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## **HOUSEHOLD SAVING RATES AND SOCIAL INSURANCE RETIREMENT INCOME: AN INTERNATIONAL COMPARISON OF THE OECD COUNTRIES**

### **Abstract:**

The motivation for this research is to examine the debate about the effect of social insurance on private savings as suggested by Feldstein (1974) and Leimner and Lesony (1982). The null hypothesis is whether expected social insurance benefits in retirement displace household private savings. We use a panel data comprised of most OECD countries (driven by data availability), incorporating 2004-2014. We also reconsider the G7 countries (Mozayeni, 2015) with the data currently available. In both cases, our dependent variable is the Household Saving Rate (HS), measured as the percentage of Disposable Income, as reported in the National Income Accounts. The dependent variables are: the Gross Replacement Rate (GRR) for retirement benefits, which had become available for 2004-2014; the Long Term Interest Rate, which is the daily average for ten year-governments' bond rates, and two fixed-effect variables, which account for the specific effects of the countries and the years in the data. Overall, our models predicts the relationships well, with  $R^2 = 0.88$  for the OECD panel and  $0.94$  for G7. We first discuss our results for the OECD panel and then the G7. In the OECD regression, the sign for HS varies year to year and from country to country. The significant levels are high only for 11 of 26 countries in the sample. With an F value of 26.94, compared to 4.052 for  $\alpha = 0.01$ , the ANOVA test strongly rejects the null hypothesis that between-groups and within-groups variations are the same. We therefore reject the null hypothesis that  $\beta_1 = \beta_2, \dots, \beta_j = 0$  and accept the alternative hypothesis  $\beta \neq 0$  for at least one value of the overall test. Our results show NO systematic dependence of household savings on retirement benefits. Our G7 regression produces an F test of 36.55,  $R^2 = 0.94$ , and negative signs for all the years in the data and positive signs for the Country effect for some and negative for others--for Germany, Japan, United Kingdom and US, the signs are negative; whereas for France and Italy are positive. The Country significance levels are high only for Italy and UK. In conclusion, we reject the proposition that expected social security income in retirement displaces household savings for the OECD countries and G7 in our sample. We methodically consider any specific effect the period in our data may have on households' saving behavior.

### **Keywords:**

Household Savings, Private Savings Displacement, Gross Replacement Rates and Private Saving

**JEL Classification:** D69, E21, H55