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Can governments boost voluntary retirement savings via tax incentives and subsidies? A German case study for low-income households

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Can governments boost voluntary retirement savings via tax incentives and subsidies? A German case study for low-income households

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Can governments boost voluntary retirement savings via tax incentives and subsidies? A German case study for low-income households

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Abstract. Since 2002 the German government has promoted private retirement saving plans by means of special subsidies and tax incentives (Riester scheme). This policy mainly targets low-income households. Using data from the German Socio-economic Panel, we scrutinize the impact of the Riester scheme on private savings. Our empirical strategy consists of treating the introduction of the Riester scheme as a natural experiment. The estimation results cast some doubts on the effectiveness of the Riester scheme in raising private savings and call for enhanced systematic efforts to evaluate that policy.

JEL-Classification: D12, D14, H24, H31, I38

Key words: retirement saving, Riester scheme, tax incentives, subsidy incentives, pensions, treatment analysis

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1 Introduction

In several OECD countries the government promotes private pension schemes by means of tax exemptions and subsidies (see Antolín *et al*., 2004, and Yoo and de Serres, 2004, for overviews). In Germany this has occurred since 2002 in form of so-called Riester contracts. The justification for introducing those subsidized retirement plans grounds on expected demographic changes leading to a dramatic increase of the ratio of retirees to workers. Fostering private pensions was seen by the German government as a key step in order to provide the current working generation with enough disposable income at time of their retirement without increasing the social security contributions of the next working generation.

Simple as it is, the economic rationale for such a policy has been questioned from various perspectives. First, subsidizing retirement plans cannot be Pareto improving since some of the taxes required to finance it are paid by households who do not benefit from those subsidies.[1] Second, like any subsidy, the one associated with Riester contracts distorts relative prices and thus creates a deadweight loss. Third, the government protects the consumers by deciding which retirement plans merit subsidization. Hence, market entry is restricted. This makes it easier for insurance company to collude, with detrimental effects for allocative efficiency. Fourth, the Riester scheme is likely to cause significant additional costs, e.g. for conceptualizing, certifying and advertising Riester products, for controlling whether people are eligible for the subsidy or not, for comparing the relative merits of offered contracts, and for settling disputes between insurers and clients.[2]

The crucial issue about tax-favored retirement plans is, however, whether they actually boost savings and, if yes, by how much. If aggregate savings are unaffected, such a policy will be virtually neutral with respect to the wealth accumulated by the current working generation at retirement age. In that case, tax-favored retirement plans would have no impact on future national income: the size of the pie which retirees and workers will share would be the same as without that policy. Conversely, if that policy increases aggregate savings, the current working generation will have more wealth at retirement age, its income will be higher, and it will be possible to avoid significant increases in contribution rates.

The extent to which tax incentives and subsidies increase savings is an empirically unresolved issue. For the eligible households, even the theory does not offer a clear prediction because of

[1] As is well known from theory, a transition from a pay-as-you-go to a funded scheme cannot yield a Pareto improvement unless special externalities or other market imperfections are present. See Breyer (2001) and Corneo and Marquardt (2000).

[2] Studies on private old-age provision in other countries suggest that these costs are potentially high. For the US, see Diamond (2004).

countervailing income and substitution effects from a savings subsidy.[3] Furthermore, subsidizing private pension schemes may alter the saving behavior of non-eligible households. Households without an operating bequest motive may save less simply because the tax required to finance the subsidy reduces their disposable income. Households with an operating bequest motive may save less in order to optimally counteract the intergenerational distributive effect that stems from that policy. Tax exemptions and subsidies also affect the savings of the public sector. If their long-term budgetary implications are negative – which is likely if there are no new private savings – explicit public debt will actually increase. Finally, the firm sector may also adjust its savings in response to the government's promotion of private pension schemes, e.g. because firms choose to alter the retirement plans they offer to their employees.

In the current paper we investigate the effectiveness of the Riester scheme with respect to the savings of private households. At first glance, about 11 million Riester contracts signed until the end of March 2008 (Federal Ministry of Labour and Social Affairs, 2008) suggest that the savings of eligible households were strongly increased by the reform. However, the sheer number of contracts is not sufficient to make that inference: eligible households might have just replaced non-subsidized savings with subsidized ones. Evidence from other countries does suggest that private savings are often diverted by tax-favored schemes.[4]

In our empirical examination we focus on low-income households. This group is particularly interesting for two reasons. First, low-income households enjoy the highest subsidies in relative terms. Second, low-income households' ability to substitute non-favored with subsidized contracts is rather low as compared to richer households, be it because of their lower financial literacy, or because they save less. A mobilization effect of the Riester reform on private savings should thus be most pronounced in the case of low-income households.

We employ data from the German Socio-Economic Panel (SOEP), and interpret the introduction of the Riester scheme as a *natural experiment* affecting the saving propensity of a treatment group (i.e. low-income households) relative to a control group.[5] Our approach allows for several variations concerning group composition, the set of conditioning variables, and the estimation method. These variations serve as a device for checking the robustness of our results.

[3] For a microeconomic analysis of the Riester scheme, see Prinz *et al.* (2003).
[4] See Antolín et al. (2004, Annex 2) for an overview of the results. The dominant part of the literature deals with experience from the US.
[5] See Blundell and Costa Dias (2000) for an overview of the methods.

At face value, our estimations suggest that the mobilization effect of the Riester scheme is at best marginal. However, our results are subject to significant uncertainties concerning the interpretation of the savings variable and the identification of a proper control group. Hence, it is not possible to draw from our exercise clear-cut implications about the effectiveness of the Riester scheme in stimulating private savings. No doubt, given its potentially large economic and financial implications, the Riester reform deserves a careful evaluation, and the current paper should merely be seen as a first step in clarifying some empirical issues at stake.

2 The Riester scheme

The Riester scheme started operating in 2002. Beneficiaries receive allowances (a basic allowance and child allowances), and can lower their income tax liability by means of deductions. The allowance is paid when a minimum saving effort is achieved. The allowance and the personal saving effort must add up to a total saving amount, which is proportional to the individual's income subject to social insurance contributions.[6]

The target groups are middle and low income households, women, families and people with residence in the New German Laender (Federal Ministry of Labour and Social Affairs, 2006a). A remarkable portion of the active population in Germany is eligible, estimates going from 30 to 36 million people.[7] Basically, all compulsorily insured persons in the German public pension system are eligible for Riester contracts. In addition, public servants, trainees, individuals in the mandatory military or social service, and the recipients of some types of public transfers (e.g., unemployment benefits) may participate. Usually, persons that are not statutorily insured in the mandatory public pension system are not eligible; those persons include marginal employees and students, social welfare recipients, senior citizens receiving a pension, and persons receiving disability benefits.[8]

Besides allowances and tax reliefs, Riester contracts may be advantageous for other reasons. First, Riester contributions, allowances and proceeds are subject to downstream

[6] The minimum saving amount is defined as a share of the income subject to social insurance contribution of the previous year including the allowances. This share has increased stepwise from one percent (introduction of the Riester scheme) to four percent (from 2008) (so-called "Riester steps"). Also the allowances and the maximal amount of expenditures have denoted a stepwise increase since the Riester scheme was introduced. Börsch-Supan and Wilke (2003) provide a detailed introduction to the German pension system and its recent reforms, including the Riester scheme.

[7] Compare the statements made by the Federal Government (Federal Ministry of Finance, 2006) and by Bräuninger (2005). According to Stolz and Rieckhoff (2005), the reason for the deviations lies in the difficulty to identify the number of indirectly eligible persons (spouses).

[8] However, eligibility regulations are very detailed and include a broad range of exemptions. See the publications by the Federal Ministry of Labour and Social Affairs (2006b) for further details.

taxation, so that taxpayers can benefit from tax deferral. Second, after-retirement income is usually lower than pre-retirement income. As the German income tax is progressive, households can benefit from a decline in their personal effective tax rates (Börsch-Supan and Wilke, 2003). Third, there are special beneficial regulations in case of unemployment to protect the saved capital against garnishment.

3 Econometric model and data

We scrutinize the impact of the Riester scheme on households' saving propensities by means of a *treatment analysis*. In order to assess the causal effect of the reform, we compare pre- and post-reform propensities to save for two groups, a treatment group (TG) and a control group (CG).[9] Since people might have anticipated the Riester reform and correspondingly adjusted their pre-reform savings, we use the year 2000 and not 2001 as the pre-reform point in time. As people might adjust savings with delay, three post-reform years are considered, from 2004 to 2006. The 2000-2004 comparison is our preferred one, as 2005 or 2006 savings are likely to be affected by other factors as well, such as the introduction of so-called Rürup pensions in 2005.[10]

We apply two different criteria to distinguish 'treated' and 'non-treated' households. They are summarized in Table 1. In the *main approach*, income - our proxy for the subsidy ratio - serves as the classification criterion. The subsidy ratio is the public subsidy (allowances and tax deductions) divided by the total savings amount for additional old-age provision. It is a relative measure of the gain that the insured can realize thanks to the subsidy. Figure 1 shows subsidy ratios depending on the wage income of a sole earner. Compared to low-income earners, the subsidy ratio is much lower in the middle-income range. Whereas insured persons with low incomes especially benefit from direct allowances, high-income earners can realize substantial benefits from tax deductions, explaining the U-shaped relationships between earnings and subsidy ratios in Figure 1.

In our econometric analysis, we assign households with an annual net income level of 25,000 Euros or below (reference year: 2002)[11] to the treatment group (TG1). The control group (CG1) are households with a net income between 35,000 and 45,000 Euros (reference

[9] Baumgartner and Steiner (2006) discuss the limitations of such a treatment analysis.

[10] So-called "Rürup pensions" are subsidized private retirement saving contracts especially targeting people that are not mandatorily insured in the German pension scheme, e.g. self-employed. Contributions are tax-deductible, and the accumulated capital is repaid as a monthly annuity (Federal Ministry of Finance, no year).

[11] Starting with the reference year 2002, the income level was adjusted to the other points in time according to the average income increase since 1992 by applying a growth rate that is equal to the average annual growth rate of the net income between 1992 and 2002 (2.05%) according to the German Sample Survey of income and expenditure of 2003 (Federal Statistical Office, 2003a).

year: 2002) and notably lower subsidy ratios.[12] We restrict the treatment analysis to a special type of households, namely Riester-eligible married couples with two children living in the household.[13] For pre- and post-reform years, for each and every household we check whether an adult household member was or is eligible (if the Riester scheme had existed in that period). All information is aggregated at the household level. In sum, the main approach exploits the fact that subsidy ratios differ widely among rather similar households. It quantifies the additional mobilization or incremental effect of higher subsidy ratios in the treated group.

A drawback of our main approach is the relatively low number of observations. Hence, we also pursue an *audit approach* where eligibility for a Riester contract serves as the classification criterion. Eligible households with a net income below average[14] and at most two adults form the treatment group in the audit approach (TG2).[15] The control group consists of non-eligible households, again with an income below average and two adults at most. Only households with up to two adults are considered because saving behavior of household units with several adults (e.g., three generation households) might be quite different.

Table 1 approximately here

Compared to the main approach, the advantages of the audit approach are twofold: regression estimates are less likely to be affected by income heterogeneity and the number of observations is substantially higher. On the other hand, average age in the treated and non-treated group is rather different, as many non-eligible households are pensioners. This age

[12] The subsidy ratios displayed in Figure 1 refers to households with a sole earner and no further income. Due to the complexity of information that is required to calculate individual subsidy ratios, we take the assumption that households with a lower net income enjoy (ceteris paribus) higher subsidy ratios in the lower and middle income range as drafted in Figure 1 for the wage income.

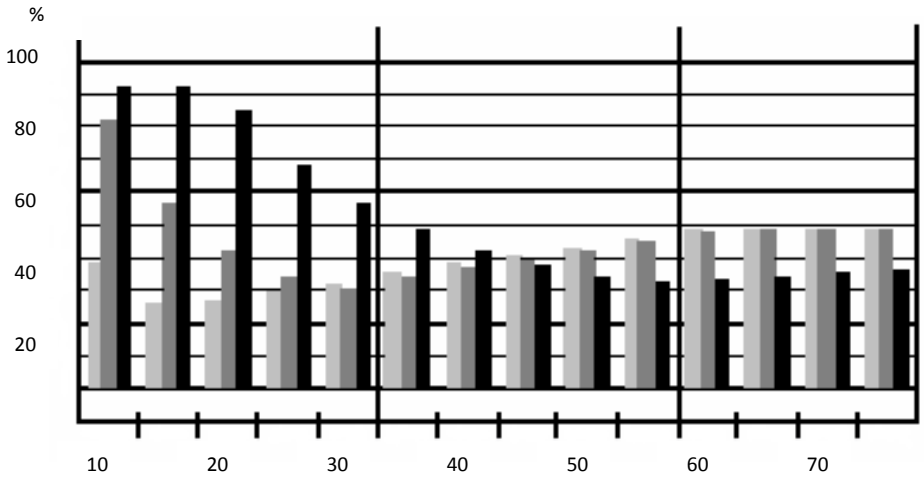
[13] We assume that students do not renounce their right to be exempt from paying social security contributions, so that they are not eligible for the Riester scheme if they earn less than 400 Euros. For some observations, we cannot check for a potential eligibility for the Riester scheme, especially for marginal employed and self-employed without employees. A further problem results from the recipients of public payments for the founders of new businesses since the GSOEP does not contain information on whether such a subsidy was received. Also, the status of non-commercial care persons cannot be observed properly. We exclude households for which we cannot identify the eligibility for the Riester scheme.

[14] The average net income is again derived from the German Sample Survey of income and expenditure of 2003.

[15] Alternatively, we could have formed several treatment groups subject to the share of household members eligible for the Riester scheme. Under the assumption that only households with at most two adults make a joint decision on savings that is observed in the GSOEP household questionnaire, this would lead to two treatment groups with a share of 50 percent and, respectively, 100 percent of eligible household members. However, a comparison of the composition of these treatment groups shows fluctuations for the 50-percent-group so that we only include households in which all adult members are eligible for the Riester scheme in order to assure that the single group compositions can be compared over time. If a mobilization effect on the propensity to save can be observed, it is likely to be strongest among households with a high share of members eligible for the Riester scheme. Therefore, our findings are also valid with some reservations for households in which some members are not eligible for the Riester scheme.

difference complicates the interpretation of our empirical results in two respects. First, the age gradient of the saving propensity is large and non-monotonic so that sample aging between 2000 and 2004/5/6 might have rather different effects on the saving behavior in the two groups. Second, the introduction of the Riester scheme was accompanied by cuts of public pension entitlements, and these cuts will widen in future decades. As a consequence, incentives to provide for one's own age privately are likely to be different for treated and non-treated households. Hence, if the saving activity of TG2 households rises faster relative to CG2 households, the difference is likely to be driven by both, eligibility/non-eligibility to Riester subsidies *and* different expected pension cuts. We therefore tend to believe that the main approach is more appropriate for assessing the mobilization effect of the Riester scheme.

Figure 1. Subsidy ratios of the Riester scheme



Income subject to contributions in thousands of Euros p.a.
Light grey: single, no children.
Dark grey: single, one child.
Black: married, sole earner, two children.
Public subsidy ratio of the total savings amount for additional old-age provision (illustration from Deutsche Bundesbank, 2002, 29, modified).

In the regression analysis that follows, two variables serve as dependent variables and measures of households' propensities to save: a dummy variable that indicates whether a household saves or not (SOEP variable "monthly savings"), and the saving ratio (SOEP variable "monthly amount of savings" divided by "household net income").[16] Among the

[16] The exact wording in the SOEP questionnaire reads as follows: "Do you usually have an amount of money left over at the end of the month that you can save for larger purchases, emergency expenses or to acquire wealth? If yes, how much?" (see SOEP online documentation: http://www.diw.de/english/questionnaires/33919.html). This variable has recently been used in econometric investigations as a measure of savings e. g. by Fuchs-Schündeln (2008).

control variables we include the following ones: ownership of special assets such as building loan contract, life insurance, fixed-interest securities, securities (e.g. shares, funds, bond issues, warrants) or business and real estate property. Other control variables include the repaying of mortgage or building loans, credit loans and interest.

4 Empirical results

4.1 Impact on the probability to save

We use a binary logit model to explain households' probabilities to save. In period t, each household, i, has a latent probability to save, SP^*, but only its saving decision (yes/no), SP, can be observed directly. Our regression model is

(4.1) $SP_{it}^* = \alpha(R_{it} \cdot N_{it}) + \beta R_{it} + \gamma N_{it} + \delta \mathrm{X}_{\mathrm{it}} + \varepsilon_{it}$

(4.2) $\Pr[SP_{it} = 1] = \Pr[SP_{it}^* > 0]$,

where

- R is a dummy variable. It takes a value of one if a household belongs to the treatment group and zero otherwise.
- N is a dummy variable. It takes a value of one if the observation refers to a post-reform period, otherwise it is zero.
- X is a vector of control variables, and
- ε is the error term.

Tables 2a and 2b display the logit estimates pertaining to the main approach. For all three inter-temporal comparisons (2000 vs. 2004, 2000 vs. 2005, and 2000 vs. 2006), estimates of three model specifications are provided. Specifications differ with respect to the set of control variables. Column A contains the estimates pertaining to a regression specification without any control variable, whereas column B reports estimates of a specification where socio-demographic household characteristics are included.[17] Finally, column C reports estimates for a specification encompassing the full set of conditioning variables.

The additional mobilization effect of the Riester reform on private savings for the treatment group is revealed by the coefficient α referring to the interaction term, $R \cdot N$. The interaction term takes the value 1 in case of post-reform observations referring to treated households, otherwise it is zero. Hence, $\alpha > 0$ and significant would be evidence in favor of

[17] In the main approach, only married couples with two children are considered. For this reason, we do not control for the numbers of adults and children.

effectiveness of the reform in creating new savings. Instead, irrespective of the regression specification and the chosen observation, the interaction term is statistically insignificant. This finding suggests that high subsidy ratios in the treatment group did not have an additional effect on these households' probabilities to save.

Several control variables have a robust influence on the saving probability. The saving probability is increasing in income (at a decreasing rate in 2000/2005). A higher probability to save is also associated with ownership of various types of assets, or of real estate ($D_{BOOKS}, D_{SEC}, D_{ESTATE} > 0$). In contrast, unemployment and repayments of real-estate credit have a robust and negative influence on the probability to save ($D_{UN}, D_{REPAY1} < 0$). The same holds if the household head is female ($D_{FEM} < 0$). Other control variables have no robust effect on the probability to save.

Table 3a and Table 3b display the logit estimates in case of the audit approach. Since in the audit approach household composition can differ, the number of children and the number of adults are included as additional control variables. Furthermore, in order to control for heterogeneity of age structures in TG2 and CG2, a fourth degree polynomial for the age variable is included.[18]

The main results from the audit approach are close to those from the main approach. The interaction term is statistically insignificant in all nine regressions, suggesting that the Riester scheme had no stimulating effect on the probability to save. The results of the main approach concerning the socio-economic variables are also confirmed in all periods, for the gender effect only for the periods 2000 vs. 2004 and 2000 vs. 2005. In addition, residence in the New German Laender ($D_{NL} > 0$) now has a robust and positive effect on the saving probability, whereas (in case of 2000 vs. 2004, and 2000 vs. 2005) households with a head being a white-collar worker save more frequently ($D_{WC} > 0$). Foreign workers, unemployed and self-employed individuals save less frequently ($D_{FO}, D_{UN}, D_{SE} < 0$),[19] whereas holding different types of assets, or owning real-estate, is usually associated with a higher saving probability ($D_{BOOKS}, D_{LOAN}, D_{LIVE}, D_{SEC}, D_{ESTATE} > 0$). In addition, the saving probability is increasing in household size ($N_{CHILD}, N_{ADULTS} < 0$). Finally, households save less frequently if

[18] To keep the presentation simple, we abstain from reporting the regression coefficients for $(age)^3$ and $(age)^4$ in the tables. The regression coefficient for $(age)^3$ is significantly positive, significantly negative for $(age)^4$.

[19] The fact that self-employed save significantly more rarely may surprise at first. However, this group also includes freelancers who are covered by the statutory social insurance institutions and therefore do not have to rely more strongly on private old-age provision than other compulsorily insured individuals. The so-called "Scheinselbstständige" (self-employed who are effectively dependent on only one client) with a low income also form part of this group.

they have to repay housing loans or credits ($D_{REPAY1}, D_{REPAY2} < 0$).[20] To check for robustness, all logit regressions were re-run using a probit model. Again, the interaction term is always statistically insignificant.

Tables 2a, 2b, 3a and 3b approximately here

4.2 Impact on the saving ratio

As saving ratios are restricted to the 0-1-interval and are not normally distributed, we use a tobit model for quantifying the mobilization effect of the Riester reform on households' saving ratios. Except for the left-hand variable, the tobit model specification is structurally equivalent to the logit model in the previous section, and is given by

$$(4.3) \qquad \begin{aligned} sp_{it}^{*} &= \alpha(R_{it} \cdot N_{it}) + \beta R_{it} + \gamma N_{it} + \delta \mathrm{X}_{\mathrm{it}} + \varepsilon_{it}, \\ \varepsilon_{it} &\,|\,(R_{it} \cdot N_{it}), R_{it}, N_{it}, \mathrm{X}_{\mathrm{it}} \sim N(0, \sigma^2) \end{aligned}$$

$$(4.4) \qquad sp_{it} = \max(0, sp_{it}^{*})$$

where sp^{*} denotes the latent saving ratio, and sp the reported saving ratio.

We will first comment on the main approach (see Tables 4a and 4b). Consistently with the results presented in the previous Section, the interaction terms are always statistically insignificant. In combination with the logit results, this suggests that the Riester reform has neither a mobilizing effect on the saving probability nor on the saving ratio. The picture is less distinct for the audit approach (Table 5a and Table 5b). Here, the interaction term is small but significantly positive for some regression specifications (C 2000/2004, B and C in 2000/2006, and weakly significant in 2000/2005).[21] If our control variables are able to capture the effects of the different age structure, these findings suggest that savings increased as a consequence of the pension policy measures introduced during the period 2000 to 2006. Then, the significance of the interaction term might reflect an impact of future pension cuts on households' saving decisions, rather than an impact of the Riester scheme. The effects of the control variables on the saving ratio are widely consistent with those from the logit estimation. We refrain from commenting on the respective coefficients here.

[20] Estimates pertaining to the further control variables (i.e., income, unemployment, household size, number of children, existence of different forms of saving in the household, obligations from credits and housing loans) are consistent with other empirical investigations. See e.g. Bedau (1999), Börsch-Supan et al. (2000), Börsch-Supan et al. (2006), Federal Statistical Office (2003b), Freyland (2005).

[21] Again, we account for the different age structure of the two groups by using a fourth degree polynomial for 'age'.

Tables 4a, 4b, 5a and 5b approximately here

4.3 Treatment and control group composition

A requirement for the validity of treatment analysis is that the socioeconomic characteristics of the treatment and the control group are inter-temporally stable, or that compositions change similarly. Tables A1 and A2 in the Appendix give summary statistics concerning the socio-economic characteristics of the treated and the control group for the years 2000 and 2004 to 2006. Overall, group compositions do not show remarkable structural changes. However, all groups age slightly over the observation period.

In case of the main approach, socioeconomic characteristics of treated and non-treated households are rather similar and stable over time. Most pronounced are the differences pertaining to the income variable, which in turn depend on the employment status of the household head. In TG1, the share of unemployed household heads is notably higher than in CG1. Moreover, the share of households with residence in the New German Laender in CG1 is considerably lower in 2005. To avoid potential biases driven by those differences, we re-ran all regressions pertaining to the main approach, excluding all unemployed and also households from the New German Laender. Again, there is no evidence in favor of a mobilization effect of the Riester reform: The interaction term is insignificant in all but one of the 18 additional specifications, weakly significant in the main approach (B, 2000/ 2005, see Tables A3a, A3b, A4a, and A4b in the Appendix).

In the audit approach, average household size decreases whereas the fraction of pensioner households rises over time. This is true for both the group of treated and non-treated households. Yet, there is the following concern. In TG2, the share of unemployed household heads is rather volatile over time, whereas for CG2 it is always zero.[22] As unemployed people usually save less, we cannot rule out that our regression results are downward biased. For this reason, we re-ran all audit regressions excluding all observations where the household head is unemployed;[23] Tables A5a, A5b, A6a, and A6b in the Appendix summarize the results of that exercise. Logit estimates contain weak evidence in favor of a slight mobilization effect in 2006. Interaction terms in the tobit regressions are significant in all specifications for the 2000/2006 comparison, in specification C for 2000/2004, and they are weakly significant in specifications B and C for 2000/2005.

[22] Apart from macroeconomic reasons, a new classification guideline to distinguish among unemployed and non-unemployed may cause this volatility (see Federal Employment Agency, 2005, for details).

[23] Again, we account for the different age structure in the two groups by using a fourth degree polynomial for the age.

5 Limitations of the current analysis

All in all, our analysis casts some doubts about the effectiveness of the Riester scheme in fostering private savings. However, we refrain from drawing clear-cut conclusions and recommend much caution in interpreting the econometric results presented above. While some caveats concerning our empirical strategy have already been mentioned, there are two that still need being discussed.

The first qualification concerns our savings measure. It is derived from the answers given by SOEP-respondents to the survey question that we have reproduced in Footnote 16 of the current paper. That question asks about a person's money which can be saved, in particular, in order to acquire wealth. Apparently, someone who has signed a Riester contract should consider the saving amount required by his or her Riester contract as money that is voluntarily saved to acquire wealth. If this was the way in which that survey question is interpreted by all persons with a Riester contract, finding no effect of the Riester scheme on the propensity to save would strongly suggest that some savers simply shifted their savings from unsubsidized assets to subsidized ones. However, drawing such an inference may be immature because some respondents with a Riester contract may not consider the corresponding saving effort when answering that survey question. Those respondents might have "chosen" to forget the voluntary nature of the Riester scheme so as to avoid the temptation to withdraw money from the accumulated savings.

Whatever its rationale, it appears that some respondents with a Riester contract actually do not count its saving requirement as savings according to the SOEP survey question. This can be verified for the year 2006 since in that year – but not in 2004 and 2005 - the SOEP asked whether the respondent has a Riester contract. As a matter of fact, many respondents that claimed to have a Riester contract declared zero savings.[24]

At this stage we cannot assess the extent to which this way of interpreting the SOEP question about savings invalidates the inference of ineffectiveness of the Riester scheme. To be sure, if every respondent in each year fully neglected his or her Riester saving effort, the interpretation of our econometric results would be a completely different one: each Euro contribution to a Riester plan would be interpreted as one Euro of new savings. However, it

[24] This finding is not unique for Riester contracts but holds also for other regular forms of savings such as building loan contracts. Therefore, the fact that some respondents with regular savings claim not to save at all seems to be a systematic problem of the GSOEP savings variables. The number of observations that are contradictory with respect to savings is not negligible.

seems hazardous to extrapolate from 2006 what might have occurred in the years before, e.g. because the saliency of the Riester scheme is likely to have declined over time.

The second qualification concerns the definition of the control groups that allowed us to treat the Riester scheme as a natural experiment. If the Riester scheme had no or a negligible effect on the saving propensity of the control groups, evidence in support of a positive saving differential for the treatment group would suggest that the scheme was effective in creating savings. However, the Riester scheme might have caused a negative effect on the saving ratio of the control groups, in which case a positive saving differential for the treatment group does not imply effectiveness with respect to aggregate private savings.

This issue is particularly relevant for our audit approach. In that case, the control group is mainly formed by old people. Their saving behavior is likely to be affected by the altruistic motive to leave a bequest to their children. Most of those children will however be eligible for the Riester subsidy and will be expected to benefit from it. This makes bequests less valuable from the viewpoint of the donors. Hence, the introduction of the Riester scheme may have had a negative effect on the saving propensity of the control group in the audit approach.

In the main approach, the control group is formed by households with a low subsidy rate. If the Riester scheme is not self-financing – a rather realistic conjecture – households in that control group, together with the non-eligible households, are likely to be the fiscal losers of the Riester scheme: their tax burden increases. In that case, the introduction of the Riester scheme actually lowered the disposable income of the households in the control group, probably inducing them to save less.[25]

6 Conclusion

A pivotal criterion for judging the success of the Riester reform in Germany is whether it mobilizes private retirement savings, especially among low-income households. This paper has offered an empirical analysis based on data from the German SOEP that begins to shed light on that question. Our results seem to suggest that, at best, the mobilization effect upon private savings has been small. However, serious doubts about how to interpret our empirical findings remain because, first, the saving measure in the SOEP questionnaire might possibly be ill-suited for our purposes and, second, the assumptions underlying the treatment of the Riester scheme as a natural experiment might be untenable. While the first problem would

[25] As a matter of fact, whenever the estimated coefficient on the post-reform dummy was statistically significant, it carried a negative sign.

lead us to underestimate the effectiveness of the Riester scheme, the second one would lead us to overestimate it. Given such uncertainties and the potentially far-reaching consequences of the Riester scheme, further policy evaluations are highly desirable.

Literature

Antolín, P., de Serres, A. and C. de la Maisonneuve (2004): Long-Term Budgetary Implications of Tax-Favoured Retirement and Saving Plans, *OECD Economic Studies*, 39.

Baumgartner, H.J. and V. Steiner (2006): Does More Generous Student Aid Increase Enrolment Rates Into Higher Education?, Evaluating the German Student Aid Reform of 2001, *DIW Berlin Discussions Papers*, 563.

Bedau, K.-D. (1999), Ersparnis und Vorsorgeaufwendungen nach Haushaltsgruppen, *DIW Diskussionspapier*, 187.

Blundell, R. and M. Costa Dias (2000): Evaluation Methods for Non-Experimental Data, *Fiscal Studies*, 21(4), 427–468.

Börsch-Supan, A., Reil-Held, A., Rodepeter, R., Schnabel, R. and J. Winter (2000), The German Savings Puzzle, *Beiträge zur angewandten Wirtschaftsforschung*, Universität Mannheim, Institut für Volkswirtschaftslehre und Statistik, Mannheim, 594-00.

Börsch-Supan, A., Reil-Held, A. and D. Schunk (2006): Das Sparverhalten deutscher Haushalte: Erste Erfahrungen mit der Riester-Rente, Gutachten für das Bundesministerium für Bildung und Forschung im Rahmen des Vorhabens „Bildungssparen“ (Mannheim Institute for the Economics of Aging, MEA, Universität Mannheim).

Börsch-Supan A. and C.B. Wilke (2003): The German Public Pension System: How it Was, How it Will Be, *Michigan Retirement Research Center Working Paper*, 041.

Bräuninger, D. (2005): Spürbare Rentenlücken trotz Reformen, *Deutsche Bank Research, Aktuelle Themen, Demografie Spezial*, Nr. 312.

Breyer, F. (2001): Why Funding is not a Solution to the „Social Security Crisis“, *IZA Discussion Paper*, 328.

Corneo, G. and M. Marquardt (2000): Public Pensions, Unemployment Insurance, and Growth, *Journal of Public Economics* 75, 293-311.

Deutsche Bundesbank (ed.) (2002): Monatsbericht Juli 2002, 54. Jahrgang, 7.

Diamond, P. (2004): Social Security, *The American Economic Review*, 94(1), 1-24.

Federal Employment Agency (ed.) (2005): Der Arbeitsmarkt in Deutschland, *Monatsbericht*.

Federal Ministry of Finance (ed.) (2006): Antwort auf die Kleine Anfrage der Abgeordneten Carl-Ludwig Thiele u.a. und der Fraktion der F.D.P.; „Einkommens- und Vermögenssituation der über 60-jährigen Bevölkerung“, BT-Drucksache 16/1183 vom 6. April 2006 (Berlin).

Federal Ministry of Finance (ed.) (no year): Alterseinkünfte/Altersvorsorge, III. Basis-/„Rürup“-Rente, http://www.bundesfinanzministerium.de/nn_53848/DE/Wirtschaft__und__Verwaltung/Steuern/Alterseinkuenfte__Altersvorsorge/004.html?__nnn=true, access on 2 September 2008, 9:44 am.

Federal Ministry of Labour and Social Affairs (ed.) (2006a): Ergänzender Bericht der Bundesregierung zum Rentenversicherungsbericht 2005 gemäß § 154 Abs. 2 SGB VI (Alterssicherungsbericht 2005).

Federal Ministry of Labour and Social Affairs (ed.) (2006b): Zusätzliche Altersvorsorge (BMAS, Referat Information, Publikation, Redaktion, Bonn).

Federal Ministry of Labour and Social Affairs (ed.) (2008): Über 11 Millionen Riester-Renten – 570.000 Neuabschlüsse im 1. Quartal 2008, http://www.bmas.de/coremedia/generator/ 26254/2008__06__02__riesterzahlen.html, access on 28 August 2008, 11:21 am.

Federal Statistical Office (ed.) (2003a): Volkswirtschaftliche Gesamtrechnungen, Nettoeinkommen und Zahl der Haushaltenach Haushaltsgruppen 1991 bis 2002, Je Haushalt, Haushaltsmitglied und Verbrauchereinheit, Arbeitsunterlage.

Federal Statistical Office (ed.) (2003b): Wirtschaftsrechnungen, Einkommens- und Verbrauchsstichprobe, Einnahmen und Ausgaben privater Haushalte, *Fachserie* 15, 4 (Wiesbaden).

Freyland, F. (2005): Household Compositions and Savings: An Empirical Analysis based on the German SOEP Data, *MEA Discussion Papers*, 088-05.

Fuchs-Schündeln, N. (2008): The Response of Household Saving to the Large Shock of German Reunification, *American Economic Review* (forthcoming).

Prinz, A., Reichardt, A. and K. Wrohlich. (2003): Mikroökonomische Analyse der “Riester-Rente”, *Wirtschaftswissenschaftliches Studium* 7, 399-405.

Stolz, U. and C. Rieckhoff (2005): Aktuelle Ergebnisse der zulagengeförderten Altersvorsorge – Erste statistische Auswertungen der Zentralen Zulagenstelle für Altersvermögen, in: *Die ANGestelltenVERSicherung, Zeitschrift der Bundesversicherungsanstalt für Angestellte, Amtliches Veröffentlichungsblatt, Jahrgang 52, September 2005*, 409-416.

Yoo, K.-Y. and A. de Serres (2004): Tax Treatment of Private Pension Savings in OECD Countries and the Net Tax Cost Per Unit of Contribution to Tax-Favoured Schemes, OECD Economics Department Working Papers 406, OECD Economics Department.

Tables

Table 1. Treatment and control group definition

Main approach				
Treatment group				
Name	Adults	Children	Income*	Eligibility for the Riester scheme **
TG1	Two	Two	< Euro 25,000	100 percent
Control group				
Name	Adults	Children	Income*	Eligibility for the Riester scheme **
CG1	Two	Two	Euro 35,000–45,000	100 percent
Audit approach				
Treatment group				
Name	Adults	Children	Income *	Eligibility for the Riester scheme **
TG2	Two or less	All	Below average	100 percent
Control group				
Name	Adults	Children	Income *	Eligibility for the Riester scheme **
CG2	Two or less	All	Below average	0 percent

* Reference year: 2002.

**Potential eligibility for the Riester scheme of the adult household members.

Table 2a. Probability to save – logit estimation, main approach

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	1.593***	-9.860***	-9.472***	1.593***	-12.617***	-12.748***
		0.219	*3.033*	*3.274*	*0.219*	*3.266*	*3.609*
Observation point after the reform (dummy)	D_{PR}	-0.137	-0.530	-0.534	-0.046	-0.207	-0.305
		0.315	*0.376*	*0.399*	*0.330*	*0.392*	*0.418*
Belonging to treatment group 1 (dummy)	D_{T1}	-1.807***	1.678**	1.559**	-1.807***	1.212*	1.121
		0.251	*0.702*	*0.746*	*0.251*	*0.697*	*0.729*
Interaction term	$D_{PR} \cdot D_{T1}$	0.168	0.216	0.199	-0.142	-0.508	-0.429
		0.373	*0.437*	*0.462*	*0.383*	*0.454*	*0.484*
Household income in thousand Euro	$y/1000$		2.779**	2.571**		4.468***	4.242***
			1.140	*1.219*		*1.194*	*1.271*
Household income in thousand Euro, squared	$[y/1000]^2$		-0.161	-0.138		-0.563**	-0.542**
			0.252	*0.266*		*0.257*	*0.270*
Head of the household is unemployed (dummy)	D_{UN}		-1.379***	-1.154***		-0.992***	-0.840**
			0.392	*0.411*		*0.365*	*0.396*
Head of the household is self-employed (dummy)	D_{SE}		-0.443	-0.179		-0.093	0.081
			0.370	*0.416*		*0.413*	*0.466*
Head of the household is public servant (dummy)	D_{PS}		0.765	0.513		1.082*	1.025*
			0.556	*0.574*		*0.577*	*0.611*
Head of the household is pensioner (dummy)	D_{PE}		-0.302	-0.077		-1.229	-0.733
			1.264	*1.671*		*1.633*	*2.305*
Head of the household is white-collar (dummy)	D_{WC}		0.165	-0.002		0.380	0.265
			0.250	*0.270*		*0.247*	*0.268*
Head of the household is student (dummy)	D_{ST}		-2.560**	-2.496**		-0.736	-0.655
			1.290	*1.271*		*1.031*	*1.002*
Head of the household with other employment type	D_{OE}		-0.104	-0.170		0.120	0.128
			0.353	*0.383*		*0.353*	*0.387*
Head of the household is foreigner (dummy)	D_{FO}		-0.556**	-0.369		-0.583**	-0.267
			0.258	*0.285*		*0.259*	*0.295*
Head of the household has univ. entrance qualific.	D_{UEQ}		0.290	0.212		-0.218	-0.205
			0.305	*0.320*		*0.298*	*0.316*
Head of household has university degree (dummy)	D_{UD}		-0.058	0.096		0.287	0.380
			0.313	*0.332*		*0.316*	*0.337*
Head of household is female (dummy)	D_{FEM}		-0.573**	-0.608**		-0.658***	-0.830***
			0.238	*0.254*		*0.240*	*0.259*
Age of the head of the household	*Age*		0.242*	0.213		0.337**	0.314**
			0.131	*0.143*		*0.142*	*0.158*
Age of the head of the household, squared	$[Age]^2$		-0.003**	-0.003*		-0.005***	-0.005**
			0.002	*0.002*		*0.002*	*0.002*
Household from New Laender (dummy)	D_{NL}		0.143	0.047		0.117	-0.076
			0.246	*0.260*		*0.253*	*0.272*
Household has a savings book (dummy)	D_{BOOKS}			0.947***			1.379***
				0.257			*0.271*
Household has a building loan contract (dummy)	D_{LOAN}			0.192			0.316
				0.212			*0.216*
Household has a life insurance (dummy)	D_{LIVE}			0.043			-0.054
				0.242			*0.244*
Household owns securities (dummy)	D_{SEC}			0.915***			0.865***
				0.234			*0.232*
Household owns business property/shares (dummy)	D_{BPS}			-0.853**			-0.357
				0.389			*0.433*
Household has to repay building loans/mortgages	D_{REPAY1}			-1.355***			-1.416***
				0.379			*0.376*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.414**			-0.130
				0.201			*0.211*
Household owns real-estate (dummy)	D_{ESTATE}			1.175***			1.273***
				0.371			*0.370*
Number of observations		713	713	713	717	717	717
Log Likelihood		-430.15	-375.85	-340.29	-430.41	-373.95	-331.45
Pseudo R^2		0.11	0.22	0.29	0.12	0.24	0.32

Remarks. Logit estimation. Endogeneous variable: Saving decision (dummy : 1=yes ; 0=no). ***/**/* Significance on the 1/5/10-%-level.

Table 2b. Probability to save – logit estimation, main approach

		2000/2006		
		A	B	C
Constant	*Const*	1.585*** 0.220	-8.331*** 2.735	-7.119** 2.893
Observation point after the reform (dummy)	D_{PR}	-0.386 0.287	-0.257 0.313	-0.406 *0.336*
Belonging to treatment group 1 (dummy)	D_{T1}	-1.792*** 0.251	0.238 0.467	-0.036 *0.496*
Interaction term	$D_{PR} \cdot D_{T1}$	0.055 0.352	-0.292 0.404	-0.157 *0.432*
Household income in thousand Euro	$y/1000$		3.015*** 0.958	2.591** *1.020*
Household income in thousand Euro, squared	$[y/1000]^2$		-0.375** 0.179	-0.314* *0.189*
Head of the household is unemployed (dummy)	D_{UN}		-1.370*** 0.371	-1.134*** *0.392*
Head of the household is self-employed (dummy)	D_{SE}		-0.409 0.364	-0.655 *0.439*
Head of the household is public servant (dummy)	D_{PS}		0.552 0.501	0.380 *0.524*
Head of the household is pensioner (dummy)	D_{PE}		-0.403 1.107	-0.118 *1.305*
Head of the household is white-collar (dummy)	D_{WC}		0.053 0.237	-0.046 *0.256*
Head of the household is student (dummy)	D_{ST}		-1.453 1.328	-1.585 *1.287*
Head of the household with other employment type	D_{OE}		0.092 0.333	0.117 *0.361*
Head of the household is foreigner (dummy)	D_{FO}		-0.326 0.250	-0.195 *0.278*
Head of the household has univ. entrance qualific.	D_{UEQ}		-0.312 0.307	-0.370 *0.325*
Head of household has university degree (dummy)	D_{UD}		0.262 0.319	0.399 0.339
Head of household is female (dummy)	D_{FEM}		-0.412* 0.234	-0.612** 0.252
Age of the head of the household	*Age*		0.239** 0.118	0.177 0.124
Age of the head of the household, squared	$[Age]^2$		-0.003** 0.001	-0.003* 0.002
Household from New Laender (dummy)	D_{NL}		0.142 0.240	0.093 0.256
Household has a savings book (dummy)	D_{BOOKS}			1.201*** 0.246
Household has a building loan contract (dummy)	D_{LOAN}			0.223 0.201
Household has a life insurance (dummy)	D_{LIVE}			0.050 0.232
Household owns securities (dummy)	D_{SEC}			0.785*** 0.219
Household owns business property/shares (dummy)	D_{BPS}			-0.049 0.434
Household has to repay building loans/mortgages	D_{REPAY1}			-1.611*** 0.362
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.135 0.202
Household owns real-estate (dummy)	D_{ESTATE}			1.211*** *0.358*
Number of observations		743	743	743
Log Likelihood		-448.23	-405.46	-363.18
Pseudo R^2		0.11	0,20	0,28

Table 3a. Probability to save – logit estimation, audit approach

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	0.513***	-3.456***	-4.427***	0.513***	-4.479***	-5.318***
		0.039	*1.193*	*1.252*	*0.039*	*1.212*	*1.273*
Observation point after the reform (dummy)	D_{PR}	-0.130**	-0.423***	-0.438***	-0.048	-0.357***	-0.352***
		0.056	*0.063*	*0.066*	*0.057*	*0.064*	*0.068*
Belonging to treatment group 2 (dummy)	D_{T2}	-0.204***	0.0005	0.004	-0.204***	0.115	0.139
		0.049	*0.088*	*0.093*	*0.049*	*0.089*	*0.094*
Interaction term	$D_{PR} \cdot D_{T2}$	-0.115	0.033	0.075	-0.117	0.058	0.044
		0.072	*0.080*	*0.085*	*0.073*	*0.083*	*0.087*
Household income in thousand Euro	$y/1000$		3.781***	3.609***		3.695***	3.562***
			0.202	*0.213*		*0.199*	*0.209*
Household income in thousand Euro, squared	$[y/1000]^2$		-0.681***	-0.661***		-0.642***	-0.627***
			0.060	*0.064*		*0.059*	*0.062*
Head of the household is unemployed (dummy)	D_{UN}		-0.843***	-0.870***		-0.838***	-0.887***
			0.089	*0.095*		*0.089*	*0.096*
Head of the household is self-employed (dummy)	D_{SE}		-0.525***	-0.376***		-0.581***	-0.505***
			0.113	*0.129*		*0.116*	*0.133*
Head of the household is public servant (dummy)	D_{PS}		0.077	-0.013		0.140	0.054
			0.149	*0.157*		*0.152*	*0.160*
Head of the household is pensioner (dummy)	D_{PE}		0.043	-0.032		0.099	0.030
			0.095	*0.101*		*0.098*	*0.103*
Head of the household is white-collar (dummy)	D_{WC}		0.236***	0.135**		0.253***	0.133**
			0.062	*0.066*		*0.064*	*0.068*
Head of the household is student (dummy)	D_{ST}		-0.212	-0.458***		0.128	-0.084
			0.143	*0.149*		*0.144*	*0.149*
Head of the household with other employment type	D_{OE}		-0.196**	-0.235**		-0.048	-0.092
			0.094	*0.102*		*0.097*	*0.104*
Head of the household is foreigner (dummy)	D_{FO}		-0.462***	-0.247***		-0.460***	-0.242***
			0.076	*0.082*		*0.077*	*0.083*
Head of the household has univ. entrance qualification	D_{UEQ}		0.099	-0.019		0.076	-0.042
			0.068	*0.071*		*0.069*	*0.073*
Head of household has university degree (dummy)	D_{UD}		0.013	-0.009		0.010	-0.024
			0.068	*0.072*		*0.070*	*0.074*
Head of household is female (dummy)	D_{FEM}		-0.089**	-0.088*		-0.117***	-0.110**
			0.045	*0.048*		*0.046*	*0.048*
Age of the head of the household	*Age*		0.143	0.171		0.236**	0.247**
			0.101	*0.106*		*0.103*	*0.108*
Age of the head of the household, squared	$[Age]^2$		-0.007**	-0.007**		-0.010***	-0.010***
			0.003	*0.003*		*0.003*	*0.003*
Household from New Laender (dummy)	D_{NL}		0.453***	0.507***		0.464***	0.504***
			0.047	*0.050*		*0.048*	*0.051*
Household has a savings book (dummy)	D_{BOOKS}			1.156***			1.147***
				0.050			*0.050*
Household has a building loan contract (dummy)	D_{LOAN}			0.399***			0.291***
				0.050			*0.051*
Household has a life insurance (dummy)	D_{LIVE}			0.123***			0.077
				0.048			*0.049*
Household owns securities (dummy)	D_{SEC}			0.504***			0.526***
				0.052			*0.054*
Household owns business property/shares (dummy)	D_{BPS}			-0.237*			-0.078
				0.142			*0.150*
Household has to repay building loans/mortgages	D_{REPAY1}			-0.585***			-0.705***
				0.077			*0.079*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.776***			-0.738***
				0.053			*0.056*
Household owns real-estate (dummy)	D_{ESTATE}			0.251***			0.308***
				0.059			*0.061*
Number of children in the household	N_{CHILDS}		-0.367***	-0.340***		-0.400***	-0.379***
			0.031	*0.034*		*0.033*	*0.035*
Number of adults in the household	N_{ADULTS}		-0.501***	-0.569***		-0.501***	-0.561***
			0.055	*0.059*		*0.056*	*0.060*
Number of observations		13,593	13,593	13,593	13,268	13,268	13,268
Log Likelihood		-9,228.29	-7,816.90	-7,139.94	-8,978.29	-7,529.41	-6,899.26
Pseudo R^2		0.01	0.16	0.23	0.00	0.16	0.23

Remarks. Endogeneous variable: Saving decision (dummy : 1=yes ; 0=no). ***/**/* Significance on the 1/5/10-%-level.

Table 3b. Probability to save – logit estimation, audit approach

		2000/2006		
		A	B	C
Constant	*Const*	0.557***	-3.038**	-3.925***
		0.039	1.220	1.286
Observation point after the reform (dummy)	D_{PR}	-0.202***	-0.560***	-0.555***
		0.055	0.062	0.066
Belonging to treatment group 2 (dummy)	D_{T2}	-0.239***	0.052	0.081
		0.049	0.089	0.094
Interaction term	$D_{PR} \cdot D_{T2}$	-0.056	0.130	0.129
		0.070	0.080	0.085
Household income in thousand Euro	$y/1000$		3.955***	3.759***
			0.193	0.204
Household income in thousand Euro, squared	$[y/1000]^2$		-0.707***	-0.673***
			0.056	0.059
Head of the household is unemployed (dummy)	D_{UN}		-0.972***	-0.991***
			0.089	0.096
Head of the household is self-employed (dummy)	D_{SE}		-0.569***	-0.466***
			0.110	0.125
Head of the household is public servant (dummy)	D_{PS}		0.142	0.037
			0.152	0.159
Head of the household is pensioner (dummy)	D_{PE}		-0.033	-0.104
			0.096	0.102
Head of the household is white-collar (dummy)	D_{WC}		0.161**	0.049
			0.062	0.066
Head of the household is student (dummy)	D_{ST}		-0.394**	-0.592***
			0.153	0.159
Head of the household with other employment type	D_{OE}		-0.159*	-0.166
			0.094	0.101
Head of the household is foreigner (dummy)	D_{FO}		-0.445***	-0.230***
			0.077	0.083
Head of the household has univ. entrance qualification	D_{UEQ}		0.171**	0.031
			0.068	0.072
Head of household has university degree (dummy)	D_{UD}		0.033	-0.016
			0.072	0.076
Head of household is female (dummy)	D_{FEM}		-0.062	-0.063
			0.045	0.047
Age of the head of the household	*Age*		0.102	0.120
			0.104	0.109
Age of the head of the household, squared	$[Age]^2$		-0.006*	-0.006*
			0.003	0.003
Household from New Laender (dummy)	D_{NL}		0.533***	0.584***
			0.047	0.050
Household has a savings book (dummy)	D_{BOOKS}			1.145***
				0.049
Household has a building loan contract (dummy)	D_{LOAN}			0.361***
				0.049
Household has a life insurance (dummy)	D_{LIVE}			0.118**
				0.048
Household owns securities (dummy)	D_{SEC}			0.536***
				0.052
Household owns business property/shares (dummy)	D_{BPS}			-0.208
				0.142
Household has to repay building loans/mortgages	D_{REPAY1}			-0.788***
				0.075
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.655***
				0.054
Household owns real-estate (dummy)	D_{ESTATE}			0.341***
				0.058
Number of children in the household	N_{CHILDS}		-0.400***	-0.378***
			0.032	0.034
Number of adults in the household	N_{ADULTS}		-0.548***	-0.629***
			0.054	0.058
Number of observations		14,012	14,012	14,012
Log Likelihood		-9,504.59	-7,906.60	-7,230.53
Pseudo R^2		0.01	0.17	0.24

Table 4a. Saving ratios– tobit estimation, main approach

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	0.098***	-0.526***	-0.415**	0.098***	-0.709***	-0.576***
		0.010	*0.175*	*0.162*	*0.010*	*0.191*	*0.175*
Observation point after the reform (dummy)	D_{PR}	-0.016	-0.031**	-0.031**	-0.014	-0.022	-0.029**
		0.015	*0.015*	*0.014*	*0.015*	*0.016*	*0.014*
Belonging to treatment group 1 (dummy)	D_{T1}	-0.106***	0.077**	0.067**	-0.108***	0.083**	0.074**
		0.013	*0.033*	*0.031*	*0.013*	*0.034*	*0.030*
Interaction term	$D_{PR} \cdot D_{T1}$	0.007	0.004	0.003	0.001	-0.023	-0.015
		0.020	*0.020*	*0.018*	*0.020*	*0.021*	*0.019*
Household income in thousand Euro	$y/1000$		0.192***	0.155***		0.321***	0.265***
			0.059	*0.054*		*0.064*	*0.057*
Household income in thousand Euro. squared	$[y/1000]^2$		-0.018	-0.012		-0.042***	-0.033***
			0.011	*0.010*		*0.012*	*0.011*
Head of the household is unemployed (dummy)	D_{UN}		-0.080***	-0.058***		-0.061***	-0.040**
			0.023	*0.021*		*0.022*	*0.020*
Head of the household is self-employed (dummy)	D_{SE}		-0.033*	-0.026		-0.026	-0.027
			0.020	*0.019*		*0.023*	*0.022*
Head of the household is public servant (dummy)	D_{PS}		-0.014	-0.016		-0.010	-0.015
			0.021	*0.019*		*0.020*	*0.018*
Head of the household is pensioner (dummy)	D_{PE}		0.004	0.003		-0.029	-0.004
			0.059	*0.054*		*0.090*	*0.085*
Head of the household is white-collar (dummy)	D_{WC}		0.003	-0.007		0.011	0.001
			0.013	*0.012*		*0.013*	*0.012*
Head of the household is student (dummy)	D_{ST}		-0.152**	-0.139**		-0.092	-0.078
			0.077	*0.069*		*0.063*	*0.055*
Head of the household with other employment	D_{OE}		0.005	-0.001		0.011	0.009
			0.020	*0.018*		*0.020*	*0.018*
Head of the household is foreigner (dummy)	D_{FO}		-0.031**	-0.020		-0.037**	-0.016
			0.015	*0.014*		*0.015*	*0.014*
Head of the household has univ. entrance qualific.	D_{UEQ}		0.016	0.014		-0.005	-0.004
			0.015	*0.013*		*0.015*	*0.013*
Head of household has university degree	D_{UD}		0.005	0.004		0.020	0.019
			0.015	*0.014*		*0.015*	*0.014*
Head of household is female (dummy)	D_{FEM}		-0.040***	-0.037***		-0.037***	-0.041***
			0.013	*0.012*		*0.013*	*0.012*
Age of the head of the household	*Age*		0.012	0.008		0.014*	0.009
			0.008	*0.007*		*0.008*	*0.008*
Age of the head of the household. squared	$[Age]^2$		-0.000*	-0.000		-0.000**	-0.000*
			0.000	*0.000*		*0.000*	*0.000*
Household from New Laender (dummy)	D_{NL}		0.013	0.013		0.014	0.007
			0.013	*0.011*		*0.014*	*0.012*
Household has a savings book (dummy)	D_{BOOKS}			0.044***			0.065***
				0.012			*0.013*
Household has a building loan contract (dummy)	D_{LOAN}			0.011			0.019*
				0.009			*0.010*
Household has a life insurance (dummy)	D_{LIVE}			0.002			-0.006
				0.011			*0.011*
Household owns securities (dummy)	D_{SEC}			0.044***			0.047***
				0.010			*0.009*
Household owns business property/shares (dummy)	D_{BPS}			-0.012			0.020
				0.017			*0.018*
Household has to repay building loans/mortgages	D_{REPAY1}			-0.093***			-0.095***
				0.014			*0.014*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.043***			-0.031***
				0.009			*0.009*
Household owns real-estate (dummy)	D_{ESTATE}			0.076***			0.083***
				0.014			*0.014*
Number of observations		713	713	713	717	717	717
Log Likelihood		96.16	151.25	217.49	72.50	131.29	206.76
Pseudo R^2		-1.32	-2.64	-4.24	-3.31	-6.80	-11.29

Remarks. Endogeneous: Saving ratio. ***/**/* Significance on the 1/5/10-%-level.

Table 4b. Saving ratios– tobit estimation. main approach

		2000/2006		
		A	B	C
Constant	*Const*	0.097***	-0.492***	-0.345**
		0.010	0.160	0.142
Observation point after the reform (dummy)	D_{PR}	-0.027*	-0.022	-0.031**
		0.014	0.015	0.013
Belonging to treatment group 1 (dummy)	D_{T1}	-0.107***	0.014	0.000
		0.013	0.026	0.023
Interaction term	$D_{PR} \cdot D_{T1}$	0.002	-0.013	-0.003
		0.020	0.021	0.019
Household income in thousand Euro	$y/1000$		0.206***	0.171***
			0.056	0.051
Household income in thousand Euro. squared	$[y/1000]^2$		-0.027***	-0.022**
			0.010	0.009
Head of the household is unemployed (dummy)	D_{UN}		-0.090***	-0.057***
			0.023	0.020
Head of the household is self-employed (dummy)	D_{SE}		-0.038*	-0.058***
			0.021	0.020
Head of the household is public servant (dummy)	D_{PS}		-0.014	-0.019
			0.021	0.018
Head of the household is pensioner (dummy)	D_{PE}		-0.013	0.001
			0.058	0.052
Head of the household is white-collar (dummy)	D_{WC}		-0.001	-0.006
			0.013	0.012
Head of the household is student (dummy)	D_{ST}		-0.123	-0.117
			0.084	0.071
Head of the household with other employment	D_{OE}		0.001	-0.001
			0.020	0.018
Head of the household is foreigner (dummy)	D_{FO}		-0.021	-0.013
			0.015	0.014
Head of the household has univ. entrance qualific.	D_{UEQ}		-0.016	-0.015
			0.016	0.014
Head of household has university degree	D_{UD}		0.020	0.018
			0.016	0.014
Head of household is female (dummy)	D_{FEM}		-0.011	-0.018
			0.014	0.012
Age of the head of the household	*Age*		0.012*	0.007
			0.007	0.006
Age of the head of the household. squared	$[Age]^2$		0.000**	0.000
			0.000	0.000
Household from New Laender (dummy)	D_{NL}		0.014	0.013
			0.013	0.012
Household has a savings book (dummy)	D_{BOOKS}			0.057***
				0.012
Household has a building loan contract (dummy)	D_{LOAN}			0.016*
				0.009
Household has a life insurance (dummy)	D_{LIVE}			-0.001
				0.011
Household owns securities (dummy)	D_{SEC}			0.050***
				0.009
Household owns business property/shares (dummy)	D_{BPS}			0.023
				0.018
Household has to repay building loans/mortgages	D_{REPAY1}			-0.112***
				0.013
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.032***
				0.009
Household owns real-estate (dummy)	D_{ESTATE}			0.083***
				0.014
Number of observations		743	743	743
Log Likelihood		74.27	114.61	199.76
Pseudo R^2		-3.03	-5.22	-9.84

Table 5a. Saving ratios– tobit estimation. audit approach

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	0.063***	-0.093	-0.166**	0.063***	-0.152*	-0.217***
		0.003	*0.086*	*0.082*	*0.003*	*0.087*	*0.082*
Observation point after the reform (dummy)	D_{PR}	-0.019***	-0.039***	-0.039***	-0.010**	-0.033***	-0.033***
		0.005	*0.004*	*0.004*	*0.005*	*0.004*	*0.004*
Belonging to treatment group 2 (dummy)	D_{T2}	-0.040***	-0.002	-0.001	-0.040***	0.001	0.002
		0.004	*0.006*	*0.006*	*0.004*	*0.006*	*0.006*
Interaction term	$D_{PR} \cdot D_{T2}$	-0.002	0.009	0.012**	-0.002	0.010*	0.009*
		0.006	*0.006*	*0.005*	*0.006*	*0.006*	*0.005*
Household income in thousand Euro	$y/1000$		0.306***	0.263***		0.291***	0.253***
			0.014	*0.014*		*0.014*	*0.013*
Household income in thousand Euro. squared	$[y/1000]^2$		-0.058***	-0.051***		-0.053***	-0.047***
			0.004	*0.004*		*0.004*	*0.004*
Head of the household is unemployed (dummy)	D_{UN}		-0.068***	-0.063***		-0.066***	-0.063***
			0.007	*0.007*		*0.007*	*0.007*
Head of the household is self-employed (dummy)	D_{SE}		-0.013	-0.008		-0.023***	-0.022**
			0.008	*0.009*		*0.009*	*0.009*
Head of the household is public servant (dummy)	D_{PS}		-0.003	-0.010		-0.005	-0.010
			0.010	*0.009*		*0.010*	*0.009*
Head of the household is pensioner (dummy)	D_{PE}		0.006	-0.000		0.012*	0.005
			0.007	*0.006*		*0.007*	*0.007*
Head of the household is white-collar (dummy)	D_{WC}		0.011**	0.002		0.012**	0.001
			0.004	*0.004*		*0.005*	*0.004*
Head of the household is student (dummy)	D_{ST}		-0.005	-0.023**		0.009	-0.007
			0.010	*0.010*		*0.010*	*0.010*
Head of the household with other employment type	D_{OE}		-0.010	-0.013*		-0.002	-0.006
			0.007	*0.007*		*0.007*	*0.007*
Head of the household is foreigner (dummy)	D_{FO}		-0.032***	-0.008		-0.035***	-0.011**
			0.006	*0.006*		*0.006*	*0.006*
Head of the household has univ. entrance qualification	D_{UEQ}		0.009*	0.001		0.010**	0.002
			0.005	*0.004*		*0.005*	*0.004*
Head of household has university degree (dummy)	D_{UD}		0.003	0.002		0.002	-0.001
			0.005	*0.004*		*0.005*	*0.004*
Head of household is female (dummy)	D_{FEM}		-0.015***	-0.013***		-0.016***	-0.014***
			0.003	*0.003*		*0.003*	*0.003*
Age of the head of the household	*Age*		-0.002	0.003		0.004***	0.008***
			0.007	*0.007*		*0.007*	*0.007*
Age of the head of the household. squared	$[Age]^2$		-0.000	-0.000		-0.000	-0.000*
			0.000	*0.000*		*0.000*	*0.000*
Household from New Laender (dummy)	D_{NL}		0.039***	0.045***		0.038***	0.043***
			0.003	*0.003*		*0.003*	*0.003*
Household has a savings book (dummy)	D_{BOOKS}			0.074***			0.073***
				0.004			*0.004*
Household has a building loan contract (dummy)	D_{LOAN}			0.023***			0.020***
				0.003			*0.003*
Household has a life insurance (dummy)	D_{LIVE}			0.009***			0.005*
				0.003			*0.003*
Household owns securities (dummy)	D_{SEC}			0.040***			0.042***
				0.003			*0.003*
Household owns business property/shares (dummy)	D_{BPS}			-0.001			0.008
				0.009			*0.009*
Household has to repay building loans/mortgages	D_{REPAY1}			-0.060***			-0.065***
				0.005			*0.005*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.063***			-0.063***
				0.004			*0.004*
Household owns real-estate (dummy)	D_{ESTATE}			0.045***			0.047***
				0.004			*0.004*
Number of children in the household	N_{CHILDS}		-0.032***	-0.028***		-0.035***	-0.031***
			0.002	*0.002*		*0.002*	*0.002*
Number of adults in the household	N_{ADULTS}		-0.054***	-0.056***		-0.055***	-0.057***
			0.004	*0.004*		*0.004*	*0.004*
Number of observations		13.593	13.593	13.593	13.268	13.268	13.268
Log Likelihood		-1,244.43	180.80	1,007.83	-1,152.48	297.85	1,101.16
Pseudo R^2		0.08	1.13	1.74	0.07	1.24	1.88

Remarks. Endogeneous: Saving ratio. ***/**/* Significance on the 1/5/10-%-level.

Table 5b. Saving ratios– tobit estimation. audit approach

		2000/2006		
		A	B	C
Constant	*Const*	0.066***	-0.108	-0.187**
		0.003	0.087	0.082
Observation point after the reform (dummy)	D_{PR}	-0.023***	-0.047***	-0.046***
		0.005	0.004	0.004
Belonging to treatment group 2 (dummy)	D_{T2}	-0.043***	-0.003	-0.001
		0.004	0.006	0.006
Interaction term	$D_{PR} \cdot D_{T2}$	0.004	0.016***	0.015***
		0.006	0.006	0.005
Household income in thousand Euro	$y/1000$		0.300***	0.258***
			0.014	0.013
Household income in thousand Euro. squared	$[y/1000]^2$		-0.055***	-0.047***
			0.004	0.004
Head of the household is unemployed (dummy)	D_{UN}		-0.076***	-0.071***
			0.007	0.006
Head of the household is self-employed (dummy)	D_{SE}		-0.024***	-0.022***
			0.008	0.008
Head of the household is public servant (dummy)	D_{PS}		-0.006	-0.013
			0.009	0.009
Head of the household is pensioner (dummy)	D_{PE}		0.001	-0.004
			0.007	0.006
Head of the household is white-collar (dummy)	D_{WC}		0.008*	0.000
			0.004	0.004
Head of the household is student (dummy)	D_{ST}		-0.029**	-0.041***
			0.011	0.011
Head of the household with other employment type	D_{OE}		-0.006	-0.007
			0.007	0.007
Head of the household is foreigner (dummy)	D_{FO}		-0.034***	-0.011*
			0.006	0.006
Head of the household has univ. entrance qualification	D_{UEQ}		0.012***	0.002
			0.005	0.004
Head of household has university degree (dummy)	D_{UD}		0.007	0.004
			0.005	0.004
Head of household is female (dummy)	D_{FEM}		-0.012***	-0.010***
			0.003	0.003
Age of the head of the household	*Age*		0.000	0.005
			0.007	0.007
Age of the head of the household. squared	$[Age]^2$		0.000	0.000
			0.000	0.000
Household from New Laender (dummy)	D_{NL}		0.040***	0.046***
			0.003	0.003
Household has a savings book (dummy)	D_{BOOKS}			0.071***
				0.003
Household has a building loan contract (dummy)	D_{LOAN}			0.020***
				0.003
Household has a life insurance (dummy)	D_{LIVE}			0.006*
				0.003
Household owns securities (dummy)	D_{SEC}			0.042***
				0.003
Household owns business property/shares (dummy)	D_{BPS}			0.006
				0.009
Household has to repay building loans/mortgages	D_{REPAY1}			-0.071***
				0.005
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.057***
				0.004
Household owns real-estate (dummy)	D_{ESTATE}			0.050***
				0.003
Number of children in the household	N_{CHILDS}		-0.034***	-0.031***
			0.002	0.002
Number of adults in the household	N_{ADULTS}		-0.055***	-0.058***
			0.004	0.004
Number of observations		14,012	14,012	14,012
Log Likelihood		-1,290.17	325.50	1,165.14
Pseudo R^2		0.08	1.23	1.83

Annex

Table A1. Composition of the treatment and the control group – main approach

Treatment group 1				
Wave [year]	Q [2000]	U [2004]	V [2005]	W [2006]
Observations	273	165	182	188
Savings: yes	0.447	0.455	0.401	0.410
Saving amount	81	72	81	81
Income	1.629	1.815	1.862	1.858
Head of the household: unemployed	0.136	0.170	0.181	0.191
Head of the household: self-employed	0.048	0.073	0.049	0.080
Head of the household: public servant	0.007	0.006	0.011	0.011
Head of the household: pensioner	0.004	0	0	0.005
Head of the household: white-collar	0.179	0.176	0.198	0.213
Head of the household: blue-collar	0.454	0.442	0.423	0.367
Head of the household: student	0.007	0.006	0.016	0.011
Head of the household: other employment type	0.176	0.145	0.137	0.149
Head of the household: foreigner	0.249	0.200	0.198	0.154
Head of the household with univ. entrance qualification	0.062	0.103	0.115	0.122
Head of the household with university degree	0.077	0.079	0.066	0.085
Head of the household: female	0.300	0.388	0.407	0.372
Age of the head of the household	35.9	36.2	36.6	37.1
Household from New Laender	0.216	0.218	0.198	0.207
Household has a savings book	0.725	0.709	0.676	0.697
Household has a building loan contract	0.487	0.515	0.555	0.548
Household has a life insurance	0.604	0.606	0.582	0.617
Household has securities	0.172	0.248	0.280	0.271
Household owns business property	0.059	0.067	0.044	0.043
Repayments for building loans/mortgages	0.271	0.279	0.286	0.319
Repayments for credit loans	0.363	0.388	0.346	0.330
Household owns real-estate	0.385	0.400	0.401	0.447
Observations in millions (weighted)	*0.47*	*0.38*	*0.45*	*0.47*

Continuation of Table A1

Control group 1				
Wave [year]	Q [2000]	U [2004]	V [2005]	W [2006]
Observations	148	127	114	136
Savings: yes	0.831	0.811	0.825	0.794
Saving amount	357	334	333	327
Income	3.217	3.449	3.462	3.597
Head of the household: unemployed	0.007	0.008	0.009	0.015
Head of the household: self-employed	0.122	0.110	0.026	0.059
Head of the household: public servant	0.182	0.134	0.167	0.162
Head of the household: pensioner	0.007	0.016	0	0.022
Head of the household: white-collar	0.500	0.559	0.561	0.544
Head of the household: blue-collar	0.142	0.134	0.175	0.132
Head of the household: student	0.007	0.008	0	0
Head of the household: other employment type	0.047	0.055	0.061	0.066
Head of the household: foreigner	0.041	0.047	0.044	0.059
Head of the household with univ. entrance qualification	0.493	0.457	0.456	0.515
Head of the household with university degree	0.405	0.354	0.342	0.419
Head of the household: female	0.216	0.283	0.263	0.272
Age of the head of the household	39.4	39.5	40.2	40.9
Household from New Laender	0.128	0.134	0.053	0.110
Household has a savings book	0.899	0.827	0.904	0.875
Household has a building loan contract	0.682	0.661	0.737	0.684
Household has a life insurance	0.878	0.858	0.895	0.904
Household has securities	0.534	0.638	0.596	0.669
Household owns business property	0.101	0.094	0.044	0.059
Repayments for building loans/mortgages	0.655	0.685	0.693	0.669
Repayments for credit loans	0.372	0.378	0.219	0.235
Household owns real-estate	0.757	0.787	0.798	0.809
Number of observations in millions (weighted)	*0.30*	*0.34*	*0.35*	*0.32*
Remarks. All values are unweighted (exception: last row).				

Table A2. Composition of the treatment and the control group – audit approach

Treatment group 2				
Wave [year]	Q [2000]	U [2004]	V [2005]	W [2006]
Observations	4.723	3.474	3.268	3.713
Savings: yes	0.577	0.516	0.536	0.515
Saving amount	133	119	129	128
Income	1.650	1.689	1.671	1.710
Household size	2.29	2.16	2.05	2.08
Number of children	0.668	0.583	0.526	0.540
Head of the household: unemployed	0.126	0.166	0.176	0.182
Head of the household: self-employed	0.038	0.032	0.032	0.040
Head of the household: public servant	0.035	0.035	0.040	0.037
Head of the household: pensioner	0.077	0.091	0.092	0.089
Head of the household: white-collar	0.355	0.372	0.371	0.377
Head of the household: blue-collar	0.340	0.291	0.278	0.275
Head of the household: student	0.022	0.024	0.024	0.023
Head of the household: other employment type	0.073	0.072	0.069	0.066
Head of the household: foreigner	0.109	0.083	0.078	0.072
Head of the household with univ. entrance qualification	0.189	0.210	0.216	0.228
Head of the household with university degree	0.149	0.161	0.165	0.161
Head of the household: female	0.375	0.431	0.440	0.433
Age of the head of the household	40.4	41.5	41.3	41.8
Household from New Laender	0.249	0.271	0.278	0.267
Household has a savings book	0.735	0.668	0.667	0.656
Household has a building loan contract	0.436	0.427	0.435	0.434
Household has a life insurance	0.584	0.533	0.526	0.535
Household has securities	0.247	0.309	0.290	0.289
Household owns business property	0.033	0.022	0.021	0.022
Repayments for building loans/mortgages	0.191	0.178	0.172	0.181
Repayments for credit loans	0.322	0.314	0.238	0.235
Household owns real-estate	0.300	0.288	0.282	0.301
Share of household members eligible for the Riester scheme	1	1	1	1
Number of observations in millions (weighted)	*12.93*	*12.25*	*11.94*	*12.25*

Continuation: Table A2

Control group 2				
Wave [year]	Q [2000]	U [2004]	V [2005]	W [2006]
Observations	2.859	2.537	2.418	2.854
Savings: yes	0.625	0.594	0.614	0.588
Saving amount	159	149	158	154
Income	1.339	1.453	1.458	1.504
Household size	1.54	1.52	1.50	1.56
Number of children	0.057	0.040	0.035	0.056
Head of the household: unemployed	0	0	0	0
Head of the household: self-employed	0.030	0.025	0.023	0.026
Head of the household: public servant	0	0	0	0
Head of the household: pensioner	0.881	0.913	0.919	0.916
Head of the household: white-collar	0	0	0	0
Head of the household: blue-collar	0	0	0	0
Head of the household: student	0.038	0.038	0.039	0.030
Head of the household: other employment type	0.058	0.037	0.030	0.040
Head of the household: foreigner	0.051	0.040	0.040	0.037
Head of the household with univ. entrance qualification	0.126	0.134	0.133	0.137
Head of the household with university degree	0.111	0.138	0.137	0.130
Head of the household: female	0.474	0.478	0.489	0.467
Age of the head of the household	66.9	68.5	68.9	68.8
Household from New Laender	0.276	0.301	0.297	0.289
Household has a savings book	0.807	0.778	0.768	0.748
Household has a building loan contract	0.155	0.203	0.211	0.226
Household has a life insurance	0.249	0.219	0.224	0.222
Household has securities	0.198	0.270	0.261	0.282
Household owns business property	0.021	0.013	0.012	0.019
Repayments for building loans/mortgages	0.066	0.068	0.066	0.078
Repayments for credit loans	0.077	0.073	0.050	0.050
Household owns real-estate	0.417	0.434	0.432	0.454
Share of household members eligible for the Riester scheme	0	0	0	0
Number of observations in millions (weighted)	*10.34*	*10.20*	*9.80*	*9.99*
Remarks. All values are unweighted (exception: last row).				

Table A3a. Probability to save – Logit-estimation. main approach (without unemployed and East German observations)

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	1.466***	-10.891***	-11.337***	1.466***	-14.339***	-15.853***
		0.226	*3.362*	*3.737*	*0.226*	*3.696*	*4.208*
Observation point after the reform (dummy)	D_{PR}	0.004	-0.406	-0.388	0.004	-0.162	-0.147
		0.336	*0.400*	*0.431*	*0.336*	*0.395*	*0.433*
Belonging to treatment group 1 (dummy)	D_{T1}	-1.423***	2.115***	1.907**	-1.423***	1.683**	1.384*
		0.270	*0.775*	*0.839*	*0.270*	*0.774*	*0.821*
Interaction term	$D_{PR} \cdot D_{T1}$	-0.065	-0.146	-0.110	-0.320	-0.937*	-0.783
		0.411	*0.482*	*0.518*	*0.411*	*0.492*	*0.538*
Household income in thousand Euro	$y/1000$		3.436***	3.226**		5.130***	4.669***
			1.332	*1.473*		*1.418*	*1.540*
Household income in thousand Euro. Squared	$[y/1000]^2$		-0.274	-0.244		-0.684**	-0.627**
			0.278	*0.301*		*0.284*	*0.305*
Head of the household is self-employed (dummy)	D_{SE}		-0.723*	-0.431		-0.127	-0.097
			0.411	*0.471*		*0.451*	*0.518*
Head of the household is public servant (dummy)	D_{PS}		0.720	0.356		1.084*	0.988
			0.597	*0.620*		*0.585*	*0.630*
Head of the household is white-collar (dummy)	D_{AN}		0.079	-0.211		0.363	0.230
			0.280	*0.311*		*0.275*	*0.305*
Head of the household has other employment type (dummy)	D_{OE}		-0.416	-0.462		-0.178	-0.025
			0.398	*0.441*		*0.400*	*0.441*
Head of the household is foreigner (dummy)	D_{FO}		-0.637**	-0.544*		-0.631**	-0.372
			0.270	*0.310*		*0.272*	*0.319*
Head of the household has univ. entrance qualification	D_{UEQ}		0.203	0.188		-0.357	-0.271
			0.348	*0.368*		*0.343*	*0.366*
Head of household has university degree (dummy) (Dummy)	D_{UD}		0.142	0.239		0.660*	0.744*
			0.376	*0.403*		*0.382*	*0.411*
Head of household is female (dummy)	D_{FEM}		-0.411	-0.551*		-0.393	-0.764**
			0.286	*0.313*		*0.287*	*0.316*
Age of the head of the household	*Age*		0.237*	0.257		0.365**	0.437**
			0.141	*0.161*		*0.156*	*0.182*
Age of the head of the household. Squared	$[Age]^2$		-0.003*	-0.004*		-0.005***	-0.007***
			0.002	*0.002*		*0.002*	*0.002*
Household has a savings book (dummy)	D_{BOOKS}			1.404***			1.795***
				0.304			*0.321*
Household has a building loan contract (dummy)	D_{LOAN}			0.074			0.290
				0.250			*0.258*
Household has a life insurance (dummy)	D_{LIVE}			-0.169			-0.343
				0.292			*0.304*
Household owns securities (dummy)	D_{SEC}			0.846***			0.803***
				0.275			*0.274*
Household owns business property/shares (dummy)	D_{BPS}			-0.892*			-0.096
				0.463			*0.516*
Household has to repay building loans/mortgages obilien (Dummy)	D_{REPAY1}			-1.866***			-1.646***
				0.483			*0.460*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.226			0.173
				0.237			*0.251*
Household owns real-estate (dummy)	D_{ESTATE}			1.632***			1.511***
				0.476			*0.456*
Number of observations		534	534	534	537	537	537
Log Likelihood		-320.52	-286.33	-252.30	-321.51	-284.97	-246.28
Pseudo R^2		0.08	0.18	0.28	0.09	0.20	0.31

Remarks. Endogeneous: Saving decision (dummy : 1=yes; 0=no). ***/**/* Significance on the 1/5/10-%-level. Pensioners and studentes were excluded due to a low number of observations.

Table A3b. Probability to save – Logit-estimation. main approach (without unemployed and East German observations)

		2000/2006		
		A	B	C
Constant	*Const*	1.457*** 0.227	-11.895*** 3.348	-12.216*** 3.734
Observation point after the reform (dummy)	D_{PR}	-0.190 0.305	-0.086 0.336	-0.228 0.369
Belonging to treatment group 1 (dummy)	D_{T1}	-1.402*** 0.271	0.778 0.536	0.426 0.581
Interaction term	$D_{PR} \cdot D_{T1}$	-0.140 0.397	-0.730 0.464	-0.557 0.507
Household income in thousand Euro	$y/1000$		3.514*** 1.211	3.185** 1.329
Household income in thousand Euro. squared	$[y/1000]^2$		-0.435** 0.220	-0.385 0.239
Head of the household is self-employed (dummy)	D_{SE}		-0.360 0.424	-0.779 0.522
Head of the household is public servant (dummy)	D_{PS}		0.775 0.551	0.490 0.587
Head of the household is white-collar (dummy)	D_{AN}		0.068 0.270	-0.060 0.300
Head of the household has other employment type (dummy)	D_{OE}		-0.048 0.387	0.192 0.429
Head of the household is foreigner (dummy)	D_{FO}		-0.316 0.264	-0.282 0.306
Head of the household has univ. entrance qualification	D_{UEQ}		-0.386 0.361	-0.469 0.386
Head of household has university degree (dummy) (Dummy)	D_{UD}		0.266 0.392	0.564 0.423
Head of household is female (dummy)	D_{FEM}		-0.451 0.293	-0.894*** 0.326
Age of the head of the household	*Age*		0.384*** 0.146	0.397** 0.166
Age of the head of the household. squared	$[Age]^2$		-0.005*** 0.002	-0.006*** 0.002
Household has a savings book (dummy)	D_{BOOKS}			1.722*** 0.306
Household has a building loan contract (dummy)	D_{LOAN}			0.112 0.238
Household has a life insurance (dummy)	D_{LIVE}			-0.273 0.285
Household owns securities (dummy)	D_{SEC}			0.701*** 0.260
Household owns business property/shares (dummy)	D_{BPS}			-0.054 0.533
Household has to repay building loans/mortgages (dummy)	D_{REPAY1}			-2.176*** 0.466
Household has to repay credit loans (dummy)	D_{REPAY2}			0.221 0.249
Household owns real-estate (dummy)	D_{ESTATE}			1.825*** 0.463
Number of observations		546	546	546
Log Likelihood		-327.56	-301.29	-260.06
Pseudo R^2		0.08	0.16	0.27

Table A4a. Saving ratios – tobit estimation. main approach (without unemployed and East German observations)

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	0.095***	-0.574***	-0.470***	0.094***	-0.760***	-0.653***
		0.010	*0.186*	*0.173*	*0.010*	*0.207*	*0.188*
Observation point after the reform (dummy)	D_{PR}	-0.009	-0.025	-0.023	-0.011	-0.019	-0.021
		0.015	*0.016*	*0.015*	*0.016*	*0.017*	*0.015*
Belonging to treatment group 1 (dummy)	D_{T1}	-0.090***	0.081**	0.057*	-0.091***	0.088**	0.064*
		0.014	*0.037*	*0.033*	*0.014*	*0.037*	*0.033*
Interaction term	$D_{PR} \cdot D_{T1}$	0.002	-0.004	-0.001	-0.002	-0.035	-0.017
		0.021	*0.022*	*0.020*	*0.022*	*0.023*	*0.021*
Household income in thousand Euro	$y/1000$		0.198***	0.147**		0.322***	0.243***
			0.066	*0.061*		*0.073*	*0.065*
Household income in thousand Euro. squared	$[y/1000]^2$		-0.020	-0.012		-0.044***	-0.032***
			0.012	*0.011*		*0.013*	*0.012*
Head of the household is self-employed (dummy)	D_{SE}		-0.043*	-0.031		-0.023	-0.027
			0.022	*0.021*		*0.024*	*0.023*
Head of the household is public servant (dummy)	D_{PS}		-0.010	-0.018		-0.005	-0.014
			0.022	*0.020*		*0.021*	*0.019*
Head of the household is white-collar (dummy)	D_{AN}		-0.000	-0.013		0.012	0.003
			0.014	*0.013*		*0.014*	*0.013*
Head of the household has other employment type (dummy)	D_{OE}		-0.000	-0.004		-0.001	0.006
			0.022	*0.020*		*0.022*	*0.020*
Head of the household is foreigner (dummy)	D_{FO}		-0.034**	-0.028*		-0.039**	-0.022
			0.015	*0.014*		*0.016*	*0.015*
Head of the household has univ. entrance qualification (dummy)	D_{UEQ}		0.013	0.015		-0.009	-0.003
			0.016	*0.015*		*0.017*	*0.015*
Head of household has university degree (dummy) (Dummy)	D_{UD}		0.018	0.010		0.038**	0.032**
			0.017	*0.015*		*0.017*	*0.016*
Head of household is female (dummy)	D_{FEM}		-0.039***	-0.038***		-0.026*	-0.036***
			0.015	*0.013*		*0.015*	*0.014*
Age of the head of the household	*Age*		0.013*	0.012		0.016*	0.015*
			0.008	*0.007*		*0.009*	*0.008*
Age of the head of the household. squared	$[Age]^2$		-0.000*	-0.000**		-0.000**	-0.000**
			0.000	*0.000*		*0.000*	*0.000*
Household has a savings book (dummy)	D_{BOOKS}			0.062***			0.080***
				0.014			*0.015*
Household has a building loan contract (dummy)	D_{LOAN}			0.006			0.014
				0.010			*0.011*
Household has a life insurance (dummy)	D_{LIVE}			-0.009			-0.020
				0.013			*0.013*
Household owns securities (dummy)	D_{SEC}			0.038***			0.042***
				0.011			*0.010*
Household owns business property/shares (dummy)	D_{BPS}			-0.010			0.034*
				0.019			*0.020*
Household has to repay building loans/mortgages obilien (Dummy)	D_{REPAY1}			-0.103***			-0.098***
				0.015			*0.015*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.033***			-0.017
				0.010			*0.010*
Household owns real-estate (dummy)	D_{ESTATE}			0.083***			0.087***
				0.015			*0.015*
Number of observations		534	534	534	537	537	537
Log Likelihood		111.12	143.62	199.76	95.88	130.96	195.70
Pseudo R^2		-0.46	-0.89	-1.62	-0.59	-1.17	-2.25

Remarks. Endogeneous: Saving ratio. ***/**/* Significance on the 1/5/10-%-Niveau. Pensioners and students were excluded due to a low number of observations.

Table A4b. Saving ratios – tobit estimation. main approach (without unemployed and East German observations)

		2000/2006		
		A	B	C
Constant	$Const$	0.094***	-0.644***	-0.524***
		0.011	0.191	0.169
Observation point after the reform (dummy)	D_{PR}	-0.021	-0.020	-0.027**
		0.015	0.015	0.013
Belonging to treatment group 1 (dummy)	D_{T1}	-0.090***	0.029	0.006
		0.014	0.028	0.025
Interaction term	$D_{PR} \cdot D_{T1}$	0.007	-0.017	-0.003
		0.022	0.024	0.020
Household income in thousand Euro	$y/1000$		0.197***	0.156***
			0.064	0.058
Household income in thousand Euro. squared	$[y/1000]^2$		-0.025**	-0.020*
			0.011	0.010
Head of the household is self-employed (dummy)	D_{SE}		-0.033	-0.060***
			0.023	0.022
Head of the household is public servant (dummy)	D_{PS}		-0.005	-0.016
			0.022	0.018
Head of the household is white-collar (dummy)	D_{AN}		0.001	-0.004
			0.015	0.013
Head of the household has other employment type (dummy)	D_{OE}		-0.009	0.002
			0.022	0.019
Head of the household is foreigner (dummy)	D_{FO}		-0.019	-0.016
			0.015	0.014
Head of the household has univ. entrance qualification (dummy)	D_{UEQ}		-0.020	-0.016
			0.018	0.015
Head of household has university degree (dummy) (Dummy)	D_{UD}		0.025	0.022
			0.019	0.016
Head of household is female (dummy)	D_{FEM}		-0.008	-0.026*
			0.016	0.014
Age of the head of the household	Age		0.020**	0.017**
			0.008	0.008
Age of the head of the household. squared	$[Age]^2$		0.000**	0.000***
			0.000	0.000
Household has a savings book (dummy)	D_{BOOKS}			0.078***
				0.014
Household has a building loan contract (dummy)	D_{LOAN}			0.007
				0.010
Household has a life insurance (dummy)	D_{LIVE}			-0.015
				0.012
Household owns securities (dummy)	D_{SEC}			0.043***
				0.010
Household owns business property/shares (dummy)	D_{BPS}			0.032
				0.020
Household has to repay building loans/mortgages obilien (Dummy)	D_{REPAY1}			-0.124***
				0.014
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.016
				0.010
Household owns real-estate (dummy)	D_{ESTATE}			0.100***
				0.015
Number of observations		546	546	546
Log Likelihood		102.86	123.87	203.61
Pseudo R^2		-0.44	-0.74	-1.85

Table A5a. Probability to save – logit estimation. audit approach (without unemployed)

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	0.513***	-3.821***	-4.766***	0.513***	-4.897***	-5.881***
		0.039	*1.231*	*1.292*	*0.039*	*1.260*	*1.320*
Observation point after the reform (dummy)	D_{PR}	-0.130**	-0.414***	-0.429***	-0.048	-0.349***	-0.346***
		0.056	*0.063*	*0.066*	*0.057*	*0.064*	*0.067*
Belonging to treatment group 2 (dummy)	D_{T2}	-0.013	-0.035	-0.025	-0.013	0.086	0.114
		0.050	*0.089*	*0.094*	*0.050*	*0.091*	*0.096*
Interaction term	$D_{PR} \cdot D_{T2}$	-0.052	0.037	0.072	-0.007	0.072	0.054
		0.075	*0.082*	*0.087*	*0.076*	*0.084*	*0.089*
Household income in thousand Euro	$y/1000$		3.602***	3.443***		3.667***	3.574***
			0.211	*0.223*		*0.210*	*0.220*
Household income in thousand Euro. squared	$[y/1000]^2$		-0.640***	-0.620***		-0.646***	-0.639***
			0.063	*0.066*		*0.062*	*0.065*
Head of the household is self-employed (dummy)	D_{SE}		-0.534***	-0.402***		-0.560***	-0.472***
			0.114	*0.131*		*0.117*	*0.135*
Head of the household is public servant (dummy)	D_{PS}		0.081	-0.020		0.162	0.071
			0.150	*0.157*		*0.152*	*0.160*
Head of the household is pensioner (dummy)	D_{PE}		0.010	-0.085		0.113	0.024
			0.099	*0.106*		*0.103*	*0.109*
Head of the household is white-collar (dummy)	D_{WC}		0.234***	0.128*		0.267***	0.143**
			0.063	*0.076*		*0.065*	*0.069*
Head of the household is student (dummy)	D_{ST}		-0.265	-0.509***		0.138	-0.063
			0.144	*0.151*		*0.145*	*0.151*
Head of the household has other employment type (dummy)	D_{OE}		-0.206**	-0.241**		-0.033	-0.066
			0.095	*0.102*		*0.098*	*0.105*
Head of household is foreigner (dummy)	D_{FO}		-0.484***	-0.263***		-0.474***	-0.252***
			0.078	*0.085*		*0.080*	*0.086*
Head of the household has univ. entrance qualification (dummy)	D_{UEQ}		0.102	-0.008		0.052	-0.059
			0.070	*0.074*		*0.071*	*0.075*
Head of household has university degree (dummy)	D_{UD}		0.022	-0.001		0.009	-0.030
			0.071	*0.075*		*0.072*	*0.076*
Head of household is female (dummy)	D_{FEM}		-0.125***	-0.121**		-0.153***	-0.147***
			0.047	*0.050*		*0.048*	*0.050*
Age of the head of the household	*Age*		0.190*	0.213*		0.273**	0.292***
			0.104	*0.109*		*0.107*	*0.112*
Age of the head of the household. squared	$[Age]^2$		-0.008***	-0.008**		-0.011***	-0.011***
			0.003	*0.003*		*0.003*	*0.003*
Household from New Laender (dummy)	D_{NL}		0.448***	0.515***		0.442***	0.492***
			0.049	*0.052*		*0.050*	*0.053*
Household has a savings book (dummy)	D_{BOOKS}			1.156***			1.141***
				0.051			*0.052*
Household has a building loan contract (dummy)	D_{LOAN}			0.385***			0.278***
				0.051			*0.053*
Household has a life insurance (dummy)	D_{LIVE}			0.118**			0.077
				0.050			*0.051*
Household owns securities (dummy)	D_{SEC}			0.502***			0.535***
				0.054			*0.056*
Household owns business property/shares (dummy)	D_{BPS}			-0.225			-0.131
				0.146			*0.153*
Household has to repay building loans/mortgages obilien (Dummy)	D_{REPAY1}			-0.574***			-0.693***
				0.080			*0.081*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.773***			-0.727***
				0.055			*0.057*
Household owns real-estate (dummy)	D_{ESTATE}			0.254***			0.294***
				0.060			*0.062*
Number of children in the household	N_{CHILDS}		-0.357***	-0.340***		-0.385***	-0.377***
			0.033	*0.036*		*0.034*	*0.037*
Number of adults in the household	N_{ADULTS}		-0.500***	-0.568***		-0.507***	-0.561***
			0.057	*0.061*		*0.057*	*0.062*
Number of observations		12,424	12,424	12,424	12,100	12,100	12,100
Log Likelihood		-8,314.08	-7,305.44	-6,677.47	-8,042.47	-7,023.60	-6,441.17
Pseudo R^2		0.00	0.12	0.20	0.00	0.13	0.20

Remarks. Endogeneous: Saving decision (dummy: 1=yes ; 0=no). ***/**/* Significance on the 1/5/10-%-level.

Table A5b. Probability to save – logit estimation. audit approach (without unemployed)

		2000/2006		
		A	B	C
Constant	$Const$	0.557*** 0.039	-3.366*** 1.265	-4.233*** 1.332
Observation point after the reform (dummy)	D_{PR}	-0.202*** 0.055	-0.552*** 0.062	-0.548*** 0.066
Belonging to treatment group 2 (dummy)	D_{T2}	-0.048 0.051	-0.014 0.090	0.020 0.095
Interaction term	$D_{PR} \cdot D_{T2}$	0.076 0.074	0.166** 0.082	0.156* 0.087
Household income in thousand Euro	$y/1000$		3.865*** 0.203	3.676*** 0.213
Household income in thousand Euro. squared	$[y/1000]^2$		-0.691*** 0.058	-0.656*** 0.062
Head of the household is self-employed (dummy)	D_{SE}		-0.569*** 0.111	-0.478*** 0.127
Head of the household is public servant (dummy)	D_{PS}		0.166 0.152	0.057 0.160
Head of the household is pensioner (dummy)	D_{PE}		-0.076 0.101	-0.181* 0.107
Head of the household is white-collar (dummy)	D_{WC}		0.177*** 0.063	0.065 0.067
Head of the household is student (dummy)	D_{ST}		-0.414*** 0.154	-0.608*** 0.160
Head of the household has other employment type (dummy)	D_{OE}		-0.170* 0.095	-0.173* 0.102
Head of household is foreigner (dummy)	D_{FO}		-0.452*** 0.080	-0.239*** 0.086
Head of the household has univ. entrance qualification (dummy)	D_{UEQ}		0.155** 0.070	0.022 0.074
Head of household has university degree (dummy)	D_{UD}		0.023 0.074	-0.024 0.079
Head of household is female (dummy)	D_{FEM}		-0.100** 0.047	-0.103** 0.049
Age of the head of the household	Age		0.143 0.107	0.158 0.113
Age of the head of the household. squared	$[Age]^2$		-0.007** 0.003	-0.007** 0.003
Household from New Laender (dummy)	D_{NL}		0.510*** 0.049	0.573*** 0.052
Household has a savings book (dummy)	D_{BOOKS}			1.151*** 0.050
Household has a building loan contract (dummy)	D_{LOAN}			0.340*** 0.051
Household has a life insurance (dummy)	D_{LIVE}			0.123** 0.049
Household owns securities (dummy)	D_{SEC}			0.539*** 0.054
Household owns business property/shares (dummy)	D_{BPS}			-0.198 0.144
Household has to repay building loans/mortgages obilien (Dummy)	D_{REPAY1}			-0.780*** 0.077
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.633*** 0.056
Household owns real-estate (dummy)	D_{ESTATE}			0.335*** 0.060
Number of children in the household	N_{CHILDS}		-0.380*** 0.033	-0.367*** 0.036
Number of adults in the household	N_{ADULTS}		-0.541*** 0.056	-0.615*** 0.060
Number of observations		12,571	12,571	12,751
Log Likelihood		-8,507.74	-7,395.13	-6,769.00
Pseudo R^2		0.00	0.13	0.21

Table A6a. Saving ratios– tobit estimations. audit approach (without unemployed)

		2000/2004			2000/2005		
		A	B	C	A	B	C
Constant	*Const*	0.065***	-0.121***	-0.192***	0.065***	-0.194**	-0.267***
		0.004	*0.089*	*0.084*	*0.003*	*0.090*	*0.085*
Observation point after the reform (dummy)	D_{PR}	-0.019***	-0.038***	-0.038***	-0.010**	-0.032***	-0.032***
		0.005	*0.004*	*0.004*	*0.005*	*0.004*	*0.004*
Belonging to treatment group 2 (dummy)	D_{T2}	-0.027***	-0.004	-0.002	-0.027***	0.000	0.002
		0.004	*0.006*	*0.006*	*0.004*	*0.006*	*0.006*
Interaction term	$D_{PR} \cdot D_{T2}$	0.003	0.009	0.012**	0.007	0.011*	0.009*
		0.006	*0.006*	*0.005*	*0.006*	*0.006*	*0.006*
Household income in thousand Euro	$y/1000$		0.288***	0.249***		0.285***	0.251***
			0.015	*0.014*		*0.015*	*0.014*
Household income in thousand Euro. squared	$[y/1000]^2$		-0.054***	-0.047***		-0.052***	-0.047***
			0.004	*0.004*		*0.004*	*0.004*
Head of the household is self-employed (dummy)	D_{SE}		-0.013	-0.008		-0.021**	-0.019
			0.008	*0.009*		*0.009*	*0.009*
Head of the household is public servant (dummy)	D_{PS}		-0.002	-0.010		-0.003	-0.009
			0.010	*0.009*		*0.010*	*0.009*
Head of the household is pensioner (dummy)	D_{PE}		0.005	-0.002		0.015**	0.007
			0.007	*0.007*		*0.007*	*0.007*
Head of the household is white-collar (dummy)	D_{WC}		0.011**	0.002		0.013***	0.002
			0.005	*0.004*		*0.005*	*0.004*
Head of the household is student (dummy)	D_{ST}		-0.010	-0.028***		0.009	-0.006
			0.011	*0.010*		*0.010*	*0.010*
Head of the household has other employment type (dummy)	D_{OE}		-0.010	-0.013*		-0.000	-0.003
			0.007	*0.007*		*0.007*	*0.007*
Head of household is foreigner (dummy)	D_{FO}		-0.034***	-0.010*		-0.037***	-0.012**
			0.006	*0.006*		*0.006*	*0.006*
Head of the household has univ. entrance qualification (dummy)	D_{UEQ}		0.009*	0.001		0.008*	0.001
			0.005	*0.004*		*0.006*	*0.005*
Head of household has university degree (dummy)	D_{UD}		0.004	0.002		0.002	-0.001
			0.005	*0.004*		*0.005*	*0.005*
Head of household is female (dummy)	D_{FEM}		-0.018***	-0.015***		-0.019***	-0.016***
			0.003	*0.003*		*0.003*	*0.003*
Age of the head of the household	*Age*		0.002	0.006		0.008	0.012*
			0.007	*0.007*		*0.000*	*0.007*
Age of the head of the household. squared	$[Age]^2$		-0.000	-0.000		-0.000*	-0.000**
			0.000	*0.000*		*0.000*	*0.000*
Household from New Laender (dummy)	D_{NL}		0.039***	0.046***		0.037***	0.044***
			0.003	*0.003*		*0.003*	*0.003*
Household has a savings book (dummy)	D_{BOOKS}			0.074***			0.071***
				0.004			*0.004*
Household has a building loan contract (dummy)	D_{LOAN}			0.023***			0.020***
				0.003			*0.003*
Household has a life insurance (dummy)	D_{LIVE}			0.009***			0.005
				0.003			*0.00*
Household owns securities (dummy)	D_{SEC}			0.040***			0.042***
				0.003			*0.003*
Household owns business property/shares (dummy)	D_{BPS}			-0.002			0.004
				0.009			*0.010*
Household has to repay building loans/mortgages (dummy)	D_{REPAY1}			-0.060***			-0.064***
				0.005			*0.005*
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.063***			-0.064***
				0.004			*0.005*
Household owns real-estate (dummy)	D_{ESTATE}			0.046***			0.047***
				0.004			*0.004*
Number of children in the household	N_{CHILDS}		-0.031***	-0.028***		-0.033***	-0.030***
			0.002	*0.002*		*0.003*	*0.002*
Number of adults in the household	N_{ADULTS}		-0.054***	-0.056***		-0.056***	-0.057***
			0.004	*0.004*		*0.004*	*0.004*
Number of observations		12,424	12,424	12,424	12,100	12,100	12,100
Log Likelihood		-671.49	390.85	1,166.26	-537.43	535.12	1,285.39
Pseudo R^2		0.07	1.54	2.62	0.06	1.94	3.26

Remarks. Endogeneous: Saving ratio. ***/**/* Significance on the 1/5/10-%-level.

Table A6b. Saving ratios– tobit estimations. audit approach (without unemployed)

		2000/2006		
		A	B	C
Constant	*Const*	0.068***	-0.145	-0.218**
		0.003	0.089	0.084
Observation point after the reform (dummy)	D_{PR}	-0.023***	-0.046***	-0.045***
		0.004	0.004	0.004
Belonging to treatment group 2 (dummy)	D_{T2}	-0.030***	-0.007	-0.004
		0.004	0.006	0.006
Interaction term	$D_{PR} \cdot D_{T2}$	0.015**	0.018***	0.017***
		0.006	0.006	0.005
Household income in thousand Euro	$y/1000$		0.289***	0.249***
			0.014	0.013
Household income in thousand Euro. squared	$[y/1000]^2$		-0.052***	-0.045***
			0.004	0.004
Head of the household is self-employed (dummy)	D_{SE}		-0.024***	-0.022***
			0.008	0.008
Head of the household is public servant (dummy)	D_{PS}		-0.004	-0.011
			0.009	0.009
Head of the household is pensioner (dummy)	D_{PE}		0.000	-0.007***
			0.007	0.007
Head of the household is white-collar (dummy)	D_{WC}		0.009**	0.001
			0.004	0.004
Head of the household is student (dummy)	D_{ST}		-0.030***	-0.041***
			0.011	0.011
Head of the household has other employment type (dummy)	D_{OE}		-0.006	-0.007
			0.007	0.007
Head of household is foreigner (dummy)	D_{FO}		-0.034***	-0.011*
			0.006	0.006
Head of the household has univ. entrance qualification (dummy)	D_{UEQ}		0.011**	0.001
			0.005	0.004
Head of household has university degree (dummy)	D_{UD}		0.007	0.004
			0.005	0.005
Head of household is female (dummy)	D_{FEM}		-0.016***	-0.013***
			0.003	0.003
Age of the head of the household	*Age*		0.004	0.008
			0.008	0.007
Age of the head of the household. squared	$[Age]^2$		0.000	0.000*
			0.000	0.000
Household from New Laender (dummy)	D_{NL}		0.040***	0.046***
			0.003	0.003
Household has a savings book (dummy)	D_{BOOKS}			0.070***
				0.003
Household has a building loan contract (dummy)	D_{LOAN}			0.018***
				0.003
Household has a life insurance (dummy)	D_{LIVE}			0.006*
				0.003
Household owns securities (dummy)	D_{SEC}			0.042***
				0.003
Household owns business property/shares (dummy)	D_{BPS}			0.006
				0.009
Household has to repay building loans/mortgages (dummy)	D_{REPAY1}			-0.070***
				0.005
Household has to repay credit loans (dummy)	D_{REPAY2}			-0.055***
				0.004
Household owns real-estate (dummy)	D_{ESTATE}			0.050***
				0.003
Number of children in the household	N_{CHILDS}		-0.033***	-0.030***
			0.002	0.002
Number of adults in the household	N_{ADULTS}		-0.055***	-0.057***
			0.004	0.004
Number of observations		12,751	12,751	12,751
Log Likelihood		-614.03	561.83	1,346.62
Pseudo R^2		0.06	1.86	3.05