Final report


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Executive Summary

While empirical research has produced many insights on how education policy should be designed to improve students’ educational outcomes, the extent to which such reforms are enacted is very limited in many countries. One likely candidate to explain this discrepancy is the interaction between political forces which ultimately implement education policies and public opinion. If politicians want to be (re-)elected, they should be responsive to the policy preferences of the electorate. Since these preferences do not necessarily reflect policies that would be most beneficial for students, the interdependence between public opinion and political action can be an obstacle to efficient education policies. Therefore, the present project implemented a series of representative public opinion surveys in Germany to understand the extent to which the public supports different education policies and reforms and to uncover the underlying determinants of these policy preferences.

To this end, we developed and implemented the annual ifo Education Survey from 2014 through 2017. Each year, the opinion survey was administered to representative samples of more than 4,000 respondents and covered general and German-specific topics of education policy ranging from early childhood education and school policies to the apprenticeship system, tertiary education, and lifelong learning. Germany’s leading survey provider, KANTAR Public (formerly called TNS Infratest), administered the surveys in a mixed mode (online and face-to-face) to assure representative coverage of the German adult population. In the 2015 and 2016 surveys, the representative sample was complemented with additional samples of parents of school-aged children and teachers, respectively, to investigate the preferences of these important special-interest groups.

While the evidence from the ifo Education Survey is extraordinarily rich and multifaceted, the general results can be summarized in two main findings. First, the majority of the German population supports fundamental reforms in different areas of the education system. For instance, the following reform proposals all have majority appeal in the German population: introduction of tuition-free preschool, national quality standards in preschool, a whole-day school system, national comparative tests in schools, national exit exams in all school tracks, autonomy for school leaders in recruiting teachers, entrance exams for teacher training courses, compulsory professional development for teachers, bonuses for teachers who teach in schools with many disadvantaged students, public funding of apprenticeships for unsuccessful applicants, and income-contingent tuition fees in higher education. Similarly, the majority favors the abolishment of the child care subsidy and the cooperation ban for federal and state governments in schools. The ifo Education Survey thus provides novel evidence that from the perspective of public opinion, policymakers have substantial leeway to reform the education system in order to improve student achievements.

Second, a series of survey experiments implemented in the ifo Education Survey showed that the provision of different types of information can significantly affect the public’s opinions and preferences about education policies. Based on these findings, the project yielded considerable scientific output, including twelve scientific papers on separate aspects of the research agenda, five descriptive articles, numerous presentations at international scientific conferences, the organization of two academic conferences, an edited volume based on these conferences, scientific collaborations with the Program of Education Policy and Governance (PEPG) at Harvard University, other scientific network-building activities, and scientific qualification work of three junior researchers. Furthermore, we took measures for open data access which ensure that the project will be useful for the scientific community in the future. This output enabled us to achieve thematic leadership on the topic of the political economy of education policy.

The results of the project were also featured in Germany’s leading high-impact media outlets. Our public relations activities assured that the findings were disseminated to the general public and were integrated in the political discourse on education policy.

To sum up, the project was successful in reaching all its pre-determined goals and has lasting impact on the state of education policy research and the public discourse alike.
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1. Background and Scientific Goal of the Project

Ever since the so-called “PISA shock” in 2001, public attention in Germany and elsewhere has focused on how education policy should be devised to improve students’ educational achievement (e.g., Klieme et al. (2010), Knodel et al. (2010), Schwager (2005)). While a lot of open questions remain, empirical research has produced many insights on important education policies, in Germany and beyond (e.g. Huebener and Marcus (2017), Bruckmeier and Wigger (2014), Piopiunik (2014), Brewer and McEwan (2010), Hanushek and Woessmann (2011), Murnane and Willett (2011), Woessmann (2007)). In line with this, there is a general feeling in Germany that policymakers – who were traditionally split into two rather ideological camps on most issues of education policy – have started to converge pragmatically on many relevant issues in an attempt to act in favor of improved outcomes for the students. Still, there is limited actual headway on many reforms. Why is this so, and what can be done to move forward?

Our project is steered by the (widely held) hypothesis that interactions between political forces and opinions of the public – the “political economy” of education policy – may be an important reason behind the discrepancy between political awareness and action. Rather than working to maximize a social welfare function, politicians face elections. Voters, in turn, have their own opinions and interests, which may be very heterogeneous across the population. This often makes it hard for policymakers, administrators, and other government officials to implement policies that might be widely perceived as favoring public welfare. A case in point may be the proposed school reform in the city state of Hamburg, which was unanimously supported by all four parties in the state parliament in 2010 but was ultimately rejected in a public referendum. The specific (self-)interests of voters, politicians, and administrators make governance a highly complex decision-making process.

In other policy areas, several recent research projects investigate policy preferences on a broad array of political topics, such as preferences for redistributive policies (Cruces et al. (2013), Kuziemko et al. (2015)), for privatization reforms (Di Tella et al. (2012)), and for payments for human organs (Elias et al. (2015)). In the area of education policy, there is considerable theoretical work on the political economy of educational funding, providing important insights on the relative roles of state and market and on possible trade-offs between inequality and growth (e.g., Gradstein et al. (2005), Glomm et al. (2011)).

However, fairly little is known about the actual opinions of the electorate on many specific issues of education policy, how they differ across population groups, and how they are formed. Such knowledge would be crucial to understand education policies and thus ultimately education outcomes. The situation is further complicated by the fact that on education topics, almost everyone considers her-/himself as an “expert” because of own experiences with the education system which are, however, not representative for the entire population. Consequently, opinions based on personal experience may not necessarily lead to good judgments for the system as a whole. Thus, the extent to which the provision of information – about facts, other people’s views, or research findings – may affect individual opinions is of critical interest for the political economy of education policies.

Our project aimed to analyze several aspects of the political economy of education policy in Germany based on a new annual public opinion survey, the ifo Education Survey. While idiosyncratic opinion polls exist, this annual survey is the first academically motivated, systematic, and intertemporally comparable survey of public opinion on education policy in Germany. Its particular features include random variations in the framing of questions and in the provision of information in order to learn how opinion is shaped by information; joint questions with a comparable U.S. survey to research comparative aspects of the topic; and the provision of local information to analyze how personal perception relates to actual situations. Section 2 describes the implementation of the ifo Education Survey along with the key aspects that were particularly relevant in the survey design.

All modules anticipated in the project proposal were successfully implemented, and we added several additional features such as a re-survey in one wave to test for persistence of
information treatment effects. Section 3 presents general and selected specific insights emerging from our research.

The model for the opinion survey was provided by the EdNext-PEPG Survey in the United States, a survey of public opinion on education issues conducted annually by the Program of Education Policy and Governance (PEPG) at the Kennedy School of Government at Harvard University since 2007 (e.g., Howell et al. (2007, 2013)). While the investigators have worked together with PEPG researchers on individual papers before, there had been no institutionalized, strategic cooperation between the ifo Center for the Economics of Education and the Harvard institute prior to this project. Thus, to enable comparative research, the project created a sustainable network between ifo and PEPG. With PEPG’s focus on political science and ifo’s focus on economics, both applied to education, the cross-disciplinary collaboration exploited particular synergies in the understanding of the political economy. Section 4.1 describes the cooperation with PEPG and its outcomes in more detail. Moreover, it depicts the cooperation with additional experts from different disciplines (including other Leibniz institutes) in a Scientific Advisory Committee and the organization of international research conferences as additional networking activities.

By generating new insights into the political economy of education policy, the project has strengthened the strategic position of the ifo Institute, and thereby of the Leibniz Association at large, in education economics and education policy. The survey has become a flagship initiative of ifo in this area of research. In addition, the survey and research can provide support to policymakers by revealing voters’ preferences and how they depend on provided information. This helps to understand which information needs to be conveyed in order to increase public acceptance of policy instruments and thus to facilitate policy implementation.

Most of all, the project prepared twelve scientific papers on separate aspects of the research agenda for submission at international conferences and at leading international peer-reviewed journals. One of these scientific articles directly builds on the cooperation between the US and Germany by providing a comparative assessment of public opinion in the both countries. The project has contributed to the academic knowledge in the field, thereby further improving the high quality of innovative research performed at the ifo Center for the Economics of Education. The project also provided a stepping stone for junior researchers to internationally leading academic research. Further deliverables of the project include two international academic conferences (one in Munich, one at Harvard), one edited volume evolving from the conferences (in progress), and five descriptive articles in the ifo Schnelldienst. Sections 4.2-4.7 elaborate on the scientific output of the project in greater detail.

2. Implementation of the ifo Education Survey

This section describes the key aspects of the implementation of the ifo Education Survey. The implementation was guided by state-of-the-art research practices and distinguishes the ifo Education Survey from previous surveys on education policy in Germany.

The first part of the project consisted in the development of the survey. In each of the four project years, we worked on the development of the survey for the first three months. During this time, we designed the questionnaires and collected feedback on the question items from colleagues at the ifo Institute as well as the Scientific Advisory Committee, which consisted of an interdisciplinary panel of experts on survey methodology and education policy in Germany. Furthermore, we conducted both qualitative and quantitative pretests of the survey items. These procedures helped us identify potential problems with specific items and allowed us to optimize the final questionnaires. Afterwards, in cooperation with the survey provider TNS Infratest (now called KANTAR Public), the survey was fielded between April and June of each year. With data work taking another three months, we were able to release first descriptive results in mid-September each year. In addition to a press conference that we held each year from 2015 onwards, we published one or two non-technical summary essays in the ifo Schnelldienst. These publications detail our findings for the generally interested public (Module 1c of the project proposal).
Overall, each survey questionnaire contained more than 30 questions on education policy, resulting in a median survey time of about 15 minutes (Module 1a). While some questions were posed each year, others were adapted or newly added to reflect the focus of each survey wave. The surveys covered a broad array of topics, such as early childhood education policies, the overall assessment of the German school system, education spending, teacher policies, funding of and access to higher education, design of vocational and adult education, education measures for refugees, and the application of digital learning and communication in the education system. While a substantial share of questions each year focused on schools, we ensured that each questionnaire covered all education stages. In addition, the questionnaire included a variety of background characteristics that allow us to investigate how respondents’ characteristics relate to their policy preferences. Alongside standard background variables such as gender, age, education, occupation, country of origin, and monthly net income, we also elicited characteristics which are particularly relevant for education policy, such as party preference, media consumption, or whether a respondent works in the education sector. These survey items allow us to conduct extensive subgroup analyses. To ensure comparability across different years, we kept most of the background questionnaire constant over the four waves.

In order to draw inferences on the general opinion of the German population, we ensured to draw a sample that resembles the target population as closely as possible (Module 1b). Around 4,000 respondents were interviewed each year. This number ensures national representativeness for the adult population of Germany and simultaneously allows for survey experiments which split the sample in up to four experimental groups. To obtain representative coverage of the national population, we combined an online survey with a face-to-face survey for people who do not use the internet (whose share in the German population decreased from 24 percent in 2014 to about 16 percent in 2017). Therefore, the surveys had two target populations: The first one is a voluntary online sample (short: “onliners”) which was drawn from the survey provider’s panel of participants. The “onliners” answered the questions on their personal computing devices. Quotation ensured that a representative sample of the German population was drawn. The second target population consisted of so-called “offliners”, i.e. people not using the internet. These respondents were surveyed through home visits where they were asked to complete the survey on a technical device provided by the professional interviewers. Many of these respondents needed the interviewers’ assistance with handling the device. Each year, the survey sampled a repeated cross-section of participants aged 18 years and older. For 2015 and subsequent years, a share of respondents consisted of re-contacts, i.e. respondents who already participated in previous surveys. In addition, the representative sample was complemented with an additional sample of parents of school-aged children (i.e. children aged between 6 and 15 years) in 2015 and an oversample of teachers in 2016. In the fourth wave, fielded in 2017, we surveyed a sample of respondents who use the internet in the “offline” mode to test for potential mode effects in answering behavior.

A crucial ingredient of the ifo Education Survey is the use of controlled, randomized experiments. In particular, a central research question of the project is the extent to which opinions depend on information. Thus, for a subset of questions in each survey, we randomly allocated respondents to either a control group or one of up to three treatment groups. The treatment groups were provided with additional information before answering the same question as the uninformed control group. This procedure allows us to estimate causal effects of information on policy preferences. We were also able to match respondents’ geographical location to information on the local level for some survey experiments, which allowed us to test the impact of local information on respondents’ policy opinions. We also implemented several methodological experiments on question framing, which allowed us to study to what extent expressed opinions depend on the particular way in which questions are posed (e.g., with respect to the number of response categories provided or to question wordings). In 2017, we re-surveyed respondents about two weeks after the main survey, which allowed us to show the persistence of information effects.
3. Research Results

The project has produced many novel and important insights on the German public’s preferences for education policies and reforms. This section first outlines some general conclusions from the project and subsequently presents five selected findings in greater detail.

3.1 General Insights from the Project

While the evidence from the ifo Education Survey is multifaceted, it brought two broad conclusions to light.

The first insight is that most of the German population supports quite fundamental reforms in different sectors of the education system: Among others, the majority of Germans favors tuition-free preschool, national quality standards in preschool, the abolition of the child care subsidy, the abolition of catchment areas in primary school, the introduction of a whole-day school system, nationally comparable tests in schools, national exit exams in all school tracks, autonomy for school leaders in recruiting teachers, entrance exams for teacher training courses, compulsory professional development for teachers, an end to the cooperation ban for federal and state governments in schools, public funding of apprenticeships for unsuccessful applicants, and income-contingent tuition fees in higher education. In many regards, it is also evident that most Germans favor a clear performance orientation in schools. In line with that, a clear majority speaks against an abolishment of grading and in favor of grade repetition for low-performing students, national exit exams, and bonuses for teachers who teach in schools with many disadvantaged students. Moreover, a substantial majority thinks that it is important for Germany to do well on the PISA test. Overall, the ifo Education Survey provides novel evidence that from the perspective of public opinion, policymakers have substantial leeway to reform the education system in order to improve student achievement. Intriguingly, the public opinion turns out to be remarkably stable over time: Analyzing a subset of survey questions which were posed in several waves of the ifo Education Survey, we find positive trends in public support for increases in education spending and in public support for national exit exams. Preferences on most other topics hardly change over the survey period.

To shed light on potential differences between the opinions of the general population and special-interest groups, the ifo Education Survey contains an oversample of parents drawn in 2015 and an oversample of teachers drawn in 2016. Overall, there are hardly any differences in the opinions of the general population and the opinions of parents with school-aged children (Module 2c). In contrast, teachers hold fundamentally different opinions than the general population, especially in those education-policy areas which affect them directly, such as support for increasing teacher salaries or support for granting teachers civil-servant status (Module 2g). As announced in the funding proposal (Module 1c), all these insights were disseminated as non-technical publications in the ifo Schnelldienst each year (see Woessmann et al. (2014, 2015, 2016a, 2016b, 2017)).

The second insight addresses the question to what extent opinions and preferences about education policies are affected by the provision of information (Module 2a). Recent research has found that public opinion is often based on false or inaccurate beliefs (e.g., Gilens (2001), Norton and Ariely (2011)). An important aspect of the ifo Education Survey is therefore to devise and implement survey experiments to analyze whether and how information provision changes public support for different education policies. The project provides clear evidence that public opinion on education topics is amenable to the provision of specific information. For instance, information on current levels of education spending and teacher salaries sharply reduces citizen's support for increases in these areas. Research-based information about the importance of early education investments shifts preferences for spending across the different education categories towards earlier investments. Information on average earnings by educational degree and income contingency increase public support for university tuition fees. Furthermore, information regarding political parties’ positions on different education reforms affects public support towards these policies (see below for an in-
depth discussion of these results). The experimental findings contribute to state-of-the-art research on the effects of information provision on public preferences on various policies (e.g., Cruces et al. (2013), Elias et al. (2015), Kuziemko et al. (2015), Bursztyn (2016), Bublitz (2016), Karadja et al. (2017), Alesina et al. (2018), Haaland and Roth (2018)). Since the ifo Education Survey is the first research program in economics to provide an in-depth assessment of public preferences on education policy, we achieved thematic leadership on this important topic. From a policy perspective, our findings show that if policymakers succeed in conveying relevant information to the public, they can enhance public support for beneficial education policies.

3.2 Selected Scientific Findings

In the following, we report five selected findings in greater detail, focusing on the effects of different types of information provision on support for education spending, for different education spending categories, for university tuition fees, and the educational aspiration gap, as well as effects of information provision on party positions. In addition to the results presented here, preference dependency on age structure (Module 2e) is analyzed in several of our scientific papers (e.g. West et al. (2016), Lergetporer et al. (2016), Lergetporer and Woessmann (2018), Grewenig et al. (2018b), and Lergetporer et al. (2018a, 2018b). In addition, geo-mapping experiments with regional information (Module 2d) did not produce substantive results in the 2015 survey (see Woessmann et al. (2015)).

3.2.1 How Information Affects Support for Education Spending

A first research paper from the project focuses on preferences towards governmental spending on education in Germany and the United States, namely preferences for increased school spending and preferences for increased teacher salaries (Module 2b). In particular, it investigates how the provision of information on current levels of education spending and teacher salaries affects these preferences (see West et al. (2016), Lergetporer et al. (2016)). For that purpose, we collaborated with researchers at PEPG and implemented two parallel survey experiments in the ifo Education Survey and the PEPG survey.

In the first survey experiment, one randomly selected treatment group was informed about the average public expenditure per pupil before it answered the same question on preferences for increased school spending as the uninformed control group. A second treatment group was additionally notified that the spending increase would be financed through higher taxes. The main results of the first experiment are depicted in Figure 1. Citizens of both countries react very similarly to the two information treatments, with the size of the treatment effect hardly differing between Germany and the United States. On average, being informed about current spending levels reduces support for increased public spending on schools from 71 percent to 50 percent (from 60 percent to 43 percent) among the German (American) public. Stating that additional spending needs to be financed through taxes in additional treatment groups further reduces support for spending increases to 30 percent in Germany and 26 percent in the United States.

In a second experiment, a randomly selected treatment group was informed about average teacher salaries before it answered the same question on preferences towards increased teacher salaries as the uninformed control group. For teacher salaries, we find that 29 percent of German respondents and 62 percent of American respondents in the control group favor salary increases. This difference in levels might be due to the fact that teacher salaries are already relatively high in Germany as compared to the United States. Although baseline support is much lower in Germany than in the United States, treatment effects are again relatively similar at around 40 percent. Support is reduced significantly to 17 percent respectively 38 percent when information on current levels of teacher salaries is provided.
Figure 1: The effects of informing about spending levels and referencing to taxes on support for higher education spending

Notes: Share of respondents who favor government funding for public schools to either “greatly increase” or “increase”; other categories are “stay about the same,” “decrease,” and “greatly decrease”. Three randomized experimental groups. Control group (Uninformed) did not receive further information. First treatment group (Informed) was informed about current spending levels. Second treatment group (Informed+tax) was additionally referred to tax financing requirements. * Difference between the two countries is statistically significant at the 5 percent level. † For the country, difference to the control group is statistically significant at the 5 percent level. Source: Busemeyer, Lergetporer, and Woessmann (2018) based on the 2014 EdNext Survey and ifo Education Survey 2014.

The cross-country comparisons reveal important insights: While the levels of support for increased spending and teacher salaries differ across countries, treatment effects are remarkably similar. Thus, respondents in both countries are ill informed about actual education spending and teacher salary levels. In addition, respondents in both countries do not take the necessity to increase taxes for financing additional public spending into account when stating spending preferences. Alleviating this lack of information through information provision significantly reduces preferences for increasing school spending and teacher salaries. On a practical level, these results indicate that improving citizens’ information levels about education spending, for example through the biannual national education report in Germany, might reduce their willingness to accept additional education spending, unless similar information is provided for other public spending areas as well.

3.2.2 How Information Affects Support for Different Education Spending Categories

The education system is inherently hierarchical: Successful participation in any education stage depends on the dynamic of skill formation at earlier education stages. A second scientific project implemented in the 2015 survey therefore investigates public preferences for the allocation of public spending education across different education stages from preschool to university (see Werner (2018)). A randomly selected treatment group received information that, according to numerous studies, investments in earlier education yield greater benefits for the future prosperity of society than investments in later education levels. Then, respondents were asked to state their preference for what education level should benefit from additional government spending on education. The control group answered the same question without receiving any information.
Only 45 percent of respondents in the control group favor additional spending on early education levels: 15 percent for early childhood education, and 30 percent for elementary school. In contrast, 41 percent of respondents favor additional spending for secondary schools: 9 percent for vocational schools and 6 percent for universities. Information on the efficacy of early education spending shifts the majority’s preference toward spending on earlier education levels. In the treatment group, 66 percent of respondents favor allocating additional spending to early education or primary schools, an increase of 21 percentage points compared to the control group. The largest increase is for early education (16 percentage points), with a smaller increase for elementary schools (5 percentage points). For later education levels, support drops by 14 percentage points for secondary schools, 4 percentage points for vocational schools, and 2 percentage points for universities. Furthermore, the preferences for additional education spending correlate with respondents’ beliefs about at what education level additional public spending would have the greatest benefit for the country’s future prosperity, which were elicited earlier in the survey. This treatment effect is also present in an oversample of parents with school-aged children, who are a particularly relevant group in education policy. Also, by implementing the same survey experiment in a sample of university students and resurveying them after two weeks, we find that the effects of information persist over time. This suggests that treatment effects are due to genuine belief updating rather than artifacts of the survey design. In sum, these findings suggest that a model of misconceptions can explain patterns in the allocation of education spending in Germany.

3.2.3 How Information and Income Contingency Affect Support for Tuition Fees

The public’s preferences for tuition fees are important for determining the financing of tertiary education. A third scientific project therefore investigates how responsive these preferences are to (i) information about relevant underlying facts and (ii) the design of the tuition fee payback scheme (regular versus income-contingent tuition fees) (Module 2a, see Lergetporer and Woessmann (2018)). For this purpose, the ifo Education Survey 2014 included a survey experiment in which a first treatment group was informed about the relative income of university graduates as compared to persons with vocational education. A second treatment group was informed about the current public spending level on universities, and a third treatment group was informed about the relative access to universities by different socioeconomic groups. After information provision, treatment group members were asked about their preferences towards tuition fees in the same way as the control group, which did not receive any information.

Informing the German public that university graduates earn 40 percent more than apprenticeship graduates shifts the plurality of respondents from opposing tuition fees in the control group (40 percent in favor, 46 percent oppose) to supporting them (48 percent in favor, 37 percent oppose) (Figure 2). The same result is replicated in subsequent surveys in which we presented the income information in absolute, rather than relative, terms. By contrast, informing respondents that the annual public cost per university student is € 8,600 or that three quarters of children from university-educated backgrounds attend university, but only one quarter of children from non-university-educated backgrounds does so, has no effect on public preferences for tuition fees. In addition, the paper investigates whether public preferences for tuition fees differ between standard fees and fees that have to be paid contingent on students’ future income. The majority of the German population favors this alternative form of tuition fees (63 percent favor, 22 percent oppose).

Recent German history may be seen as a prototypical example for the political economy conflicts surrounding tuition fees: While fees were introduced in some federal states after 2005, they were re-abolished by 2014 due to severe public opposition. In this context, it is particularly encouraging that information provision can shift the plurality of the public from opposing tuition fees to favoring them. Most importantly, the finding that a majority of Germans favors income-contingent tuition fees indicates that there might be political leeway for reforming higher education finance in Germany if tuition fee schemes are designed adequately.
3.2.4 How Information on Party Positions Affects Public Opinion on Education Policies

The positions of political parties on educational policies are likely to coincide with the preferences of their electorate. However, not all voters possess complete information on the precise positions of their preferred party regarding certain policies. The ifo Education Survey 2015 therefore investigates whether citizens’ opinion on specific education policies are affected by information on party positions (Modules 2c and 2f, see Grewenig et al. (2018b)). For this purpose, three survey experiments were incorporated in which randomly selected treatment groups were informed about the positions of the six largest political parties in Germany on three specific education policies before they were asked about their preferences towards the corresponding policies. Respondents in the control group stated their policy preferences without any additional information. Together with the information on the respondents’ stated party preference, the experimental design allows to analyze whether respondents with different party preferences align their preferences more closely with their preferred parties’ position after being informed about the party positions.

The first survey experiment focused on preferences for Betreuungsgeld, a subsidy for parents whose children do not attend publicly subsidized child care services. The information provided to the treatment group was that CDU/CSU is in favor of this subsidy while SPD, Linke, Grüne, and AfD oppose it, and FDP takes a neutral position. Interestingly, in the control group, the majority of CDU/CSU supporters oppose the policy (34 percent in favor, 57 percent oppose). Informing these partisans about their party’s position significantly increases (reduces) the share of those who support (oppose) it to 42 percent (47 percent). The information on party positions does not affect supporters of parties who actually oppose the proposal (30 percent in favor, 64 percent oppose in the control group) (Figure 3).
Figure 3: Effects of information treatment on preferences towards child care subsidy by partisanship

Panel A: Support for child care subsidy

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<th>Control</th>
<th>Treatment</th>
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<td>Non-partisans</td>
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<td>Partisans of child care subsidy favoring parties</td>
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Notes: Wording of questions: Control group: “The government pays parents who do not enroll their children aged between 2 and 3 years into a childcare facility, but provide home-care instead, a child care subsidy in addition to the child benefits. Do you favor or oppose that parents receive a child care subsidy in addition to the child benefits?” Treatment: “The government pays parents who do not enroll their children aged between 2 and 3 years into a childcare facility, but provide home-care instead, a child care subsidy in addition to the child benefits. CDU/CSU tends to favor the child care subsidy, SPD, Linke; Grüne and AfD ted to oppose it. The FDP is rather neutral. Do you favor or oppose that parents receive a child care subsidy I addition to the child benefits?” Source: Grewenig et al. (2018b) based on ifo Education Survey 2015.

Panel B: Opposition against child care subsidy

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Notes: Wording of questions: Control group: “The government pays parents who do not enroll their children aged between 2 and 3 years into a childcare facility, but provide home-care instead, a child care subsidy in addition to the child benefits. Do you favor or oppose that parents receive a child care subsidy in addition to the child benefits?” Treatment: “The government pays parents who do not enroll their children aged between 2 and 3 years into a childcare facility, but provide home-care instead, a child care subsidy in addition to the child benefits. CDU/CSU tends to favor the child care subsidy, SPD, Linke; Grüne and AfD ted to oppose it. The FDP is rather neutral. Do you favor or oppose that parents receive a child care subsidy I addition to the child benefits?” Source: Grewenig et al. (2018b) based on ifo Education Survey 2015.

The second experiment considers preferences for parent-independent Bafög, a reform proposal to expand the current needs-based student aid to a universal one. Respondents in the treatment group were informed that Linke, Grüne, and FDP favor the policy, CDU/CSU and AfD oppose it, and SPD takes a neutral position. For supporters of parties who oppose...
this proposal, the information marginally significantly reduces their support (51 percent in favor in the control group, 43 percent in favor in the treatment group). The information treatment does not affect the preferences of supporters of the other parties. In a third experiment concerning a reform proposal to remove a constitutional regulation which prohibits the federal government to engage in the education sector, information on party positions did not significantly affect partisans’ preferences on this issue.

Overall, the results show that information on party preferences can indeed shift opinion on education policy. In the analyzed cases, opinions did not differ significantly across supporters of different parties when no information on party positions was provided. When informed about the party positions, especially voters of conservative parties used their party’s position as an anchor for their own opinion.

3.2.5 How Information on Economic Aspects Affects the Educational Aspiration Gap

The gap in university enrollment by parental education is large and persistent in many countries. The 2016 and 2017 waves of the ifo Education Survey investigate university aspirations and whether these aspirations are amenable to information about returns and costs of university education (see Lergetporer et al. (2018a)). For this purpose, two experiments were conducted in which (i) respondents’ beliefs about the returns and costs of university education were elicited, (ii) random treatment groups were provided with different types of information about the returns and costs of university education, and (iii) everyone’s aspirations for the ideal educational degree for their child were elicited.

The first experiment in 2016 focused on the return side of economic considerations whether to pursue a university education. A first treatment group was informed about the respective earnings of graduates with different education degrees. Respondents in a second treatment group were informed about the unemployment rates by educational degrees. The second experiment in 2017 focused on the cost side of pursuing a university education. A first treatment informed respondents that university students in all of Germany currently do not have to pay any tuition fee. Respondents in a second treatment group were informed that comprehensive public student aid (known as “BAföG”) is available to university students in Germany. A third treatment group received both pieces of information. In both experiments, all respondents were asked about their ideal aspiration for their child. However, respondents in the control group answered the question on educational aspirations without any further information.

The findings indicate that aspirations do indeed differ strongly by educational background. In the control group, 74 percent of university graduates but only 36 percent of those without university education consider a university degree (rather than an apprenticeship degree) the ideal educational outcome for their child. Results also show that individuals without university education tend to underestimate the returns and overestimate the costs of university education more than university graduates. On average, respondents who hold a university degree correctly estimate the earnings advantages of university graduates but underestimate their unemployment advantages. In both cases, respondents who do not hold a university degree underestimate the returns to university education to a significantly larger extent. Similarly, while university graduates tend to overestimate tuition fees and underestimate available student aid, the extent of this is again stronger among respondents without a university degree. In principle, these informational asymmetries suggest that ignorance among those without university education could contribute to the educational aspiration gap.

The experimental results show that informing about the actual returns and costs of university education indeed significantly increases the educational aspirations of respondents. However, the information treatment effects are at least as strong among individuals with university education as among individuals without a university degree (Figure 4). Consequently, information provision, if anything, increases rather than decreases the gap in educational aspirations. The results cast doubt that ignorance of economic returns and costs can explain educational inequality in Germany.
Figure 4: Effects of information experiments on adults' aspiration for the education of their child

Notes: Effects of random information provision about earnings differentials, unemployment differentials, tuition fees, and student aid, respectively, on respondents' ideal educational degree for their child. Significance levels of difference from respective control group: ** p<0.05, * p<0.1. Data source: ifo Education Survey 2016 and 2017.
4. Output of the Project

In this section, we provide a comprehensive description of the output of the project, including (1) scientific cooperation and network-building activities; (2) scientific publications; (3) scientific presentations; (4) scientific qualification work by junior researchers; (5) measures taken for open data access; (6) descriptive articles; and (7) media coverage. In recognition of these achievements, the project team was awarded the prize for special achievements in externally funded research projects of the ifo Institute in June 2018.

4.1 Scientific Cooperation and Network-Building Activities

The project allowed establishing a strategic network between the ifo Institute and the Program of Education Policy and Governance (PEPG) at Harvard University ([Module 3a](#)). Throughout the three years of the project, we entertained a close interdisciplinary collaboration with the director of PEPG, Prof. Paul E. Peterson, its Assistant Director, Prof. Martin R. West (both Harvard), and Prof. Michael B Henderson (Louisiana State University). Both teams worked closely together in developing the surveys in both countries and managed to coordinate survey questions which allow cross-country comparisons of the publics' opinion on various education topics. The scientific output from this collaboration is a joint scientific paper ([West et al. (2016)](#)) for which we received an invitation to revise and resubmit to the *Journal of Public Economics*, the leading journal in the field of public economics. Furthermore, Prof. Martin R. West (PEPG) and Prof. Ludger Woessmann (ifo Institute) will jointly edit the volume “Public Opinion and the Political Economy of Education Policy around the World” (see below). One chapter of this volume, which is co-authored by team members of both institutions, provides a detailed analysis of the similarities and differences of the German and U.S. education systems ([Henderson et al. (2015)](#)).

The collaboration between both institutions also included a research visit. From September 2016 on, Katharina Werner (ifo Institute) spent 9 months as a Visiting Fellow at PEPG, strengthening the collaboration between both institutions.

Another key component of our network-building activities was the joint organization of two academic conferences ([Module 3c](#)). The first conference was held at the ifo Institute in Munich in May 2015, the second conference was held at Harvard in May 2016. Both conferences brought together leading U.S. and European researchers on public opinion surveys and the political economy of education policy to present and discuss ongoing research on the topic (see Figures 5 and 6 for photos of the conference participants). At the conferences, the two organizing institutions presented their comparative and country-specific research (see Appendix A1 for lists of the papers presented at the two conferences). Based on the two conferences, both institutions are jointly editing a volume titled “Public Opinion and the Political Economy of Education Policy around the World” at MIT Press which contains original contributions on the political economy of education policy in different countries (see Appendix A2 for table of contents).

The network-building activities of the project extended well beyond the collaboration between PEPG and the ifo Institute. In particular, we created an interdisciplinary network with additional partners in the form of a Scientific Advisory Committee (SAC) ([Module 3b](#)). The SAC consisted of six expert scientists from different fields and advised the project on specifics of the questionnaires: Stefan C. Wolter, Director of the Swiss Coordination Centre for Research in Education and Professor of Economics at the University of Berne; Olaf Köller, Managing Director of the IPN – Leibniz Institute for Science and Mathematics Education and Professor of Educational Research at the University of Kiel; Beatrice Rammstedt, Scientific Director of the Department Survey Design and Methodology at GESIS – Leibniz Institute for the Social Sciences and Professor at the University of Mannheim; Marius R. Busemeyer, Professor for Political Science at the University of Konstanz; Kerstin Martens, Professor for International Relations and World Society in the Institute for Political Science at the University of Bremen; and Dr. Natalja Menold, University of Mannheim.
Before going into the field, the questionnaires were shared with the members of the SAC to comment on the suggested items from the perspective of their specific expertise, and SAC members had the opportunity to suggest specific questions. In addition, two members of the SAC, Prof. Stefan Wolter and Prof. Marius Busemeyer, run their own surveys on education policy in Switzerland and several European countries, respectively. Therefore, they took on active roles in the conferences and contributed chapters to the edited volume. Furthermore, two members of the ifo Institute collaborated with Prof. Marius Busemeyer on a joint survey article on public opinion and the political economy of education reforms which has been published in the *European Journal of Political Economy* (Busemeyer et al. (2018)).

### 4.2 Scientific Publications

Most of all, the project aimed to prepare a number of scientific papers on separate aspects of the research agenda for submission at international conferences and at leading international
peer-reviewed journals. In particular, the following twelve papers have been written during the project phase:


4.3 Scientific Presentations

We also disseminated the research from the project to the scientific community through presentations at international conferences. From 2015 onwards, we presented the findings from the project at numerous international conferences. These included, among others, meetings of the European Economic Association, the Econometric Society, the German Economic Association, the Society of Labor Economists, the European Society for Population Economics, the Association for Education Finance and Policy, the Spring Meeting of Young Economists, the Institute of Labor Economics, and the European Association of Labour Economists. Furthermore, the papers were presented at university seminars at Harvard, Stanford, Ohio, Bocconi, Prague, Munich, Mainz, Konstanz, Freiburg, and Karlsruhe, the CESifo education meeting in Munich, an IZA workshop in Bonn, the FRBNY/NYU education seminar, and GESIS Mannheim.

4.4 Scientific Qualification Work

The scientific output of the project is used for the scientific qualification work of several junior researchers at the ifo Institute: The cumulative dissertation of Katharina Werner entitled “The
Role of Information for Public Preferences on Education”, submitted to the Economics Department of the Ludwig-Maximilians-University Munich in March 2018, contains four chapters that use data from the ifo Education Survey (see West et al. (2016), Werner (2018), and Lergetporer et al. (2018a, 2018b)). Furthermore, Elisabeth Grewenig’s dissertation, which is scheduled to be submitted in 2020, contains two papers using survey data of the project (see Grewenig et al. (2018b, 2018c)). Finally, the habilitation of Philipp Lergetporer, PhD, largely builds on papers from this project.

4.5 Measures Taken for Open Data Access

As this project collected new data which are potentially useful for the scientific community, we implemented steps to ensure the data are archived appropriately and will be accessible to other scientists in the future. For reasons of data security and to safeguard the privacy of survey respondents, we collaborate with the LMU-ifo Economic & Business Data Center (EBDC) which manages data storage and future data access. Currently, the project team and the EBDC evaluate different possibilities to grant data access to other researchers (e.g., scientific-use files and on-site use). All waves of the survey data are available in STATA format, labeled and documented comprehensively in separate codebooks that contain a description of all variables and question wordings. The datasets also include auxiliary variables that could be useful for future analyses, for example survey time stamps, and generated variables, for example country codes indicating the country of birth of respondents. To identify questions which were posed in more than one survey year, the codebooks provide detailed cross-references. This allows researchers to exploit the panel structure of the data more easily. For non-German speakers, a translated English version will be provided for convenience, although we advise to rely on the original survey items for any further research. All key information regarding the survey design, access to the data, as well as the structure of the dataset will be summarized in a user manual made publicly available through the ifo Working Paper Series.

4.6 Descriptive Articles

In addition to the scientific articles, the project produced five descriptive articles on the basic results of each wave of the ifo Education Survey:


4.7 Dissemination Work and Media Coverage

In addition to the annual publication of the results for a non-academic public in the ifo Schnelldienst, each wave was accompanied by a broad range of dissemination work. Selected insights from the project were included in many presentations and publications aimed at a general-interest audience, in particular by Prof. Woessmann. Furthermore, the results of each wave were distributed in a press release (see Appendix A3).
The results of the project were widely covered by the media, including newspaper articles, interviews, and TV and radio coverage. The results of the first ifo Education Survey in 2014 were published exclusively in the weekly news magazine *Der Spiegel*. From the second survey year on, the results were presented at press conferences held at the headquarters of the Leibniz Association in Berlin each year in September. These press conferences were well attended by journalists from various media and were followed by the publication of different news articles and interviews with Prof. Woessmann. Appendix A4 provides an overview of selected media coverage.

As a further example of a dissemination activity, Ludger Woessmann organized the 2015 Education Policy Forum of the Leibniz Education Research Network (LERN), a Leibniz Research Alliance, in Berlin on the topic “Acceptance and Feasibility of Educational Reform: How We Can Tap Educational Potentials.” The presentations and discussions of the forum were informed by several results of this project.

5. References


**Appendix**

**A1. Papers Presented at Munich and Harvard Conferences**

**Public Opinion and the Political Economy of Education**

*ifo Institute, Munich, 9 May 2015*

Andreas Schleicher (OECD): Strong Performers and Successful Reformers in Education – Some Policy Lessons from International Comparisons

Martin R. West (Harvard University): The Responsiveness of Education Policy to Public Opinion: Evidence from American States


Hans Bonesrønning (NTNU Trondheim): Local Responses to a National Productivity-Enhancing Reform

Jon Valant (Tulane University): The Word on the Street or the Number from the State? How Parent Comments and Government Ratings Affect Americans’ Opinions of Schools

Michael Hartney (Lake Forest College): Are Education Policymakers More Responsive to Teachers or Parents? Experimental Evidence from a Survey of School Board Members

Michael Henderson (Louisiana State University), Philipp Lergetporer (Ifo Institute): The Role of Information in the Formation of Public Opinion on Education: A U.S.–German Comparison

Patrick J. Wolf (University of Arkansas): School Vouchers in the U.S.: Explaining the Strange Bedfellows Supporting and Opposing Private School Choice

Dennis Epple, Richard Romano, Sinan Sarpcan (Koç University, Istanbul): Majority Choice of an Income Targeted Educational Voucher

Aurélien Abrassart (Konstanz), Marius R. Busemeyer, Maria A. Cattaneo, Stefan C. Wolter: Why Do Migrants Prefer Academic to Vocational Education? Evidence from Switzerland

Timm Fulge (University of Bremen): Varieties of Higher Education and the Formation of Political Preferences

Sam Barrows (University of Cambridge): Does School Performance Information Affect Incumbent Support in School Board Elections?

Eric A. Hanushek (Stanford University): Information and Educational Decision Making
The Politics of Education Policy: An International Perspective

*Kennedy School of Government, Harvard University, May 5-6, 2016*


Philipp Lergetporer, Ludger Woessmann (ifo Institute): The Political Economy of University Tuition Fees: Information Provision and Income Contingency in Representative Survey Experiments

Samuel Barrows (PEPG, Harvard Kennedy School) Michael Henderson (Louisiana State University), Paul E. Peterson (Harvard University) and Martin R. West (Harvard Graduate School of Education): Relative Performance Information and Perceptions of Public Service Quality: Evidence from Schools

Patrick J. Wolf (University of Arkansas): Going Private: Political Factors Shaping the Enactment and Expansion of Private School Choice Programs

Philipp Lergetporer, Laura Oesterich, and Ludger Woessmann (ifo Institute): Public Preferences for Class-size Reduction: Do Voters Appreciate the Tradeoffs?

Luca Repetto (Uppsala University): Balance Sheet Disclosure and the Budget Cycle of Italian Municipalities

Marius R. Busemeyer, Julian L. Garritzmann (University of Konstanz): Academic, Vocational, or General? An Analysis of Public Opinion towards Education Policies with Evidence from a New Comparative Survey

Philipp Lergetporer (ifo Institute), Guido Schwerdt (Konstanz), Katharina Werner, and Ludger Woessmann (ifo Institute): Information and Preferences for Public Spending: Evidence from Representative Survey Experiments

Anja Kilibarda, Robert Y. Shapiro, and Sofi Sinozich (Columbia University): Race, Economic Status, and Attitudes Toward Education and Social Welfare Issues


Stefan C. Wolter (Bern): A Decade of Public Opinion Surveys on Education in Switzerland

Terry Moe (Stanford): Teachers Unions and Education Systems across the World

Vigile Marie Fabella (Konstanz): The Political-Economic Determinants of Education Reform

Randall Reback (Barnard College, Columbia University): Fiscal Spillovers between Local Governments: Keeping up with the Joneses' School District

Vladimir Kogan, Stéphane Lavertu (Ohio State University), Zachary Peskowitz (Emory University): Do School Report Cards Produce Accountability Through the Ballot Box?

**A2. Table of Content of Volume**

*Public Opinion and the Political Economy of Education Policy around the World*

Editors: Martin R. West (Harvard) and Ludger Woessmann (Munich)

A. Introduction

1. Martin R. West (Harvard) and Ludger Woessmann (Munich): Towards a Comparative Political Economy of Education: Initial Insights and Giant Gaps

B. Comparative Evidence


3. Michael B. Henderson (Louisiana), Philipp Lergetporer (Munich), Paul E. Peterson (Harvard), Katharina Werner (Munich), Martin R. West (Harvard), and Ludger Woessmann (Munich): Is Seeing Believing? How Americans and Germans Think about their Schools

C. Country Case Studies
5. Robert Y. Shapiro, Anja Kilibarda, Sofi Sinozich, and Oliver McClellan (Columbia): American Public Opinion and Partisan Conflict: Education’s Exceptionalism?
6. Samuel Barrows (Harvard), Michael B. Henderson (Louisiana), Paul E. Peterson (Harvard), and Martin R. West (Harvard): Ten Year Trends in Public Opinion of US Schools
7. Philipp Lergetporer, Katharina Werner, and Ludger Woessmann (Munich): Public Opinion on Education Policy in Germany
8. Maria A. Cattaneo and Stefan C. Wolter (Bern): Selected Findings from Ten Years of Public Opinion Surveys on Education in Switzerland

A3. Selected Press Releases
15 September 2014: “Germans Favor Compulsory Preschool and the Abolition of Fees – Results of the First Ifo Education Barometer” (“Deutsche für Kindergarten-Pflicht und Abschaffung der Gebühren – Ergebnisse des ersten ifo Bildungsbarometers”)
1 September 2015: “Results of the Ifo Education Survey 2015: Germans Support Higher Salaries for Preschool Teachers and Oppose the Home Child-Care Subsidy” (“Ergebnisse des ifo Bildungsbarometers 2015: Deutsche unterstützen höhere Gehälter in Kitas – Gegen das Betreuungsgeld”)
14 September 2016: “Germans Sceptical About Immigrants’ Education Level – Teachers Particularly Featured in the Ifo Education Survey” (“Deutsche skeptisch beim Bildungsniveau der Flüchtlinge - Lehrer im ifo Bildungsbarometer gesondert befragt”)
14 September 2017: „Germans See Themselves as Digital Winners” (“Deutsche sehen sich persönlich als Gewinner der Digitalisierung”)

A4. Selected Media Coverage
2014
„Mehr Bildung ja, aber nicht mehr Geld“, wiwo.de, 22.09.2014.

2015
„Denkt an die Kinder!“, Presseartikel von Ludger Wößmann, Süddeutsche Zeitung, 27.07.2015, S. 16.
„Studie zur Bildungspolitik“, TV-Beitrag, ZDF, ZDF spezial, 01.09.2015.
„Bildungsbarometer 2015“, TV-Beitrag, MDR, MDR aktuell, 01.09.2015.
„ifo Studie – Was Deutsche über Bildung denken“, Radiointerview mit Ludger Wößmann, Deutschlandfunk, Das BildungsMagazin, 01.09.2015.
„ifo Bildungsbarometer 2015“, Radiointerview mit Ludger Wößmann, BR2, Radiowelt, 01.09.2015.
„Bildungsumfrage: Deutsche wollen Zentralabitur“, spiegel.de, 01.09.2015.
„Mehrheit für kostenlosen Kita-Platz ab vier Jahren“, heute.de, 01.09.2015.
„Von wegen reformmüde“, zeit.de, 01.09.2015.
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„Deutsche für kostenfreie Kita-Plätze ab vier Jahren“, *faz.net*, 01.09.2015.
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„Mehrheit der Deutschen ist gegen Betreuungsgeld“, *merkur.de*, 01.09.2015.
„Klare Mehrheit für Stärkung der Kita-Erziehung“, *focus.de*, 01.09.2015.
„Mehrheit lehnt Betreuungsgeld ab“, *rp-online.de*, 01.09.2015.
„Wie denken die Deutschen über die Bildung“, *mdr.de*, 01.09.2015.

2016


2017
„Schule digital – was wollen die Deutschen“, *dpa*, hier auf *FR.de*, 15.09.2017.