

Privatization of Social Security System and Its Consequences: The Turkish Case

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Abstract

The purpose of this study is to critically analyze the efficiency of the private pension system in Turkey. Firstly, the social security system and the recent institutional reforms will be briefly evaluated. Secondly, the private pension system in Turkey will be examined as a government strategy to cut down on the economic cost of welfare provision and sharing the cost of social responsibility with the emerging private pension market. Thirdly, the efficiency of the private pension system will be evaluated with respect to the survey data collected in Mugla, Turkey. Finally, a comparative analysis on the private pension system and the public social security system will be carried out on a structural level, both empirically and theoretically. If the social responsibility of welfare provision is funneled to the market, what kind of social risks will emerge if the market is in crisis? The institutional responses together with social dynamics will contribute to an evaluation of policy alternatives under potential financial crisis.

Keywords: social security system, private pension plan, intertemporal utility, Turkey.

Introduction

One of the major areas that the state pulled out of under the neo-liberal rubric of globalization has been the provision of social security. A common strategy of deregulating welfare systems has been privatization in pensions and health care. Recently established private pension system in Turkey aims to decrease the financial burden of social security on governments, also help the development of new financial institutions and deepening of capitalist markets. The recent financial crisis has intensified the problems faced by the social security systems of both advanced capitalist and developing countries. These problems include demographic factors, problems of financing, expansion of the informal sector and changing labor markets (Uralcan, 2005, p. 7-8). The lack of commitment to actuarial principles generated monetary pressures in many countries, pushing for reorganization in social security systems (Brown, 1999). In this context, policies towards increasing the retirement age, shrinking the gender gap between retirement ages, extending the work period for pension entitlements, decreasing pensions, limiting unemployment, disability

and health care coverage are used as precautionary measures for the long term sustenance of the social security systems (Ferrera-Tanner, 1998). Even though such measures have helped the financial problems encountered by the social security systems, they also have caused a retreat in the life standards of individuals in their retirement period.

While private pension systems decrease the burden of public social security systems, they also contribute to the overall economy through the long term and regular collection of savings, development of new financial institutions and deepening of capital markets (MacCarthy, 2004). States that resort to private pension systems promote the system through tax incentives (Kochin, 1974).

Reference to private pension system in Turkey has increased in recent years, especially in parallel to the undergoing social security reform. Many stated that the system was in dire need of reorganization for long term sustainability (Ergenekon, 2000). Following the necessary legal adjustments, a private pension system in Turkey was established in 2003 as an alternative pension system, with the purpose of sharing the social security burden of the state. With the impact of the global financial crisis, social security reforms were accelerated and state's efforts to promote private pensions have intensified (Alper, 2002). According to the new social security law, individuals tend to enroll in private pension plans firstly because they see public pensions as insufficient to maintain their living standards and secondly because they want to maximize their incomes and guarantee higher life standards in the long run.

The research problem under focus in this study aims to understand the impact of the emerging private pension system on the existing social security system and individual preferences towards the emerging alternative of private pensions. More specifically, on a macro scale analysis the research aims to disentangle the relationship between public and private options of social security. However, on a micro level, individual preferences of social security complement the former macro level analysis. In addition, by making use of an intertemporal utility maximization approach, the study aims to provide a crude forecast as to how the private pension plans will operate in the future.

The first section of the paper will briefly cover the economics of social security. The relationship between the individual and social security has been operationalized as

intertemporal utility maximization. Next, the increasing need for private pension systems in the world, the operation of private pension systems in Turkey, and public vs. private social security provision in Turkey is elaborated. Following the highlights of an empirical study on the efficiency of the private pension system conducted in the city of Mugla, Turkey, the last section will discuss to what extent this form of privatization or neo-liberal opening will ease the social impact of global economic crisis.

The Turkish case proves to be an interesting analytical alternative for a variety of reasons. First of all, the emergence of private pension plans as an alternative in the financial market in Turkey is a fairly new phenomenon. One aspect of this novelty is the contribution of private pensions to overall savings deposits. The second aspect is Turkey's integration with the global economy and the role of this new market niche in Turkey's international economic relations. Second, as a developing country that has been committed to neo-liberal economic policy for the last three decades and the success or the failure of the Turkish case will set an example for other developing countries as how they should remodel their social security. Last but not the least, privatization of social security in Turkey is part of an ongoing reform agenda on social security. Given contemporary austerity measures in several different countries, the Turkish case may also be evaluated on the basis of governments' ability to counter financial crisis.

A survey analysis has been conducted in Mugla Turkey for this research. A sample of 120 respondents has been employed in a city of approximately 50,000. The sample was randomly selected. The surveys were analyzed through SPSS 16.0, variables were processed through cross tabulation.

1. Intertemporal utility and retirement

The life of an economic unit could be regarded as a function of utility maximization (Calvo, 1983). The degeneration of the public pension system designed specifically for the social needs of a country have motivated the individuals towards the emerging alternative of private pensions. The basic reasoning behind is the fact that individuals seek to protect their utility from fluctuations in time and aim to maximize it (Shafer and Sonnenschein, 1982).

Once an economic unit enters work life, his income and accompanying consumption is subject to fluctuations, rendering his utility unstable. For example, the fast increase in income and consumption during youth and middle ages will reach a zenith in the old age and end by retirement. Given the low levels of income during retirement, consumption and utility levels will not reach earlier periods in life. Consequently, the principle objective of a rational economic unit will be to maintain a certain level of utility and welfare for the life term.

Intertemporal utility maximization is the distribution of life term economic welfare during periods of youth, middle age and old age for the purpose of utility maximization (Grafstein, 1995). A better life standard

during old age may require the saving of a certain amount of income utility in earlier periods to be transferred to future periods. Therefore the individuals need to save for higher welfare, utility or returns in the old age. Compulsory saving systems or deposit schemes emerged out of the need to limit immediate consumption tendencies of individuals and the potential problems in the old age, such as unemployment and health issues (Champ and Freeman, 2001).

Accordingly, compulsory pension systems developed in parallel to the developments in the market economy in order to ensure a certain level of utility in the old age. These systems operate in a similar manner to individuals' intertemporal utility maximization, invest the savings in various instruments, and give back the returns to pension receivers. As an alternative, the operation of the compulsory pension systems depended on both returns from investments and transfers from younger generations financing the older ones, in the case of an intergenerational transfer process (Modigliani and Miller, 1958). While aiming to overcome the impasse created by the economic rationality of individuals, compulsory pension systems created their own irrationalities over time (Feldstein, 2004).

The main problem is that while the basic choice in any function of intertemporal utility maximization is given to the individual, in compulsory pension systems it is given to the political authority (Allen and Gale, 2002). Especially in times of crisis, political authorities tend to make decisions that are disadvantageous for individuals. Economic units tend to maximize their utility by investing their savings with respect to the market interest rates or investment returns and hence transfer their utility to the future. On the other hand, the political authority determines all the external circumstances of the individual such as the number of pension receivers, market returns and interests, and the length of the work period and as a result, secures a minimum pension.

Although compulsory pension systems guarantee a certain utility for old age, the value of this utility decreases over time for a number of reasons. On a structural level, the neo-liberal economic policies adopted across the board, the pressures created by the economic crisis forcing governments to take austerity measures have been deeply effective (Lecaillon, 1990). In addition, tendency of governments to limit funding of social security systems due to budgetary restraints, political decisions limiting premium payments, decreasing retirement age, low rates of returns from the investment of savings as well as technological and demographic factors caused the saturation of problems of social security systems. The clash of interests of the political authority and the citizens subject to that authority compelled individuals to plan their savings and investments themselves towards intertemporal utility maximization. Private pension systems emerged within the legal framework established by governments, in which the social rights of citizens moved from the realm of the state to that of the market. Consequently, private pension plans could be defined as a basic effort of intertemporal utility maximization in which the primary initiative is that of the individual.

2. Reasons behind the increasing need for private pension plans

The use of private pension systems in the world historically intensified, especially due to financial problems in the public pension systems based on redistribution (with the impact of Ponzi financing), aging populations, increasing costs, problems of transparency in the reinvestment of savings, economic crisis and changing economic policies around the world have made the private pension systems inevitable (Samwick and Skinner, 2004).

One of the major problems in the world is the aging population, increasing numbers of elderly that do not work and require care and the urgent need to establish a system to maintain the welfare of this group. Changing demographic structures of many countries underline the severity of this problem (World Bank, 2000).

Currently, major portion of the compulsory pension systems in the world operate on a PAYG (Pay-As-You-Go) system of redistribution, based on the collection of certain amount of premiums from every individual and securing a minimum income, enough to maintain their life. Of all the compulsory pension systems in the world, 49 percent operate on this principle, including those in Turkey; 33 percent of compulsory pension systems are based on defined returns system (in general a system providing a fixed income to pension receivers). The remaining 18 percent are voluntary systems where savings are invested in changing instruments.

The aging populations in the world, the inefficiency in reinvestment of savings and increasing numbers of retirees have generated a need for finding the resources to pay these pensions (Uralcan, 2005). The difficulty in finding the resources forces governments to borrow from their treasury, creating an extra burden on their budgets. Therefore, the increasing deficit in compulsory pension systems forced the governments to resort to private pension systems.

The ratio of private pension plans to GNP increased in almost all of the advanced capitalist countries between the period of 1970 and 1990, hence becoming an important economic instrument (World Bank, 2000). The funds collected in private pension schemes bring economic stability due to their long term commitment, increase the diversity of financial instruments and derivatives in financial markets and contribute to economic development with investments that can be monitored continuously. One of the most radical transformations is seen in Sweden, known for its commitment to public social security and social state (Weaver, 2005). The government that came to power in 2006 regarded the social state as an obstacle against economic growth and competition. The liberal policies initiated by the government decided to limit tax support and financial backing of social schemes and promoted private pension plans. The data indicates that GNP per capita increased by 45 percent between 1975 and 2000 in Sweden. On the other hand, the increase for the same period was by 72 percent in the US and by 64 percent in Western European countries. Sweden, spending 64 percent of its budget for social provision, considered the high growth rates in the US and Western Europe and

moved towards a liberal reform. Part of the liberal reform was based on the establishment of private pension plans (Sunden, 2000). Other policies included were abolishing property and estate taxes, decreasing of VAT and wealth taxes and decreasing of unemployment income by half. One can conclude that private pension plans in fact develop with higher wealth accumulation (OECD, 2006).

Private pension plans have generated long term and large scale accumulation of funds in many countries. Most of these long term funds are invested in a variety of investment funds; enabling long term crediting for both private sector and the public sector. The appropriate use of crediting towards investment increases employment, production and in return generates exports and domestic demand. Commitment to transparency and accountability has been an attractive aspect for individuals to resort to private pensions, and the inclusion of their savings in the financial system functioned as a lever in making economies stronger. The fact that the ratio of private pension funds to GDP is 118 percent in Switzerland, 125 percent in the Netherlands, 99 percent in the US, and 86 percent in the UK, indicates the size of the private pension funds and their contribution to the overall economy. In recent years advanced capitalist countries have also experienced an increase in the ratio of private pension funds to GNP. However, less developed countries face a relatively lower ratio of private pension funds to GNP due to the delay in starting their private pension plans (Davis, 1998).

Predictions suggest that although pension funds in advanced capitalist countries such as the US, UK, Switzerland, the Netherlands or Canada will decelerate, their private pension funds will be higher than the OECD average (Davanzo and Kautz, 1992).

3. Problems of the social security system in Turkey

This section will briefly introduce the social security system in Turkey and its problems and contextualize the private pension system and its efficiency. Major issues regarding the social security system in Turkey are the size of the population, the financing of the social security system, partly caused by increasing costs despite diminishing revenues. In addition, early retirement, pension payments without premium receipts, voluntary insurance schemes, increasing pension payments due to increasing life expectancy and the delinking of premiums and pension payments are some factors that affect increasing costs. Early retirement, declaring lower income levels in order to pay less premiums, the size of the informal labor market, problems in collection of premiums, and reluctance to pay premiums due to pardoning are some factors that limit revenues. In terms of tax burden Turkey ranks in the top positions among OECD states. The current system, because of high premiums, is disadvantageous for all economic indicators, especially for the informal labor market.

Given these structural limitations, the coverage of the social security system is very much limited. Although almost all of the population is claimed to be covered (including pension receivers, dependents, elderly and the

disabled), only 47 percent of the labour force is in fact under social protection. The dependency ratio is highly skewed, according to which the dependents are about five times the active social security recipients, indicating the root of the financial problems. For every 1.8 workers there is one dependent. Informal employment is a structural feature of the labor market. The ratio is 5:1 in European Union countries. Social security institutions, recently united under one umbrella organization, show radical differences in terms of organization, conditions of entitlement, amount of pensions, and length of payments. Although there is now a single institution of social security, one can hardly speak of common norms and standards. The adjustment period is planned to continue until 2048 when national standards will apply across the board. The resources allocated for social security are insufficient, the deficit of social security institutions reached 5-6 percent of GNP. The budget transfers to social security institutions show a continuous increase over the years; with 1 percent in 1994, 2.8 percent in 1998, 3.15 percent in 2001, and 4.23 percent in 2006. In the last decade, budget transfers to social security institutions amounted to \$100 billion, which is more than the GNP in 2004, indicating that the cost of the ten year social security deficit is more than the productive value in Turkey in 2004. Unless the state covers this deficit every year, millions of pension receivers would not receive pensions. In addition, pensions are very low and the public health provided by the system is insufficient and of low quality; 35 percent of the population cannot benefit from health care; health care policy under these circumstances is inadequate (SGK, 2009).

Public spending on health care also increased over the years, amounting to roughly 125 million euros in 2000 and 1.25 billion euros in 2008. The lack of transparency, the abuse of health care system as well as the changes in the system during election times greatly contributed to the deficit of the system. Despite the increase in spending, the quality of the health care is not at satisfactory levels.

Several attempts of reform were initiated to overcome these problems. The newly established social security system in 2006 aimed to take precautionary measures. However the presidential veto in 2007 postponed these reforms until after 2007 elections. New social security law (Law No. 5510 in place of Law No. 4447) was passed and

put into operation in 2008. The three social security institutions united under one umbrella organization. Practically, retirement age and premium levels have increased for all groups and the pensions are planned to decline gradually (Elveren, 2008).

4. Comparative analysis of compulsory social security system and private pension plans in Turkey

Private pension system came into use in 2003. A continuous increase is observed in the number of individuals enrolled and in the funds accumulated. Most important advantages of the system are its transparency and the tight auditing mechanism. The state security provided for the system prevents the use and/or devaluing of funds in times of crisis. The funds allocated amounted to eight billion euros, with over three million enrollments as of November 2012 (<http://www.egm.org.tr>, 06-11-2012). These numbers are predicted to increase in the future, due to the policies applied globally, insufficiency of the compulsory social security plans and the tendency of individuals to maximize their future incomes and guarantee their lives against possible risks in the future.

One major difference between the compulsory social security system and the private pension plan is that the former provides health care yet only a limited monthly income for pensioners, whereas the latter excludes health care yet gives the chance to beneficiaries to maximize their income for the future. The returns of the public social security system and the private pension plan can be seen in Tables 1 and 2. The calculations in the tables are based on a 30 year premium payment period.

The main hypothesis of this research is that private pension system, when used as a complementary pension scheme, allows individuals to maximize their incomes and provides a higher living standard. The estimates calculated in Tables 1 and 2 also support this hypothesis. In Table 1, a worker who pays a premium of 300 TL for duration of 30 years to the public social security system is estimated to receive a monthly pension of 610-620 TL and will benefit from public health care as well. However, several unions argue that given a poverty line of 2300 TL, monthly pensions are well below an acceptable standard.

Table 1

Returns of the Public Social Security System

Premiums (TL.) (monthly)	Pension Returns (TL.)(monthly)
300 (130 eu)	610-620 (280 eu)
400 (175 eu)	650-660 (300 eu)
500 (220 eu)	700-710 (320 eu)
600 (270 eu)	750-760 (340 eu)
700 (320 eu)	850-860 (400 eu)

Source: Social Security Institute.

Note: * Calculations have been made with the help of experts from SSI.

* Calculations were made according to LAw No. 1479, therefore calculated for pensioners retired before 2009. Therefore changes during the transitory period are not permanent, which was finalized as of January 2009.

* As of January 2009 pension receivers are estimated to receive 20-30 TL. (10-15 eu) less than those retired with respect to Law No.1479.

Table 2

Returns of Private Pension Plans

Premiums (TL.) (monthly)	Total contributions (TL.)	Estimated returns for scenario 1	Estimated annual income	Estimated monthly income	Estimated returns for scenario 1	Estimated annual income	Estimated monthly income
300 (130 eu)	108.000 (47000eu)	156.000 (68000 eu)	9.500 (4200eu)	770 (350eu)	221.000 (970000 eu)	13.000 (6000eu)	1.050 (470eu)
400 (175 eu)	144.000 (62000eu)	211.000 (92000 eu)	12.400 (5500eu)	1.030 (460eu)	297.000 (130000 eu)	17.400 (8000eu)	1.450 (640eu)
500 (220 eu)	180.000 (79000eu)	264.000 (115000 eu)	15.500 (7000eu)	1.290 (580eu)	372.000 (165000 eu)	21.880 (10000eu)	1.820 (820eu)
600 (270 eu)	216.000 (94000eu)	318.000 (140000 eu)	18.700 (8500eu)	1.550 (700eu)	450.000 (200000 eu)	26.400 (12000eu)	2.200 (1000eu)
700 (320 eu)	252.000 (110000eu)	372.000 (165000 eu)	21.880 (10000eu)	1.820 (820eu)	527.000 (235000 eu)	31.000 (14000eu)	2.580 (1150eu)

Source: Akbank.

Note: * Calculations have been made with the help of experts from Akbank.

* Estimated returns were calculated according to regulations of the Undersecretary of Treasury.

* When calculating returns low risk investment instruments were preferred. Middle risk or high risk investment instruments were excluded from calculations.

* Calculations were based on assumptions that an individual would pay premiums for 30 years and retire at the age of 56.

* Estimated returns were based on the assumptions that an individual would retire at 56 and would receive pension until 73. Estimated returns were divided by 17. According to OECD statistics life expectancy in Turkey as of 2004 is 71.2. Given the annual increase in life expectancy the rate is taken to be 73.

* Income rates are estimated real income rates based on the decree 2003/04 of Undersecretary of Treasury.

* Income scenario 1: According to Undersecretary of Treasury, the increase in returns is estimated to be 9% until 31.12.2013 and 6% afterwards.

* Income scenario 2: According to Undersecretary of Treasury, the increase in returns is estimated to be 11% until 31.12.2013 and 8% afterwards.

Even when the premiums are increased to 700 TL per month, the estimated monthly pension rises up to 850-860 TL which provides only a minimal standard of living for a dual earner family. As a result, the public social security system ensures a minimum level of income, which becomes the imperative behind the use of private pensions as a complementary system of social security.

Table 2 demonstrates the estimated private pension returns for the same amount of premiums and for the same duration. Given that the funds are invested in low risk instruments such as government bonds, equity or cash funds, the first scenario takes the real interest rate as 9 percent until 31.12.2013 and 6 percent afterwards. This individual is assumed to retire at 56 and receive a pension until 73 years old. Estimated monthly pension is approximately 770 TL. However, these numbers are estimates and based on numerous assumptions about the life expectancy and living standards. In cases of economic crisis, possible rise in conjunctural volatility or under inflationist circumstances volatility in pensions is also inevitable. The estimated interest rates and returns are calculated with regards to the stability of Turkish economy and the highly regulated financial system.

Comparing the data in the two tables, even if the private pension system does not include health care coverage, as a complementary system to the public pension system, it contributes significantly to individuals who seek to maximize their utility and raise their standards of living. Since public pensions are well below the poverty line, the retired may maintain their living standards only when joining their public pensions with that from the private pension system.

The inclusion of health care in the public social security system makes it indispensable for individuals. In addition, the system is compulsory for public sector workers. The major problem with the system is that the quality of public health care is very low and the health care system is highly abused by institutions and the political authority, becoming a highly corrupt rentier system in recent years. Therefore, not only the pensions are very low, but also the health care provision is poor in the public social security system. The number of people enrolled in public pension system care is very low. As a less developed country, greater part of the population in Turkey has low to middle income. Since the success and utility of private pension plans depend on the level of income, enrollment and utility maximization will improve with rising income levels. In Table 1, when the premium levels increase to 700 TL for 30 years, the pension will move up to 850-860 TL. However, a premium of 700 TL per month implies that this individual has an income of approximately 2000 TL per month. For a person who is used to living with 2.000 TL per month, which is relatively high for Turkish standards, currently three times the minimum wage, it may be very difficult to survive with a monthly pension of 860 TL. Hence the comparative analysis of data in these tables indicates that the returns from public pension system are very low.

Once again, looking at Tables 1 and 2, we may calculate the combined benefits of the two systems from a different view. Instead of paying 700 TL per month to the public pension system, an individual may choose to pay 400 TL to the public system and 300 TL to the private pension system. This preference may result in the sum of

650-660 TL from the public and 770 TL from the private pension plans, totaling to 1420 TL at worst estimate, instead of an 850-860 TL that would come from a 700 TL premium invested in the public sector alone. These calculations are done with all other things being equal, such as duration of premium payments, life expectancy or retirement age. Assuming that the individual will live up to 88 and divide the pension returns to 32 years, the pension from the private plan will fall to 415 TL. Together with the public pension, a total of 1100 TL is still a relatively higher level of income. Under these circumstances, the individual will benefit from public health care and maximize their incomes.

A simple comparison of premiums and their returns in Table 1 shows that despite a significant increase in premiums, the returns for such increase does not parallel the rise of the premiums. A premium of 300 TL brings about 650-660 TL pension, whereas a 700 TL premium brings about 850-860 TL pension. Therefore the state does not provide a decent pension to either the high premium or to the low premium pensioner. Many public sector employees tend to delay retirement to maintain income levels. Many also choose to enroll in private pension plans due to concerns on old age living standards, also demonstrated empirically. In addition, given the low returns from the public pension plans, the interest in private pension plans continues to increase in the future. Especially in times of crisis, individuals want to secure the maximum income possible and the highly regulated private pension plans becomes a secure savings option.

According to Table 1 a person paying 300 TL premium to the public pension plan has an income approximately around the minimum wage level of 600 TL. It is highly unlikely for an individual of such economic means to enroll in private pension plans. Therefore the necessary policy for people under these circumstances – consisting a major portion of the working age population in Turkey – is either to increase the returns of the public social security system or to promote enrollment in private pension plans. Especially for low income segments of the society, tax exemption of private pension enrollment would be a supportive mechanism.

5. Evaluating the efficiency of the private pension system: an empirical study in the city of mugla

The main objective of this case study is to empirically demonstrate how individuals will maximize their utility for their future income by making use of both the compulsory and voluntary based private pension plans and measure the efficiency of the private pension system in the case of Mugla.

The study shows the operation of intertemporal utility maximization in the case of Mugla and the findings from this fieldwork helps us to analyze the problems and changes in the social security system. Last but not the least, this analysis helps to make micro level policy suggestions to improve the system.

The fieldwork is based on a survey analysis, in which the surveys contain 36 close-ended questions. The survey

was pre-tested with a sample of 50 subjects for the level of perception, clarity of questions, testing of responses and any other problems. The pre-testing helped to ensure clarity of the survey, applicability, and efficiency; as well as improving the length, cost and feedback of the survey, which in turn ensured the validity and reliability of survey data for further analysis. The sample size determined for Mugla was 100; however, 120 surveys were conducted to ensure diversity of the sample and reliability of data. Subjects were chosen randomly and survey data was analyzed with SPSS-16.0. This study will cover the relatively more important frequency and chi square tables.

As Table 3 shows, 51 percent of respondents are aged between 18-34; thus it is a relatively young population. Including the 35-44 age group, young and middle age population between 18-44 becomes approximately 77 percent. Since the study regards private pension system as a functional of intertemporal utility maximization, the relatively younger population will make the findings more relevant. For a relatively older population group, private pension plans may be seen as a less appropriate mechanism in terms of time and opportunity cost. Younger individuals have a greater concern for their future and realizing the insufficiency of pensions, may resort to utility maximization for their future.

Table 4 shows that in 67 percent of Mugla households there are two people working. These would be considered as dual earner families. The higher the number of working members in the household, the greater income could be spared for a private pension plan and transferred to the future. This imperative becomes more important when considering fluctuations in the economy, especially in a time of crisis. The development of a market economy in a certain setting implies the expanding of the labor market, whether towards industry or towards services. Although industrial development is rather limited in Mugla, public services and Mugla University as a major employer generates a sizable service employment. Increasing migration to the city lead to a greater demand for housing. The locals have benefited from investing in real estate and collecting rents from their estates. High levels of non-wage income promoted enrollment in private pension plans.

Tables 5 and 6 show that 64 percent of the respondents have non-wage income such as rent, interest or transfer payments. Non-wage income increases standards of living and makes it possible to dispose part of their incomes to alternative investment instruments, hence maximize their incomes. Table 6 shows the amount of non-wage income and 44 percent of the respondents have a non-wage income of 1.000 TL or less. Those who have 1.000 TL or more non-wage income per month are 20 percent, which is also a relatively high rate. Despite its low population, in terms of deposits Mugla ranks the third in Turkey (TUIK, 2010). This is in line with the results of the survey analysis. Before 1990s, Mugla was a small city with no industry and limited urbanization. The economy operated on a small number of small-scale retailers and a large group of public servants. With the establishment of Mugla University in 1992, the city became a college town where new economic activity was introduced.

Table 3

Economic Units' Perception of Private Pension Plans in Mugla

Age Groups	Value	(%)
18-24	12	10,0
25-34	49	40,8
35-44	32	26,7
45-54	13	10,8
55-64	11	9,2
65 ve over	3	2,5
Total	120	100,0

Table 4

Household Labor Force

Labor Force	Value	(%)
1	24	20,0
2	80	66,7
3	10	8,3
3-5	5	4,2
5 +	1	0,8
Total	120	100,0

Table 5

Non-Wage Income

	Value	(%)
No	44	36,7
Yes	76	63,3
Total	120	100,0

Table 6

Amount of Non-Wage Income

Monthly Non-Wage Income	Value	(%)
500 TL or less (225 EU)	33	27,5
501-1.000 TL (226-460 EU)	20	16,7
1.001-1.500 TL (461-690 EU)	9	7,5
1.501-2.000 TL (691-920 EU)	4	3,3
2.001 TL or more (921 EU)	10	8,3
Total	76	63,3
Bias	44	36,7
Total	120	100,0

¹ The bias of 44 is due to those without any non-wage income did not answer this question.

Table 7

Monthly Wages

Monthly wages	Value	(%)
300-500 TL (225 EU)	6	5,0
500 TL or less (225 EU)	30	25,0
501-1.000 TL (226-460 EU)	16	13,3
1.001-1.500 TL (461-690 EU)	20	16,7
1.501-2.000 TL (691-920 EU)	48	40,0
2.001 TL or more (921 EU)	120	100,0

Table 8

Social Security Institute

Social Security and Complementary Plans	Value	(%)
SSK (private sector)	35	29,2
BK (self-employed and agriculture)	12	10,0
ES (public sector)	13	10,8
Private Pensions	1	0,8
SGK+ Private Pensions	44	36,7
SGK+ Private Pensions +Private Health Insurance	9	7,5
None	6	5,0
Total	120	100,0

The university-led development, with the support of tourism, marble, and forestry industries in the vicinity of Mugla helped the city to move from a public sector oriented economy to a market economy (<http://www.mugla.gov.tr>, 20-04-2011).

According to Table 7, 40 percent of the respondents have a monthly wage of 500-1.500 TL. Approximately 60 percent earn 1.500 TL or more. Consequently, major portion of individuals in Mugla earn more than the average income level in Turkey. The remaining 40 percent of the respondents represent the middle class segments of Mugla population.

Table 8 shows that 50 percent of the respondents benefit from the public social security system; 45 percent of respondents are also enrolled in the private pension system. This is a very high percentage. Combining these numbers with the previous tables on wage levels and non-wage income levels reveals a number of conclusions. Most of the respondents enroll in private pension plans in order increase their standards of living. The private pension system operates as a complementary system and under current circumstances it is impossible to make the private pension system the primary system of social security, replacing the public social security system. However, given the declining pension benefits and the uncertainty the public social security holds for the future and the potential crisis have made the private pension system a

viable option for the working age population. Therefore, it is by no means surprising to see the private pension system become a preferred saving instrument in Mugla.

Evaluating the expectations from social security institutions 93 percent of respondents expect maximum levels of pension, health care and flexibility from the compulsory social security system. As for the private pension system, 60 percent of respondents expect maximum levels of pension, health care and flexibility. The difference in the rates is due to the realization that private pension system is not the primary system of social security or it is not a system to replace the public social security. Instead it is a system that supports the already existing and available public social security.

When testing the hypotheses; as $(\chi^2:SD) = (93,302; 24) > \chi^2_{Table}$, we may reject H_0 and accept H_1 . The probability of no relationship is approximately zero. According to H_1 hypothesis, preference of social security is related to income level, since it is regarded as a function of savings. A sustainable income level is a precondition for savings. The propensity to save is shown in the increasing tendency to enroll in private pension plans in order to take precautionary measures against possible crisis in the future. The recent economic crisis has affected the Turkish economy like any other economy in the world. The economy shrunk by 13.8 percent in the first quarter of 2009. However, Mugla seems to be one of those areas least

affected from the crisis. One reason for this is the high income levels of locals in Mugla. Another reason is the rational behavior of individuals using alternative saving instruments such as private pension plans. Table 1.18 shows that rising income levels the tendency to enroll in private pensions also rises; 80 percent of those enrolled in

a private pension plan have an income of 1500 TL or higher; 70 percent of those having a private health insurance have an income of 2000 TL or higher. These conclusive rates are consistent with the hypotheses and results of the study.

Table 9

Monthly Wage (Non-Wage Income) and the Relationship between Public Pension Provision and Private Pension

Soc. Sec. ()	SSK	BK	ES	Private Pension	Public & Private Pensions	Public, Private Pensions & Private Health Insurance	None	Total
Monthly wage								
300-500 TL (225 EU)	2 (%1,7)	0 (% 0)	0 (% 0)	0 (% 0)	0 (% 0)	0 (% 0)	4 (% 3,3)	6 (% 5)
501-1.000 TL(226-460 EU)	19 (%15,8)	2 (%1,7)	2 (%1,7)	1 (%0,8)	5 (%4,2)	0 (% 0)	1 (%0,8)	30 (%25)
1.001-1.500TL(461-690 EU)	2 (%1,7)	2 (%1,7)	5 (%4,2)	0 (% 0)	5 (%4,2)	2 (%1,7)	0 (% 0)	16 (13,3)
1.501-692.000TL(701-920 EU)	4 (%3,3)	1 (%0,8)	3 (%2,5)	0 (% 0)	11 (%9,2)	1 (%0,8)	0 (% 0)	20 (16,7)
2.001 TL or more (921 EU)	8 (%6,7)	7 (%5,8)	3 (%2,5)	0 (% 0)	23 (%19,2)	6 (%5)	1 (%0,8)	48 (%40)
Total	35 (%29,2)	12 (% 10)	13 (% 10,8)	1 (%0,8)	44 (%36,7)	9 (%7,5)	6 (% 5)	120 (% 100)

SD = 24; p = 0,000; $\chi^2 = 93,302$

H_0 : There is no relationship between income level and social security preference.

H_1 : There is a relationship between income level and social security preference.

Table 10

The relationship between Public Pension System and the Decision to Enroll in a Private Pension Plan

Soc. Sec. ()	SSK	BK	ES	Private Pension	Public & Private Pensions	Public, Private Pensions & Private Health Insurance	None	Total
Opinions								
Yes	24 (%20)	5 (% 4,2)	9 (% 7,5)	1 (% 0,8)	41 (% 34,2)	8 (% 6,7)	6 (% 5)	94 (% 78,3)
No	11 (%9,2)	7 (%5,8)	4 (%3,3)	0 (%0)	3 (%2,5)	1 (% 0,8)	0 (%0)	26 (%21,7)
Total	35 (%29,2)	12 (%10)	13 (%10,8)	1 (% 0,8)	44 (%36,7)	9 (%7,5)	6 (% 5)	120 (%100)

SD = 6; p = 0,002; $\chi^2 = 20,348$

H_0 : There is no relationship between the public pension enrollment and the decision to enroll in a complementary private pension plan.

H_1 : There is a relationship between the public pension enrollment and the decision to enroll in a complementary private pension plan.

Table 11

The Relationship between Monthly Wage and Expectations from Private Pension Plans

Monthly wage \ Expectations	300-500 TL (225 EU)	501-1.000 TL (226-460 EU)	1.001-1.500TL(4 61-769 EU)	1.501-2.000TL (691-920 EU)	2.001 TL or more (921 EU)	Total
Max. income	1 (%0,8)	2 (% 1,7)	4 (% 3,3)	7 (% 5,8)	21 (% 17,5)	35 (% 29,2)
Max. health care	0 (%0)	0 (%0)	2 (%1,7)	0 (%0)	0 (%0)	2 (%1,7)
Sustainable and secure income	0 (%0)	5 (%4,2)	2 (%1,7)	0 (% 0)	0 (%0)	7 (%5,8)
Max. income, Max. health care	0 (%0)	2 (% 1,7)	0 (% 0)	0 (% 0)	2 (%1,7)	4 (% 3,3)
Max. income, Max. health care, flexibility	5 (%4,2)	21 (%17,5)	8 (%6,7)	13 (%10,8)	25 (%20,8)	72 (%60)
Total	6 (%5)	30 (%25)	16 (%13,3)	20 (% 16,7)	48 (%40)	120 (%100)

$SD = 16; p = 0,001; \chi^2 = 38,324$

H_0 : There is no relationship between monthly wage and expectations from private pension plans.

H_1 : There is a relationship between monthly wage and expectations from private pension plans.

When testing the hypothesis; since $(\chi^2; SD) = (20,348; 6) > \chi^2_{Tablo}$, we may reject H_0 and accept H_1 . The probability of the lack of this relationship is approximately zero. According to hypothesis H_1 , the enrolled social security institution or complementary plans, are directly related to the fact that private pension plans provide a second and/or additional income. Policies of early retirement, increasing social security deficits, the declining real value of pensions, and the uncertainty in the value of future pensions (due to IMF recommendation towards decreasing pensions) have diminished the contribution of compulsory pension systems to a great extent. In the case of Mugla, individuals seeking intertemporal utility maximization resorted to private pension system in order to secure a second or an additional income in the future. Table 10 suggests that 80 percent of the respondents prefer or plan to enroll in private pension plans in order to have more pension income and/or a second pension. About 95 percent of those already enrolled in private pension plans prefer the plan to earn more or additional pensions. As a result, the commitment to private pensions as a future benefit is in line with the main hypothesis of the study that private pension system is a complementary system and function of intertemporal utility maximization.

When testing the hypothesis; as $(\chi^2; SD) = (38,324; 16) > \chi^2_{Tablo}$, H_0 is rejected and H_1 is accepted. The probability of the lack of this relationship is approximately zero. According to hypothesis H_1 , monthly wage is directly related to expectations from private pension plans; 60 percent of respondents expect maximum income, maximum health care and maximum flexibility from the system. However, 30 percent expect only a maximum

income from the system. Both rates are in congruence with major lines of argument in the study. Currently, private pension system in Turkey does not provide health care. Therefore the expectations of the aforementioned 60 percent will remain to be an expectation. For the current state, the 35 respondents already enrolled in a private plan have done so only for the maximum income; 80 percent of those already enrolled have an income of 1500 TL or more; 70 percent of those already enrolled have an income of 2000TL or more. As a result income levels and rational choice of utility maximization in the future are important determinants of enrollment in private pension plans. Therefore the basic hypothesis that the combined use of compulsory public pension systems and private pension systems provides the maximum utility is validated. The common goal of both systems is to maximize income during retirement period. The survey data collected in Mugla proves the aforementioned arguments.

The case analysis suggests that the contribution of private pension plans to overall provision of social security will continuously increase. As long as individuals continue to maximize their intertemporal utility, the efficiency of the private pension system will improve. However, the continuity of the private pension system heavily depends on individuals' income levels.

Conclusion

On a micro level, private pension plans provide a solution to potential problems individuals may face in their later lives. By giving individuals an opportunity to maximize their utility and transfer it to later stages of their lives, private pension plans provide long term and sustainable increase in living standards. On a macro level,

the funds accumulated in private pension systems provide a resource for the national economy. The use of these resources may help shrink budget deficits, create employment and may increase the propensity to save on a national level.

In Turkey as well as in many other countries, the pensions given to retired citizens provide a monthly pension that is insufficient even to meet the basic needs of pension receivers. This insufficiency creates an uncertainty in terms of the value of the pensions due to instability of growth rates, technological changes, and sudden changes in economic policy. Individuals enrolling in private pension plans seek to maximize their future income in order to avoid potential economic crisis.

One limitation for this research is field choice. Although a representative sample was selected from the field, the fact that the research was conducted in one of the relative more developed cities in Turkey undermines the impact of regional economic differences on individuals' preferences and proximity to save. To overcome this limitation, a comparative analysis needs to be conducted in several different cities with significantly representative samples. However, for practical purposes such a comparative analysis is beyond the scope of this research.

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O. Yanardag

Socialinės apsaugos sistemos privatizavimas ir jo pasekmės: Turkijos atvejis

Santrauka

Straipsnyje siekiama nustatyti besiformuojančios privačios pensijų sistemos poveikį egzistuojančiai socialinės apsaugos sistemai ir individualiems pasirinkimams, susijusiems su privačių pensijų alternatyvomis. Ižvalgos daromos Turkijos ir vieno iš jos miestų – Muglos – atveju. Makroanalizės lygmenyje tyrimu siekiama atskleisti ryšį tarp viešų ir privačių socialinės apsaugos alternatyvų, tačiau mikroanalizės lygmuo, kuriame akcentuojamas individualus poreikis rinktis socialinės apsaugos alternatyvas, papildo makrolygmens analizę. Taip pat straipsnyje siekiama prognozuoti, kaip privatūs pensijų fondai funkcionuos ateityje.

Pagrindinė straipsnyje keliami hipotezė yra ta, kad privati pensijų sistema funkcionuoja kaip papildoma socialinės apsaugos sistema ir atlieka tarplaikinio naudingumo maksimizavimo funkciją. Tokiu būdu ji apsaugo individų ekonominę gerovę potencialios rizikos požiūriu.

Pirmojoje straipsnio dalyje trumpai apžvelgiami ekonominiai socialinės apsaugos aspektai. Ryšys tarp individo ir socialinės apsaugos sistemos operacionalizuojamas kaip tarplaikinis naudingumo maksimizavimas. Taip pat atskleidžiamas didėjantis privačių pensijų sistemų poreikis pasaulyje, privačių pensijų sistemų veikimas Turkijoje bei visuomeninių ir privačių socialinės apsaugos paslaugų teikimas šioje šalyje. Remiantis esminiais empirinės privačios pensijų sistemos efektyvumo studijos, atliktos Mugla mieste (Turkija) rezultatais, paskutinėje straipsnio dalyje diskutuojama, kokių mastu ši privatizacijos forma ar neoliberalus požiūris sumažins socialinį globalios ekonominės krizės poveikį.

Straipsnyje pateikiami empirinio tyrimo, atlikto Mugla mieste (Turkija), rezultatai. Tiriamųjų imtis (120 respondentų) dirba mieste, kuriame yra apie 50 tūkst. gyventojų. Tiriamųjų imtis - atsitiktinė. Tyrimo duomenims apdoroti buvo taikoma SPSS 16.0 programa, kintamieji analizuoti krovstabuliacijos metodu. Empirinis tyrimas atskleidė, kad individai suvokia poreikį didinti savo pajamas tam, kad kompensuotų visuomeninės sveikatos apsaugos sistemos ribotumus, išlaikytų aukštą gyvenimo lygį, nepaisant potencialių rizikų ir krizės ateityje, taip pat užtikrintų ilgalaikį asmeninių ir šeimos poreikių patenkinimą. Dėl to poreikis privatiems pensijų planams turėtų didėti, nepaisant ekonominės krizės ar konjunktyrinio nestabilumo nacionalinėse ekonomikose, kadangi pensijų planai atlieka papildančią funkciją ir yra lankstūs, suteikdami pasirinkimo laisvę.

Mikrolygmenyje privatūs pensijų planai siūlo sprendimus potencialioms problemoms, su kuriomis gyventojai gali susidurti ateityje. Suteikdami žmonėms galimybę padidinti jų gaunamą naudą ir perkelti ją į vėlesnes gyvenimo stadijas, privatūs pensijų planai siūlo ilgalaikį ir subalansuotą gyvenimo standarto kilimą. Makrolygmenyje privačiuose pensijų fonduose sukaupti ištekliai tampa nacionalinės ekonomikos ištekliais. Šių išteklių naudojimas gali padėti sumažinti biudžeto deficitą, sukurti darbo vietas ir padidinti nacionalinio lygmens santaupų tendenciją.

Reikšminiai žodžiai: socialinės apsaugos sistema, privatūs pensijų planai, tarplaikinis naudingumas, Turkija.

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