# THE FINANCIAL OUTLOOK OF TURKISH SOCIAL SECURITY SYSTEM: CAN SOCIAL SECURITY DEFICITS BE ALLEVIATED?

**Onur SUNAL***

***ABSTRACT***

*Social security systems are important pillars for sustaining social and economic welfare in contemporary societies. These systems differ in terms of contributions defined, benefits received, proportions of populations covered and the way they are financed, however they all aim to insure people socially and economically against some crucial risks. Even though these systems provide some undisputable benefits to the receivers, the financial difficulties faced by these systems globally, created the basis for debates that were centered on reformation and privatization in the last decades. Likewise, Turkish social security system had also undergone some several reformation attempts nevertheless there has been no significant changes observed in the financial structure of the system. The aim of this study was to reveal the financial state of the social security system in Turkey by using data for years 2000-2010. In this study conceptual framework was introduced first and then the general outlook of the social security system in Turkey was discussed including reformation processes. Also, in this paper it is found out that by increasing labour force participation rate to 60% and by alleviating unregistered employment there would be no social security deficits. Therefore it was suggested that governments should focus on sustaining economic growth and creating decent employment to restore financial stability.*

**Keywords:** *Social Security, Budget Deficits, Reformation, Unregistered Employment, Labour Force Participation.*

***ÖZET***

***TÜRK SOSYAL GÜVENLİK SİSTEMİNİN FİNANSAL GÖRÜNÜMÜ: SOSYAL GÜVENLİK SİSTEMİNİN AÇIKLARI KAPATILABİLİR Mİ?***

Sosyal güvenlik sistemleri, sosyal ve ekonomik refahı sağlamak konusunda çağdaş toplumların en önemli yapıtaşlarından birdir. Bu sistemler, her toplumda tartışmasız büyük faydalar yaratmış ancak, son birkaç on yıldır içine düştükleri finansal zorluklar nedeniyle çeşitli eleştirilere maruz kalmış ve bu sistemlerle ilgili reform ve özelleştirme konuları sıkça gündeme gelmiştir. Ülkemizde de bunlara koşut olarak benzer sistemler çeşitli zamanlarda reform süreçlerinden geçirilmiş ne var

* Yrd. Doç. Dr., Başkent Üniversitesi, Bankacılık Bölümü (osunal@baskent.edu.tr)

ki finansal yapı üzerinde kayda değer bir değişiklik görülmemiştir. Bu çalışmanın amacı, Türk sosyal güvenlik sisteminin finansal durumunun 2000-2010 yılları arasını kapsayan çeşitli veriler kullanılarak ortaya konması olarak belirlenmiştir. Ayrıca bu çalışmada, işgücüne katılım oranının % 60'a çıkartılması ve kayıt dışı istihdamın ortadan kaldırılması durumunda sosyal güvenlik açıklarının kapanacağı sonucuna ulaşılmıştır.

**Anahtar Kelimeler:** *Sosyal Güvenlik, Bütçe Açıkları, Reform, Kayıt Dışı, İstihdam, İşgücüne Katılım Oranı.*

## 1. Introduction

Social security systems provide a safety shelter to protect individuals from the undesirable outcomes that might occur as a result of risks associated with high probabilities of being deprived from acquiring a level of income that is sufficient to cover the costs of basic human needs. These dangers that any individual in any random society might face creates basis for solidarity in between the members of communities. Because no one can be sure about which step of the welfare ladder one might end up –conceptualised as veil of ignorance by Kelly and Rawls (2001)– as the distribution process in a market oriented economy might deteriorate equality. Moreover, the risk of losing earning capacity because of experiencing health related problems or being unemployed either as a result of labour market failures or personal inadequacies has a devastating impact on the welfare of individuals and families which reveals the importance attached to the systems that are designed to insure them against such social, occupational and economic uncertainties.

The effects of these uncertainties might be tempered by sharing risks. Thus, sharing the risks as a society means intergenerational solidarity where current workers contribute financially to the expenses of elderly individuals. Pay as you go systems reflect this view as funds needed to cover the costs of providing the defined or promised benefits are compensated by the premiums and taxes paid by the current workers. In these schemes where risks are shared, benefits received are not directly related to the contributions made (Fultz, 2003). Alternatively, in funded systems, individuals are making contributions in the form of premium payments through out a certain period of time only for themselves and accumulation of capital into the system is invested on the basis of a selected portfolio approach. Therefore, benefits to be received in the future are directly related to the contributions made by the individual.

The sustainability of social security systems are heavily dependent on the financial conditions of these systems which are directly related to the strength of their governance and their actuarial well being. Social security systems regardless of the way they are financed face risks. Although fluctuations in output and prices are important, demographic changes are at the centre of the discussion. World Bank Report, *Averting the Old Age Crises*, focused on the aging of societies which was considered as a factor that is likely to deteriorate the financial sustainability of the social security systems (World Bank, 1994). Hence, transition from pay as you go systems to funded or privatised systems were suggested as a solution to the problems created by the aging population. At the same time according to Barr (2009), funded systems face some other additional risks such as management risk, investment risk and annuities market risk. During the ages of high economic growth, pay as you go social security systems where almost full coverage to all needs provided were administrated without considering the long term future dynamics. Nevertheless with demographic challenges, switching from pay as you go to funded systems or a mixture of both was considered as a solution (Castellino and Fornero, 1999). Some researchers (Febrero and Cadarso, 2006) also argue that irrespective of the system selected, governments should find a way to increase the rate of productivity, labour participation rates and invest more in human capital as the financial outcome relies heavily on these factors. Cesaratto (2007) argues whether pay as you go and fully funded systems are equivalent according to the macro economic considerations of alternative theories.

## 2. Turkish Social Security System and Its Financial Outlook

In Turkey there are a several different social insurance schemes where the distinctions are made according to the employment status of the premium payer. In general employees in private sector are members of *SSK* (Social Insurances Agency) where registration is compulsory and the insurance premiums are mainly paid by both the employers and the employees, employers and individuals who are self-employed are members of *BAĞ-KUR* where insurance premiums are fully paid by the receivers and individuals who are employed by the government are members of *Emekli Sandığı*, where the premiums are paid by both the government and the receivers. One of the key features of these systems is that partners, children and parents of these premium payer insurants are also receiving benefits if they are not covered by any of these schemes. Citizens who are not protected by the shelter of any of these social insurance systems or any other private insurance schemes –mainly the very poor– are given *Yeşil Kart* (Green Card) which provides free health benefits to the recipients. In practice there are no organic bonds in between these different schemes but they all are controlled and administrated by the government (Ulutürk and Dane, 2009).

The social security system in Turkey has the characteristics of a pay as you go scheme with defined contributions. The premiums received before 1980s were invested especially in the properties markets and provided some important income though these flows have declined during 2000s parallel to the growing rate of deficits (Yılmaz, 2006). Moreover, all these different schemes designed for a separate part of the society are controlled and administrated by the government and financial back up to these schemes are provided by the state. Therefore when evaluating these schemes financially, all of them should be taken into account. The tables below provide some important information about the state of these systems in Turkey. The data given in each table puts forward the situation of these major schemes which constitutes the main pillars of the social security system in the country. Premium revenues, pension and health payments are cumulative summations of the data for each separate system including Emekli Sandığı, Bağ-Kur and SSK.

**Table 1: Revenues and Payments of Turkish Social Security System during 2000-2010**

| Years | PRSC[1] (I) | PP[2] (II) | HP[3] (III) | TP[4] (II+III) | SSD[5] (II+III-I) | PR/TP[6] |
|---|---|---|---|---|---|---|
| 2000 | 10.605.400 | 10.897.903 | 4.247.665 | 15.145.568 | 4.540.168 | 70,0% |
| 2001 | 7.983.214 | 8.767.705 | 3.750.815 | 12.518.520 | 4.535.306 | 63,8% |
| 2002 | 9.881.275 | 11.124.933 | 5.086.018 | 16.210.951 | 6.329.676 | 61,0% |
| 2003 | 14.213.709 | 16.895.436 | 7.155.515 | 24.050.951 | 9.837.243 | 59,1% |
| 2004 | 19.312.528 | 21.592.042 | 9.260.654 | 30.852.696 | 11.540.168 | 62,6% |
| 2005 | 23.219.854 | 28.975.263 | 10.231.491 | 39.206.755 | 15.986.901 | 59,2% |
| 2006 | 29.104.808 | 31.521.577 | 12.354.318 | 43.875.894 | 14.771.087 | 66,3% |
| 2007 | 33.885.950 | 40.239.791 | 15.372.010 | 55.611.801 | 21.725.851 | 60,9% |
| 2008 | 42.284.072 | 45.842.278 | 19.647.995 | 65.490.273 | 23.206.201 | 64,6% |
| 2009 | 35.441.028 | 44.548.034 | 18.708.236 | 63.256.270 | 27.815.243 | 56,0% |
| 2010 | 44.907.958 | 52.991.610 | 21.818.042 | 74.809.652 | 29.901.694 | 60,0% |

Reference: Sosyal Güvenlik Kurumu, SGK İstatistik Yıllıkları, SGK 2010, Mali Tablolar, www.sgk.gov.tr.

*Numbers are in thousands of US dollars, where original numbers in TLs are converted in to US dollars with respect to the average yearly $/TL exchange rates.

[1]Premium Revenues without State Contribution, [2]Pension Payments, [3]Health Payments, [4]Total Payments, [5]Social Security Deficit, [6]Premium Revenues/Total Payments

Table I reveals the financial structure of the social security system in Turkey. Premium revenues consist of payments made by workers and employers for private sector employees, payments made by self-employed individuals and payments made by government on behalf of civil servants. Although there are other minor sources of revenues, when evaluating the self sufficiency of the social security system, cash flows from premium payments are considered as the main source of revenues. Likewise when calculating the total expenditure of the social security system, only pension payments and health payments are taken into account as they are the major components of the total expenditure.

As table 1 indicates during 2000 and 2010, the social security deficit rose from 4.5 billion $ to 29.9 billion $. Both revenues and total expenditures increased though the rise in revenues was 3.2 times where as the rise in expenditures was 4 times which contributed to the widening gap in between these values. Moreover, the premium revenues without state contribution could only cover %60 percent of pension and health expenditures which are the core components of the total social security expenditures.

**Table 2: Social Security Deficits, Direct Government Transfers and Consolidated Government Budget Deficits in Turkey during 2010-2010**

| Years | GDP[1] | SSD[2] | DGT[3] | SSD as % of GDP[4] | CGBD[5] | T as % of CGBD[6] |
|---|---|---|---|---|---|---|
| 2000 | 268.803.260 | 4.540.168 | 5.356.451 | 1.7 | 21.185.483 | 25.2 |
| 2001 | 196.904.986 | 4.535.306 | 4.190.163 | 2.3 | 23.406.557 | 17.9 |
| 2002 | 233.650.726 | 6.329.676 | 7.470.000 | 2.7 | 26.789.333 | 27.8 |
| 2003 | 305.221.919 | 9.837.243 | 10.685.906 | 3.2 | 26.985.234 | 39.5 |
| 2004 | 393.685.229 | 11.540.168 | 13.614.788 | 2.9 | 20.512.676 | 66.3 |
| 2005 | 487.918.580 | 15.986.901 | 17.866.165 | 3.3 | 5.190.225 | 344 |
| 2006 | 530.343.206 | 14.771.087 | 16.446.153 | 2.8 | 3.246.853 | 506 |
| 2007 | 648.598.786 | 21.725.851 | 25.433.076 | 3.3 | 10.544.615 | 241 |
| 2008 | 736.848.256 | 23.206.201 | 27.234.883 | 3.1 | 13.513.178 | 201 |
| 2009 | 618.544.532 | 27.815.243 | 34.211.038 | 4.5 | 34.260.389 | 99.8 |
| 2010 | 737.449.227 | 29.901.694 | 36.938.926 | 4.1 | 26.900.000 | 137 |

Reference: Sosyal Güvenlik Kurumu, SGK İstatistik Yıllıkları, SGK 2010, Mali Tablolar, www.sgk.gov.tr, TC Maliye Bakanlığı, Genel Yönetim Mali İstatistikleri, Genel Bütçe İstatistikleri, www.maliye.gov.tr

*Numbers are in thousands of US dollars, where original numbers in TLs are converted in to US dollars with respect to the average yearly $/TL exchange rates.

[1]Gross Domestic Product, [2]Social Security Deficit, [3]Direct Government Transfers to Social Security System, [4]Social Security Deficit as % of GDP, [5]Consolidated Government Budget Deficit, [6]Transfers as % of Consolidated Government Budget Deficit

Table II reveals some important facts about the state of social security system in Turkey. The core social security deficit as defined earlier is covered by direct transfers from the government budget every year. As it can be seen from the figures, the deficits created by the social security system are compensated by direct cash transfers made by the government. Between years 2000 and 2010, GDP has increased 1.7 times where as the transfers has increased 5.7 times. Hence, social security deficit as a percentage of GDP during the same period rose from 1.7% to 4.1%. The burden of direct transfers on the budget as a whole can be observed just by looking at the data which shows transfers as percentages of budget deficits. In year 2001, transfers to the social security system made only 17.9% of government budget deficit. Though from year 2005 and onwards there would have been no budget deficits only if there should have been no direct transfers to the social security system as the amount of cash transfers were higher than 100% of budget deficits. In the next 10 years if GDP and social security deficits will rise on average at the same pace, social security deficit to GDP ratio will be 9.7% and in 30 years time the ratio will be 56.2%, which will imply a drastic rise from 4.1%. The existing data on social security system reveals that with such numbers it would be difficult to achieve financial stability and sustainability of the system unless remarkable reforms will be practiced.

## 3. Past Reformation Experiences

The need for reformation of the social security system has been on the government's agenda since 1960s. One of the first important reports about the future of the social security system in Turkey was prepared by Antoine Zelenka who was appointed by ILO (International Labour Organisation) on Turkish government's request. Zelenka (1969) mainly pointed out the actuarial difficulties the system might probably face as an outcome of the new legislation number 1186 which provided pension benefits to the insurants without any age condition. Moreover, Zelenka (1969) highlighted that the system might collapse with payments growing at such a pace. These predictions about the future state of the social security system might be considered as very realistic as during 1980s and 1990s the burden of debt created by the social security deficits reached such a level that a new social security reform act (number 4447) was legislated and came into effect on August 1999. Ekin, Alper and Akgeyik (1999) revealed the reasons of the crises experienced in this period as follows:

- Practices that decrease revenues
    - Informal employment
    - Unrealistic income declaration for premium payments
    - Uncollectable premiums
    - Deterioration of contribution-benefit ratio
    - Amnesty acts

- Practices that increase expenditures
    - Young pensioners
    - A model providing benefits without contributions
    - One contributor providing benefits to several dependents
    - Heavy premium burdens on employees and employers

Özşuca (2003) highlighted that the new reform package intended to decrease the expenditures and increase the revenues. The implementation of the new reforms contradicting with the high expectations attributed to them seemed to have no significant impact on the financial situation of the social security system in Turkey. As shown in Tables I and II, both deficits and direct transfers from the budget to finance the debt created by social insurance schemes has increased. Therefore, once again another new reform appeared on the government's agenda, as the administrative inefficiency created by the partial character of the system was considered to be the causation of the problems. A new legislation (5510 Social Insurances and General Health Insurance Law) was made recently in year 2006, where these partial systems were integrated under a single roof (Yorgun, 2007). Every single citizen became a compulsory member of general health insurance system with this new act where the premiums of individuals who have a share of household income below one third of minimum wage were going to be paid by the government and the premiums of children under the age of 18 or if they continue higher education until the age of 25 were to be fully financed by the government. Some other important features of the new reforms can be listed as follows:

- Premium payments to be made to be able to receive health benefits were raised from 11% to 12.5%.
- For pensioners to receive annuities at least 7200 days of premium payments should be made.

- Retirement age was raised from 58 for women and 60 for men to 65 for both men and women.
- Income replacement rate will be decreased to 40% for those who will be newly insured after the legislation came into effect.
- Only the rate of inflation is going to be taken into account for monthly pension payment adjustments.

Even though the latest reforms aim to re-structure the system, both the current and the future financial sustainability of the system still remains a mystery. The rise in social security expenditures should be accompanied by at least a proportional rise in premium revenues to keep the system strong in a changing demographic and economic environment. However, low labour participation rates and more importantly a very high ratio of unregistered employment are constraints which are structural in nature implying that raising premium revenues is not an easy task to accomplish.

## 4. The Relationship between Labour Participation Rates, Unregistered Employment and Deficits

**Table 3: Labour Force, Unemployment Rate and Unregistered Employment in Turkey during 2000-2010**

| Years | Labour Force * | Labour Force Participation Rate (%) | Unemployment Rate (%) | Unregistered Employment in Agriculture* | Unregistered Employment in Non Agriculture* |
|---|---|---|---|---|---|
| 2000 | 23.078 | 49.9 | 6.5 | 6.887 | 4.038 |
| 2001 | 23.491 | 49.8 | 8.4 | 7.422 | 3.959 |
| 2002 | 23.818 | 49.6 | 10.3 | 6.723 | 4.409 |
| 2003 | 23.064 | 48.3 | 10.5 | 6.531 | 4.441 |
| 2004 | 22.016 | 46.3 | 10.8 | 5.136 | 4.708 |
| 2005 | 22.455 | 46.4 | 10.6 | 4.547 | 5.119 |
| 2006 | 22.751 | 46.3 | 10.2 | 4.307 | 5.285 |
| 2007 | 23.114 | 44.4 | 10.3 | 4.290 | 5.132 |
| 2008 | 23.805 | 46.9 | 11 | 4.406 | 4.814 |
| 2009 | 24.748 | 47.5 | 14 | 4.503 | 4.825 |
| 2010 | 25.641 | 48.8 | 11.9 | 4.857 | 4.915 |
| 2011 | 26.725 | 49.9 | 9.8 | 5.151 | 4.998 |

Reference: TÜİK Hanehalkı İşgücü İstatistikleri, www.tuik.gov.tr
*Numbers are in thousands of US dollars, where original numbers in TLs are converted in to US dollars with respect to the average yearly $/TL exchange rates.

Table III reveals the structure of labour force in Turkey. Labour force participation rate was fairly low in the past ten years ranging between 45-50% when compared to some other countries (Canada 67%, France 56%, Germany 60%, Netherlands 65%, Portugal 62%, Russia 63%, UK 62%, USA 64%, Japan 60% and South Korea 60%). At the same time unregistered employment is a serious problem and it seems that it is almost persistent and moreover there is a rising trend especially in the non-agricultural sectors.

In the light of these data it can be easily calculated that if the labour force participation rate should have been 60%, the labour force would have been 32.1 million in year 2010. With an unemployment rate of 11.9%, an ideal number of 28.2 million employees could have been paying social security premiums under the consideration that no one is unregistered. However, the current number of premium payers (compulsory) was only 14.4 million which implies that the gap between the current and the ideal number was 13.7 million employees. The monthly premium payment which accrued for a minimum wage receiver was 106.47 TL and which accrued for an employer was 142,16TL in year 2010. Therefore if the labour force participation rate would have been 60% with no one unregistered, there should be an extra accumulation of premiums to the social security system which would have amounted to 41.1 billion Turkish Liras even if we assume that these potential 13.7 million labourers were all minimum wage receivers. Besides 96.96 TL income tax accrued monthly for every single employee which in effect was paid by the employer to the government on behalf of the minimum wage receiver. Hence this means another 16.0 billion TL which would have been collected otherwise. Just these two items makes a lump-sum of 57.1 billion TL which makes around 38.1 billion US dollars. The direct transfers from the consolidated budget to the social security system in 2010 were around 36.9 billion US dollars. By taking these calculations into account we might conclude as a consequence that by increasing labour force participation rate and alleviating unregistered employment, there would have been no need for any direct transfers to the system.

## 5. Conclusion

Social security systems emerged in the last quarter of the 19$^{th}$ century and played a crucial role in compensating the externalities created as a result of industrialisation by providing a safety net which enabled the benefit receivers to insure themselves against some important economic and social risks. Although majority of these systems were administrated under the intergenerational dependency assumption, as the financial burdens created by these provisions increased, sustainability of these schemes became uncertain. In line with the international adjustments, the social insurance systems in Turkey also experienced a several reformation attempts after 1970s where restoration of the financial strength was at the center of these reformation processes.

New legislations (number: 4447 in 1999 and number: 5510 in 2006) were made to restructure the system, nevertheless there has been no significant enhancements achieved in terms of reducing the gap created by the difference between the revenues collected and expenditures made. As revelaed by the data which were presented in the former parts of this study, it was estimated that in 30 years time the social security debt to GDP ratio will rise to 56.2% (currently it is 4.1%) if the GDP and the debt will keep growing at the same pace. The main reason for the failures in attempt to reform the system was that governments focused on increasing revenues and decreasing expenditures by passing new acts from the parliament which in turn seems to have no effect on the structure of the system in general.

The structural disorder of the system in Turkey can be observed easily just by looking at the current data. There were 16.1 million (14.4 million compulsory) active premium payers (including apprentices and volunteers) and 35.4 million dependants who were also receiving benefits and besides there were 9.5 million pensioners in year 2010. There were also 9.3 million green card (yeşil kart) holders who also received health benefits without making any premium contributions to the system as they were assumed to be the poorest in the society. As a consequence these numbers indicate that 16.1 million premium payers were socially securing 70.3 million people including themselves which reveals the reason behind the rising trend in social security deficits, the higher amount of government transfers from the budget every year and more importantly underlines why reforms were incapable of sustaining financial stability.

As a concluding remark, the policy makers should concentrate on increasing labour force participation rates, creating decent jobs, attaining high rates of sustainable economic growth, encouraging female labour participation and abolishing unregistered and informal labour. As predicted earlier in this study just by increasing labour force participation rate to 60% and eradicating unregistered employment, the compulsory premium paying base could be increased to a level (28.2 million) where there would be no need for direct transfers to the system. In practice achieving these goals requires structural changes and adjustments which might take a certain amount of time. However these structural reforms might provide an undisputable amount of benefit if planned properly and practiced efficiently.

## BIBLIOGRAPHY

Barr, N. (2009). "International trends in Pension Provision", *Accounting and Business Research*, 39 (3), 211-225.

Castellino, O., Fornero, E. (1999). "From PAYG to Funding in Italy", *The Geneva Papers on Risk and Insurance*, 24 (4), 473-487.

Cesaratto, S. (2007). "Are PAYG and FF Pension Schemes Equivalent Systems? Macro Economic Consideraitons in The Light of Alternative Economic Theories" *Review of Political Economy*, 19 (4), 449-473.

Ekin, N., Alper, Y., ve Akgeyik, T. (1999). *Türk Sosyal Güvenlik Sisteminde Arayışlar: Özelleştirme ve Yeniden Yapılandırma,* İstanbul Ticaret Odası, Yayın No: 1999-69.

Febrero, E., Cadarso, M. A. (2006). "Pay As You Go Versus Funded Systems: Some Critical Considerations", *Review of Political Economy*, 18 (3), 335-357.

Fultz, E. (2003). *Recent Trends in Pension Reform and Implementation in the EU Accession Countries,* ILO.

Kelly, E., Rawls, J., (2001), *Justice As Fairness: A Restatement*, Cambridge-Massachusetts: Belknap Press of Harvard University Press.

Özşuca, Ş. (2003). "Küreselleşme ve Sosyal Güvenlik Krizi", *Ankara Üniversitesi SBF Dergisi*, 58 (2), 133-152.

Ulutürk, S., Dane, K. (2009), "Social Security : Theory, Transformation and Turkey's Application", *Electronic Journal of Social Sciences*, 8 (29), 114-142.

Yılmaz, G. A., "Türkiye'de Sosyal Güvenliğin Finansmanı", *İktisat Dergisi*, 478, 62–74.

Yorgun, S. (2007). "5510 Sayılı Kanun, Anayasa Mahkemesinin İptal Kararı ve Çatırdayan Norm ve Standart Birliği", *Tisk Akademi*, 2 (4), 126-145.