# Effect of children on household budget 

## ASSIGN BUSTER

1. Other Household-related Determinants

According to the life cycle theory and permanent income hypothesis, demographic variables such as age, household structure, employment and education attainment and other factors which could potentially affect income and/or consumption, would more or less have impact on household saving behavior.

As Modigliani and Brumberg (1954) suggest, households save during middleages when income is relative high and dissave after retirement. Nevertheless, empirical studies indicate lower dissaving with old-ages than the predition of the theory (Avery and Kennickell, 1991) and sometimes even keep on saving at high rate (e. g. Takayama and Kitamura, 1994; Banks and Blundell, 1994; Börsch-Supan and Essig, 2003). The cause of this discrepancy is often explained from the view of uncertainty regarding life expectancy and/or bequest motives (intergenerational transfer). These two aspects could in turn be influenced by factors such as health care or children.

## 1. Household Structure and Expenditure

Household Structure

There is another implication about household structure from the life-cycle hypothesis and permanent income hypothesis. Through the influence on household needs and budget, household structure, which mostly concerns household size and the presence of dependent children (Hanna and Rha, 2000), impacts on consumption, through this, household saving behavior is likely to be affected (Rha, Motalto and Hanna, 2006).

By controlling the family size, Burbidge and Davis (1994) found married couples save at the rates higher than other family types in Canada. The similar result is also obtained in New Zealand, where people who have a partner save more than the single ones (Le et al, 2010). Beckmann et al. (2013) used CESEE cross-country data and suggested two-person households show more probability to save than single households or those with more members, the possible reason, as Heckman et al. suppose, could be that the members of two-person households tend to be adults and income earners. Many implications of other empirical studies are supportive to the findings mentioned above (Avery and Kennickell, 1991; Chang, 1994; Yilmazer, 2002).

However, the results in Italy investigated by Jappelli and Pagano (1994) are somehow discrepant: the saving rates share a positive relation with number of adults in the household as well as a negative relation with the number of children; the impact of adults weighs more than that of the children, therefore greater saving is found in larger families in comparison to the smaller; also surprisingly, the Italian data suggests less saving for married couples.

Apart from the marital status, the presence of children is another essential component to a family. The presence of children does have impact on saving, for it has effect on the household consumption during the life-cycle (Pashardes, 1991; Kooreman and Wunderink, 1997).

The presence of children is likely to affect many aspects of household saving motives, which can mainly categorized as precautionary motives, life-cycle
motives, and bequest motives (Yilmazer, 2002): firstly, households would save for the health and well-being for the children in case of future income instability, this could count as the precautionary motive; and then, children's education is taken seriously, saving for this purpose consists the most important part of saving for children (Harris et al. 2002); at last households get old and keep on saving, partly aiming at leaving assets for the children, this could be seen as the bequest motive.

However, Yilmazer (2002) posits that the causal effects of children in the household might tend to be the contrary side of the analysis above. With certain level of precautionary and other saving motives, due to factors which could cause uncertainty, such as income fluctuations, fertility decision of households might be affected in the first place. Meanwhile, household income and head age could also potentially have impact on fertility decision. When looking the issue in this way, the interaction among various factors would be much more complicated. Therefore, most empirical researches overleap the decision process of household fertility and work on the influence of children directly.

With the U. K. data, Banks and Blundell (1994) found that saving rates seem to rise as the number of children increases. Although household saving is generally lower with presence of children than the case without children, a rise in saving rate is to see as age of household head becomes older. In the study of Douthitt and Fedyk (1989), it is also proved that childrearing increase consumption, thus households save less. Evidence for that saving rates of households with children are lower than those without is also found in the USA (Browning and Luscardi 1996).

Moreover, a significant and negative correlation exists between saving and the number of children in both Australia and the USA (Browing and Lucard, 1996; Harris et al., 2002; Yilmazer, 2002), which differs from the findings in U. K. though. Later, Yilmazer (2002) provided more detailed findings on the effect of children with the U. S. panel data. Mainly there are two patterns of the effect: in the households with young heads, saving declines when having another more child; while in those with older heads, the saving rises as the number of children increases. The results in CESEE countries suggest insignificant effect of children on saving, although the number of young children in a household works positively on saving, and meanwhile, the number of teenage children has slightly negative impact (Beckmann et al. 2013).

Regardless the effect of children number, the presence of children is proved to have prejudicial influence on the saving propensity. Furthermore, among the savings caused by children, saving for children's education and leaving a bequest turn out to be the most vital consideration.

Harris et al. (2002) present that saving for children's education is the chief difference in saving motives among households with and without children in Australia, also supported by the evidence in the US. Households in Japan treat children's education as an important saving motive (Horioka and Watanabe, 1997). These findings show that households take children's education seriously and save for the possible expenditure on this aspect, which is in accordance with the implication of the life cycle theory and could be well explained by it, for the households plan and save for children's in advance in order to smooth the household consumption in the future
(Yilmazer, 2002). In addition, Yilmazer holds the argurement that saving for college education rises as the household head ages; moreover, households with higher wealth and income also save more for education probably because of a higher expectation of higher educational expenditure.

Aiming at finding out a more concrete connection between children and household saving behavior, Yilamzer (2002) did a series of studies with the US panel data of the Survey of Consumer Finances (SCF).

Focusing on the effect of uncertainty of household consumption, Yilamzer tested the relation between fertility decision and household saving behavior so as to explore more evidence for the precautionary saving. Also, he tried to investigate whether income uncertainty has an effect on children decision, which is new point added to the earlier studies. From the analysis of Yilmazer, with the decision of having a child, the households are found to save less, for the expected increase in consumption. Since fertility decision is rather endogenous to saving decisions for a household, a generally negative effect of children is implied from the study.

With the presence of a child in the household, effect on household saving depends but on the age of the households: household saving would decline with younger heads, while saving would increase in the case of middle-aged household heads. Furthermore, the age of household heads determine the effect of an additional child on the household saving. The interaction between household structure and the age of household head has been brought out by Yilmazer. With the same age of household head, the increase of children number would lower savings; however, an additional child would
raise the household savings when the head age is older. Also, with the same number of children in the household, the families with older household heads tend to save more.

In the case of children, the bequest motive does also play a role, which means, the households with strong willing to leave a bequest to their children would save considerably more than those without. These findings confirm the implication of the life-cycle theory that household composition acts vital impact on the life-cycle savings, whereas the precautionary saving model is not supported by the findings.

