Does the Broad Public Want to Consolidate Public Debt? – The Role of Fairness and of Policy Credibility

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Preliminary version: January 14, 2010

Abstract

The paper tests various long-standing hypotheses about why voters support or oppose fiscal consolidation. I deviate from the empirical literature which mainly focuses on cross-sectional and time series evidence by employing data from a public opinion survey that has been conducted in spring 2010 in Austria. The results show (i) that voters are fiscally prudent, that (ii) they behave rationally in the sense that self-interest matters, that (iii) they care for the next generation (however this effect is surprisingly small), that (iv) the distributional fairness among the current generation is as at least as important as the intergenerational aspect and that (v) the low credibility of medium-term fiscal policy plans can be a serious impediment to voters' support for consolidation. These results bear direct implications on the design of fiscal consolidation plans.

JEL-Classification: H63, H31, D12
Keywords: Public debt, fiscal adjustment, political economy, fairness, credibility

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[†]I thank Pirmin Fessler, Markus Knell, Walpurga Köhler-Töglhofer, Lukas Reiss and Josef Zuckerstätter for helpful comments. The views expressed are those of the author and do not necessarily reflect those of the Oesterreichische Nationalbank.

1 Introduction

The question why debt consolidation efforts that followed periods of sustained fiscal deficits were only modestly successful was an important issue in the economic policy debate of the 1980s and the 1990s. The— partly dramatic—increases in public indebtedness in practically all Western democracies during the last few years, brings this issue back on top of the economic policy agenda. While the necessity to initiate policies which reduce debt-to-GDP ratios is relatively uncontested from an economic point of view, their political feasibility critically depends on whether politicians can gain voters' approval. Therefore, it is important to understand whether and under what condition the electorate supports or opposes running down public debt levels.

Against this background, the present paper tests various long-standing hypotheses about why people support or oppose consolidation, with a focus on the role of intergenerational altruism, intragenerational fairness and policy credibility. The paper deviates from the empirical literature which mainly focuses on cross-sectional and time series evidence by employing data from a public opinion survey that has been conducted in spring 2010 in Austria. This extends the empirical evidence to the direct opinions of the electorate about consolidation – which seems natural, indeed overdue. Important results of the literature and discussions about the effects of government debt build on the assumption that the electorate cares for the next generation.[1] Is this the case, and if yes, is the motive of intergenerational altruism strong enough to induce voters to favor a faster consolidation even if this implies that they are financially burdened. Other strands of the literature highlight the importance of the intragenerational distribution of the consolidation burden. Do economic agents weigh intergenerational consideration more heavily than intragenerational aspects? To answer these question, direct evidence from voters is necessary — and presented in this paper.

Specifically, the paper presents a series of regression results which relate a measure of voters demand for consolidation to a comprehensive set of explanatory variables. Foremost, I analyze the importance of self-interest and of intergenerational altruism controlling for time preferences, ideology and the level of information respondents have. The presented regression model also incorporates two aspects whose potential importance can be derived from related fields of research but for which evidence has

[1] For example: "An obvious limit to [the] behavior [of shifting the burden of taxation into the future], is given by intergenerational altruism: parents do care about their children." Alesina and Perotti (1994, p.14)

not been presented in the literature on fiscal consolidation: I study if and how (i) intragenerational fairness considerations and (ii) low credibility of fiscal policy plans affect voters' demand for consolidation.

That fairness matters has been established in several topics of social behavior . The underlying decisions agents have to make in the context of redistributive politics (e.g. Alesina and Giuliano, 2009) or in the context of tax issues (e.g. Heinemann and Hennighausen, 2010) are close to the decision agents face when deciding whether to oppose or to support fiscal consolidation. The potential importance of fairness considerations also follows by results from the literature emphasizing that intragenerational considerations—or how the burden of consolidation should be distributed among the current generation—could be crucial for explaining why consolidations are delayed (e.g. Alesina and Perotti (1994) or Jensen and Rutherford (2002)).[2]

The importance of the credibility of fiscal policy plans for the effectiveness of fiscal policy has long been established in macroeconomics and a crucial assumption behind many macroeconomic models is that government announcements regarding fiscal plans are credible (for recent results, see Corsetti et al. (2010a) and Corsetti et al. (2010b)). Against the background of such models, it is important to understand how credibility affects the demand for consolidation, but empirical evidence has been scant.

The regression analysis delivers several results: First, I find that a majority of voters favors fiscal consolidation. Moreover, voters prefer a stronger consolidation than they expect from the government.[3]

Second, voters behave rational in the sense that self-interest matters, both with respect to the contemporaneous effect and the forward looking effect of consolidations: respondents who expect to be short-run financially burdened by consolidation measures favor a weaker consolidation; if positive pay-offs of a successful consolidation are expected in the medium-run, voters favor a stronger consolidation; upward mobility matters; people with higher time preferences favor a weaker consolidation; older people tend to favor a weaker consolidation than younger people. Also, self-

[2]Indirectly, the role of fairness also follows from the literature on the institutional design of politics, like weak coalition governments or government instability (cf. Alesina and Perotti, 1994). If polarization of party positions in coalition governments about how the burden of adjustment should be distributed among the current generation results in delayed stabilizations and if parties represent the ideological orientation of their voters then this polarization should be directly detectable also in the stated preferences of voters.

[3]This provides support to the view that voters are fiscal conservatives (Peltzman, 1992) and challenges the conclusion of the model of Jensen and Rutherford (2002) ("based on majority voting of self-interested households, debt reduction would never occur", p.1).

interest works differently for old, young and old-poor, hinting at the importance of distributional aspects and bequest constraints (Cukierman and Meltzer, 1989).

Third, the results corroborate the view that intergenerational altruism is important—parents care for their children, which does not occasion a big surprise. However, what is more is that this effect is not as strong as one might have expected and that it does not apply for all parents. In particular, I find that only those parents who expect their children to have a lower living standard relative to their own living standard differ in their demand for consolidation while parents expecting their children to have the same or a higher living standard do not differ from non-parents. From a political economy point of view, this has implications: while 62% of respondents have children, only one fourth of voters expect their children to have a lower living standard. This suggests that election can not be won if politicians solely appeal to voters responsibility concerning intergenerational altruism.

Fourth, the paper reveals that intragenerational fairness has a substantial impact on the demand for consolidation. Consolidation measures which are perceived as "fair" dampen the negative impact of financial affliction. The literature has debated the relative importance of the intergenerational distribution of debt versus aspects related to the intragenerational distribution of debt (Alesina and Perotti, 1994). I show that both factors are important and that neither dominates the other.

Fifth, the paper shows that a serious impediment to successful debt consolidation can be seen in the low credibility of consolidation plans. About two thirds of voters do not expect that debt ratios will be sustainably reduced in 20 years time. Under the hypothetical case that consolidation efforts are successful, about the same share of voters believe that indebtedness will soon rise again. These expectations lead them to favor weaker consolidations beforehand.

The paper is related to the literature in several dimensions. Foremost, I provide microdata based evidence on the demand for consolidation. On the one hand this allows to test several propositions raised in the literature which complements the rich empirical fiscal consolidation literature that mainly builds on cross-country and time series analyses. One of the greatest advantages of the empirical approach chosen in this paper is that it allows incorporating various effects previously studied separately in the literature. To our knowledge, there are only a few microdata based papers who studied demand for consolidation. Blinder and Holtz-Eakin (1984) and Blinder and Krueger (2004) cover aspects which are close to the demand for consolidation, however their scope differs in the sense that they focus more on how informed

agents are, the role of ideology and how sentiments about economic variables (e.g. fears of inflation) affect approval or disapproval of consolidations. Apart from these contributions, my paper can also be seen in the broad context of the literature on the demand for redistribution (e.g. Fong, 2001; Alesina and Giuliano, 2009) or the literature on preferences for tax preferences (Heinemann and Hennighausen, 2010; Pitlik et al., 2010).

The paper is organized as follows. Section 2 introduces the data and discusses the dependent variables. Section 3 presents the modeling approach. Descriptive results are presented in Section 5, estimation results in Section 6. Section 7 concludes.

2 Data and Dependent Variables

The data employed are drawn from a survey which has been conducted among Austrian voters. About 2,000 randomly selected respondents were interviewed face-to-face from late January to early March 2010. The structure of the questionnaire was to pose several warm-up questions about the effect of debt on various general aspects and to ask about the knowledge of respondents regarding the evolution of government debt.[4] Then, respondents were informed about the increase of the government debt level during the crisis and about what this implies in terms of annual interest payments.[5] I have chosen this approach to make sure–at least as much as possible– that all respondents have the same information when answering subsequent questions.[6] Then, respondents were asked about their expectations regarding government measures and about how they expect to be financially affected by these measures ("financial affliction").

The dependent variables are derived from questions about the preferred consolidation speed: "Assume that you could determine the extent of the reduction of government debt, but not the type of savings or which taxes are increased—this is determined by the government". Answers refer to the debt ratio and range from "no consolidation, debt ratio continues to increase", "consolidation, but only to the

[4]The wording of selected questions used in this study is provided in Appendix A. The complete questionnaire is available upon request.

[5]The increase in interest payments for the extra debt which has emerged since the start of the crisis amounts to about 2 bn euro a year or about two thirds of one percentage point of GDP. Respondents were confronted with this figure. However, the figure was also related to the costs of the public procurement of fighter jets, whose total life costs are in the same range. This comparison was chosen because this acquisition has been the subject of heavy political and public debates.

[6]Given evidence from Blinder and Krueger (2004), one can expect respondents to be influenced by the provision of this information.

extent that the debt ratio does not continue to increase", "very weak (relatively weak, strong, very strong) consolidation such that the debt ratio declines within the next 50 (20,10,5) years". These answers were presented on a show card where questions were ordered in a logically consistent way. Furthermore, respondents answered two questions prior to this question with the same answer categories such that answer categories were not new to respondents. The first question referred to the expectations about what the government will do. The second one referred to what respondents would do under the assumption that they could choose freely–set the extent and speed of consolidation, determine which taxes are changed, etc.

In most regressions, I will use answers from the first question as the main dependent variable (labeled CONSPEED). It is important to note that CONSPEED conditions on the fact that politicians set the policy measures, i.e. $CONSPEED_i = E(CS_i|\text{expected government policy})$, where CS_i denotes consolidation preferences of respondent i. In other words, the formulation of the survey instrument behind CONSPEED was chosen such that respondents are aware that the government sets the actual measures, an approach which should prevent that individuals answer without thinking about the consequences of their answers. However, in some regressions I will also employ the unconditional variable which determines what agents would like to do if they were free to choose (CONSPEED PREF). Despite the ordered nature of CONSPEED and CONSPEED PREF, ranging from 1 to 6, I will nevertheless present ordinary least squares (OLS) estimation results, because the marginal effects are easier to interpret than those from ordered probit regressions. Moreover, as I will show in robustness tests, there is practically no difference between ordered probit or OLS estimation results.

Given the complexity of the topic, one clearly needs to be wary about the reliability of results. To account for this, I took great care to simplify the survey questions as much as possible. Hence, the survey is basically comparable to sentiment surveys like the Social Value surveys, which are frequently employed for studies about the demand for redistribution (e.g. Fong, 2001). According to the survey institute which conducted the survey, the interest of respondents in the topic was high and the non-response rates was rather low. Also, it is reassuring that answers are to a large extent logically consistent.[7] An important issue concerns the interpretation of point estimates as the direction of causality of the phenomena I study is not clear. Related to this is the fact that there is a paucity of truly exogenous variables - but

[7]This can be seen along many dimensions. I will mention some results in later sections.

this is normal in studies which deal with sentiments issues (e.g. Blinder and Krueger, 2004). So, the estimation equations will in many instances establish correlation and no causality, which however is perfectly suitable for the purpose of this study.

During the interviewing period, fiscal adjustments were a topic but not the main topic in the public debate. At the time when the survey was conducted, some government members even claimed that no tax increases would be necessary to cope with the rising debt ratio. We consider this as an advantage, because respondents were not biased through the intensive public debate about government debt which arose in spring 2010 with the Greek debt situation and which culminated in late 2010 with the debt situation in other countries. Despite this fact, it is remarkable that about 94% of respondents knew that government debt has increased over the past two years (prior to the interview). To prevent that results are biased by people whose economic knowledge is limited, the sample is restricted to only those respondents who recognized that government debt has increased during the financial crisis.

To put the results into perspective, the macroeconomic situation in Austria is of relevance. The debt-to-GDP ratio increased from about 60% to projected 75% in 2014. Bringing the situation under control will demand considerable fiscal adjustments: spending cuts or tax increases in the extent of about 2% of GDP per annum are necessary to stabilize the debt ratio. Although the Austrian situation is relatively modest in an international comparison, the reduction of the debt ratio to 60%, as foreseen by the Stability and Growth Pact, requires fiscal adjustments to an extent such that societal conflicts over how the burden will be distributed are very likely.[8].

3 Empirical Procedure

The paper relates empirical measures of agents i's preferred consolidation speed (CS) with variables which have been identified in the literature as potentially important, including self-interest and intergenerational altruism:

$$CS_i = f(SI_i, IGEN_i, GEN_i, CR_i, X_i) + \epsilon_i, \tag{1}$$

where SI contains variables describing self-interested motives, $IGEN$ = intergenerational aspects and X = a vector of various control variables, including sociodemographic variables. Importantly, the regression model contains two aspects for

[8]The political debate over the 2011 budget gave already a first indication of this.

which evidence has not been presented in the literature. The first concerns intragenerational considerations (GEN), in particular fairness considerations, and the second the effect of policy credibility (CR).

The survey elicits several sources of information about self-interest and I will employ both objective data on respondents' socio-economic characteristics (income, education and age) as well as subjective variables. Among the latter, expected financial affliction—whether or not respondents belief they are expected to be financial affected by consolidation measures—is the most important variable. For example, Pitlik et al. (2010) argue that subjective affliction is as important as ideology for the choice of various policy measures to finance an income tax decrease in Austria. To account for the inter-temporal nature of self-interest (e.g. self-interest might also depend on the utility derived in 20 years), I also control for expected income mobility.

Several different pieces of information regarding the intergenerational motive for consolidation are available. Most naturally, I control for whether a respondents has children or not. In addition, information on the children's expected well-being will be included. These and other included variables will be discussed in greater detail throughout the text.

Apart from socio-demographic variables, the vector X includes control variables which have a potential to be important: the respondent's time preference and life expectancy, a measure of ideology, a measure to control about how well a respondent is informed and his or her attitude towards personal debt. While the first two of these are natural to include in a decision problem involving a time dimension, the inclusion of ideology is asserted from previous work which has highlighted the important role of ideology for decisions about economic policy issues (cf. Blinder and Krueger, 2004). The same holds for knowledge which might affect answers. The inclusion of respondents' attitude towards personal debt should prevent that voters draw invalid analogies to personal finances.

4 Descriptive Results

Table 1 summarizes the responses concerning debt consolidation which agents' expected the government will choose and the preferred consolidation speed under the assumption that respondents choose the speed of consolidation and politicians choose the policy measures (CONSPEED).

Several findings are noteworthy. First, respondents are not too optimistic about

the governments willingness to consolidate: 19% expect no consolidation, 38% expect consolidation efforts but only such that the debt ratio is stabilized.[9] Second, respondents seem to favor a faster consolidation than they expect from the government. 67% would like to see the debt ratio to decrease within the next 20 years.

At first sight, these results show that the relatively modest success of governments to decrease the debt ratio which has been noted in the literature (Alesina and Perotti, 1994) does not seem to be rooted in voters' ignorance – at least in this particular case. If the speed of consolidation were the only issue in the next elections, a reduction of the debt-to-GDP ratio would get a clear relative majority.

A third finding is that a remarkable 27% favor a constant debt ratio and further 3% favor no consolidation. This could be taken as evidence against the contention that such surveys can not be taken seriously because all respondents dislike debt. To the contrary, stated preferences about consolidation are logically consistent with respect to several dimensions (the questionnaire contained test questions).

5 Estimation Results

5.1 Self-Interest Cleary Affects Consolidation Speed

The substantive inquiry of this paper begins with Table 2. If the support for consolidation operates through self-interest, then one should find a negative impact for those who loose in the short-run and a positive impact for those who expect to gain in the long-run. The results largely support this presumption: those who expect to be "very strongly affected" by government measures of consolidation have a significantly lower preferred consolidation speed than all others; for respondents who believe that a lower debt level in 20 years time has a positive personal impact, a significantly higher consolidation speed is obtained.

Self-interest also works through other channels. One is the income situation. I find that persons with a lower household income and persons with lower education favor a slower consolidation speed, most likely reflecting fears of cuts in social spending.[10] Note that the model does not include household income as a regressors but just a dummy variable for low household income respondents. This specification was

[9] These expectations were very accurate as the planned mid-term budgetary path of the Austrian government which was decided upon in late 2010 foresees a stabilization of the debt-to-GDP ratio.

[10] Alternatively, the effect for low education could also reflect knowledge effects. Since I (partly) control already for knowledge effects, this alternative explanation is less plausible.

chosen on the basis of prior tests which revealed that the impact of household income amounts to a comparison of low versus higher income (these tests are available in the paper's supplement). However, what is more important than measured income is the subjective assessment of the own income situation: persons who assess the financial situation of their household as very bad or very good prefer a slower consolidation speed (than those with a good situation). Again, this is likely to reflect fears of cuts in social spending or tax increases, respectively.

Another variable which one could expect to be of significant importance is age—young persons may opt for a faster consolidation such that they do not inherit high debt levels, older persons have little incentive to contribute as they will not reap the benefits of consolidation. Somewhat surprisingly, age exerts no statistically significant influence (neither age individually nor age jointly with age squared).[11]

Cukierman and Meltzer (1989) and Jensen and Rutherford (2002) analyze the distributional consequences of consolidation. Somewhat generalizing, one could derive from these models that the old, the poor and especially the old-poor stand to loose from consolidation. Thus, age might exert an influence through interaction effects. I account for this argument by separately estimating the model of col. 1 for below median and above median households. The implied age profiles, depicted in Figure 1, corroborate this argument. Old-poor have a lower predicted consolidation speed than old-not-poor, at least up to an age of 65[12]; in contrast, young-poor are significantly more in favor of consolidation than young-not-poor, probably reflecting prospective income mobility. For not-poor, the age-consolidation profile is very flat up to an age of about 50, with a somewhat declining preferred consolidation speed for persons aged 50+. Despite these differentiated effects, the overall effect of age does not seem to be very sizeable—challenging the prediction of Jensen and Rutherford (2002) that older generations are the obstacle to fiscal reform because they will not reap any gains.

The baseline specification in column 1 of Table 2 also includes several other important variables. Foremost, respondents with children are found to prefer a significantly faster consolidation (I will delve more deeply into the intergenerational motive below). The regressions also control for the time preference of respondents and the coefficient has the expected sign–higher preference for the present is associated with a lower CONSPEED.[13]. An alternative way to model time preferences is to control for

[11] In some of the richer specification, which will be presented later, age is statistically significant.
[12] Poor persons are defined as persons with a household income below the median.
[13] In later specifications this coefficient is not always significant

the self-assessed life expectancy of respondents. In most regressions the coefficient for the dummy variable "I will be dead in 20 years" is not significant and moreover positive, which runs counter to what one would assume by pure self-interest.

People differ in their attitude towards (personal) indebtedness. To control for this heterogeneity and its likely consequences on people's attitude towards government indebtedness, the specification includes a dummy variable controlling for whether respondents feel uncomfortable when their checkings accounts are overdrafted ("overdraft uncomfortable"):[14] this variable is insignificant. Finally, males are in favor of a faster consolidation, an effect which corresponds to findings in other areas of redistributive politics. In the context of the present study, males might also be less risk averse, more activists and less concerned with the effect on the whole society than females—all of them reasons cited in the literature (cf. Heinemann and Hennighausen (2010)). Additionally, males might react differently in interview situation. In the end, all these explanations remain speculative.

The degree of knowledge of respondents is proxied through information on media consumption. In particular, those who read quality papers and magazines and those who read other (non-quality) newspapers are compared with those who read no newspapers (the omitted category). The point estimates reveal that readers of quality newspapers or magazine favor a stronger consolidation that those who no not read newspapers, however the effect depends on the specification and is not always significant.

A final group of variables which has been highlighted by previous research is ideology. Some scholars have assigned ideology an outstanding importance for social decisions, more important than self-interest (Blinder and Krueger, 2004). Pitlik et al. (2010) qualify this finding and note that self-interest might be as important as ideology. Regardless of the view one holds, I take from these studies that ideology is likely to matter and by not controlling for ideology one would risk that results are driven by a mere general ideological attachment to fiscal positions, like fiscal conservatism. Accordingly, the baseline specification includes one measure for ideology, i.e. the degree of redistribution respondents' prefer relative to their assessment of the actual situation. From these responses three dummy variables are constructed measuring whether respondents prefer "more redistribution", "less redistribution" or "no change" (the omitted category). A priori, the expected sign of these coef-

[14] In Austria, overdraft facilities for checking accounts are very frequent. By using them, it is easy to become a borrower without running through the usual loan application procedures at commercial banks.

fcients is ambiguous: For example, one could argue that preferences towards more redistribution are correlated with a weaker preferred consolidation in order to not endanger the budgetary means for this policy. On the other hand, a preference for redistribution could be consistent with a stronger consolidation if it is financed by wealthy citizens.

The point estimates reveal that ideology matters: Both effects are of about the same size, however the significance of "less redistribution" varies across specifications while "more redistribution" is always significant at least at the 5% level.[15] Concerning the sign, a differential impact is obtained, i.e. both the group favoring less redistribution and the group favoring more redistribution prefer a stronger consolidation than those who are satisfied with the current degree of redistribution. This finding makes sense, as respondents who are not content with the government policy concerning redistribution might also not be content with the measures (expected) from the government to achieve consolidation.

Extending the baseline specification Columns 2 to 4 of Table 2 extend the baseline specification. In col. 2, I control for expectations of what high debt levels imply in the future. If respondents expect higher taxes in the future (absent consolidation), they are in favor of a faster consolidation, whereas lower transfers (again absent consolidation) have no impact. Like in the case of age, one can presume that many of the discussed effects might unfold through interactions—expected future tax increases are relevant only for those that expect to be still alive and who expect to have high income. As the matter of self-interest is not at the core of the present analysis and as the number of observations is not overly high, which restricts the number of interactions which can meaningfully be analyzed, I do not delve more deeply into this issue but present just one additional model containing interaction terms. In col. 3, expected income mobility is interacted with expectations of higher taxes. Upward mobility alone does not matter for the preferred consolidation speed, but the interaction of upward mobility and expectations of higher taxes are important: those who are upwardly mobile and who expect higher taxes favor a faster consolidation than those who are upward mobile but do not expect higher taxes.[16] In turn, expectations of higher taxes (absent consolidation) do not matter for those

[15] This clearly reflects the fact that the number of respondents favoring "less redistribution"is sizeably smaller than that those favoring "more redistribution".

[16] This is derived from the following test: "exp. upward mobility" = "exp. upward mobility" + "high debt implies higher taxes in the future" + (exp. upward mobility x "high debt implies higher taxes in the future"). The F-test statistics is 7.59 with a p-value of 0.01.

not upwardly mobile. Finally, the last column in Table 2 demonstrates that the results which have been discussed so far are not driven by the subjective assessment of the current tax burden or the self-assessed importance on transfers for the monthly household budget—both variables are statistically insignificant.

5.2 Intergenerational Concerns Matter – But Not Unconditionally

The previous results have established that parents have a higher preferred CONSPEED than non-parents. This confirms the presence of an intergenerational motive. However, in light of the outstanding role that has been assigned to the intergenerational motive in the literature, it is surprising that the difference in CONSPEED between parents and non-parents is not overly high both in absolute terms and compared with other marginal effects: for example, the marginal effect of self-interest as measured by "lower debt in 20 yrs: positive impact for me" is as important as the intergenerational effect.[17] This deserves a closer look.

Table 3 shows the marginal effects of six specifications where "has children" is interacted with various variables which might potentially affect preferences towards consolidation—the reported coefficients represent the marginal effects relative to those respondents without children.

Column 2 compares parents whose children are still living at home with parents whose children left home. The former have a significantly higher CONSPEED than the latter. Moreover, the latter group of parents do not favor a stronger consolidation than non-parents.

In column 3, I account for intergenerational mobility, i.e. the living standard parents expect for their offsprings relative to their own living standard. Employing this information reveals a significant difference in CONSPEED between those who expect their children to have a lower living standard and those who expect them to have the same or a higher living standard. In particular, parents who expect their children to have a lower living standard favor a significantly faster consolidation than non-parents or parents who expect them to have the same or a better living standard.

Similarly, I employ information about whether respondents think that government debt will constitute a burden for their children (col. 4). Again, results are very similar: those parents who consider debt to be a burden for their children differ

[17] The estimates in col. 1 of Table 2 suggest that the 95% confidence interval for both effects ranges from about 0.04 to 0.44.

both from those parents who do not think so and from non-parents. Based on answers about whether debt will be a burden for children, I construct a variable indicating whether parents would increase their saving effort and inherit more if the debt-to-GDP ratio will not be reduced. Among parents who consider debt a burden for their children, about 46% of respondents answer that they would increase their inheritances and, as expected, this share is increasing with income. From basic Ricardian equivalence considerations one could expect that parents who plan to increase bequests have a lower CONSPEED than those who do not plan to increase their bequests. However, the opposite result is obtained: plans to increase bequests are correlated with a higher CONSPEED.

A further survey question inquires about whether parents think that their children will have a better standing than average children – pertaining to the relative standing of their offsprings within the next generation (in contrast to the standing relative to the parents). Those who think that the standing of their children will be higher have a significantly higher CONSPEED (col. 6). Finally, we split parents according to whether their household income is above or below the median household income observed in the sample. This shows that parents with an above-median income tend to have a higher CONSPEED than parents with a below median income.[18]

In summary, the intergenerational motive of fiscal consolidation is found to be relatively weak when averaged across all parents. Moreover, a more detailed view establishes that intergenerational concerns do not matter unconditionally. While some groups of parents are not different from non-parents, marginal effects are sizeable for other groups of parents. Although the presented results do certainly not condition on all possible aspects parents might include in their assessment, the presented results nevertheless strongly suggest that expectations of parents regarding the economic future of their children play a substantial role. Moreover, the results allow drawing some conclusions about Ricardian equivalence. The survey evidence shows that those who want to increase bequests, those who expect their children to have a high relative standing within the next generation and those who fear that their offsprings have a lower living standard in comparison to themselves have, in general, higher incomes. Therefore, all results of Table 3 point towards the direction that higher income families favor a faster CONSPEED. While neither of these regressions can be used as a direct test of Ricardian equivalence, the evidence, in sum, seems to run

[18]However, the difference between parents with above-median income and parents with below median-income is only weak, i.e. the test of equality of coefficients is rejected only at a 10% level.

counter to the predictions of Ricardian equivalence.[19]

These findings will be incorporated in subsequent analyses. In particular, I will use the model of column 3 of Table 3 as the new baseline model to which further variables will be added (extended baseline model).

5.3 Distributional Fairness Important

I provide a direct test whether fairness perceptions exert an impact on the preferred consolidation speed above and beyond the effect of self-interest and intergenerational concerns. In particular, respondents were asked to think about the expected consolidation measures set by the government and to indicate their consent to the following statements: "the burden will be distributed very unfairly" (25% of respondents agree to this statement)[20].

The results confirm that fairness perceptions matter quite substantially. If "the burden will be distributed very unfairly" is appended to the extended baseline specification, it is both economically and statistically significant (Table 4, col. 1). It can be expected that answers on fairness are distorted by a "self-serving bias", i.e. that respondents conflate the views about what is fair with views about self-interest. This raises the minor problem that my measure of personal affliction is likely to be correlated with the measure of perceived fairness—which can easily be accounted for in estimations. A more subtle problem is whether it is at all possible to empirically identify an effect of fairness *independent* of financial affliction. Ultimately, such a pure separation seems only possible in experimental studies but not with survey data. Instead, I will present several estimations which aim at dampening the effect of financial affliction.

In col. 2, personal affliction is omitted which results in the finding that "the burden will be distributed very unfairly" turns larger, which points towards the correlation of financial affliction and fairness. One way to account for this correlation is by interacting affliction and expected fairness. The results indicate a very strong impact of fairness (col. 3). This can be seen along two dimensions: First, those who expect to be very strongly or strongly affected and who consider the expected policy

[19] A particular shortcoming of my analysis is that I do not have information on wealth which would be required for a direct test of the propositions of Ricardian equivalence.

[20] The survey question from which this variable was constructed has four answer categories: very fair, somewhat fair, somewhat unfair, very unfair. I have chosen to separate respondents into those answering very unfair and the rest because only one out of four respondents consider the expected policy measures as somewhat or very fair.

measures fair do not differ statistically from those who are just somewhat affected (the omitted base category). Second, within single categories of affliction, there are significant differences between respondents who expect the government's measures to be fair and respondents who expect the government's measures to be unfair: for those expecting to be "strongly affected" the marginal effects are 0.07 versus -0.41 (p-value of F-test of equal coefficients: 0.01), for those "very strongly affected" the marginal effects are -0.27 and -0.53, respectively. These point estimates suggest a neutralizing role of perceived fairness. Policy measures which are expected to be fair do not completely wipe out the negative effect of being financially afflicted but, at least, significantly reduce its negative impact.

Other ways to control for the possible correlation between fairness and financial affliction are to restrict the sample in various dimensions. This is done in col. 4 of Table 4 which disregards all respondents who expect to be very strongly affected by consolidation measures. In a similar vein, in col. 5, I include only respondents who do not fully agree to the statement that "me and my family will be burdened too much if the government aims at reducing government debt". In both cases, fairness remains both economically and statistically significant.[21]

For a last test, I calculate the difference of CONSPEED and CONSPEED PREF and recode the difference to a dummy variable which takes a value of one if respondent i wants to consolidate more slowly in case the government sets the policy measures than if respondent i is free to choose:

$$\begin{aligned} \text{CONSPEED DIFF}_i &= 1 \text{ if } \text{CONSPEED}_i - \text{CONSPEED PREF}_i < 0 \\ &= 0 \text{ else.} \end{aligned}$$

As the only difference between the questions underlying CONSPEED and CONSPEED PREF is the effect of government policy, CONSPEED DIFF signals whether respondents deviate from their preferences regarding fiscal consolidation if government sets policy. A direct consequence of the differentiation is that all variables which reflect a general attitude towards consolidation (intergenerational concerns, time preference, etc.) should be differenced away, implying that their effect should be insignificant in estimations whereas variables which reflect government policy

[21]The samples used in in col. 4 and 5 are based on independent survey questions. Nevertheless, the number of observations is rather similar in both specifications. This reflects the fact that answers to the survey questions which are used to separate the samples are correlated. Nevertheless, the samples in col. 4 and 5. are not identical (about 85% of the samples overlap).

should remain significant.

The corresponding results are summarized in col. 6. In line with our contention, I find that all general variables which previously have been identified as significant and important turn insignificant while those variables which are related to government policy remain significant.[22] On the one hand, this provides convincing evidence that respondents did answer in a consistent way. On the other hand however—and more important—, the results show that perceived fairness exerts a sizeable and significant impact on whether a respondent deviates from his/her preferences regarding consolidation if the expected government measures are deemed unfair.

All these results from Table 4 taken together suggest that intragenerational fairness exerts an important impact, substantiating results from the literature which identify the lack of intragenerational fairness as an important cause for failed consolidations.

5.4 Intra- vs. Intergenerational Distribution – What is More Important?

Having established evidence that intergenerational as well as intragenerational aspects of consolidation measures matter, the question emerges as to the relative importance of these effects.

The survey contains one question which can be used to analyze this issue: "What factors would affect your willingness to accept financial burdens? How important are the following preconditions?" The question comprised two answers and for each answer respondents could indicate their consent: "If I know, that the burden is distributed fairly within today's generation" and "If the future burden of today's young or of following generations will be reduced". Employing this information, three dummy variables are constructed: "only intragenerational fairness important" for those who consider the first reason important but not the second, "only intergenerational fairness important" for those who consider the second reason important but not the first and "both are important".

For about 50% of the sample, neither of the two motives is important. As I do not know whether these 50% do not want to contribute or would like to contribute for some other reason, this test must build on the relative importance of the inter- versus the intragenerational aspect.

[22] The results are summarized in the supplement.

A first indication can be obtained from descriptive statistics. For a relative majority of 28% of all respondents both aspects are important and for 17% only intragenerational fairness is important. In turn, intergenerational fairness is considered by just 5% as the sole motive.

A second approach is to append these three dummy variables to our previous specification (the marginal effects must be seen relative to those for whom neither of the reasons is important). All marginal effects are positive (Table 5). As the question pertains to the willingness to contribute for the consolidation, this was expected, and in the end, demonstrates the logical consistence of the results. The strongest effect is found for those who consider both aspects important. If "only intergenerational fairness important" is compared with "only intragenerational fairness important" no statistically significant difference is found. Finally, this pattern of results also holds (i) if "CONSPEED PREF" is used as the dependent variable and (ii) if the sample is reduced to only parents. In the latter case, the intergenerational aspect gains in importance, as could have been expected, but nevertheless remains insignificantly different from the intragenerational aspect.

5.5 Policy Credibility

The survey allows shedding light on two aspects of policy credibility – what is the stance of credibility and how does it affect preferences towards consolidation. This evidence is based on two independent survey questions. First, respondents were asked whether they expect that government debt will be reduced sustainably within the next 10 to 20 years. Alternatively, respondents were asked counterfactually about what they expect will happen if the government achieves a debt reduction. One answer category was that "government debt will soon start to increase again".

The descriptive findings suggests that Austrian fiscal policy makers have a considerable credibility problem: 66% of respondents do not believe that debt will be reduced sustainably in 10 to 20 years and 73% expect an rebound of debt after it has been reduced.[23]

The estimates presented in Table 6 support the view that expectations regarding the political process affect voters' preferences for consolidation. In particular, the coefficients of interest are significantly negative implying that those respondents who have doubts about whether debt will be lower in the future favor a slower consoli-

[23]The question was not geared towards a specific consolidation plan. Therefore, answers reflect an attitude towards the entire political process.

dation. Furthermore, the coefficients are sizeable in comparison to other frequently cited motives for why the public likes or dislikes consolidation, i.e. in comparison to the intergenerational motive.

There are two potential caveats which could affect these estimation results. First, expectations about the debt level in 20 years are likely to be correlated with expectations about whether the government will already consolidate in the short-run. I account for this by including these expectations as an additional right-hand side variable (results not shown) and, alternatively, I restrict the sample to only those who expect the government to consolidate already in the short-run (col. 3 of Table 6). In neither case do the results change qualitatively. Second, the finding could be also caused by omitted variables which affect both policy credibility and the desired speed of consolidation. A natural candidate would be the attitude towards politicians or political institutions – a negative attitude could translate into lower credibility and lower CONSPEED. To account for this argument, I have added measures of trust in government (col. 4 of Table 6) and trust in political parties (not shown) as explanatory variable. Their inclusion does barely affect the other variables.

5.6 Reliability of Results and Robustness Tests

The results presented in this paper are based on a series of simple regressions and there are good reasons to be wary of some results.

One source of possible scepticism could be rooted in the fact that I use survey data which raises the issue of whether answers reflect the truth. Clearly this is an issue which has to be taken seriously. However, I think that in this case the survey techniques is the most appropriate: at the heart of our analysis is voting behavior. In this case, the use of survey data is very plausible because on average voters are unlikely to invest much more time when casting their poll than when answering survey questions (cf. Pitlik et al., 2010). Furthermore, the questionnaire contained several possibilities to cross-check results and these tests suggest that answers are plausible. On balance, therefore, I do not consider the methodology of great concern although the present study can be seen as a starting point upon which improvements in the questionnaire are clearly possible.

The second source of possible scepticism can be rooted in the usual estimation issues. Foremost, the presented marginal effects establish correlation and no causality, which is fine for the purpose of the study. Second, model selection is an issue: I applied a simple-to-general specification search. This resulted in a baseline model

(Table 2, col. 1). Starting from this model, (blocks of) variables were sequentially added. This raises the issue about which variables should be left in the model as I add additional variables (e.g. fairness). It turns out, fortunately, that for almost all of the presented estimations, this does not pose a problem, i.e. that results do not change qualitatively if one or the other block of variables is left out of the regression (which can be expected if the omitted variables are not very highly correlated with the other regressors). Also, one could turn this around and ask what would happen, if one started out with a full model, including fairness variables and variables of policy credibility. Again, this does not affect the results (cf. with col. 1 of Table A.3). This finding also applies if all regressions are estimated with ordered probit instead of OLS (col. 2 of Table A.3).

Finally, the regressions controlled for knowledge via dummy variables about newspaper consumption. Although I don't consider it very likely, the chance remains that these knowledge variables are poor proxies for knowledge about fiscal issues. To account for this, I have repeated all regressions with the sample restricted to only those respondents who are interested in politics, accounting for the finding of Blinder and Krueger (2004) that knowledge about government debt is highly correlated with political involvement, at least in the US. The results from this robustness tests shows that results are very comparable (there are some minor differences which are due to the fact that the sample is smaller) and that neither of the conclusions drawn above needs to be changed (col. 3 of Table A.3).

6 Implications

The results of this paper demonstrate the importance of self-interest, intergenerational altruism, intragenerational fairness and of fiscal policy credibility for the demand for debt consolidation. Also, the results show that voters are fiscally prudent. This bears economic policy implications: The role of intergenerational altruism is uncontested, however it might have too much weight in the economic debate. In the end, it applies only to about one third of parents or to about one fourth of voters. Second, voters' assessment of intragenerational fairness is at least as important as intergenerational aspects. Policy measures which are perceived as fair have a significantly higher chance of obtaining voters approval. Third, the low credibility of fiscal policy plans can be a serious impediment to voters' support for consolidation. Interestingly, these results are very much in line with economic policy advice on how

to design fiscal adjustment in advanced economies: "You shall target a long-term decline in the public debt-to-GDP ratio, not just its stabilisation at post-crisis levels", "You shall be fair", "You shall have a credible medium-term fiscal plan" (Blanchard and Cottarelli, 2010). The same as these results contribute in how economic policy should be designed, they might contribute in explaining why consolidations have failed in the past.

The results can be extended in several directions. In particular, I have tested only a small number of predictions from the literature and I have not studied how an optimal consolidation should look like and what measures are perceived as fair. Also, it would be interesting to study the relative importance of the various effects for the voting behavior of agents. Finally, given that the data are from Austria, the question emerges whether the results can be confirmed for more countries. This does not so much apply to voters' attitude towards government debt—for the US voters have also been found to be fiscally prudent (Alesina et al., 1998; Peltzman, 1992)—and to the role of fairness—fairness has been shown to be important in many countries (e.g. Alesina and Giuliano, 2009; Fong, 2001; Heinemann and Hennighausen, 2010)—but more for the role of policy credibility.

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A Variable Description

A.1 Dependent Variables

The dependent variables are derived from the following sequence of questions. These questions were asked after a series of questions about the general attitude towards debt, about the increase of debt in the course of the financial crisis, about what type of measures respondents expect (tax increases, cuts in transfers, etc), whether they will be affected by these measures and whether they consider these measures fair.

1. "And what do you think: How strong will the government consolidate public finances?".
   (a) "no consolidation, debt ratio continues to increase"
   (b) "consolidation, but only to the extent that the debt ratio does not continue to increase"
   (c) "very strong consolidation such that the debt ratio declines within the next 5 years"
   (d) "strong consolidation such that the debt ratio declines within the next 10 years"
   (e) "somewhat weaker consolidation such that the debt ratio declines within the next 20 years"
   (f) "much weaker consolidation such that the debt ratio declines within the next 50 years".
2. "And suppose you could choose - you could choose, how strongly and in what areas expenditures are cut, whether and what taxes are increased. What would you choose?"
3. "Assume that you could determine the extent of the reduction of government debt, but not the type of savings or which taxes are increased—this is determined by the government. What would you choose under these circumstances?".

Answers from question 3 are used to construct the main dependent variable "CONSPEED", answers from question 2 are used to construct "CONSPEED PREF". Answer categories for both "CONSPEED" and "CONSPEED PREF" are ordered from 1 to 6 such that 1 represents "no consolidation, debt ratio continues to increase" and 6 represents "very strong consolidation such that the debt ratio declines within the next 5 years".

A.2 Explanatory Variables

The following table contains a definition of dependent variables and of variables which are used to restrict the sample. Own translation.

Table A.1: Explanatory variables

fin. sit. very good, fin. sit. good, fin. sit. bad, fin. sit. very bad	"All in all: how would you assess the financial situation of your household?" (very good, good, bad, very bad)
low income	Dummy variable, 1 if respondent's household income falls into the lowest percentile.
read other newspapers, read quality newspapers, reads other newspapers	Respondents were asked about their newspaper and magazine consumption. For those reading quality newspapers or magazines, "read quality newspapers"=1, "read no newpapers"=1 if respondent does not read newspapers or magazines. Omitted category=reads other newspaper.
overdraft uncomfortable	"Please tell me how much the following statements apply to you personally" (agree, somewhat agree, somewhat disagree, disagree) - "when I overdraft my account, I feel bad" Dummy variable, 1 if respondent agrees or somewhat agrees.
time preference	"Imagine that you have won a monthly salary in the lottery (or the amount, which you usually have at your disposal per month). This money will be paid out in a year from now. If you relinquish parts of the money, you can have the rest immediately. To get the money right now, how many percent would you give up?" Showcard with 9 categories (0%, 2%, 3%, 5%, 7%, 10%, 15%, 20%, more than 20%). For "time preference" these categories were translated into numerical values.
not affected, somewhat affected, strongly affected, very strongly affected	Derived from two questions about (i) expected cuts in transfer payments and (ii) expected tax increases. For both questions, respondents were asked to indicate on a scale from 1 to 4 whether they will be financially affected. The four dummy variables are constructed as a combination of answers to both questions.
lower debt in 20 yrs: positive impact for me	"And personally. If you think about the time in 10 to 20 years. Would consolidated public finances have positive effects on your life in 10 to 20 years." (very positive, positive, negative, very negative, practically no effects, will not affect me anymore) Dummy variable, 1 if respondent answers that this would have very positive or positive effects.
will be dead in 20 years	Same question as above: Dummy variable, 1 if respondent answers that this will not affect him/her anymore.
high debt implies higher taxes in the future	"People have different views on the effects of government debt. I am going to read some statements. Please tell me how much, in your opinion, the following statements apply." (agree, somewhat agree, somewhat disagree, disagree) - "higher government debt implies that I have to pay more taxes in the future" Dummy variable, 1 if respondent agrees or somewhat agrees.
high debt implies lower transfers in the future	Same question as above: - "higher government debt implies that the protection through government transfers will be worse in the future" Dummy variable, 1 if respondent agrees or somewhat agrees.

See continuation.

Table A.1: Explanatory variables (cont'd)

exp. upward mobility	Derived from two questions: 1) "If you think about your living standard. Where would you place yourself on a scale from 1 to 10, where 1 means very bad living standard and 10 means very good living standard." 2) "And on which position do you think you will be in 10 years from now." Answers on both questions were compared and "exp. upward mobility" is coded as 1 for those who expect an improvement, 0 else.
my children will have worse standing	(question is posed in the context of the questions above) "And on which position do you think will your child be if it is in your age?" (if respondent has more children, then answer refers to the youngest). Dummy variable, 1 if children is expected to have worse standing than respondent.
children higher status than avg. children	"In the long-run, do you think that your children or grandchildren will have a better living standard than average children or grandchildren" Dummy variable, 1 if "yes, because they will inherit enough" or "yes, because of other reasons".
higher inheritances	Derived from question above, dummy variable, 1 if "yes, because they will inherit enough".
tax burden too high	"How do you assess your current burden from taxation. Is the burden much too high, too high, appropriate, too low or much too low?" Dummy variable, 1 if too high or much too high.
transfers are important	"any persons or households receive transfer payments from the government, like money for children, for personal care, grants, housing subsidies. How important are such payments for your monthly budget?" (very important, important, unimportant, very unimportant) Dummy variable, 1 if important or very important.
debt a burden for children	"Suppose, this government or the next governments do not succeed in consolidating government debt within the next 10 to 20 years. Do you think that this would constitute a burden for your children or grandchildren?" Dummy variable, 1 if respondent agrees.
today's generation should restrain itself to avoid burden	"There are many opinions about what is fair with respect to subsequent generations. How much do you agree to the following statements?" (agree, somewhat agree, somewhat disagree and disagree) - "today's generation should financially restrain itself such that the next generations are not burdened by high debt levels" Dummy variable, 1 if respondent agrees or somewhat agrees.
environment	Same question as above: - "today's generation should restrain itself such that the next generations are not burdened by environmental damages which are caused by today's generation" Dummy variable, 1 if respondent agrees or somewhat agrees.
burden will be distributed very unfairly	"In case the government consolidates public finances – how much do you think will the following apply?" (agree, somewhat agree, somewhat disagree and disagree) - "the financial burden will be distributed fairly" Dummy variable, 1 if respondent disagrees.

See continuation.

Table A.1: Explanatory variables (cont'd)

only intragen. fairness important, only intergen. fairness important, both are important, neither is important	"Under which conditions would you be willing to accept a financial burden for fiscal consolidation? How important are the following preconditions for you?" - "If the future burden for today's young or of future generations will be lowered" - "If I know, that the burden is distributed fairly within today's generation" Respondents could agree/disagree to each question on a four point scale. The variables are then defined as dummy variables for those who agree to the first reason but not the second, for those who agree to the second reason but not to the first and for those who agree on both or on neither statement.
expect no sustainable consolidation	"Do you think that government debt will be reduced sustainably within the next 10 to 20 years?" (yes/no) Dummy variable, 1 if respondent answers yes.
future: debt will increase again	Derived from a question which was posed after the hypothetical question on the effects of government debt if debt will not be reduced (see above, "debt a burden for children") "And now the opposite: Suppose this government or the next governments do succeed in consolidating government debt within the next 10 to 20 years. What do you think would happen after the consolidation?" (agree, somewhat agree, somewhat disagree, disagree) - government debt will rise again soon afterwards Dummy variable, 1 if respondent agrees or somewhat agrees.
trust in government	"How much do you trust the following institutions?" (trust, somewhat trust, somewhat distrust, distrust) Dummy variable, 1 if respondent trusts or somewhat trusts the government.
I am interested in politics (this variable is not used as a dependent variable but to restrict the sample for robustness tests)	Same question as above: - "I am interested in politics" Dummy variable, 1 if respondent agrees or somewhat agrees.
knowledge about government debt (this variable is not used as a dependent variable but to restrict the sample; only those who answered strong increase or increase were included in the sample)	"And now to government debt. How do you assess the development of government debt over the past two years?" (strong increase, increase, about constant, decline)

Table A.2: Descriptive statistics

	mean	sd	min	max
preferred consol. speed (CONSPEED)	3.82	1.50	1	6.00
preferred consol. speed (CONSPEED PREF)	3.97	1.52	1	6.00
fin. sit. very good	0.10	0.30	0	1.00
fin. sit. bad	0.22	0.41	0	1.00
fin. sit. very bad	0.06	0.23	0	1.00
low income	0.08	0.27	0	1.00
age	46.71	16.45	16	96.00
age sq. (x1e3)	2.45	1.65	0.26	9.22
edu low	0.56	0.50	0	1.00
edu high	0.26	0.44	0	1.00
male	0.48	0.50	0	1.00
married	0.62	0.49	0	1.00
read other newspapers	0.60	0.49	0	1.00
read quality newspapers	0.26	0.44	0	1.00
overdraft uncomfortable	0.78	0.41	0	1.00
time preference	3.38	5.45	0	30.00
will be dead in 20 years	0.10	0.30	0	1.00
less redistribution	0.14	0.35	0	1.00
more redistribution	0.66	0.47	0	1.00
not affected	0.06	0.23	0	1.00
somewhat affected	0.36	0.48	0	1.00
strongly affected	0.39	0.49	0	1.00
very strongly affected	0.19	0.39	0	1.00
lower debt in 20 yrs: positive impact for me	0.55	0.50	0	1.00
high debt implies higher taxes in the future	0.48	0.50	0	1.00
high debt implies lower transfers in the future	0.41	0.49	0	1.00
exp. upward mobility	0.26	0.44	0	1.00
exp. upward mobility X higher taxes	0.12	0.32	0	1.00
tax burden too high	0.68	0.47	0	1.00
transfers are important	0.50	0.50	0	1.00
has children	0.62	0.48	0	1.00
children, not in household	0.27	0.45	0	1.00
children in household	0.35	0.48	0	1.00
my children will have worse standing	0.23	0.42	0	1.00
my children will have better/same standing	0.35	0.48	0	1.00

See continuation.

Table A.2: (cont'd) Descriptive statistics

	mean	sd	min	max
debt a burden for children	0.55	0.50	0	1.00
debt no burden for children	0.07	0.26	0	1.00
burden & higher inheritances	0.24	0.42	0	1.00
burden & not higher inheritances	0.28	0.45	0	1.00
children higher status than avg. children	0.22	0.41	0	1.00
children not higher status than avg. children	0.32	0.47	0	1.00
children and high income	0.33	0.47	0	1.00
children and low income	0.29	0.46	0	1.00
today's generation should restrain itself to avoid burden	0.64	0.48	0	1.00
today's generation should restrain itself X children	0.42	0.49	0	1.00
today's generation should restrain itself X no children	0.22	0.42	0	1.00
environment X children	0.52	0.50	0	1.00
environment X no children	0.31	0.46	0	1.00
burden will be distributed very unfairly	0.25	0.43	0	1.00
strongly affected X measures are fair	0.28	0.45	0	1.00
strongly affected X measures are unfair	0.09	0.28	0	1.00
very strongly affected X measures are fair	0.10	0.29	0	1.00
very strongly affected X measures are unfair	0.08	0.27	0	1.00
only intragen. fairness important (A)	0.17	0.37	0	1.00
only intergen. fairness important (B)	0.05	0.22	0	1.00
both are important	0.28	0.45	0	1.00
expect no sustainable consolidation	0.66	0.47	0	1.00
future: debt will increase again	0.73	0.45	0	1.00
trust in government	0.30	0.46	0	1.00

Table A.3: Robustness Tests

	preferred consolidation speed (CONSPEED)		
	(1) OLS	(2) ord. probit	(3) restr. sample OLS
fin. sit. very good	-0.463***	-0.082***	-0.501***
	(0.155)	(0.027)	(0.161)
fin. sit. bad	0.061	0.015	0.084
	(0.125)	(0.021)	(0.138)
fin. sit. very bad	-0.443*	-0.067*	-0.675***
	(0.229)	(0.040)	(0.245)
low income	0.541***	0.098***	0.494**
	(0.201)	(0.034)	(0.222)
age	-0.032*	-0.006*	-0.048**
	(0.017)	(0.003)	(0.019)
age sq. (x1e3)	0.276	0.050*	0.427**
	(0.170)	(0.029)	(0.187)
edu low	-0.444***	-0.077***	-0.392***
	(0.134)	(0.023)	(0.141)
edu high	-0.214	-0.037	-0.185
	(0.148)	(0.025)	(0.154)
male	0.219**	0.040**	0.163
	(0.096)	(0.016)	(0.103)
married	0.036	0.004	0.042
	(0.109)	(0.018)	(0.117)
read other newspapers	0.002	-0.005	-0.162
	(0.148)	(0.025)	(0.174)
read quality newspapers	0.169	0.023	0.035
	(0.171)	(0.028)	(0.193)
overdraft uncomfortable	-0.036	-0.001	0.022
	(0.109)	(0.018)	(0.118)
time preference	-0.020**	-0.003**	-0.025***
	(0.009)	(0.001)	(0.009)
will be dead in 20 years	0.283	0.031	0.102
	(0.212)	(0.036)	(0.222)
less redistribution	0.224	0.048*	0.229
	(0.163)	(0.027)	(0.180)
more redistribution	0.215*	0.030	0.225*
	(0.118)	(0.019)	(0.128)

[1] See continuation.

Table A.3: Robustness Tests (cont'd)

	preferred consolidation speed (CONSPEED)		
	(1) OLS	(2) ord. probit	(3) restr. sample OLS
my children will have worse standing	0.474***	0.086***	0.521***
	(0.137)	(0.023)	(0.146)
my children will have better/same standing	0.082	0.017	0.084
	(0.121)	(0.021)	(0.128)
lower debt in 20 yrs: positive impact for me	0.185*	0.030	0.155
	(0.112)	(0.019)	(0.122)
not affected	0.157	0.020	0.065
	(0.251)	(0.042)	(0.254)
strongly affected X measures are fair	0.074	0.009	0.105
	(0.120)	(0.020)	(0.127)
strongly affected X measures are unfair	-0.366**	-0.065**	-0.325*
	(0.158)	(0.025)	(0.175)
very strongly affected X measures are fair	-0.266	-0.058*	-0.362*
	(0.178)	(0.030)	(0.194)
very strongly affected X measures are unfair	-0.565***	-0.104***	-0.430**
	(0.164)	(0.028)	(0.183)
expect no sustainable consolidation	-0.415***	-0.065***	-0.386***
	(0.099)	(0.017)	(0.105)
constant	4.769***		5.253***
	(0.450)		(0.512)
adj-R2	0.07		0.07
pseudo-R2		0.03	
uncond. probability of outcome		0.17	
N	1013	1013	900

[1] Marginal effects from ordinary-least squares regression (col. 1 and 3).
[2] Marginal effects from ordered probit regression (col. 2). The marginal effects were calculated for outcome 6 (consolidation with the next 5 years).
[3] In col. 3 the sample is restricted to only those who are interested in politics.
[3] Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.
[4] Omitted variables (base categories for groups of dummy variables): fin. sit. good, edu med., somewhat affected, read no newspaper, same extent of redistribution.
[5] Variables are defined in the Appendix.

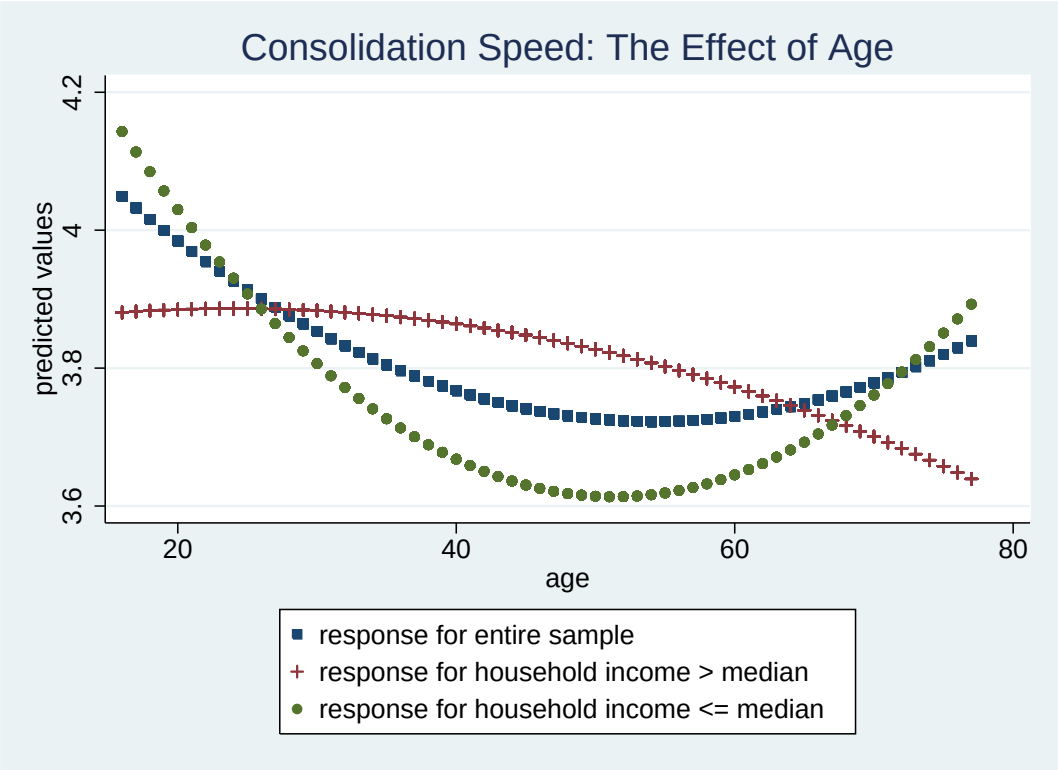

Figure 1: Preferred Consolidation Speed and the Age-Income Profile

Table 1: Preferred and expected consolidation speed

	expected from government	preferred (CONSPEED)
no consolidation, debt ratio continues to increase	19	3
consolidation, constant debt ratio	38	27
very weak consolidation (reduction within 50 years)	3	3
weak consolidation (reduction within 20 years)	17	24
strong consolidation (reduction within 10 years)	14	26
very strong consolidation (reduction within 5 years)	9	17

[1] Answers in % of respondents.

Table 2: Self-Interest

	preferred consolidation speed (CONSPEED)			
	(1)	(2)	(3)	(4)
fin. sit. very good	-0.308**	-0.334**	-0.318**	-0.301**
	(0.147)	(0.148)	(0.153)	(0.149)
fin. sit. bad	-0.054	-0.043	-0.032	-0.098
	(0.114)	(0.115)	(0.119)	(0.118)
fin. sit. very bad	-0.596***	-0.658***	-0.601***	-0.646***
	(0.201)	(0.198)	(0.211)	(0.212)
low income	0.479**	0.479**	0.412**	0.526***
	(0.189)	(0.192)	(0.194)	(0.196)
age	-0.024	-0.022	-0.032*	-0.024
	(0.016)	(0.016)	(0.017)	(0.017)
age sq. (x1e3)	0.224	0.197	0.283*	0.211
	(0.158)	(0.161)	(0.171)	(0.166)
edu low	-0.395***	-0.392***	-0.418***	-0.388***
	(0.122)	(0.122)	(0.129)	(0.126)
edu high	-0.065	-0.045	-0.083	-0.100
	(0.133)	(0.133)	(0.138)	(0.137)
male	0.228***	0.243***	0.264***	0.232***
	(0.088)	(0.089)	(0.091)	(0.090)
married	0.074	0.080	0.048	0.094
	(0.101)	(0.101)	(0.105)	(0.102)
read other newspapers	0.143	0.195	0.170	0.134
	(0.141)	(0.144)	(0.145)	(0.146)
read quality newspapers	0.288*	0.332**	0.349**	0.321*
	(0.159)	(0.162)	(0.163)	(0.164)
overdraft uncomfortable	-0.050	-0.006	0.027	-0.062
	(0.103)	(0.104)	(0.106)	(0.106)
time preference	-0.017**	-0.016*	-0.018**	-0.013
	(0.009)	(0.009)	(0.009)	(0.009)
will be dead in 20 years	0.253	0.283	0.373*	0.264
	(0.188)	(0.189)	(0.203)	(0.193)
less redistribution	0.251*	0.302**	0.337**	0.246
	(0.152)	(0.153)	(0.158)	(0.153)
more redistribution	0.298***	0.289***	0.283**	0.302***
	(0.109)	(0.110)	(0.113)	(0.110)
has children	0.237**	0.210**	0.210*	0.228**
	(0.104)	(0.104)	(0.107)	(0.107)
not affected	0.057	0.005	0.068	0.027
	(0.236)	(0.231)	(0.247)	(0.252)
strongly affected	-0.042	-0.069	-0.019	-0.022
	(0.101)	(0.103)	(0.105)	(0.106)
very strongly affected	-0.332***	-0.372***	-0.331**	-0.294**
	(0.125)	(0.129)	(0.133)	(0.136)
lower debt in 20 yrs: positive impact for me	0.239**	0.228**	0.223**	0.217**
	(0.101)	(0.102)	(0.104)	(0.103)
high debt implies higher taxes in the future		0.307***	0.193	
		(0.111)	(0.128)	
high debt implies lower transfers in the future		-0.087	-0.118	
		(0.109)	(0.113)	
exp. upward mobility			-0.408***	
			(0.155)	
exp. upward mobility X higher taxes			0.385*	
			(0.198)	
tax burden too high				-0.134
				(0.097)
transfers are important				0.037
				(0.100)
constant	3.969***	3.750***	4.115***	4.059***
	(0.420)	(0.428)	(0.455)	(0.448)
adj-R2	0.05	0.06	0.06	0.05
N	1191	1168	1105	1152

[1] Marginal effects from ordinary-least squares regression.
[2] Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.
[3] Omitted variables (base categories for groups of dummy variables): fin. sit. good, edu med., somewhat affected, read no newspaper, same extent of redistribution.
[4] Variables are defined in the Appendix.

Table 3: Intergenerational Distribution

	preferred consolidation speed (CONSPEED)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
has children	0.237**						
	(0.104)						
children, not in household		0.056					
		(0.128)					
children in household		0.346***					
		(0.114)					
my children will have worse standing			0.404***				
			(0.132)				
my children will have better/same standing			0.114				
			(0.116)				
debt a burden for children				0.273***			
				(0.106)			
debt no burden for children				-0.001	0.025		
				(0.181)	(0.182)		
burden & higher inheritances					0.465***		
					(0.129)		
burden & not higher inheritances					0.140		
					(0.125)		
children higher status than avg. children						0.381***	
						(0.116)	
children not higher status than avg. children						0.158	
						(0.112)	
children and high income							0.330***
							(0.116)
children and low income							0.123
							(0.124)
F-test: equal coefficients		5.54	4.95	2.58	6.88	3.59	2.96
p-value		0.02	0.01	0.11	0.01	0.06	0.09
adj-R2	0.05	0.05	0.05	0.05	0.06	0.05	0.05
N	1191	1191	1102	1191	1081	1191	1191

[1] Marginal effects from ordinary-least squares regression.
[2] Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.
[3] The variables which are summarized in this table have been appended to the model of col. 1 of Table 2. The coefficients of the other explanatory variables are not shown. All variables in columns 2 to 7 are only defined for respondents who have children.
[4] The F-test refers to a test of equal coefficients (e.g. whether the coefficient of "children, not in household" is statistically the same as "children in household".
[5] Variables are defined in the Appendix.

Table 4: Fairness

	preferred consolidation speed (CONSPEED)					Difference in CONSPEED (0/1)
	(1)	(2)	(3)	(4)	(5)	(6)
lower debt in 20 yrs: positive impact for me	0.270**	0.246**	0.250**	0.205*	0.231*	0.022
	(0.109)	(0.109)	(0.107)	(0.120)	(0.123)	(0.028)
not affected	0.170		0.161	0.169		-0.011
	(0.258)		(0.247)	(0.257)		(0.068)
strongly affected	-0.028			-0.038		-0.034
	(0.108)			(0.109)		(0.030)
very strongly affected	-0.327**					-0.113***
	(0.139)					(0.042)
my children will have worse standing	0.438***	0.420***	0.425***	0.447***	0.453***	-0.025
	(0.133)	(0.132)	(0.131)	(0.157)	(0.152)	(0.035)
my children will have better/same standing	0.090	0.104	0.092	0.043	0.187	0.042
	(0.118)	(0.118)	(0.116)	(0.130)	(0.129)	(0.030)
burden will be distributed very unfairly	-0.232**	-0.298***		-0.274**	-0.270**	-0.100***
	(0.111)	(0.106)		(0.128)	(0.128)	(0.034)
strongly affected X measures are fair			0.070			
			(0.115)			
strongly affected X measures are unfair			-0.410***			
			(0.151)			
very strongly affected X measures are fair			-0.270			
			(0.170)			
very strongly affected X measures are unfair			-0.527***			
			(0.161)			
constant	4.350***	4.329***	4.258***	4.594***	4.294***	
	(0.441)	(0.441)	(0.434)	(0.502)	(0.497)	
adj-R2	0.05	0.05	0.05	0.03	0.04	
pseudo-R2						0.06
N	1077	1077	1102	859	873	1066

[1] Marginal effects from ordinary-least squares regression (col. 1 to 5) and from probit regression (col. 6).
[2] In col. 6 the dependent variable is a dummy variable reflecting the difference between CONSPEED and CONSPEED PREF. A value of one implies that respondents want the government to consolidate slower than preferred.
[2] Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.
[3] The variables which are summarized in this table have been appended to the model of col. 3 of Table 3. The coefficients of the other explanatory variables are not shown.
[4] Variables are defined in the Appendix.

Table 5: Intergenerational versus Intragenerational Distribution

	preferred consolidation speed (CONSPEED)			
	(1) full sample	(2) only parents	(3) full sample	(4) only parents
only intragen. fairness important (A)	0.345***	0.417***	0.120	0.092
	(0.124)	(0.155)	(0.123)	(0.156)
only intergen. fairness important (B)	0.496**	0.591**	0.295	0.359
	(0.215)	(0.257)	(0.222)	(0.255)
both are important	0.440***	0.497***	0.310***	0.301**
	(0.099)	(0.123)	(0.100)	(0.126)
F-test: $(A) = (B)$	0.43	0.40	0.55	0.95
p-value	0.51	0.53	0.46	0.33
adj-R2	0.04	0.06	0.05	0.07
N	1198	750	1173	732

[1] Marginal effects from ordinary-least squares regression.
[2] Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.
[3] The variables which are summarized in this table have been appended to the model of col. 3 of Table 3. The coefficients of the other explanatory variables are not shown.
[4] The F-test refers to a test of equal coefficients for "intragenerational fairness important" and "intergenerational fairness important".
[5] Variables are defined in the Appendix.

Table 6: Policy Credibility

	preferred consolidation speed (CONSPEED)			
	(1)	(2)	(3) restr. sample	(4)
	(1)	(2)	(3)	(4)
expect no sustainable consolidation	-0.414***		-0.305**	-0.405***
	(0.099)		(0.123)	(0.100)
future: debt will increase again		-0.332***		
		(0.107)		
trust in government				-0.009
				(0.111)
adj-R2	0.07	0.06	0.10	0.07
N	1013	999	460	997

[1] Marginal effects from ordinary-least squares regression.
[2] Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.
[3] The variables which are summarized in this table have been appended to the model of col. 3 of Table 3. The coefficients of the other explanatory variables are not shown.
[4] For the model in column 3, the sample is restricted to only those who expect the government to consolidate in the short-run.
[5] Variables are defined in the Appendix.