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Social Security Reform

Chapter 3:
The Outline of the Polish
Case

Household saving behaviour in Poland: results from the exploratory cross- tabulation analysis for 1995¹

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1. Introduction

Household saving is a key determinant of capital stock and thus of the level of economic output. Recent research (Lusardi & Browning, 1996; Gokhale, Kotlikoff & Sabelhaus, 1996; Lunt & Livingstone, 1991; van Veldhoven & Groenland, 1993; Schmidt-Hebbel, Serven & Solimano, 1996) indicates that household saving behavior is still poorly understood. In some of these studies there are examples that people behave according to the life-cycle hypothesis (Gokhale, Kotlikoff & Sabelhaus, 1996, seem to provide the strongest support). According to the life-cycle hypothesis (Ando & Modigliani, 1957 & 1963; Modigliani & Brumberg, 1954; and Modigliani, 1986) saving is a strategy for consumption smoothing between working age and the age of retirement. However, there are also examples (Heller, 1989; Summers and Carrol, 1987; Auerbach, Kotlikoff, 1987; Venti & Wise, 1987;

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Aaron, 1989; Borsh-Supan, 1991) that the elderly do not dissave as much as the model would predict, this behavior may reflect precautionary motives which operates in addition to life-cycle motives (Mankiw, 1997). Empirical international research on precautionary motives for saving provided mixed evidence (Skinner, 1988; Kuehlwein, 1991; Guiso, Jappelli & Terlizzese, 1992, 1996; Dyan, 1993; Lusardi, 1993; Caroll, 1994; Kazarosian, 1994; Caroll & Samwick, 1995a & 1995b; Engen & Gruber, 1995; Palumbo, 1995; Starr-McCluer, 1996). Another possible reason for lower than expected dissaving in retirement is bequest motives (Kotlikoff and Summers, 1981; Bernheim, Shleifer, Summers, 1995).

In Poland only a handful of recent studies, e.g. *Warunki ...* (1997), have examined the saving behaviour of Polish households. During earlier years of central planning there were limited studies of household saving behaviour (e.g. Nasiłowski, 1983; Łukaszewicz, 1983).

2. Results from the cross-tabulation analysis for 1995²

The household budget survey of living conditions of Polish Households carried out in 1995 by the Central Statistical Office (CSO), provides a detailed and representative source of living conditions of households including levels, differences and structure of disposable income, expenditures and consumption, and assets of households.

The survey interviewed a total of 32,009 households³. An average of 2,667 households were interviewed monthly. The following analysis is based on monthly data.

The socio-economic and demographic variables selected for analysis are as follows: 1. Household size and composition by family type: single, couple without children, couple with one child, couple with two children, couple with three children, couple with more than three children, mother with children, father with children, other; 2. Age of the head of household: 18-24, 25-34, 35-44, 45-60, +60; 3. Socio-economic categories of the head of household by main source of household income: employee, farmer, mixed (both farm and non-farm income), pensioner,

² All results reported are statistically significant (chi-square test in SPSS 7.5 for Windows).

³ According to the results from the microdata in 1995 there were 12,500,802 households in Poland. In this survey 0.25% of all Polish households were interviewed. The analysis used weighted wages to fit the sample to the socio-economic, family and locality structure of Polish households.

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self-employed, other⁴; 4. Number of children; 5. Number of all the household members; 6. Sex of the head of household; 7. Urban/rural residence; 8. Education level of the head of household.

The saving variable selected for analysis was monthly amount deposited in banks and other financial institutions. Note that this is a flow variable; it does not refer to the stock of accumulated savings. Investments in stocks and banks were excluded, as 99.4% of households reported no financial assets apart from bank accounts.

Saving distribution by households

The most striking conclusion is that only 20% (19.9%) of all households make any monthly savings (see Fig. 1). The remaining households either did not save during the survey month or data were not available (12.8%⁵ of all households). The low incidence of saving can be due to:

- households do not save at all, as they can not afford to save any amount of money because of current consumption and low disposable income;
- households save, but this saving takes forms which are not captured by data collected in the national survey;
- households either intentionally or unintentionally fail to report saving.

As shown in Fig. 1 no saving were declared by 68.3% of households. Then, 13.4% of households had monthly savings between 0 and 25 złoty in 1995. In comparison spending on shoes and clothes in 1995 was 20.66 złoty per person in a household⁶. Only 5.4% of households saved over 25 złoty per month.

Because of the high incidence of non-savers, the total monthly household saving rate for Poland is low, only 1.2% of disposable income.

⁴ Definitions of household types: employees – whose exclusive or main (prevailing) source of subsistence are earnings; farmers – their main source of subsistence is income from a private farm of arable area exceeding 1 hectare; mixed (employees-farmers) – source of subsistence is the sum of earnings and income from an private farm of a farming area over 1 ha; pensioners – source of subsistence is any type of pension; self-employed – source of subsistence is income from self-employment or from practicing free profession; other – source of subsistence is any type of income other than pension, income from odd jobs or donations.

⁵ In fact the missing values can be treated as no savings reported by households.

⁶ Source: *Statistical Yearbook 1996*, Central Statistical Office, Warsaw, Poland.

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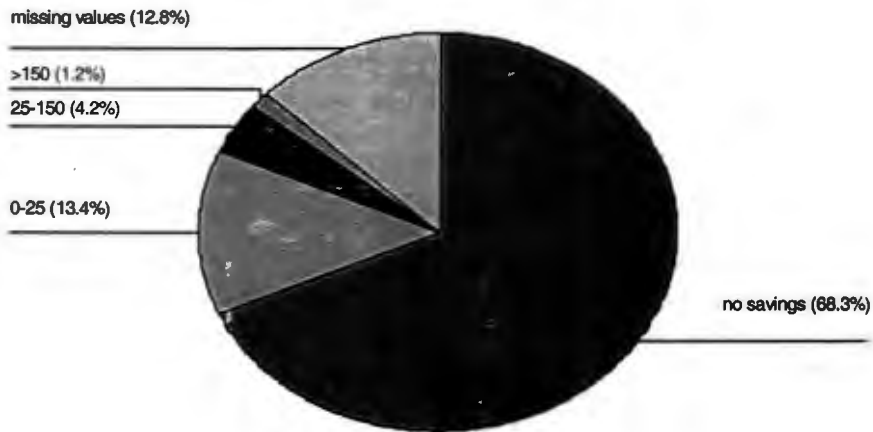


Figure 1: Savings in banks and in other institutions

Saving by different household categories⁷

The incidence of saving is the lowest among farmers and pensioners. However, those farmers who did save, interestingly, saved a great deal, as a result, the saving rate for farmers is higher than for all other categories of main source of income. This apparently is the result of investing any additional money by farmers. Employees had the second-highest saving rate. Households in which the head is aged over 60 have the lowest propensity to save, which is not surprising in view of the low number of pensioners who save. Among younger households, the incidence of saving is the highest for those with the head aged 34-45. Households with children are substantially more likely to save than households without children. On the other hand, among households with children, the likelihood of engaging in saving declines with number of children. There is no significant difference in having savings

⁷ All detailed results can be given under request.

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between households with male or female as a head of household, which remains in relation to the higher educational level of female heads of household. Not surprisingly, saving is positively correlated with the educational level of the head of household. Among the rural households there are many more non-savers, compared with urban ones; this is connected with the high percentage of farmer households.

More advanced analysis of cross-tabulations with more than two variables allows us to combine relationship between savings, type of family and socio-economic category and age of the head of household. However, these detailed results do not add much to our understanding of Polish household saving behaviour, in part because with finer units of analysis, differences in the proportion of missing values become significant. For example, the reason for the association between presence of children in the household and saving behaviour is probably due to the fact that a high proportion of households with children fall into the anyway high-saving 35-44 age group. In all age groups, regardless of household composition, farmers are least likely, and employees most likely, to save.

3. Conclusions

This paper presents the very preliminary analysis of the household saving behaviour in Poland. Altogether:

1. Fewer farmers and pensioners save. However, the saving rate for farmers is the highest, because those farmers who do save, save a lot.
2. Households with children are substantially more likely to save than households without children, however: among households with children, the likelihood of engaging in saving declines with the number of children.
3. Education is positively correlated with savings.
4. There are no significant differences between male-headed and female-headed households in savings, as female headed households are much better educated.

Summing up, this data set contains a wealth of interesting information about household behaviour. However further information would add to the usefulness of the data (see, *Ekspertyza*, 1997). An understanding of saving behaviour requires first of all, further analysis and research, the new categorisation of saving (e.g. savings in trust funds, pension schemes, life-insurance companies etc.). Otherwise, it is difficult to determine whether there exists any family financial support⁸ and

⁸ Some attempts to observe interfamily support was investigated by Cox, Jimenez, Okrasa (1995), who found out that in the transition period the role of Polish family support has decreased.

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what is the typical basket of the household's financial instruments. Further research on household saving behaviour should include analysis how people will react to a new social security system⁹. Likewise, with the ageing of the population becoming a key feature of economic developments in Poland, it would be useful to study the saving behaviour by each cohort. Also future assessments of the relative importance of different factors on savings should be investigated in a more integrated framework (e.g. van Veldhoven, Groenland, 1993).

Finally, we should remember that the saving decision process of households depends on many variables, not all of which can be measured and modelled.

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⁹ As Robert Hall suggest, changes in consumption and savings due to a policy appear not at the instance of introduction of a particular reform but when the future change is announced.

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