<input type="checkbox"/>	... fight unemployment in the euro area
<input type="checkbox"/>	... maintain price stability in the euro area
<input type="checkbox"/>	... provide credit to EU member states
<input type="checkbox"/>	... control the euro/US dollar exchange rate
<input type="checkbox"/>	Don't know
Knowledge about Monetary Policy	
Private banks borrow liquidity from the ECB at a given interest rate. Assume that prices in the euro area are expected to increase strongly. How do you think the interest rate should be set?	
<input type="checkbox"/>	Decrease interest rate
<input type="checkbox"/>	Keep interest rate constant
<input type="checkbox"/>	Increase interest rate
<input type="checkbox"/>	Don't know
Knowledge about ECB Decisions	
Who is responsible for setting this interest rate?	
<input type="checkbox"/>	The ECB, independently of euro area governments
<input type="checkbox"/>	The ECB; euro area governments have to agree afterward
<input type="checkbox"/>	The ECB together with euro area governments
<input type="checkbox"/>	The euro area governments, with the ECB executing the decisions
<input type="checkbox"/>	Don't know

We developed three multiple-choice questions that deal with relevant institutional details of the ECB, namely, its main objective ('Knowledge about the ECB Mandate'), its political

¹ All questions were originally phrased in German and our translation attempts to capture the nuances of that language. Note that the order of the questions presented in this section differs from the original questionnaire.

independence ('Knowledge about ECB Decisions'), and the general functioning of monetary policy in a very basic scenario ('Knowledge about Monetary Policy'). We wanted to know if the broad public is familiar with basic features of a European institution vested with wide powers, though not democratically elected. If the ECB owes the public the duty of being transparent about its policies, laymen need a basic knowledge of its objectives and decision-making processes in order to understand the ECB's communication efforts (Minehan 2006; Trichet 2005). In addition, we wanted to find out whether laymen have some basic intuition about the interplay between inflation and interest rate setting by a central bank. This intuition could be helpful when forming inflation expectations and making longer-term financial decisions.

Given that people might believe themselves well-informed about this topic when, in fact, such is not the case, we decided to control for respondents' own assessments of their knowledge. There is often a substantial mismatch between the subjective and objective dimensions of knowledge (Alba and Hutchinson 2000; Carlson et al. 2009) and a person's beliefs about her economic knowledge appear to influence her financial decision making (Hadar et al. 2013; Robb and Woodyard 2011), sometimes to an even greater extent than a person's actual knowledge (Ellen 1994). To measure subjective knowledge, we provided the interviewees with a common five-point scale ranging from 'very bad knowledge' to 'very good knowledge'. Table 2 shows the wording of our survey's subjective knowledge question.

Table 2: Subjective ECB Knowledge²

The monetary policy of all countries in the euro area is managed by the European Central Bank (ECB). How do you rate your own knowledge about the ECB? Value 1 means that your knowledge is very bad. Value 5 means that your knowledge is very good. You may grade your knowledge with the values in between.		
1	'very bad'	()
2		()
3		()
4		()
5	'very good'	()

Another part of the survey deals with the use of mass media to obtain information about the ECB. Thus, if people have knowledge about the ECB—or at least think they do—to what extent is their knowledge influenced by their media usage? How important is it to the public to keep informed about the ECB? And if they inform themselves, what type of media do they rely on? Table 3 shows the wording of our survey's media-related questions.

² Note that the numbering and order of answers in Tables 2, 3, and 4 differ from the original text. For example, in the original, 1 was 'very good' and 5 was 'very bad' when asking for subjective knowledge. In this paper, however, the numbering and order of answers correspond to the later variables in the empirical analysis by Hayo and Neuenkirch (2014, 2018).

Table 3: Media Usage Relating to the ECB

Desire to be Informed					
How important is it for you personally to be informed about the following institutions? Value 1 means that it is not important at all for you to be informed. Value 5 means that it is very important for you to be informed. You may grade the level of importance with the values in between.					
	1	2	3	4	5
	'not important at all'			'very important'	
German Bundestag	()	()	()	()	()
European Union	()	()	()	()	()
United Nations	()	()	()	()	()
German Bundesbank	()	()	()	()	()
European Central Bank	()	()	()	()	()
International Monetary Fund	()	()	()	()	()
Frequency of Media Use					
How many times do you use each of the following to inform yourself about the ECB?					
	1	2	3		
	'never'	'occasionally'	'regularly'		
Newspapers	()	()	()		
Magazines	()	()	()		
Radio	()	()	()		
Television	()	()	()		
Internet	()	()	()		
Relatives/friends/colleagues	()	()	()		
Websites					
How many times have you visited the following websites?					
	1	2	3		
	'never'	'once'	'several'		
The official Bundesbank website	()	()	()		
The official ECB website	()	()	()		

To compare the relative importance of ECB information with that about other institutions, we included a question about desire to be informed about other institutions. This allows us to distinguish between a person who is not interested at all in political and economic topics and a person who is specifically not interested in the ECB. Other questions deal with how frequently different media sources are used to keep informed about the ECB. We were concerned that respondents might confuse their overall media usage with their specific media usage relating to our topic. To address this issue, the survey contains an additional question, for comparison only, on overall Internet use; a difference between answers on overall and ECB web usage reveals that the interviewees clearly distinguish between the purposes of their media use. Specific Internet use was the subject of our third media question in an effort to

determine whether people who use the Internet to find information about the ECB have ever visited the ECB or Bundesbank websites for this purpose.

One good reason why the German public should be knowledgeable and stay informed about the ECB is its lack of democratic legitimacy. In turn, and to further this outcome, an independent central bank should be transparent and explain its decisions to the public (Trichet 2005). By asking about trust in the ECB, we can measure public support for the ECB and relate this support to knowledge and media use in the empirical analysis. Table 4 shows sets out our trust question. Again, we asked for trust in several other institutions in order to measure relative support for the ECB.

Table 4: Institutional Trust

To what extent do you trust the following institutions? Value 1 means that you have no trust at all. Value 5 means that you have very much trust. You may grade your trust with the values in between.					
	1	2	3	4	5
	'no trust at all'			'very much trust'	
German Bundestag	()	()	()	()	()
European Union	()	()	()	()	()
United Nations	()	()	()	()	()
German Bundesbank	()	()	()	()	()
European Central Bank	()	()	()	()	()
International Monetary Fund	()	()	()	()	()

In a subsequent section of the survey, interviewees were asked several questions about their economic situation and political preferences. Table 5 shows the wording of these questions. First, we were interested in our respondents' favourite long-term political objectives, from which we hope to derive information about the extent of their inflation aversion. This question was originally included in Inglehart (1971). The original text was: 'If you had to choose among the following things, which are the two that seem most desirable to you? Maintaining order in the nation. Giving the people more say in important political decisions. Fighting rising prices. Protecting freedom of speech.'

Inglehart (1971, p. 994f) distinguishes between people with 'traditional acquisitive value preferences' and those with 'post-bourgeois values'; the classification is based on pairs of first and second objectives a respondent chose. Related to Inglehart's hypothesis of value change, the first and the third items are regarded as indicating traditional 'acquisitive' value preferences; the other two items are regarded as 'post-bourgeois' values. Consequently, Inglehart expects respondents with higher socioeconomic status to prefer the 'post-materialism' items and those with lower socioeconomic status to prefer the 'materialism' items. In our survey, we included this item to measure people's relative preference for price stability against other important objectives for a (democratic) country.

Table 5: Political Preferences and Personal Economic Situation

Long-Term Preferences				
In the following, we list a few objectives that different people consider to be less or more important. Please tell me which of these objectives you personally consider to be in the long-term interest (over a period of 15 years) of Germany:				
	... the most important	... the 2 nd most important	...the 3 rd most important	the 4 th most important
To maintain order in the country.	()	()	()	()
To give people a say in important decisions.	()	()	()	()
To fight rising prices.	()	()	()	()
To protect freedom of speech.	()	()	()	()
Don't know	()	()	()	()
Union Membership				
Are you a member of a trade union?				
()	Yes	()	No	
Economic Situation				
How do you feel about your current economic situation?				
()	Very secure	()	Quite unsecure	
()	Quite secure	()	Very unsecure	
()	Neither secure nor unsecure			
Savings Behaviour				
Are you a saver or a borrower?				
()	More of a saver than a borrower	()	Neither nor	
()	More of a borrower than a saver			
Political Orientation				
Many people in the country tend to support one particular political party, although they elect other parties from time to time. Do you tend to support one particular party and, if so, which one the following?				
()	SPD	()	NPD/ DVU/ Republicans	
()	CDU/ CSU	()	Other parties	
()	FDP	()	No particular party	
()	Greens	()	I don't want to answer	
()	Leftists/ PDS			

Thus, there may be a tension between potentially important influences going in opposite directions. For instance, a higher level of income may be associated with more concern about

inflation. If that were the case, this preference could be partially obscured in the present specification of the question by a move towards a less materialistic cultural perspective brought about by an increase in the living standard.

Another preference-related question asks whether a respondent is a member of a trade union. Trade union membership may have an influence on the amount of information employees have and could be related to their preferences. Respondents are then asked to evaluate their personal economic situation. Individuals who perceive their economic environment as insecure might be more interested in the ECB and its monetary policy decisions than individuals who experience economic certainty and thus might not care about current economic developments. Similarly, an individual's savings behaviour is likely to influence his knowledge and his need for obtaining ECB information. The ECB's interest rate setting and its mandate of price stability have a direct impact on the lives of respondents who either save or borrow money.

Finally, the interviewee is asked to provide information concerning his political orientation. Rather than using a so-called 'Sonntagsfrage' ('Which party would you vote for if federal elections were held this Sunday?'), our question seeks information about long-term preferences rather than a respondent's attitude towards recent government policies. The poll ends with a number of questions on common socio-demographic characteristics. These include, inter alia, the respondent's age, sex, educational level, monthly household net income, occupation, marital status, and place of residence.

2.2 Implementation

During the development phase of our survey, we conducted several pre-tests with different groups of people. We wanted the questionnaire to be specialised enough and have sufficient detail for economic empirical analysis, but it also had to be short enough to be easily included in a large omnibus survey of laymen, many of whom would not be well-versed in economics. First, we had economics students (who should be somewhat familiar with the topic) fill out the questionnaire. If they were unable to understand the questions or answer any of them correctly, the questionnaire would be obviously inappropriate for the broader public. We then asked some of our friends and relatives (none of whom have anything to do with economics in their daily lives) to answer the questions.

After we had settled on a final version of the questionnaire, we decided that the complexity of the questionnaire, coupled with our desire to obtain accurate information, made conducting it via telephone inappropriate. We believed that the respondents should be able to see the answer choices in front of them during face-to-face interviews. This method should go far in avoiding a situation where respondents choose every first or last item, or just say 'I don't know', because they do not remember all the offered choices, which had also been a big concern when we were contemplating fielding the survey by telephone.

We selected Gesellschaft für Konsumforschung (GfK), one of the biggest private German institutes specialising in collecting public opinion data, to conduct the survey. After some further consultations on exact wording and ordering of questions, GfK agreed to include our

questionnaire in one of their regularly conducted omnibus surveys, the GfK CLASSIC BUS.³ The poll was based on a structured questionnaire with interviewers following a strict question order. Fieldwork was done by 496 interviewers between 8–29 July 2011. The interviews conducted face-to-face interviews with the help of pen pads, an interview method called ‘Cam-Quest’ (Computer Assisted Multimedia Questioning). However, a first look at the raw data revealed that GfK had forgotten to include four of our questions in this survey wave. GfK offered to repeat the procedure with the full questionnaire, again embedded in their computer-assisted, face-to-face omnibus survey. This time, 512 interviewers conducted the interviews between 30 September and 14 October 2011. Unfortunately, this did not result in panel structured data as the July respondents were not the same as those in the October sample.

2.3 Sample

The statistical population includes men and women, age 14 and older, living in Germany. At the time of the survey, approximately 67,038,000 persons living in private households were in this category. A sample of around 2,000 persons was taken in July, with another 2,000 persons interviewed in October. The two samples (hereafter referred to as the ‘July sample’ and the ‘October sample’) are quota samples, where the distribution of selected socio-demographic characteristics across the respondents is fixed some time ahead of the interviews. The interviewers were given information as to desired characteristics of the sample, including sex, age, household head occupation, and household size. Given that each interviewer worked in his own place of residence, we also know the sizes of the towns and the federal state in which respondents live.

Before conducting a statistical analysis of our questionnaire based on the two samples, we needed to confirm that the sample distributions are indeed accurate representations of the population distribution. To this end, we compared the number of observations for each socio-demographic characteristic included in the quota sampling with the expected values based on official statistic. If the actual proportions do not match the expected ones, we rely on sampling weights so as to achieve representative results for Germany. Table 6 shows results of Chi-square goodness-of-fit tests for the socio-demographic variables on which the quota sampling is based.

Desired distributional values were computed by GfK based on official statistics; actual values and test statistics are based on our own calculations. For each of the quota variables, we reject the null hypothesis that the observed values in each category resemble the expected values, at a significance level of 5 per cent. Thus, neither the July wave nor the October wave yielded a perfectly representative sample of the German population.

³ See <http://www.gfk.com/de/produkte-a-z/omnibus/> for a detailed description of survey methods offered by GfK.

Table 6: Sample Representativeness of Quota Variables

Variable	July (N = 2,116)			October (N = 2,006)		
	k	Z	Pr(Z < z)	k	Z	Pr(Z < z)
Gender	2	17.01	0.000	2	7.90	0.005
Age	8	21.23	0.003	8	35.40	0.000
Household size	4	14.33	0.003	4	13.54	0.004
City size	4	31.44	0.000	4	12.55	0.006
Head of household occupation	5	64.50	0.000	5	70.34	0.000
Federal state	14	41.65	0.000	14	34.93	0.001

Notes: Test statistics and p-values of Chi² goodness-of-fit tests for each quota variable are shown. The null hypothesis states that the observed number of cases equals the expected number of cases for k categories of a variable. A list of categories can be found in Table 7. Bold values denote significance at the 5 per cent level.

Table 7 shows in more detail the proportions for each category of the variables, both for the actual sample and for the population, as well as p-values for one-sample tests on the equality of proportions. Women are overrepresented in both July and October. In the July sample, the proportion of female respondents is 5 percentage points (PP) higher than the general population proportion. In the October sample, the proportion is 3 PP higher. There are too few very young and very old interviewees in both samples, while respondents between 40 and 59 years are overrepresented. Concerning desired household size, single-person households are overrepresented in the July sample, while the October sample contains too few very large households of four or more persons. Both samples include too many respondents living in villages with fewer than 5,000 residents. In the July sample, when compared to the general population, there are 5 PP fewer respondents living in small towns with 5,000 to 20,000 residents and 2 PP more respondents living in towns with 20,000 to 99,000 residents. The desired distribution for household head occupation in the population was also not met. Workers are clearly underrepresented in both samples (6 PP in July and 7 PP in October) and there are too many employees and self-employed respondents. As to distribution across German states, we observe too few respondents living in Nordrhein-Westfalen (2 PP both in July and October) as well as in Baden-Wuerttemberg (3 PP in July); accordingly, we observe too many respondents living in Hessen and Brandenburg (July) as well as too many respondents living in Hessen, Mecklenburg-Vorpommern, Brandenburg, and Sachsen (October).

Table 7: Sample Representativeness of Individual Proportions

Variable	Category	July (N = 2,116)				October (N = 2,006)			
		Sample	Population	Difference	Pr(Z < z)	Sample	Population	Difference	Pr(Z < z)
Gender	Male	0.445	0.490	-0.045	0.000	0.459	0.490	-0.031	0.005
	Female	0.555	0.510	0.045	0.000	0.541	0.510	0.031	0.005
Age	14-15 years	0.018	0.020	-0.003	0.411	0.012	0.020	-0.009	0.007
	16-19 years	0.048	0.060	-0.012	0.022	0.044	0.060	-0.016	0.003
	20-29 years	0.131	0.130	0.001	0.848	0.133	0.130	0.003	0.680
	30-39 years	0.127	0.140	-0.013	0.078	0.145	0.140	0.005	0.553
	40-49 years	0.209	0.190	0.019	0.023	0.219	0.190	0.029	0.001
	50-59 years	0.180	0.160	0.020	0.012	0.177	0.160	0.017	0.044
	60-69 years	0.143	0.140	0.003	0.720	0.135	0.140	-0.005	0.486
	70 years +	0.144	0.160	-0.016	0.046	0.137	0.160	-0.023	0.004
Household size	1 person	0.252	0.220	0.032	0.000	0.241	0.220	0.021	0.025
	2 persons	0.375	0.380	-0.005	0.649	0.385	0.380	0.005	0.658
	3 persons	0.165	0.180	-0.015	0.080	0.186	0.180	0.006	0.492
	4 persons +	0.207	0.220	-0.013	0.149	0.188	0.220	-0.032	0.001
City size	up to 4999	0.189	0.160	0.029	0.000	0.184	0.160	0.024	0.003
	5,000 - 19999	0.216	0.260	-0.045	0.000	0.242	0.260	-0.018	0.071
	20,000 - 99,999	0.303	0.280	0.023	0.017	0.290	0.280	0.010	0.314
	100,000 +	0.293	0.300	-0.007	0.458	0.283	0.300	-0.017	0.101

Notes: One-sample tests for individual proportions are shown. The null hypothesis states that the sample proportion equals the population proportion. Bold values denote significance at the 5 per cent level.

Table 7 (continued): Sample Representativeness of Individual Proportions

Variable	Category	July (N = 2,116)				October (N = 2,006)			
		Sample	Population	Difference	Pr(Z < z)	Sample	Population	Difference	Pr(Z < z)
Head of household occupation	Worker	0.192	0.250	-0.058	0.000	0.183	0.250	-0.067	0.000
	Employee	0.339	0.310	0.029	0.004	0.350	0.310	0.040	0.000
	Official	0.032	0.040	-0.008	0.051	0.040	0.040	0.000	0.982
	Self-employed	0.112	0.080	0.032	0.000	0.111	0.080	0.031	0.000
	Unemployed	0.326	0.320	0.006	0.548	0.316	0.320	-0.004	0.708
State	Schleswig-Holstein	0.034	0.040	-0.006	0.159	0.039	0.040	-0.001	0.802
	Hamburg	0.022	0.020	0.002	0.577	0.022	0.020	0.002	0.443
	Bremen and Niedersachsen	0.108	0.110	-0.002	0.746	0.102	0.110	-0.008	0.235
	Nordrhein-Westfalen	0.199	0.220	-0.021	0.022	0.196	0.220	-0.024	0.011
	Hessen	0.084	0.070	0.014	0.014	0.083	0.070	0.013	0.025
	Rheinland-Pfalz and Saarland	0.070	0.060	0.010	0.055	0.065	0.060	0.005	0.318
	Baden-Wuerttemberg	0.104	0.130	-0.026	0.000	0.121	0.130	-0.009	0.211
	Bayern	0.147	0.150	-0.003	0.738	0.135	0.150	-0.015	0.053
	Mecklenburg-Vorpommern	0.024	0.020	0.004	0.237	0.026	0.020	0.006	0.041
	Sachsen-Anhalt	0.034	0.030	0.004	0.332	0.032	0.030	0.002	0.529
	Brandenburg	0.041	0.030	0.011	0.003	0.039	0.030	0.009	0.020
	Thüringen	0.035	0.030	0.005	0.225	0.034	0.030	0.004	0.306
	Sachsen	0.058	0.050	0.008	0.104	0.063	0.050	0.013	0.009
	Berlin	0.042	0.040	0.002	0.707	0.043	0.040	0.003	0.507

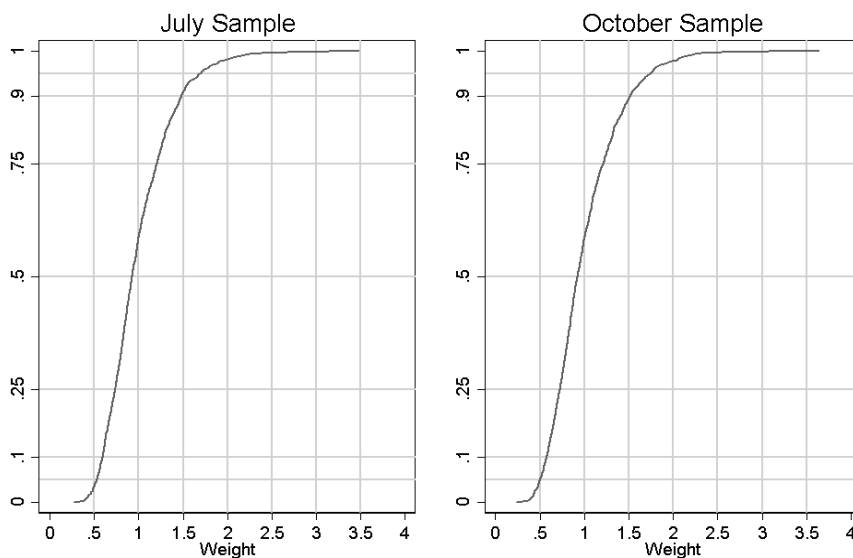
Notes: One-sample tests for individual proportions are shown. The null hypothesis states that the sample proportion equals the population proportion. Bold values denote significance at the 5 per cent level.

Although the distribution of key socio-demographic characteristics in the samples differs from the distribution in the population, we can still achieve fully representative results by applying appropriate weights. Hence, all descriptive statistics in Section 3 are weighted by gender, age, household size, city size, occupation, and state.⁴ Figure 1 shows the cumulative distribution of the applied sampling weights for both the July and October samples. For the July sample (October sample), the smallest weight is 0.27 (0.23), and the largest weight is 3.48 (3.64).⁵ Between both ends, the cumulative distributions of July and October sampling weights are generally very similar.

On the left-hand side, 1 per cent of weights are less than or equal to 0.4, 10 per cent are less than or equal to 0.6, and 25 per cent are less than or equal to 0.7. On the right-hand side of the distributions, 25 per cent of weights are higher than 1.2, 10 per cent are higher than 1.5, and 1 per cent are higher than 2.2.

As to be expected, not every respondent answered every question; consequently, some observations are incomplete. In the German Socioeconomic Panel (GSOEP), which is the longest-running household panel study in Europe, the number of non-responses varies considerably across items; for example, a high rate is usually found for labour income (Frick and Grabka 2007; Rässler and Riphahn 2006). In general, the number of non-responses is related to the survey mode, the interviewer, and the topic (Dillmann et al. 2002). Thus, one advantage of computer-assisted face-to-face interviews is that a respondent himself can answer a sensitive question without assistance from the interviewer. For our part of the omnibus survey, questions on trade union membership, savings behaviour, and the person's economic situation, as well as the one on political orientation, were autonomously answered on the computer display.

Figure 1: Cumulative Distribution of Sampling Weights



⁴ Weights were determined by GfK using an iterative weighting procedure.

⁵ Given that the sampling weights are normalized to sum to the sample size, means are equal to 1 in both cases.

Table 8 shows rates and patterns of missing values for each sample. Fortunately, we do not have to cope with ‘true’ missing values for our key questions on economic knowledge, information desire, media use, or institutional trust. In general, the majority of missing values are for the income question; 24 (20) per cent of respondents refused to answer in the July (October) sample. When it comes to a person’s political orientation, 17 per cent of answers in the October sample are missing (the question was not included in the July sample). A question on the respondent’s educational background has only 2 (1) per cent missing values in the July (October) sample. There are only two missing observations for the respondent’s family status in the July sample.

Table 8: Rates and Patterns of Missing Values

July Sample (N=2,116)			
Number of observations	Household net income	Education	Family Status
1,586	Observed	observed	observed
517	missing		
37		missing	
2			missing
492	missing	observed	observed
24	missing	missing	observed
12	observed	missing	observed
1	observed	missing	missing
1	missing	observed	missing
October Sample (N=2,006)			
Number of observations	Household net income	Political orientation	Education
1,355	observed	observed	observed
409	missing		
337		missing	
30			missing
290	missing	observed	observed
230	observed	missing	observed
101	missing	missing	observed
14	missing	observed	missing
10	observed	observed	missing
4	missing	missing	missing
2	observed	missing	missing

We now discuss the underlying patterns of missing data in more detail. For the July sample, 492 respondents have a non-response for income, yet answered on education and family status, while 24 respondents did not reveal either their income or educational background.

For the October sample, 290 respondents concealed their income, yet answered the questions about political orientation and education. Similarly, 230 respondents refused to specify their political orientation, yet stated income and education. There were 101 respondents who answered neither the income nor the political orientation question, and 14 persons have a non-response for both income and education. This leaves us with 1,586 complete observations in the July sample, and 1,355 complete observations in the October sample.

3. Absolute and Relative Frequencies

In this section, we systematically list absolute and relative frequencies of the core questions contained in the two waves of the survey. Two waves of roughly 2,000 respondents each were interviewed in July 2011 and October 2011. Note that Questions D1 to D4 were asked only in October 2011. Numbers in tables refer to absolute frequencies and those in parentheses to relative frequencies. In the discussion above, the ordering of answers for some questions was reversed compared to the original order used in the survey, which is presented here. Finally, the values presented in this section refer to population-weighted values, whereas non-weighted sample values are used elsewhere.

Q1: In the following, we list a few objectives that different people consider to be less or more important. Please tell me which of these objective you personally consider to be in the long-term interest (over a period of 15 years) of Germany.

July 2011	Most important	Second most important	Third most important	Fourth most important
Maintaining order in the nation	639 (30.2%)	551 (26.0%)	564 (26.6%)	340 (16.1%)
Giving people more say in important government decisions	542 (25.6%)	593 (28.0%)	528 (24.9%)	434 (20.5%)
Fighting rising prices	622 (29.4%)	537 (25.4%)	436 (20.6%)	500 (23.6%)
Protecting freedom of speech	298 (14.1%)	417 (19.7%)	564 (26.6%)	817 (38.6%)
Don't know	15 (0.7%)	18 (0.9%)	25 (1.2%)	25 (1.2%)

October 2011	Most important	Second most important	Third most important	Fourth most important
Maintaining order in the nation	540 (26.9%)	550 (27.4%)	521 (26%)	384 (19.1%)
Giving people more say in important government decisions	533 (26.6%)	527 (26.3%)	478 (23.8%)	453 (22.6%)
Fighting rising prices	644 (32.1%)	531 (26.5%)	410 (20.4%)	413 (20.6%)
Protecting freedom of speech	282 (14.1%)	389 (19.4%)	579 (28.9%)	738 (36.8%)
Don't know	7 (0.3%)	10 (0.5%)	18 (0.9%)	18 (0.9%)

Note: Values are population-weighted.

Q2: How important is it for you personally to be informed about the following institutions? Value 1 means that it is very important for you to be informed. Value 5 means that it is not at all important for you to be informed. You may grade your opinion with the values in between.

July 2011	Very important (1)	(2)	(3)	(4)	Not at all important (5)
German Bundestag	372 (17.6%)	689 (32.6%)	561 (26.5%)	251 (11.9%)	242 (11.4%)
European Union	253 (12.0%)	561 (26.5%)	688 (32.5%)	315 (14.9%)	298 (14.1%)
United Nations	191 (9.0%)	436 (20.6%)	776 (36.7%)	380 (18.0%)	332 (15.7%)
German Bundesbank	255 (12.1%)	503 (23.8%)	683 (32.3%)	349 (16.5%)	325 (15.4%)
European Central Bank	225 (10.6%)	445 (21.1%)	666 (31.5%)	397 (18.8%)	382 (18.1%)
International Monetary Fund	173 (8.2%)	401 (19.0%)	691 (32.7%)	446 (21.1%)	405 (19.1%)

October 2011	Very important (1)	(2)	(3)	(4)	Not at all important (5)
German Bundestag	301 (15%)	632 (31.5%)	597 (29.7%)	227 (11.3%)	250 (12.5%)
European Union	218 (10.9%)	542 (27%)	647 (32.3%)	275 (13.7%)	325 (16.2%)
United Nations	139 (6.9%)	415 (20.7%)	691 (34.4%)	393 (19.6%)	368 (18.3%)
German Bundesbank	213 (10.6%)	495 (24.7%)	618 (30.8%)	342 (17.1%)	338 (16.8%)
European Central Bank	184 (9.2%)	409 (20.4%)	652 (32.5%)	379 (18.9%)	381 (19%)
International Monetary Fund	148 (7.4%)	366 (18.2%)	667 (33.3%)	423 (21.1%)	402 (20%)

Note: Values are population-weighted.

Q3: To what extent do you trust the following institutions? Value 1 means that you have very much trust. Value 5 means that you have no trust at all. You may grade your trust with the values in between.

July 2011	Very much trust (1)	(2)	(3)	(4)	No trust at all (5)
German Bundestag	85 (4.0%)	399 (18.9%)	844 (39.9%)	487 (23.0%)	301 (14.2%)
European Union	75 (3.5%)	357 (16.9%)	848 (40.1%)	503 (23.8 %)	334 (15.8%)
United Nations	85 (4.0%)	415 (19.6%)	896 (42.3%)	463 (21.9%)	258 (12.2%)
German Bundesbank	118 (5.6%)	452 (21.4%)	845 (39.9%)	433 (20.4%)	268 (12.7%)
European Central Bank	66 (3.1%)	349 (16.5%)	849 (40.1%)	530 (25.0%)	322 (15.2%)
International Monetary Fund	36 (1.7%)	248 (11.7%)	860 (40.6%)	588 (27.8%)	384 (18.2%)

October 2011	Very much trust (1)	(2)	(3)	(4)	No trust at all (5)
German Bundestag	84 (4.2%)	387 (19.3%)	775 (38.6%)	414 (20.6%)	347 (17.3%)
European Union	53 (2.6%)	321 (16%)	774 (38.6%)	477 (23.8%)	382 (19.1%)
United Nations	76 (3.8%)	362 (18%)	813 (40.5%)	447 (22.3%)	308 (15.4%)
German Bundesbank	94 (4.7%)	445 (22.2%)	735 (36.6%)	417 (20.8%)	315 (15.7%)
European Central Bank	57 (2.8%)	338 (16.8%)	728 (36.3%)	504 (25.1%)	380 (18.9%)
International Monetary Fund	40 (2%)	235 (11.7%)	718 (35.8%)	589 (29.4%)	425 (21.2%)

Note: Values are population-weighted.

Q4: The monetary policy of all countries in the euro area is managed by the European Central Bank (ECB). How do you rate your own knowledge about the ECB? Value 1 means that your knowledge is very good. Value 5 means that your knowledge is very bad. You may grade your knowledge with the values in between.

July 2011

Very good (1)	(2)	(3)	(4)	Very bad (5)
25 (1.2%)	183 (8.7%)	688 (32.5%)	646 (30.5%)	573 (27.1%)

October 2011

Very good (1)	(2)	(3)	(4)	Very bad (5)
18 (0.9%)	185 (9.2%)	662 (33%)	591 (29.5%)	549 (27.4%)

Note: Values are population-weighted.

Q5: Which of the following do you think is the main objective of the ECB? The main objective of the ECB is to ...

	July 2011	October 2011
... promote growth in the euro area	215 (10.1%)	202 (10.1%)
... fight unemployment in the euro area	70 (3.3%)	54 (2.7%)
... maintain price stability in the euro area	1098 (51.9%)	976 (48.6%)
... provide credit to EU member states	366 (17.3%)	434 (21.6%)
... control the euro/US dollar exchange rate	176 (8.3%)	150 (7.5%)
Don't know	192 (9.1%)	190 (9.5%)

Note: Values are population-weighted.

Q6: Private banks borrow liquidity from the ECB at a given interest rate. Assume that prices in the euro area are expected to increase strongly. How do you think the interest rate should be set?

	July 2011	October 2011
Decrease interest rate	743 (35.1%)	694 (34.6%)
Keep interest rate constant	668 (31.6 %)	672 (33.5%)
Increase interest rate	414 (19.6%)	402 (20.1%)
Don't know	291 (13.7%)	237 (11.8%)

Note: Values are population-weighted.

Q7: Who is responsible for setting this interest rate?

	July 2011	October 2011
The ECB, independently of euro area governments	666 (31.5%)	720 (35.9%)
The ECB; euro area governments have to agree afterward	375 (17.7%)	371 (18.5%)
The ECB together with euro area governments	515 (24.3%)	450 (22.4%)
The euro area governments, with the ECB executing the decisions	185 (8.7%)	177 (8.8%)
Don't know	376 (17.7%)	288 (14.4%)

Note: Values are population-weighted.

Q8: How many times do you use each of the following to inform yourself about the ECB?

July 2011	Regularly	Occasionally	Never
Newspapers	254 (12%)	828 (39.1%)	1034 (48.9%)
Magazines	110 (5.2%)	722 (34.1%)	1284 (60.7%)
Radio	131 (6.2%)	475 (22.4%)	1510 (71.4%)
Television	284 (13.4%)	965 (45.6%)	867 (41%)
Internet	87 (4.1%)	317 (15%)	1712 (80.9%)
Relatives/friends/colleagues	57 (2.7%)	497 (23.5%)	1562 (73.8%)
October 2011	Regularly	Occasionally	Never
Newspapers	260 (13%)	801 (39.9%)	946 (47.1%)
Magazines	146 (7.3%)	677 (33.7%)	1183 (59%)
Radio	130 (6.5%)	558 (27.8%)	1318 (65.7%)
Television	305 (15.2%)	923 (46%)	778 (38.8%)
Internet	91 (4.6%)	302 (15%)	1613 (80.4%)
Relatives/friends/colleagues	47 (2.3%)	539 (26.9%)	1420 (70.8%)

Note: Values are population-weighted.

Q9: How many times have you visited the following websites?

July 2011	Several	Once	Never
The official Bundesbank website	46 (11.3%)	76 (18.8%)	283 (69.9%)
The official ECB website	40 (9.8%)	75 (18.6%)	289 (71.5%)
October 2011	Several	Once	Never
The official Bundesbank website	45 (11.4%)	59 (15%)	289 (73.7%)
The official ECB website	42 (10.6%)	58 (14.8%)	293 (74.6%)

Note: Values are population-weighted.

D1. Are you a member of a trade union?

October 2011

Yes	No
184 (9.2%)	1,822 (90.8%)

Note: Values are population-weighted.

D2. Are you a saver or a borrower?

October 2011

More of a saver than a borrower	More of a borrower than a saver	Neither nor
1,054 (52.5%)	270 (13.5%)	682 (34%)

Note: Values are population-weighted.

D3: How do you feel about your current economic situation?

October 2011

Very secure	Quite secure	Neither secure nor unsecure	Quite unsecure	Very unsecure
61 (3%)	674 (33.6%)	759 (37.8%)	427 (21.3%)	86 (4.3%)

Note: Values are population-weighted.

D4. Many people in the country tend to support one particular political party, although they elect other parties from time to time. Do you tend to support one particular party and, if so, which one of the following?

October 2011

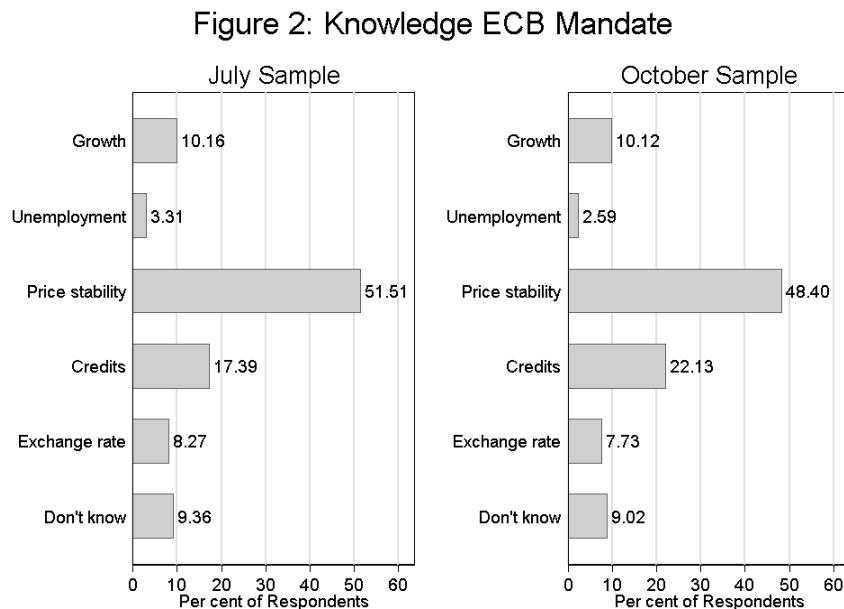
SPD	CDU / CSU	FDP	Greens	Leftists / PDS	NPD / DVU / Republicans	Other parties	No particular party	I don't want to answer
361 (18%)	400 (19.9%)	20 (1%)	189 (9.4%)	89 (4.5%)	28 (1.4%)	35 (1.7%)	536 (26.7%)	347 (17.3%)

Note: Values are population-weighted.

4. Descriptive Analysis

4.1 Subjective and Objective ECB Knowledge

We start our descriptive analysis by looking at how well or poorly our respondents did on our factual knowledge questions. Figure 2 shows the distribution of answers relating to the first question on the ECB's mandate, for the July sample and the October sample, respectively.



It turns out that the majority of Germans know the main objective of the ECB; 52 (48) per cent of July (October) respondents choose 'Price stability'. Here, the proportion of correct answers in the early poll is significantly higher.⁶ At the same time, the proportion of respondents that chose 'Credits for EU member states' as the ECB's main objective is significantly higher in October. The other proportions do not differ significantly between the two waves. In both survey waves, every tenth respondent refused to choose and opted for 'Don't know'.

Figure 3 shows the distribution of answers to the second question on the general functioning of monetary policy. Responses to our very basic scenario paint a less encouraging picture: only 19 per cent of respondents state that the central bank's response to future inflationary pressures should be to raise the policy rate. In contrast, the majority of respondents would not change the interest rate or even decrease it to prevent higher inflation. Fourteen (12) per cent of July (October) respondents chose 'Don't know'. For this question, the distribution of answers in July and October does is significantly different.

⁶ All results in the descriptive analysis refer to a significance level of 5 per cent. Henceforth 'significantly' is equivalent to 'significantly at a level of 5 per cent'.

Figure 3: Knowledge Monetary Policy

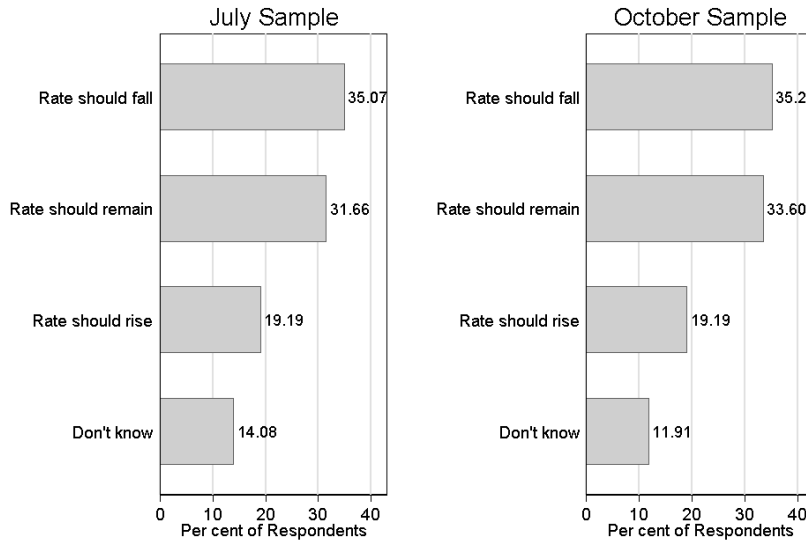
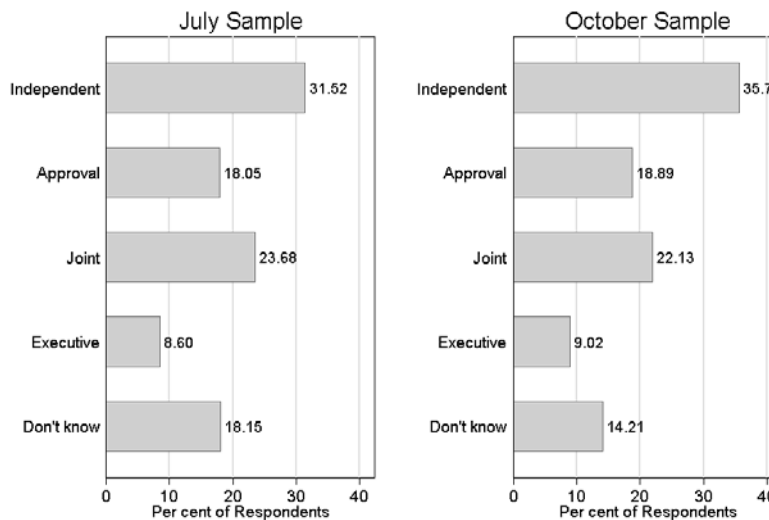


Figure 4 shows the distribution of answers to our third question on the ECB’s independence in setting interest rates. Approximately 32 per cent of July respondents knew the correct answer; 36 per cent of the respondents in the October wave chose the correct answer (a significantly higher proportion compared to the earlier wave). However, the majority of respondents both in July and October still think that European governments have a say in setting the main refinancing rate. This is supposed to happen via approval (18 per cent in July, and 19 per cent in October), joint decision (24 per cent in July, and 22 per cent in October), or even by setting the interest rate by themselves (9 per cent in both July and October). The proportion of interviewees that chose ‘Don’t know’ is significantly lower in October (14 per cent) compared to the July sample (18 per cent).

Figure 4: Knowledge ECB Decision



Our next step is to construct an index measuring respondents’ overall level of factual knowledge. Based on the responses to the three above questions, our index ranges from 0 to 3 correct answers. Figure 5 shows the proportion of respondents within each category. In

general, the level of objective knowledge in both samples is rather low, as only 6 per cent of respondents were able to answer all three questions correctly. At least every fifth (fourth) July (October) respondent was able to answer two out of three questions correctly. The majority of respondents have a score of one, where the proportion is significantly higher in July (41 per cent) compared to October (39 per cent). The other proportions do not differ significantly. Thirty-one (32) per cent of July (October) respondents fail completely.

We continue our descriptive analysis with the respondents' own assessment of their knowledge. Figure 6 shows the distribution of answers for both samples. In line with their actual knowledge level, our respondents do not claim to know very much about the ECB. In both samples, only 1 per cent of respondents assess their own knowledge to be very good, and only 9 per cent say that their knowledge is good (Category 4).

Figure 5: Number of Correct Answers

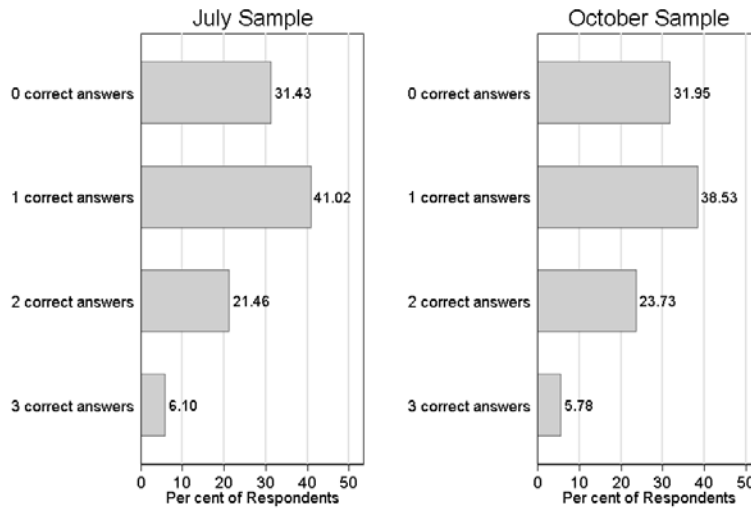
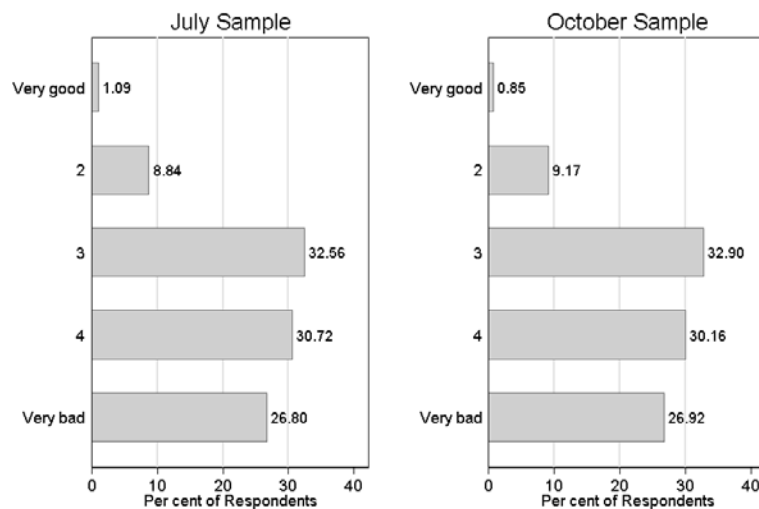


Figure 6: Subjective Knowledge



In contrast, 27 per cent say that their own knowledge about the ECB is very bad, and 30 per cent of respondents evaluate their knowledge to be bad (Category 2). The majority of

respondents (33 per cent) evaluate their knowledge to be neither good nor bad (Category 3). The distribution of subjective knowledge is stable between the two waves as the proportions do not differ significantly between July and October.

To discover whether level of knowledge differs across various socio-demographic characteristics, we take a close look at subgroups based on sex, age, income, education, and whether the respondent lives in West or East Germany. To this point, our analysis is based on complete samples, in which the average number of correct answers is one, and the average level of subjective knowledge is 2.3 for both the July and October samples. But, are men and women equally knowledgeable? Do less educated people evaluate their own knowledge the same way highly educated people do? First, we conduct Wald tests for each of the variables, where the null hypothesis is that average knowledge levels are the same for each category. Concerning objective knowledge, the null hypothesis is rejected for sex, income, and education, in both July and October. Furthermore, the average number of correct answers does not differ significantly between East and West German respondents. While we do not find significant differences between age groups for the October sample, the null hypothesis is rejected for the July sample. A similar picture emerges when looking at respondents' subjective knowledge levels. For the July sample, the null hypothesis is rejected for different sex, age, income, and education categories. Again, we do not find a significant difference between East and West German respondents. For the October sample, we find significant differences in subjective knowledge across sex, income, and education groups. Furthermore, there is a significant difference between East and West German respondents, nor is the null hypothesis rejected for different age groups in this sample.

We now take a closer look at the underlying patterns of subgroup differences in knowledge levels. Table 9 shows pairwise mean comparison tests for objective knowledge as well as subjective knowledge, for both the July and October samples.⁷ Concerning the sex differences, on average, men know more correct answers and are more confident in their own knowledge. The average objective knowledge score of male respondents in July (October) is 0.2 (0.18) higher compared to that of female respondents. The average level of subjective knowledge in July (October) is even higher at 0.33 (0.36).

In both samples, objective knowledge tends to increase with age, but the differences are only significant among the very young respondents. In July, the average level of factual knowledge is 0.31 higher for respondents aged 16 to 19 years compared to the adjacent younger group of respondents aged 14 to 15 years. Similarly, in October, the average level of factual knowledge is 0.27 higher for respondents aged 20 to 29 years compared to the adjacent younger group of respondents aged 16 to 19 years. A respondent's subjective knowledge level also tends to increase with age, but only two (one) category mean comparisons in the July (October) sample indicate a significant difference. In the July sample, respondents between 16 and 19 years (between 40 and 49 years), on average, evaluate their own ECB knowledge significantly 0.71 (0.16) higher than respondents aged between 14 and

⁷ To avoid an almost unmanageable number of tests, we only test for equal means of adjacent categories. In contrast, the Wald test includes mean comparisons of a reference category with each other category.

15 years (between 30 and 39 years). In the October sample, the only significant difference (of 0.38) is between respondents aged 20 to 29 years and the adjacent younger group of respondents.

As mentioned above, neither sample shows significant differences in objective knowledge between West and East German respondents. The only significant difference is found for the level of subjective knowledge in the October sample; here, West German respondents, on average, evaluate their own knowledge 0.12 better compared to their East German counterparts.

When we look at income, we find significant differences in objective knowledge for all pairs of adjacent groups in the October sample. In general, the average number of correct answers increases with as income becomes higher. The largest difference (of 0.24) is found between respondents in the highest income group of 3,500 or more Euro per month compared to respondents who have 2,500 to 3,499 Euros per month. In contrast, there are no significant income group differences in the July sample when looking at adjacent categories. However, when computing the difference between income categories '< €1,499' and '€3,500', we obtain 0.24, which is significantly different at the 5 per cent level.

The level of subjective knowledge increases at higher incomes, too. However, the only significant difference in the July sample is found for the two lowest income groups. The average level of subjective knowledge is 0.23 higher for respondents who have 1,500 to 2,499 Euros per month compared to respondents with less than or equal to 1,499 Euro. Similarly, in the October sample the only significant difference (of 0.32) is found for the two highest income groups.

For both samples, we find considerable knowledge differences across education levels. In general, the level of both objective knowledge and subjective knowledge increases with more education. In the July sample, respondents with a university degree have, on average, a 0.25 higher knowledge score when compared to respondents

Table 9: Knowledge Differences Across Subgroups

Variable	Category	Objective Knowledge						Subjective Knowledge					
		July sample			October sample			July sample			October sample		
		Mean	Diff.	P> t	Mean	Diff.	P> t	Mean	Diff.	P> t	Mean	Diff.	P> t
Gender	Male	1.13			1.14			2.43			2.45		
	Female	0.93	0.20	0.000	0.96	0.18	0.000	2.10	0.33	0.000	2.09	0.36	0.000
	14-15 years	0.59			1.10			1.40			1.99		
	16-19 years	0.91	-0.31	0.031	0.78	0.32	0.228	2.11	-0.71	0.000	2.01	-0.02	0.939
	20-29 years	0.97	-0.06	0.542	1.05	-0.27	0.013	2.20	-0.09	0.524	2.38	-0.38	0.007
	30-39 years	0.97	0.00	0.993	0.99	0.06	0.451	2.17	0.02	0.800	2.22	0.16	0.088
	40-49 years	1.06	-0.10	0.195	1.07	-0.09	0.212	2.33	-0.16	0.048	2.32	-0.09	0.251
	50-59 years	1.11	-0.05	0.457	1.10	-0.03	0.657	2.37	-0.03	0.628	2.28	0.03	0.643
	60-69 years	1.12	-0.01	0.888	1.08	0.03	0.734	2.40	-0.03	0.691	2.30	-0.02	0.817
	70 years+	1.03	0.09	0.228	1.07	0.01	0.950	2.24	0.15	0.054	2.23	0.07	0.408
Germany	West	1.03			1.05			2.28			2.29		
	East	1.03	0.00	0.943	1.04	0.01	0.868	2.22	0.06	0.306	2.17	0.12	0.032
Net Income	<1,499€	0.93			0.89			2.04			2.14		
	1,500-2,499€	1.03	-0.10	0.065	1.03	-0.14	0.017	2.27	-0.23	0.000	2.19	-0.06	0.403
	2,500-3,499€	1.03	0.00	0.963	1.06	-0.03	0.633	2.36	-0.09	0.223	2.30	-0.10	0.136
	3,500€+	1.19	-0.16	0.057	1.30	-0.24	0.004	2.52	-0.16	0.069	2.61	-0.32	0.000
Education	Primary	0.76			0.79			1.79			1.73		
	Apprentice	1.01	-0.26	0.000	0.96	-0.17	0.033	2.10	-0.31	0.000	2.15	-0.42	0.000
	‘Realschule’	1.05	-0.04	0.438	1.06	-0.10	0.043	2.30	-0.20	0.000	2.36	-0.21	0.000
	‘Abitur’	1.06	-0.01	0.892	1.27	-0.21	0.008	2.73	-0.43	0.000	2.56	-0.20	0.015
	University	1.30	-0.25	0.007	1.37	-0.09	0.377	2.83	-0.10	0.281	2.72	-0.17	0.112

Notes: Mean comparison tests are shown. The null hypothesis states that the means of adjacent categories are equal. Bold values denote significance at the 5 per cent level. Objective knowledge ranges from 0 to 3 correct answers, subjective knowledge ranges from 1 ‘very bad’ to 5 ‘very good’.

with only a secondary education. The difference between university respondents and those with only a primary education is 0.5. Thus, given that the sample average is one correct answer, education explains notable differences in knowledge. However, multivariate analysis shows that subject-specific knowledge is an even better predictor of people's attitudes towards monetary policy issues, for example, trust in the ECB (Hayo and Neuenkirch 2014). A similar picture can be seen in the October sample. For instance, the average score is 0.21 higher for respondents with secondary education compared to the adjacent lower group. The respondent's level of subjective knowledge increases with more education, too. In the July sample, perception of own knowledge is, on average, 0.43 higher for a person with a secondary education compared to the adjacent lower group. Similarly, in the October sample, the average perception of own knowledge is 0.42 higher for a person with completed training compared to a person with only a primary education. Concerning subjective knowledge, the only insignificant mean difference is found between university and secondary education; this is true for both samples.

4.2 Information Desire and Media Use Relating to the ECB

We now investigate our German respondents' desire to be informed about the German Bundestag, EU, UN, the German Bundesbank, ECB, and IMF. Table 10 shows the distribution of answers for all six institutions in both samples as well as the average level of information desire. Whether or not a respondent believes it is important to be informed clearly depends on the institution at issue. The average desire to be informed is significantly greater for national institutions compared to European ones, and further decreases significantly for international institutions.⁸ The highest information desire is found for the German Bundestag (3.3 in July, and 3.2 in October), followed by the European Union (3.1 in July, and 3.0 in October) and the German Bundesbank (3.0 in July, and 2.9 in October). It is surprising that our German respondents rate information about the German Bundesbank significantly higher than information about the ECB, even 13 years after the ECB took charge of monetary policy in Europe. If we compare the average information desires of the two samples, we see that for the Bundestag and the United Nations it is significantly lower in the October sample. We find no significant differences for the ECB or the other institutions.

Only 10 per cent of our respondents say that information about the ECB is very important, and twenty per cent evaluate ECB information to be somewhat important (Category 4). By comparison, the most important information for our respondents is that about the German Bundestag, where 18 (15) per cent of July (October) respondents say that information is very important to them, and over 30 per cent of both July and October respondents find themselves in Category 4. On the other hand, a total of 30 per cent rate ECB information as 'not important at all' or unimportant (Category 2), both in July and in October. The majority of respondents seem to be indifferent to ECB information; almost every third respondent chose 'neither important nor unimportant' (Category 3).

⁸ All statements refer to two-sided mean comparison tests on a significance level of 5 per cent.

Table 10: Desire to be Informed

		July	October			July	October
Bundestag	Very important	0.176	0.150	Bundesbank	Very important	0.121	0.106
	4	0.326	0.315		4	0.238	0.247
	3	0.265	0.297		3	0.323	0.308
	2	0.119	0.113		2	0.165	0.171
	Not important at all	0.114	0.125		Not important at all	0.154	0.169
	Mean	3.33	3.24		Mean	3.01	2.94
EU	Very important	0.120	0.109	ECB	Very important	0.107	0.092
	4	0.265	0.270		4	0.211	0.204
	3	0.325	0.323		3	0.315	0.325
	2	0.149	0.137		2	0.188	0.189
	Not important at all	0.141	0.162		Not important at all	0.181	0.190
	Mean	3.08	3.02		Mean	2.88	2.82
UN	Very important	0.090	0.069	IMF	Very important	0.082	0.074
	4	0.206	0.207		4	0.190	0.182
	3	0.367	0.345		3	0.327	0.333
	2	0.180	0.196		2	0.211	0.211
	Not important at all	0.157	0.183		Not important at all	0.191	0.200
	Mean	2.90	2.77		Mean	2.77	2.71

Notes: Distributions of answers and mean values are shown for the July sample and the October sample, respectively. 'Desire to be informed' ranges from 1 'not important at all' to 5 'very important'.

When people want to inform themselves about the ECB, they mainly watch television or read newspapers for this purpose. On average, both sources are used occasionally to obtain ECB information; the television mean is 1.7 (1.8) in July (October), and the newspaper mean is 1.6 (1.7) in July (October). Other media sources, i.e., magazines, radio, or the Internet, on average are never used to obtain information about the ECB; similarly, on average, respondents never talk about the ECB to friends, colleagues, or relatives. The minimum mean of 1.2 is found for the Internet, both in July and October.

Figures 7 and 8 show the distribution of answers for all six sources for the July and October samples. At least 14 (15) per cent of July (October) respondents watch television on a regular basis to inform themselves about the ECB, while 46 (47) per cent of July (October) respondents occasionally rely on TV to obtain ECB information. Similarly, at least 12 (13) per cent of July (October) respondents read newspapers on a regular basis for this purpose and 40 per cent of July and October respondents read newspapers at least occasionally for obtaining information about the ECB. However, almost every second person never reads a newspaper to become informed about the ECB, and almost 40 per cent of respondents never watch TV for this purpose, either in July or in October.

The vast majority of respondents never use any of the remaining sources to obtain ECB information. The least important source seems to be the Internet; 80 per cent of respondents' state 'never', and only one in 20 states 'regularly', for both July and October. Similarly, it seems rare to talk to friends, colleagues, or relatives about the ECB, as over 70 per cent of respondents state 'never', and only one in 50 states 'regularly', and this is the case in both July and October. Magazines and radio rank somewhere in between, as we find 6 to 7 per cent of respondents making regular use of these media, 23 to 34 per cent making occasional use, and 59 to 70 per cent never using either source.

Next, we compare the average frequency of using television and newspapers—evidently the two most important sources—across subgroups. Again, we start with Wald tests for each individual socio-demographic variable.

Figure 7: Frequency of Media Use to Obtain ECB Information
July Sample

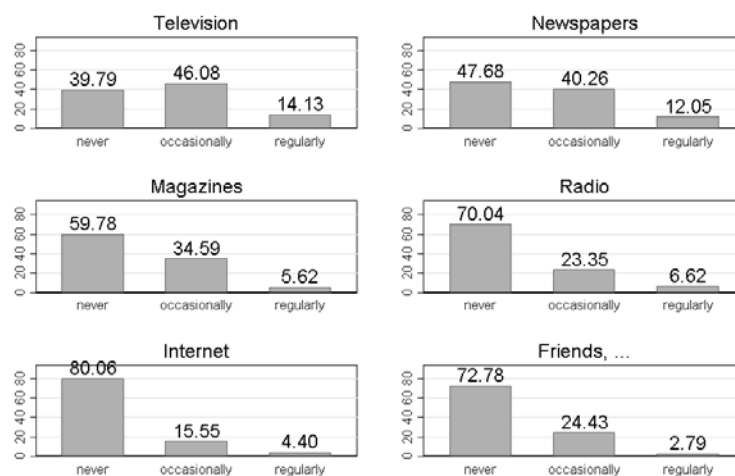
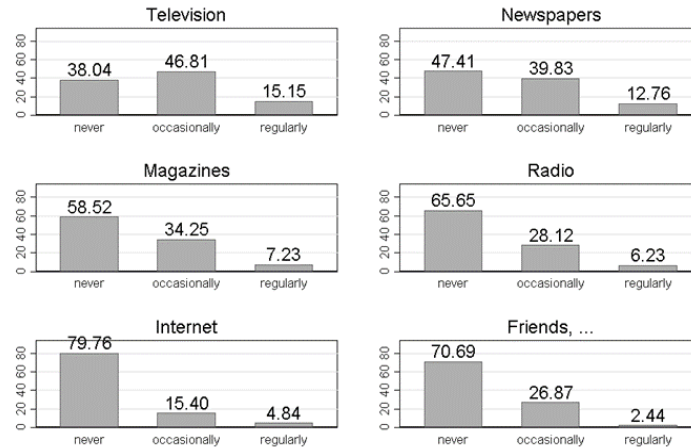


Figure 8: Frequency of Media Use to Obtain ECB Information
October Sample



The frequency of reading newspapers for ECB information is significantly different for respondents in different sex, age, income, or education categories, and between East and West German respondents. This finding applies to both samples. The frequency of watching television for ECB information is also significantly different for respondents in different sex, age, or education categories, again in both samples. However, the difference across income categories is significant only for the October sample. Furthermore, television use for ECB information does not vary significantly between East and West Germany.

To obtain a clearer picture of the mean differences for both the July and October samples, Table 11 shows pairwise tests. Overall, the mean of television use is 1.7 (1.8) in July (October), and the mean of newspaper use is 1.6 (1.7) in July (October). Male respondents, on average, rely on both media sources more frequently than do women. The use frequency of television for male respondents is 0.12 (0.21) higher in July (October) compared to that of female respondents. Similarly, the use frequency for newspapers is 0.14 (0.22) higher in July (October). Furthermore, the average use frequency of both sources tends to increase with increasing age. Concerning television use, however, only one in 14 tests of adjacent age groups indicates a significant difference.⁹ In July, respondents aged 40 to 49 years on average have a 0.11 higher use frequency compared to respondents aged 30 to 39 years. Concerning newspaper use, we find significant pairwise differences in five out of 14 tests; all significant cases involve the middle age groups. For example, in July, the use frequency is 0.13 higher for respondents aged 40 to 49 years compared to the adjacent younger group.

On average, West German respondents have a 0.1 higher newspaper use frequency compared to their East German counterparts, both in July and in October. Furthermore, newspaper reading tends to increase as income rises. Four out of six tests reveal significant differences between adjacent age groups, differences that range between 0.1 and 0.2. In contrast, we find no significant pairwise age differences in television use. Newspaper reading tends to increase with more education. Five out of eight tests reveal a significant pairwise difference.

⁹ Note that the Wald test, in contrast, includes mean comparisons of the youngest group with each other category of older respondents.

Table 11: Differences in Media Use Across Subgroups

Variable	Category	Television						Newspapers					
		July sample			October sample			July sample			October sample		
		Mean	Diff.	P> t	Mean	Diff.	P> t	Mean	Diff.	P> t	Mean	Diff.	P> t
Gender	Male	1.79			1.87			1.70			1.77		
	Female	1.66	0.12	0.000	1.66	0.21	0.000	1.56	0.14	0.000	1.55	0.22	0.000
Age	14-15 years	1.29			1.32			1.18			1.20		
	16-19 years	1.49	-0.20	0.075	1.56	-0.24	0.060	1.31	-0.13	0.150	1.38	-0.18	0.088
	20-29 years	1.55	-0.06	0.457	1.64	-0.08	0.355	1.37	-0.07	0.318	1.47	-0.09	0.214
	30-39 years	1.64	-0.09	0.137	1.70	-0.06	0.338	1.55	-0.18	0.001	1.55	-0.08	0.146
	40-49 years	1.74	-0.11	0.036	1.77	-0.07	0.196	1.68	-0.13	0.015	1.63	-0.08	0.135
	50-59 years	1.83	-0.08	0.092	1.85	-0.08	0.122	1.74	-0.06	0.211	1.74	-0.12	0.025
	60-69 years	1.84	-0.01	0.798	1.87	-0.02	0.736	1.80	-0.06	0.347	1.84	-0.09	0.154
	70 years+	1.85	-0.01	0.908	1.87	0.00	0.941	1.76	0.04	0.578	1.86	-0.02	0.720
Germany	West	1.72			1.77			1.65			1.68		
	East	1.72	0.00	0.945	1.75	0.02	0.578	1.55	0.10	0.006	1.58	0.10	0.006
Net Income	<1,499€	1.66			1.67			1.49			1.51		
	1,500-2,499€	1.74	-0.09	0.058	1.73	-0.06	0.208	1.61	-0.12	0.006	1.63	-0.11	0.018
	2,500-3,499€	1.72	0.02	0.684	1.81	-0.08	0.093	1.71	-0.10	0.047	1.68	-0.06	0.257
	3,500€+	1.77	-0.05	0.424	1.91	-0.09	0.132	1.77	-0.06	0.301	1.88	-0.20	0.001
Education	Primary	1.45			1.45			1.36			1.37		
	Apprentice	1.72	-0.27	0.000	1.76	-0.31	0.000	1.62	-0.26	0.000	1.65	-0.28	0.000
	‘Realschule’	1.72	0.00	0.997	1.80	-0.04	0.342	1.60	0.02	0.644	1.67	-0.02	0.661
	‘Abitur’	1.83	-0.11	0.044	1.82	-0.02	0.696	1.81	-0.21	0.000	1.72	-0.05	0.315
	University	2.04	-0.21	0.002	2.03	-0.21	0.002	2.03	-0.22	0.003	1.97	-0.24	0.001

Notes: Pairwise mean comparison tests are shown. The null hypothesis states that the means of adjacent categories are equal. Bold values denote significance at the 5 per cent level. Media use includes categories 1 ‘never’, 2 ‘occasionally’, and 3 ‘regularly’.

Compared to respondents with only primary education, respondents with completed training have, on average, a 0.26 (0.28) higher use frequency in July (October). Compared to respondents with 'Abitur', those with a university degree have, on average, a 0.22 (0.24) higher use frequency in July (October). On average, respondents with only primary education never read newspapers to inform themselves about the ECB (mean value 1.4). Respondents with a university education, on average, occasionally read newspapers for this purpose (mean value 2). A similar pattern emerges with television use, where five out of eight tests reveal a significant pairwise difference. For example, respondents with a university degree have, on average, a 0.21 higher use frequency compared to those with 'Abitur', in both July and October. And again, the mean difference between the lowest and the highest education group is almost 0.6, for both months.

Given that only a small fraction of respondents use the Internet at all to become informed about the ECB, it is not surprising that even fewer of them have ever visited the original websites of the ECB or the Bundesbank. In both samples, only one out of 20 respondents have ever visited the ECB website, i.e., state 'once' or 'several times'; the same applies to the Bundesbank website.

4.3 Institutional Trust

When asked about their trust in various institutions, Germans seem to be neither very trustful nor very distrustful. Mean levels of trust in the German Bundestag, EU, UN, German Bundesbank, ECB, and IMF indicate that, on average, our respondents chose the middle category. In general, the largest mean trust level is found for the Bundesbank (2.9 in July, and 2.8 in October) and the UN (2.8 in July, and 2.7 in October), followed by the Bundestag (2.8 in July, and 2.7 in October). The ECB and the EU rank fourth (2.7 in July, and 2.6 in October), and the lowest average trust level is found for the IMF (2.5 in July, and 2.4 in October). Wald tests indicate that the average trust levels for the six institutions differ significantly from each other, both in July and in October. In pairwise comparisons, the null hypothesis of equal means cannot be rejected for either the EU or the ECB in both samples, nor for the Bundestag and the UN in the October sample. If we compare the two waves with each other, there is evidence for a small decline in trust during the summer as mean levels are significantly lower for the EU, the UN, the Bundesbank, and the IMF in October.

Table 12 shows the distribution of answers for trust in each of the six institutions. Overall, 40 per cent of respondents chose the middle category, in both the July and October samples. Very few people indicate that they have very much trust in a particular institution; between 2 per cent (IMF) and 6 per cent (Bundesbank) of respondents chose this category. In contrast, a greater number of people have no trust at all in a particular institution; between 12 per cent (Bundesbank) and 21 per cent (IMF) of respondents chose this category. Concerning the ECB itself, only one out of five Germans has high or very high trust (Categories 4 or 5), whereas twice as many respondents have low or very low trust (Categories 1 or 2). It appears that, overall, institutional distrust rose slightly between the

Table 12: Institutional Trust

		July	October			July	October
Bundestag	Very much trust	0.040	0.042	Bundesbank	Very much trust	0.056	0.047
	4	0.189	0.193		4	0.214	0.222
	3	0.399	0.386		3	0.399	0.366
	2	0.230	0.206		2	0.204	0.208
	No trust at all	0.142	0.173		No trust at all	0.127	0.157
	Mean	2.76	2.72		Mean	2.87	2.79
EU	Very much trust	0.035	0.026	ECB	Very much trust	0.031	0.029
	4	0.169	0.160		4	0.165	0.168
	3	0.401	0.386		3	0.401	0.363
	2	0.238	0.238		2	0.250	0.251
	No trust at all	0.158	0.191		No trust at all	0.152	0.189
	Mean	2.69	2.59		Mean	2.67	2.60
UN	Very much trust	0.040	0.038	IMF	Very much trust	0.017	0.020
	4	0.196	0.180		4	0.117	0.117
	3	0.423	0.405		3	0.406	0.358
	2	0.219	0.223		2	0.278	0.294
	No trust at all	0.122	0.154		No trust at all	0.182	0.212
	Mean	2.81	2.73		Mean	2.51	2.44

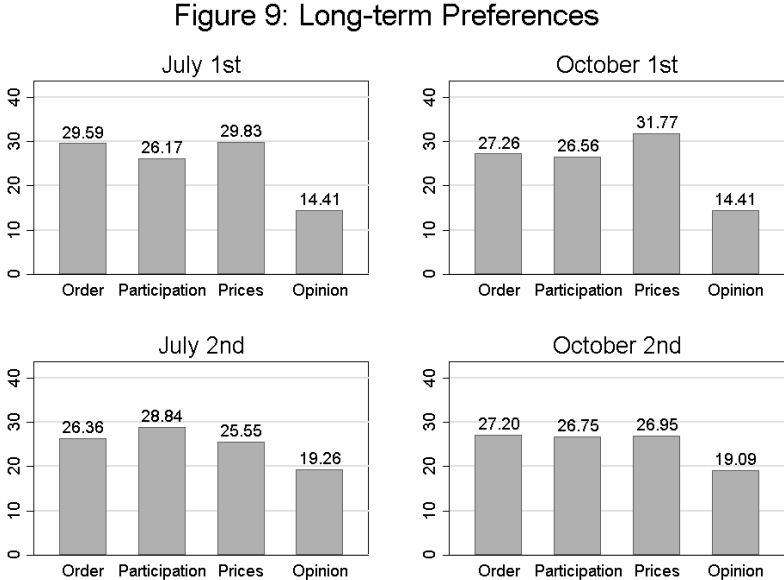
Notes: Distributions of answers and mean values are shown for the July sample and the October sample, respectively. 'Institutional trust' ranges from 1 'no trust at all' to 5 'very much trust'.

two waves. The number of respondents with the lowest trust level is significantly higher in the October sample for all six institutions, with a difference of 3 to 4 PP.

4.4 Political Preferences and Personal Economic Situation

Based on Inglehart’s (1971) classification, our 2011 sample results indicate that Germans prefer materialistic values to post-materialistic ones. Twenty-six (27) per cent of our respondents in July (October) chose maintaining order and price stability as their first and second preferences. Only 14 per cent of respondents, in both July and October, chose freedom of speech and participation in political decisions as their first and second preferences. Given our context, Germans seem to have strong inflation aversion as more than every second respondent chose price stability as his first or second long-term preference, and this was true of both samples. In contrast, for example, only every third respondent chose freedom of speech as his first or second long-term preferences, again true of both samples.

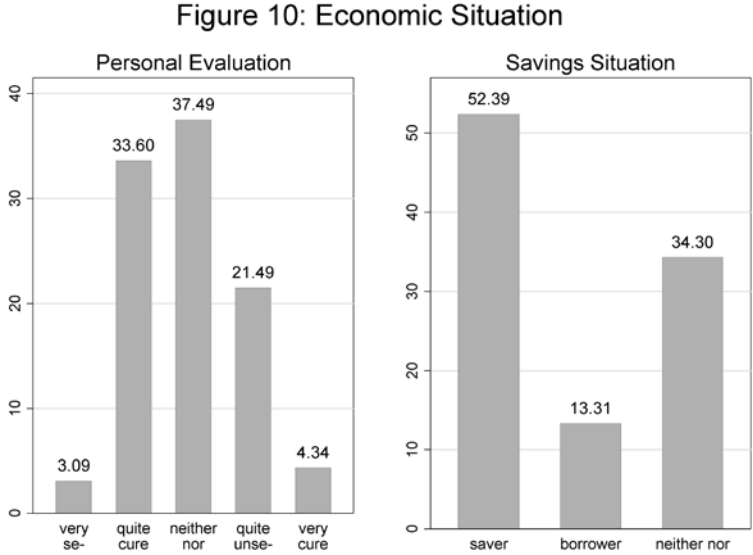
Figure 9 shows the distribution of answers for the first and second preference for July and October.



In both samples, the majority of respondents chose price stability as their first long-term preference (30 per cent in July, and 32 per cent in October), followed by maintaining order in the country (30 per cent in July, and 27 per cent in October). Participation in political decisions ranks third (26 per cent in July, and 27 per cent in October), and freedom of speech ranks last (14 per cent both in July and October). However, the proportions of price stability and maintaining order are not significantly different from each other in the July sample. Similarly, the proportions of maintaining order and participation are not significantly different from each other in the October sample. Concerning the second long-term preference, in the July sample, the majority of respondents chose participation (29 per cent). Order and price stability (26 per cent each) rank second as their proportions do not differ significantly, followed by freedom of speech (19 per cent). In the October sample, three choices share first place: the proportions of order, participation, and prices (all 27 per cent) are not significantly different

from each other. Again, freedom of speech ranks last (19 per cent). If we compare the two waves with each other, the distribution of answers for the first and second choices is not significantly different between July and October.

Because the remaining questions were not included in the July wave, analysis of these results is based solely on the October sample. Figure 10 shows the distribution of answers for a person’s evaluation of her economic situation and her savings behaviour.



The majority of respondents feel ‘neither secure nor unsecure’ about their personal economic situation as 37 per cent chose the middle category. Very few respondents evaluate their situation to be ‘very unsecure’ (4 per cent) or ‘very secure’ (3 per cent). In contrast, significantly more respondents say that their situation is ‘quite secure’ (34 per cent) or ‘quite unsecure’ (21 per cent). Every second respondent states that he is more of a saver than a borrower (52 per cent). In contrast, 13 per cent of our respondents say that they are more likely to borrow money than to save it. Thirty-four per cent indicate that they have a balanced budget.

When we ask about political preferences, the majority of respondents say that they do not tend to support one particular party (33 per cent). Table 13 shows the distribution of all answers. In our sample, the two major German parties have the greatest number of followers; 21 per cent of respondents say that they support the SPD, and 23 per cent say that they support CDU or CSU. Twelve per cent tend to support the Greens, and 6 per cent support Leftists. Only 1 per cent say that they support the FDP, and 2 per cent chose one of the extreme parties. ‘Other parties’ also have a proportion of 2 per cent.

Table 13: Political Orientation

	Frequency	Percent
SPD	357	21.39
CDU/ CSU	390	23.37
FDP	22	1.32
Greens	193	11.56
Leftists/ PDS	100	5.99
NPD/ DVU/ Republicans	26	1.56
Other parties	39	2.34
No particular party	542	32.47
	1669	100

Only one out of 10 respondents state that they are members of a trade union. This is not surprising in light of our representative sample of the whole population, which includes children, nonworking people, and pensioners. The majority of this subgroup tends to support one of the two major parties; 35 per cent of union members say that they support the SPD; 20 per cent say that they support CDU or CSU.

5. Summary

In this paper, we present a unique survey of German households, conducted on our behalf by GfK in 2011. Fieldwork was done in July and October; the interviewers conducted computer-assisted face-to-face interviews. Each sample includes more than 2,000 observations. After employing a weighting scheme, both samples are representative of the general German population. As the respondents are not the same in the two waves, we do not have a panel structure. Our questionnaire was designed to discover how much the German public knows about the ECB itself, and monetary policy in general. The survey contains three multiple-choice questions on (i) the ECB's mandate, (ii) the ECB's independence in setting interest rates, and (iii) the interplay between inflation and key interest rates in a very basic scenario. Each respondent assessed his own level of knowledge before answering any factual knowledge questions. We also asked our respondents to rate their desire to be informed about the ECB, their media use relating to the topic, and their trust in the ECB.

A detailed descriptive analysis reveals that our German respondents' knowledge about monetary policy issues is far from perfect. For example, although at least every second respondent knows the ECB's main objective, the majority of respondents are convinced that European governments have a say in setting the ECB's key interest rates. Moreover, only every fifth respondent would increase the policy rate when facing future inflationary pressures, whereas the majority would leave the rate unchanged or even decrease it in this situation. On average, interviewees were able to answer one of the three questions correctly. However, the average knowledge level differs across socio-demographic subgroups. Specifically, on average, male respondents and respondents with higher levels of education or income answered significantly more questions correctly. Our German respondents' self-assessment of their knowledge is equally poor. Only every 10th person declares his own knowledge about the ECB

to be either good or very good. In contrast, six out of 10 respondents think that their knowledge is bad or even very bad. Again, we find significant differences across socio-demographic subgroups. On average, subjective knowledge is found to be higher for male respondents and respondents with higher levels of education or income.

Second, the general public is reasonably interested in information about the ECB compared to interest in information about other institutions. The desire to be informed about the German Bundestag is most pronounced, followed by the European Union. On average, Germans still rank information about the German Bundesbank as of higher interest than interest in information about the ECB, even 13 years after the ECB took charge of monetary policy. At least every third person states that it is important or very important to be informed about the ECB; however, significantly more people evaluate information about the ECB to be not important or even not important at all.

Third, if people want to inform themselves about the ECB, they mainly watch television or read newspapers for this purpose. Every 10th respondent reads newspapers on a regular basis for information about the ECB, and 15 per cent of respondents regularly watch television to keep informed about this institution. Nearly every second person at least occasionally relies on newspapers or TV for ECB information. However, the vast majority of respondents never read magazines, listen to the radio, use the Internet, or talk to friends, colleagues, or relatives about the ECB. Media usage behaviour varies among our socio-demographic subgroups. The average use frequency of both television and newspapers is significantly higher for male respondents and respondents with higher levels of education or income. Furthermore, the average use frequency tends to increase in tandem with a respondent's age. On average, West German respondents read newspapers more often to obtain ECB information than do East German respondents.

Finally, the majority of Germans are neither very trustful nor very distrustful of political institutions. In our samples, the highest level of trust is found for the German Bundesbank, the lowest level for the IMF, with the ECB ranking in between. Overall, only three out of 100 Germans say that they have 'very much trust' in the ECB. At least 17 per cent have high trust in the ECB. In contrast, every fourth respondent has low trust in the ECB, and one out of five respondents report no trust in the ECB at all.

To summarise, our survey is the first to provide detailed insight into the German public's knowledge about the ECB itself and monetary policy in general. We examine both subjective and objective knowledge and investigate how or if respondents use different types of media to obtain information about the ECB. Joint and pairwise tests indicate differences in knowledge and media use based on socio-demographic characteristics (e.g., between men and women and across different levels of income and education). Using our data, a more sophisticated empirical analysis could be made of the interplay between a person's media use, her economic knowledge, and her public support for the ECB. Does a more intense use of different media sources lead to improved knowledge? Do more knowledgeable individuals show increased support for the ECB? Hayo and Neuenkirch (2014, 2018) try to answer some of these questions.

References

- Alba, J. W., Hutchinson, J. W. (2000), Knowledge Calibration: What Consumers Know and What They Think They Know, *Journal of Consumer Research* 27, 123–156.
- Carlson, J. P., Vincent, L. H., Hardesty, D. M., Bearden, W. O. (2009), Objective and Subjective Knowledge Relationships: A Quantitative Analysis of Consumer Research Findings, *Journal of Consumer Research* 35, 864–876.
- Dillmann, D. A., Eltinge, J. L., Groves, R. M., Little, R. J. A. (2002), *Survey Nonresponse*, John Wiley & Sons, New York.
- Ellen, P. S. (1994), Do We Know What We Need to Know? Objective and Subjective Knowledge Effects on Pro-Ecological Behaviors, *Journal of Business Research* 30, 43–52.
- Frick, J. R., Grabka, M. M. (2007), Item Non-Response and Imputation of Annual Labor Income in Panel Surveys from a Cross-National Perspective, *IZA DP No. 3043*.
- Hadar, L., Sood, S., Fox, C. R. (2013), Subjective Knowledge in Consumer Financial Decisions, *Journal of Marketing Research* 50, 303–316.
- Hayo, B., Neuenkirch, E. (2014), The German Public and its Trust in the ECB: The Role of Knowledge and Information Search, *Journal of International Money and Finance* 47, 286–303.
- Hayo, B., Neuenkirch, E. (2018), The Influence of Media Use on Layperson Monetary Policy Knowledge in Germany, *Scottish Journal of Political Economy*, forthcoming.
- Inglehart, R. (1971), The Silent Revolution in Europe: Intergenerational Change in Post-industrial Societies, *American Political Science Review* 65, 991–1017.
- Rässler, S., Riphahn, R. T. (2006), Survey Item Nonresponse and its Treatment, *Allgemeines Statistisches Archiv* 90, 217–232.
- Robb, C. A., Woodyard, A. (2011), Financial Knowledge and Best Practice Behavior, *Journal of Financial Counseling and Planning* 22, 60–70.
- Trichet, J.-C. (2005), Keynote Speech at the New Year's Reception of the International Club of Frankfurt Economic Journalists on 24 January 2005, Frankfurt am Main, available at <http://www.ecb.int/press/key/date/2005/html/sp050125.en.html>.

Appendix A: English Translation of German Questionnaire

Two waves of roughly 2,000 respondents each were interviewed in July 2011 and October 2011. Note that Questions D1 to D4 were asked only in October 2011.

Interviewer note: Let respondents see and read the screen for all following questions.

Q1: In the following, we list a few objectives that different people consider to be less or more important. Please tell me which of these objective you personally consider to be in the long-term interest (over a period of 15 years) of Germany.

Interviewer note: Only one answer per objective and rank. Randomise order.

	Most important	Second most important	Third most important	Fourth most important
Maintaining order in the nation				
Giving people more say in important government decisions				
Fighting rising prices				
Protecting freedom of speech				
Don't know				

Q2: How important is it for you personally to be informed about the following institutions? Value 1 means that it is very important for you to be informed. Value 5 means that it is not at all important for you to be informed. You may grade your importance with the values in between.

Interviewer note: Only one answer per institution. Randomise order.

	Very important (1)	(2)	(3)	(4)	Not at all important (5)
German Bundestag					
European Union					
United Nations					
German Bundesbank					
European Central Bank					
International Monetary Fund					

Q3: To what extent do you trust the following institutions? Value 1 means that you have very much trust. Value 5 means that you have no trust at all. You may grade your trust with the values in between.

Interviewer note: Only one answer per institution. Randomise order.

	Very much trust (1)	(2)	(3)	(4)	No trust at all (5)
German Bundestag					
European Union					
United Nations					
German Bundesbank					
European Central Bank					
International Monetary Fund					

Q4: The monetary policy of all countries in the euro area is managed by the European Central Bank (ECB). How do you rate your own knowledge about the ECB? Value 1 means that your knowledge is very good. Value 5 means that your knowledge is very bad. You may grade your knowledge with the values in between.

Very good (1)	(2)	(3)	(4)	Very bad (5)
---------------	-----	-----	-----	--------------

Q5: Which of the following do you think is the main objective of the ECB?

The main objective of the ECB is to ...

- ... promote growth in the euro area
- ... fight unemployment in the euro area
- ... maintain price stability in the euro area
- ... provide credit to EU member states
- ... control the euro/US dollar exchange rate
- Don't know

Q6: Private banks borrow liquidity from the ECB at a given interest rate. Assume that prices in the euro area are expected to increase strongly. How do you think the interest rate should be set?

Interviewer note: Only one answer.

- Decrease interest rate
- Keep interest rate constant
- Increase interest rate
- Don't know

Q7: Who is responsible for setting this interest rate?

Interviewer note: Only one answer.

- The ECB, independently of euro area governments
- The ECB; euro area governments have to agree afterward
- The ECB together with euro area governments
- The euro area governments, with the ECB executing the decisions
- Don't know

Q8: How many times do you use the following to inform yourself about the ECB?

Interviewer note: Only one answer per media channel. Randomise order.

	Regularly	Occasionally	Never
Newspapers			
Magazines			
Radio			
Television			
Internet			
Relatives/friends/colleagues			

Q9: How many times have you visited the following websites?

Interviewer note: Only one answer per internet site. Randomise order.

	Several	Once	Never
The official Bundesbank website			
The official ECB website			

Interviewer note: Intermediate screen. Attention interviewer: please briefly explain how the pen-pad is used and hand it over to the respondent.

For the following questions, I am going to hand you the pen-pad and ask you to fill in the answers yourself. I want to assure you that your answers are treated as absolutely confidential and anonymous. The data analysis is based on all interviews and identification of you personally will be impossible. I am at your disposal in case of any questions.

D1. Are you a member of a trade union?

Yes

No

D2. Are you a saver or a borrower?

- More of a saver than a borrower
- More of a borrower than a saver
- Neither nor

D3: How do you feel about your current economic situation?

- Very secure
- Quite secure
- Neither secure nor unsecure
- Quite unsecure
- Very unsecure

D4. Many people in the country tend to support one particular political party, although they elect other parties from time to time. Do you tend to support one particular party and, if so, which one of the following?

Interviewer note: Only one answer. Randomise order.

- ... SPD
- ... CDU / CSU
- ... FDP
- ... Greens
- ... Leftists / PDS
- ... NPD / DVU / Republicans
- ... Other parties
- No particular party
- I don't want to answer

Intermediate screen: Thank you for your answers! Please hand the pen-pad back to the interviewer.

Appendix B: Original German questionnaire

Two waves of roughly 2,000 respondents each were interviewed in July 2011 and October 2011. Note that Questions D1 to D4 were asked only in October 2011.

Interviewerhinweis: Befragte(n) mit auf den Bildschirm sehen und mitlesen lassen!

Q1: Im Folgenden sind einige Ziele genannt, die unterschiedliche Leute für mehr oder weniger wichtig erachten. Bitte sagen Sie mir, welches dieser Ziele Sie persönlich langfristig (über einen Zeitraum von 15 Jahren) für Deutschland für ...

Interviewerhinweis: Nur eine Antwort pro Ziel und Rang! Reihenfolge randomisieren!

	... am wichtigsten halten	... am zweitwichtigsten halten	... am dritt-wichtigsten halten	... am viert-wichtigsten halten
Die Aufrechterhaltung der inneren Sicherheit				
Mehr Mitspracherecht für die Bevölkerung bei wichtigen politischen Entscheidungen				
Die Bekämpfung steigender Preise				
Der Schutz der Meinungsfreiheit				
Weiß nicht				

Q2: Wie wichtig ist es Ihnen persönlich, Informationen über die folgenden Institutionen zu erhalten? Der Wert 1 bedeutet, dass es Ihnen persönlich sehr wichtig ist, Informationen über diese Institution zu erhalten. Der Wert 5 bedeutet, dass es Ihnen persönlich überhaupt nicht wichtig ist, Informationen über diese Institution zu erhalten. Mit den Werten dazwischen können Sie Ihre Meinung abstimmen.

Interviewerhinweis: Nur eine Antwort pro Institution! Reihenfolge randomisieren!

	Sehr wichtig (1)	(2)	(3)	(4)	Überhaupt nicht wichtig (5)
Deutscher Bundestag					
Europäische Union					
Vereinte Nationen					
Deutsche Bundesbank					
Europäische Zentralbank EZB					
Internationaler Währungsfonds					

Q3: Wie groß ist Ihr Vertrauen in die folgenden Institutionen? Der Wert 1 bedeutet, dass Sie sehr viel Vertrauen in diese Institution haben. Der Wert 5 bedeutet, dass Sie überhaupt kein Vertrauen in diese Institution haben. Mit den Wertendazwischen können Sie Ihre Meinung abstimmen.

Interviewerhinweis: Nur eine Antwort pro Institution! Reihenfolge randomisieren!

	Sehr viel Vertrauen (1)	(2)	(3)	(4)	Überhaupt kein Vertrauen (5)
Deutscher Bundestag					
Europäische Union					
Vereinte Nationen					
Deutsche Bundesbank					
Europäische Zentralbank EZB					
Internationaler Währungsfonds					

Q4: Die Europäische Zentralbank EZB ist für die gemeinsame Geldpolitik aller Euroländer zuständig. Wie gut schätzen Sie Ihr eigenes Wissen über die EZB ein? Der Wert 1 bedeutet, dass Sie Ihr Wissen als sehr gut einschätzen. Der Wert 5 bedeutet, dass Sie Ihr Wissen als sehr schlecht einschätzen. Mit den Werten dazwischen können Sie Ihre Meinung abstufen.

Sehr gut (1)	(2)	(3)	(4)	Sehr schlecht (5)
--------------	-----	-----	-----	-------------------

Q5: Welche der folgenden Aufgaben ist Ihrer Meinung nach die wesentliche Aufgabe der EZB?

Die wesentliche Aufgabe der EZB ist es, ...

- ... das Wachstum im Euroraum zu fördern
- ... die Arbeitslosigkeit im Euroraum zu bekämpfen
- ... die Preisstabilität im Euroraum zu gewährleisten
- ... den Mitgliedstaaten der Europäischen Union Kredite bereitzustellen
- ... den Wechselkurs zwischen dem Euro und dem US-Dollar zu kontrollieren
- Weiß nicht

Q6: Die Privatbanken leihen sich zu einem festgelegten Zinssatz Geld bei der EZB. Angenommen, man erwartet, dass die Preise im Euroraum in Zukunft stark ansteigen werden. Wie sollte sich dann Ihrer Meinung nach der Zins verhalten?

Interviewerhinweis: Nur eine Antwort!

- Der Zins sollte sinken
- Der Zins sollte gleich bleiben
- Der Zins sollte ansteigen
- Weiß nicht

Q7: Wer bestimmt Ihrer Meinung nach über die Festlegung dieses Zinssatzes?

Interviewerhinweis: Nur eine Antwort!

- Die EZB, unabhängig von den Regierungen der Euroländer
- Die EZB, anschließend bedarf es einer Zustimmung der Regierungen der Euroländer
- Die EZB und die Regierungen der Euroländer gemeinsam
- Die Regierungen der Euroländer, anschließend führt die EZB die Entscheidung aus
- Weiß nicht

Q8: Wie häufig nutzen Sie die folgenden Kanäle, um sich Informationen über die EZB zu beschaffen?

Interviewerhinweis: Nur eine Antwort pro Kanal! Reihenfolge randomisieren!

	Regelmäßig	Ab und zu	Nie
Tageszeitungen			
Nachrichtenmagazine			
Radio			
Fernsehen			
Internet			
Verwandte, Freunde und Kollegen			

Q9: Wie häufig haben Sie bereits die folgenden Internetseiten besucht?

Interviewerhinweis: Nur eine Antwort pro Internetseite! Reihenfolge randomisieren!

	Mehrfach	Einmal	Nie
Die eigene Internetseite der Bundesbank			
Die eigene Internetseite der EZB			

Interviewerhinweis: Zwischenbildschirm: Achtung Interviewer: Bitte erklären Sie kurz die Handhabung des Geräts und übergeben Sie es anschließend der / dem Befragten!

Für die folgenden Fragen würde ich Ihnen jetzt gerne das Gerät übergeben und Sie bitten, diese selbst auszufüllen. Ich versichere Ihnen, dass Ihre Angaben absolut vertraulich und anonym behandelt werden. Die Auswertung der Daten wird nur auf Basis aller durchgeführten Interviews erfolgen, eine Zuordnung Ihrer Angaben zu Ihrer Person ist nicht möglich. Bei Fragen stehe ich Ihnen gerne zur Verfügung.

D1. Sind Sie Mitglied in einer Gewerkschaft?

- Ja
 Nein

D2. Sind Sie eher ein Sparer oder eher ein Kreditnehmer?

- Eher ein Sparer
- Eher ein Kreditnehmer
- Weder noch

D3: Wie empfinden Sie Ihre derzeitige wirtschaftliche Situation?

- Sehr sicher
- Ziemlich sicher
- Weder sicher noch unsicher
- Ziemlich unsicher
- Sehr unsicher

D4. Viele Leute in der Bundesrepublik Deutschland neigen längere Zeit einer bestimmten politischen Partei zu, obwohl sie auch ab und zu mal eine andere Partei wählen. Wie ist das bei Ihnen: Neigen Sie – ganz allgemein gesprochen – einer bestimmten Partei zu und falls ja, welcher?

Hinweis: Nur eine Antwort! Reihenfolge randomisieren!

Ja, und zwar ...

- ... der SPD
- ... der CDU / CSU
- ... der FDP
- ... den Grünen
- ... der Linken / PDS
- ... der NPD / DVU / den Republikanern
- ... einer sonstigen
- Nein, keiner
- Keine Angabe

Hinweis: Zwischenbildschirm: Vielen Dank für die Beantwortung. Bitte geben Sie nun das Gerät dem Interviewer zurück!