# EXPLORING SAVING BEHAVIOR OF TURKISH FAMILIES IN ANKARA/TURKEY

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## Abstract

*The purpose of the present study is to explore saving behavior of Turkish families in Ankara, Turkey. The research is composed of 600 people living in the neighborhood of Dr. Halil Ulgen Health Center (Mamak-Ankara-Turkey). Results indicated that the vast majority of Turkish families were not saving and not willing to take any financial risk. More than half of the participants did not discuss finance with their parents when they were growing up. Majority of the families reported that over the past year their family's spending exceeded their income and the current economic situation significantly impacted more than half of the families' saving behavior and attitudes. Most of the families indicated that their parents were savers while they were growing up. Interestingly, families who reported both parents were savers while they were growing up were less likely to be saving than those who reported neither were savers. As expected, having experience of negative financial events in the last two years was significantly related to the likelihood of saving.*

**Key Words:** *financial behaviors, saving, negative financial events.*

**JEL Classification: D14-Personal Finance**

## 1. INTRODUCTION

Saving is a way to accumulate wealth over time and raise living standards in the future. In essence, the choice is between consumption today and consumption tomorrow (Rijckeghem, Uçer, 2009:16). Households usually prefer investing some of their savings into various financial instruments rather than spending their whole income. Individual investors make their portfolio decisions based on different perspectives such that on the one hand, they want to prevent the loss in the value of their portfolio, on the other hand they try to maintain a reasonably high return for their portfolio. The portfolio choices depend on social and economic conditions the households

live in, their behavior, education, and income level and also, various other personal, financial and environmental factors affect these investment choices (Bozkus, Ucdogruk, 2007:1).

Household savings literature is based on two major hypotheses. Following the pioneering work of Keynes (1936) which defines savings as a linear function of income, the first major breakthrough in savings literature is the permanent income hypothesis of Friedman (1957). This hypothesis differentiates permanent and transitory components of income as determinants of savings. Permanent income is defined in terms of the longtime income expectation over a planning period and a steady rate of consumption maintained over lifetime given the present level of wealth. The second major contribution to savings literature comes from Ando and Modigliani's life cycle hypothesis (1963:55-84), according to this hypothesis, individuals spread their lifetime consumption over their lives by accumulating savings during earning years and maintaining consumption levels during retirement. Tests of the life cycle hypothesis are therefore mainly concerned with the effect of demographic variables such as age groups on saving behavior (Muradoğlu, Taşkın, 1996:138; Ozcan, Gunay, Ertac, 2003:1405).

As pointed out by Schmidt- Hebbel, Webb, and Corsetti (1992), is the use of national aggregate savings data assuming that private savings account for a predominant part of total savings (Muradoğlu, Taşkın, 1996:139). Therefore the purposes of this study were to determine saving behavior in a Turkish sample selected socioeconomic and family financial characteristics in Ankara-Turkey. Especially, we are interested in the relationship of the psychometric characteristics on saving behavior in Turkish households.  Economic theories have traditionally acknowledged psychological factors in saving such as fear of economic uncertainty and pessimism about the economy (Lunt, Livingstone, 1991:621). Katona (1975) has been particularly influential in suggesting that people's beliefs about the economy mediate their saving. According to his view, saving is partly determined by income, and partly by some independent intervening variables like optimism or pessimism that reflect the behavioral impact of the general and personal economic context of individuals and aggregates of individuals.

There are at least two reasons why it is important to analyze the motives for which households save. First, analyzing the motives for which households save will enable us to understand better the saving behavior of households, differences among households in their saving rates, the factors that influence the level of household saving, past and future trends in the household saving rate, and so on. Secondly, analyzing the motives for which households save will shed light on which economic model is of greater applicability in the real world (Horioka, Watanebe, 1997:537).

Turkey has experienced various intensive social and economic changes in the 20th and 21st centuries. Given the differences in the economic environment of the developing and industrial countries there should be substantial variation in the household behavior (Muradoğlu, Taşkın, 1996:139). Effective financial management by families is especially important in developing countries since it is an indispensable component of improvement in the conditions of these countries. Although Turkey is a developing country, there have not been much prior studies investigating psychological variables on saving behavior of families (Copur et al., 2010:1626).

The current national study investigated the age profiles of income, consumption and saving of Turkish households, compares them to the profiles reported for various developing and developed

countries, and evaluates the results within a life-cycle theory framework by using 2002-2006 Household Budget Survey published by Turkstat (Cilasun, Kirdar, 2009:9). The studies show that Turkey's private saving rate is low compared to other emerging market countries, but this is a recent phenomenon (other than in comparison with Asia) that reflects recent declines in the Turkish savings rate (Celasun, 1998:7, Rijckeghem, Uçer, 2009:13).

Earlier studies found that income level has a positive impact on private saving rate, and growth rate of income is not statistically significant. From a policy point of view, financial depth and development measures in Turkey suggest that countries with deeper financial systems tend to have higher private saving rates (Ozcan, Gunay, Ertac, 2003:1405). Muradoğlu and Taskın (1996:147) indicated that in industrial countries, as permanent income increases, households increase their savings rates while in developing countries, as permanent income increases, households tend to change their spending patterns in favor of consumption.

## 2. METHODOLOGY
### 2.1. Data and Sample

 The present research is designed in order to explore saving behavior of Turkish family in Ankara, Turkey. The research is composed of 600 people living in the neighborhood of Dr. Halil Ulgen Health Center (Mamak-Ankara-Turkey). Participants were selected via systematic sampling method by utilizing health center household evaluation form.

The vast majority (95.7%) of the sample was married-widowed-separated, 75.0% were female. The ages of the participants ranged from 18-84 with a 47.8% 35-54 years old. About two-thirds were not working (65.3%). Incomes varied between less than750-1501 or more Turkish lira (TL) per month with a 46.8% 751-1500 TL/month (1 U.S. dollar is equivalent to about 1.50 TL).

### 2.2. Procedure

Participants were contacted in person and surveys were given individually. Upon arrival at their living sites, and following the researcher's self-introduction, the purpose of the study was explained. Participants were also informed that participation in the study was voluntary. After obtaining their consent, the survey packets, which subjects read and completed on their own, were distributed, and then researchers collected all surveys once they were completed. None of the contacted individuals refused to participate. Data were collected between the dates of 8th of June-8th of July 2009.

### 2.3. Measurement of Variables

*Independent Variables*

This study used a trans-created adaptation of the NCC 1172 The Complex Nature of Saving: Psychological and Economic Factors to establish a better understanding of savings behavior in Turkey.

*Socio-economic Variables:* The study involved participants' demographic variables of gender, age, education, work, marital status, and income

*Willingness to Take Financial Risks:* Willingness to take risks was measured with the question, "Which of the statements on this page come closest to the amount of financial risk that you are willing to take when you save or make investments?" Responses included: "Take substantial financial risks expecting to earn substantial returns," "Take above average financial risks expecting to earn above average returns," "Take average financial risks expecting to earn average returns," and "Not willing to take any financial risks." For the analyses, the "Take substantial financial risks" and "Take above average financial risks" categories were combined as "Take above average financial risks."

*Financial Socialization: F*inancial socialization was measured with the question, "When growing up in your parents' or guardians' home, did your parents or guardians include you in discussions or speak with you about any of the items below?" Responses included: "The importance of saving," "The family spending plan," "Your own spending," "Using credit," and "Did not include me in discussions." Also for the purpose of the study we asked participants' parents were savers or not with the question, "Would you categorize either of your parents or guardians as savers while you were growing up?" Responses included: "Yes, both were savers," "Yes, only one was savers," and "No, neither were savers."

*Negative Financial Events:*   Negative financial events were measured with three questions. Reported frequency of the occurrence of eight specific negative financial events in the last two years, such as "needed emergency repairs (for car, home etc.)" and "been late on bills and/or credit card payments," measured this variable. Respondents were instructed to indicate the occurrence for each event as "yes" (coded as 1), "no" (coded as 0). The frequency of occurrence of such events, then, provided an indication of a respondent's financial condition. Participants were asked how was the current economic situation impacted their saving behaviors and attitudes. Responses included: "No impact at all," "Some impact," and "Significant impact." Participants were also asked over the past year, their family's spending exceed, about the same as or less than their income.

*Dependent Variable*

*Saving Behavior:* For the purpose of this study, saving was considered as a dependent variable. Saving was measured with the question, "Are you currently depositing/investing money on a regular basis into some sort of account (includes employer plans, individual retirement account (IRA), savings)?" Responses included "yes" (coded as 1) or "no" (coded as 0).

## 2.4. Analyses

Preliminary analysis includes calculating frequencies of the sample on all independent variables. This is followed by binary logistic regression. The dependent variables include families saving behavior.

## 3. RESULTS

### 3.1. Univariate Analysis

Most (60.3%) of the families indicated that their parents were savers while they were growing up however, 63.3 % of the families do not save. More than half of the participants (53.2%) did not

discuss finance with their parents when they were growing up. Nearly two-thirds (61.5%) of the families have experienced increase in the cost of housing and about half of the families (46.5%) have experienced been late on bills and/or credit card payments in the last two years that affected their ability to save or invest. Majority (60.2 %) of the families reported that over the past year their family's spending exceeded their income and the current economic situation significantly impacted more than half (58.0%) of the families' saving behavior and attitudes. The vast majority of Turkish families (64.8%) were not willing to take any financial risk.

### 3.2. Multivariate Analysis

Logistic regression analysis was used to examine contributions of families' characteristics variables to the variance in the saving behavior. Interestingly, families who reported both parents were savers while they were growing up were less likely to be saving than those who reported neither were savers. The odds of saving were 69% lower for families whose parents were savers. As expected, having experience of negative financial events to save or invest in the last two years was significantly related to the likelihood of saving. Families who had experienced needed emergency repairs (for car, home etc.), costly out-of-pocket medical expenses, affected by natural disaster and vandalism or terrorism were less likely to be saving than those families who had not experience such disaster. Compared to those who had not experienced negative financial effects, families who needed emergency repairs 43%, had costly out-of-pocket medical expenses 39%, had natural disaster 72%, and had vandalism or terrorism 51% decrease in the odds of saving. However, families who had been late on bills and/or credit card payments and unemployment were more likely to be saving than those families who had not experience such disaster. Families who had been late on bills and/or credit card payments 55% and had unemployment 74% increase in the odds of saving. Interestingly, families who had indicated that over the past year their spending exceeded their income were more likely to be saving than those families who had indicated their spending equaled their income. The odds of saving were 163% higher for families who spent more than their income over the past year compared to families who spent equally with their income.

**Table 2. Logistic Regression of Saving Behavior (*N*=600)**

| Independent variables | Saving | |
|---|---|---|
| | *B (SE)* | *Odds ratio* |
| *Socio-economic Variables* | | |
| Female | .107 (.312) | 1.113 |
| "35-54" age | -.131 (.290) | .878 |
| "55+" age | -.149 (.353) | .862 |
| High school or less | .280 (378) | 1.323 |
| Working-retired | .429 (.312) | 1.535 |
| Married-Widowed-Separated | -.075 (.525) | .928 |
| 751-1500 TL income | -.150 (.233) | .861 |
| 1501 or more income | -.242 (.356) | .785 |
| *Financial Socialization* | | |
| Both parents were savers | -1.167 (.330)** | .311 |
| Only one parent was saver | -.161 (.374) | .851 |
| Discussed importance of saving | -.218 (.250) | .804 |
| Discussed family spending plan | -.220 (.266) | .803 |
| Discussed their own spending | -.445 (.258) | .641 |

| | | |
|---|---|---|
| Discussed using credit | .011 (.767) | 1.011 |
| *Negative Financial Events* | | |
| Needed emergency repairs | -.565 (.213)** | .568 |
| Been late on bills and/or credit card payments | .440 (.206)* | 1.553 |
| Had costly out-of-pocket medical expenses | -.487 (.244)* | .614 |
| Unemployment | .552 (.268)* | 1.736 |
| Natural disaster | -1.263 (.540)* | .283 |
| Vandalism or terrorism | -.713 (.299)* | .490 |
| Major life changes | -.369 (.210) | .692 |
| Increase in cost of housing | .183 (.241) | 1.201 |
| *Impact of economic situation* | | |
| No impact at all | -.193 (.422) | .825 |
| Significant impact | -.409 (.271) | .665 |
| *Spending-Income balance* | | |
| Spending exceeded income | .965 (.242)*** | 2.625 |
| Spending was less than income | -.652 (.458) | .521 |
| ***Willingness to Take Financial Risks*** | | |
| Above average risks | .247 (.326) | 1.280 |
| No financial risks | .477 (.281) | 1.611 |
| Constant | .991 (.835) | 2.695 |
| $²$ goodness-of-fit test | 133.09*** | df    28 |
| Cox & Snell $R^2$ | .199 | |
| Nagelkerke $R^2$ | .272 | |
| H-L goodness-of-fit test    $²$ | 2.743 >.05 | df     8 |

Odds ratio and unstandardized coefficients are reported, with standard errors in parentheses.
NOTE: *$p < .05$, **$p<.01$, ***$p < .001$

## 4. CONCLUSION

Overall this study shows that selected Turkish families' saving behavior rate is lower and experience of some negative financial events significantly determinates Turkish families' saving behavior. We found that negative relationship between needed emergency repairs, costly out-of-pocket medical expenses, affected by natural disaster and vandalism or terrorism and saving behavior however, those who save, been late on bills and/or credit card payments and unemployment are not seen to be the problem.

Majority of the families reported that over the past year their family's spending exceeded their income and the current economic situation significantly impacted more than half of the families' saving behavior and attitudes. The vast majority of the Turkish families were not willing to take any financial risk. In contrast with earlier studies we found that socioeconomic variables did not predicted of saving behavior (Copur, Terzioglu, 2000; Copur, Safak, 2004; Lunt, Livingstone, 1991; Ozcan, Gunay, Ertac, 2003; Schmidt-Hebbel, Webb, and Corsetti, 1992). The negative relationships between when both parents were savers and saving rates of participants should not suggest that higher savings rates result from neither parents were savers.

Lower saving behavior rate may be derived from maximizing utility not only under a lifetime budget constraint but also under the limitations imposed by low financial literacy, lack of information, and crude sources of financial advice. Thus, policies that aim to stimulate saving and

financial security after retirement should consider a variety of incentives, including how to decrease informational barriers and simplify decision-making.

We note several caveats that should be kept in mind in interpreting this research. First, limitation of the present study is the sample structure. Our sample included only middle or lower socioeconomic families in Ankara, which limits the generalizability of the results. The findings are likely to have differed if the study had included families from different cities, various socio-economic and urban or rural profiles, or from different areas in Turkey. In the future, more research and different samples will be needed regarding saving behavior of families to better understand other segments within the Turkish population. Second, this study did not include financial education and financial knowledge variables. It could have seen effect of financial education and knowledge on saving behavior if the study had included financial education and knowledge variables. Further research should examine financial education and knowledge indicators to understand the relationships between saving behavior and financial education and knowledge of families.

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