

# **The Pension Traps of Northern Cyprus**

By

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## **Abstract**

This paper reviews how the Pay-As-You-Go (PAYGO) Civil Service and Social Security pension systems in North Cyprus enabled policy makers to make promises to the Turkish Cypriot residents to retain them on the Island following a long protracted civil war. Unfortunately, the success of this policy has created a relatively huge unfunded pension liability that is becoming an increasingly heavier burden on both the labor force and the general taxpayer. Estimates are presented here of the difference between the present values of future contributions to be made and the pension benefits to be received by those currently retired and those who are contribution now but will retire in the future. The analysis covers the period from 2009 until the last person now contributing to these systems first retires and then dies. Various policy reform options are also examined in this study. The estimated unfunded liability of these pension plans is found to be so large that none of the conventional policy reforms used in the EU is effective in fixing the fiscal imbalances already created by past policies. Structural reforms such as moving towards private pension plans with tax incentives for contribution, and perhaps at the same time administering a high rate social insurance contribution system in lieu of a personal income tax seems to be more promising strategy.

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## **Introduction**

An important feature of the publicly sponsored pay-as-you-go (PAYGO) pension systems of a country is the pattern of fiscal burden they impose on the public finances of a country over time. While the promises of pension benefits are made at an early stage in their evolution, their cash costs only grow much later as the system matures and a greater proportion of the participants of the pension plans move from being contributors to beneficiaries of the system.

In Northern Cyprus, two PAYGO pension systems, one for civil servants and the other for private sector workers, were established after a long civil war that ended in 1974. After the separation of the island into two in 1974, owing to the political uncertainties facing the Turkish Cypriots on the island, a significant amount of Turkish Cypriots moved either to UK or to Australia for a better future. The Turkish government and the local authorities on the island developed policies with the intention to slow the emigration and to keep the Turkish Cypriots on the island. This would politically make the Turkish side stronger during the negotiations for a resolution on the island.

One of the most effective strategies in this regard was to provide people with protected jobs in the government sector with generous pension benefits. Those who were self-employed or worked in the private sector were also granted eligibility to retire early with generous pension rights. Although politically it seemed to be a success in those days, now it is apparent that the economic and fiscal impacts of such politically rooted policies have created a huge fiscal burden and uncertainty for future generations. For example, since 2010 large numbers of Greek residents have either emigrated, or are in

the process of emigrating from Greece because of the financial chaos created by such unfunded liabilities that eventually came due.

It is 35 years now since these pension systems were set up in Northern Cyprus so they are now well into their mature state. In addition to the above mentioned political motives, until about 2005, high and variable rates of inflation have been the dominant economic variable that affected both the value of the contributions and the payouts of the system. Prefunding of pensions in Turkish Liras was impossible due to the chaos that high and variable rates of inflation created in the capital markets. Hence, the financing structure of the pension system had to be designed as a PAYGO pension plan.

Unlike funded pension plans, a PAYGO system does not require that actuarial estimates be made on a regular basis of the funding requirements of the plan. Such actuarial calculations would tell the sponsor(s) of the plan how much they need to invest now in order to be able to meet the obligations they have promised through the rules of the plan. A PAYGO system instead tries to pay the current benefit payouts from the contributions collected from current workers. However, that does not lessen the economic burden of the pension system on the non-pensioned residents of the society; it just shifts the burden over time.

Table 1 below summarizes the rules and reforms regarding the old-age and survivor benefits of the PAYGO pension systems (Civil Service Pension System - the CSPS, and Social Insurance System - the SIS) effective prior to 2008 and the reformed pension system (Social Security System – the SSS) of 2008 that is applicable to all new hires as of 2008 in the TRNC.

Table 1: The Summary Comparison of the 2008 Pension Reform and the Old Pension Systems

	<b>Civil Servants pre 2008 (Civil Servants Law, 1977)</b>	<b>SIS System pre 2008 (Social Insurance Law, 1976)</b>	<b>SSS System post 2008 (Social Security Law, 2007)</b>
<b>Coverage</b>	-Civil servants only	-Public and Private Sector employees, -Self employed	-Civil servants, -Public and Private sector employees, -Self employed
<b>Eligibility requirements for a full old-age pension</b>	-Pre 1987, no age requirement, -10 or 15 years of service, -Post 1987, 55 years of age and 25 years of service, -Post 1987, 60 years of age and 15 years of service -Mandatory retirement age is 60	-50 years of age and 25 years of contribution, -55 years of age and 15 years of contributions, -60 years of age and 12 years of contribution, minimum 1800 days of contribution (for women), -60 years of age and 15 years of contribution, minimum 2250 days of contribution (for men)	-60 years of age and 25 years of contribution (with reduced replacement rate), -63 years of age and 15 years of contribution (with reduced replacement rate)
<b>Survivors benefits</b>	-If the number of years of service is less than 20 years, calculated over 20 years, -If it is more than 20 years, then calculated over those years 50% of the husband's pension benefit is paid to the widow, -25% for each child, -If there are no children receiving survivors benefit, widow gets 2/3, -If no wife, each child gets 50%. However, the payments cannot exceed the father's pension	-If the number of years of contribution is more than 15, than the widow receives a pension over 25 years, -50% of the husband's pension benefit is paid to the widow, -25% for each child, -If there are no children receiving survivors benefit, widow gets 2/3, -If no wife, each child gets 50%. However, the payments cannot exceed the father's pension, -The husband can get survivor benefit if he is over 60 and was fully dependent on his wife's pension.	-The widow (men or women) gets a survivor benefit, -If the spouse dies while working, 60% of the minimum wage is paid to the widow every month, -If the spouse dies after a contribution of 1800 days, then the widow gets a pension over 5400 days, -If the spouse dies after a contribution of 3600 days, then the widow gets a pension over 7200 days, -If the spouse dies after a contribution of 5400 days, then the widow gets a pension over 9000 days, -25% for each child, -If no wife, each child gets 50%. However, the payments cannot exceed the father's pension
<b>Calculation of the old-age pension benefit</b>	-Last month's salary * Number of months in service * 0.75 / 484 (55.79% over 30 years of service)	-The highest 4 years' salary in the last 7 years of work adjusted for the average highest declarable salary, formulas and tables (we used 70%)	-(Average monthly income)x (Monthly replacement rate), -Monthly replacement rate is 2.5% for each year for the first 15 years of contribution and 2% for each year after 15, -Average monthly income is adjusted for each monthly income throughout the working history
<b>Contribution Rates (for old-age and survivors benefits)</b>	-Men 9%, Women 5%	-11%	-12.5%
<b>Declarable Income</b>	-No limit	-Min: minimum wage, -Max: 5 times minimum wage	-Min: minimum wage, -Max: 7 times minimum wage

The three major pension changes that were implemented by the EU countries in the recent past were also the primary measures undertaken in the TRNC. These mainly included increasing the retirement age from 55 (on average) to 60, increasing the contribution rates for civil servants from 9% for men and 5% for women and for private sector employees from 11% to a uniform rate of 12.5% and decreasing the replacement rate by changing the formula used to calculate the pension benefit at the time of retirement and by indexing the benefits to be paid to the average income of all contributors in the system.

Based on the pension rules of the TRNC, actuarial estimates have been made separately of the present value of the deficits of the historical civil service (CSPS) (Altıok and Jenkins, 2012a) and social insurance systems (SIS and SSS)<sup>1</sup> (Altıok and Jenkins, 2012b) under a wide range of assumptions. These estimates were made using 100% of the records of the participants in each of these pension plans. The present value of the deficits associated with the existing pensioners and members of these pension plans expressed in 2009 euro values is 17.7 billion in total. This is made up of 7.3 billion in deficit for the civil servants and 10.4 billion for the members of the SIS system, including the contributions of the new entrants. Here, they are brought together for the base case assumptions in Table 2 where the projected present value of the deficits is reported as a proportion of GDP.

Under the base case assumption where the retirement ages for the existing contributors in both civil service and social insurance systems were 55, the ratio of the deficit to 2009's GDP is 668% (Table 2, column 4). This number is almost three times as high as the EU average of 217% (European Commission, 2006). According to the 2005 estimates of the European Commission, the highest ratios in the EU were 246% for Portugal and 237% for France. Mylonas and Maisonneuve (1999) in an

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<sup>1</sup> Social Insurance System (SIS) was set up under Social Insurance Law in 1976 and covered only the workers in the private sector and Social Security System (SSS) was introduced in 2007 and was applicable to both civil servants and public and private sector employees hired after 2008.

OECD working paper reported that this ratio was over 200% for Greece. Gokhale (2009) estimated the ratio of total government implicit liabilities to GDP in these countries (this includes many additional items such as conventional government financial debt, and future costs associated with their health systems) to be 549% for France, 492% for Portugal and 875% for Greece. In the same Cato Institute study by Gokhale, the average ratio of the all of the various fiscal imbalances<sup>2</sup> to GDP in the EU area was recorded to be 434% in 2004.

As can be seen from the table below, the ratio to GDP of pension liabilities alone in the TRNC is 54% bigger than the average for the countries in the EU even if we included all their national debts in this ratio. One possible reform that might lead to a reduction in this ratio for the TRNC would be to increase the retirement age from 55 to 60 (the current law for new entrants into the SSS system) or to 65 (the EU target retirement age) for the existing contributors of the historical civil service and SIS systems. The analysis reported in Table 2 column 4 shows that such changes in the pension plan rules would decrease the ratio of the present value of deficit to GDP from 668% to 643% and to 573%, respectively. Although a decrease of about 25% and 95% of GDP is a significant change, such a policy decision alone does not solve the problem of the massive liabilities facing future taxpayers in the TRNC. Other aspects of pension promises or rules will also be needed to be taken into consideration if this burden is to be significantly reduced.

Table 2: Ratio of Present Value Total Liability of the Current Civil Service, Social Insurance and Social Security Pension Systems to GDP (2009) for Different Retirement Ages

	<b>Retirement Age</b>	<b>CSPS</b>	<b>SIS and SSS</b>	<b>TOTAL</b>
	1	2	3	4
1	55	276%	392%	668%
2	60	275%	368%	643%
3	65	268%	305%	573%

<sup>2</sup> The difference between the present value cost of government entitlement promises such as pension plans, health-care services and public debt net of expected tax revenues.

In making these estimates, an appropriate financial rate of discount must be selected. The results reported in Table 2 used a real (net of inflation) discount rate of 3%, a rate that reflects the average real discount rate used by actuaries estimating the present value of such pension liabilities in Europe (Queisser and Whitehouse, 2006 and Brown, Clark and Rauh, 2011). To check on the sensitivity of the results for the TRNC the above estimates were recalculated using real discount rates from 2 to 4%. For the case when the discount rate is set at 2%, the ratio of the present value of the pension liabilities to GDP rises from the base case of 668% to 849%, and for a 4% real discount rate the ratio falls to 535% of GDP (Table 3, column 4).

Table 3: Ratio of Present Value Total Liability of the Current Civil Service, Social Insurance and Social Security Pension Systems to GDP (2009) for Different Discount Rates

	<b>Discount Rate</b>	<b>CSPS</b>	<b>SIS and SSS</b>	<b>TOTAL</b>
	1	2	3	4
1	4.00%	226%	309%	535%
2	3.50%	249%	347%	596%
3	3.00%	276%	392%	668%
4	2.50%	306%	444%	750%
5	2.00%	342%	507%	849%

In conducting the estimates reported in this study, the rate of real growth of GDP over the next 40 years is assumed to be equal to the historical average for the TRNC of 4.61%. This is a rather high growth rate for such a long period of time, while at the same time it is assumed that the growth in real wages would only be on average 2%<sup>3</sup>. This base case assumption might be unrealistically low if the labor force is not growing rapidly, and may be too high if the growth in GDP is coming from a large inflow of low wage immigrants that would expand the labor force.

To test out the sensitivity of the estimates to various rate of the real growth in the wages of individuals (in addition to seniority premiums), within the constraint of a 4.61% growth in GDP, an analysis was

<sup>3</sup> The growth in real wages due to seniority increases does not increase the average real rate of growth of wages for the economy. Each year people retire with high wages while new entrants enter the labor force with relatively low wages. The seniority premiums are thus offset in the economy's total wage bill by the process of retirees from labor force and new hires. Of course, this only holds exactly if the size of the overall labor force is not changed

conducted using real rates of growth of real wages from the extreme of 0% on the low side to a high rate of real growth rate of 3%. In each of these cases the assumption is made that after retirement the pensions are only maintained at the constant real value (full adjustment for inflation only) they were at the point of retirement.

The results (Table 4, column 4) show that with a 3% real growth in wages (similar to what has been the actual practice in the past in the TRNC) the ratio of the present value of the pension liabilities to GDP would increase from 668% to 727%. Alternatively, if the real wages of individuals grow at 0% (nominal wages grew at the rate of inflation) then this ratio would fall to 571%. The liabilities would still be far above the EU average. It is clear that in order to address the size of the liabilities, other more fundamental changes are required.

Table 4: Ratio of Present Value Total Liability of the Current Civil Service, Social Insurance and Social Security Pension Systems to GDP (2009) for Different Rates of Growth in Real Wage Rates

	<b>Growth in Real Wage Rates</b>	<b>CSPS</b>	<b>SIS and SSS</b>	<b>TOTAL</b>
	1	2	3	4
1	3.00%	302%	425%	727%
2	2.00%	276%	392%	668%
3	1.00%	254%	362%	616%
4	0.00%	235%	336%	571%

Note: The growth in real wages is in addition to seniority premium, the seniority premiums are for civil servants 1.75% for men and 2.00% for women (Altiok and Jenkins, 2012a), for private sector, they are 2.33% for men and 1.55% for women (Altiok and Jenkins, 2012b).

In the TRNC, the indexing formulae for pension benefits after retirement are not well defined in law. In practice the pensioners obtained full indexation for inflation plus a real increase in wages equal to what members of the labor force got. This has averaged to be approximately 2 to 3% a year real increase.

Table 5 shows the dramatic effect of changing the indexation formulae for the monthly pension benefits after retirement. If the average real growth rate is 2% (the assumed average growth in real wages) then the present value of the deficit to GDP raises from 668 % to 915%, an increase of 247% of



GDP. If the real increase in pension benefits given by the government is 3%, then the ratio increases to 1088% or an increase of 420% of GDP. These results point out how critical this variable is to the overall fiscal burden of the pension system. It is often a political ploy to raise pension benefit prior to an election, but now we can see how damaging this practice can become to future generations of taxpayers who are saddled with this burden.

Table 5: Ratio of Present Value Total Liability of the Current Civil Service, Social Insurance and Social Security Pension Systems to GDP (2009) for Different Rates of Adjustment in the Real Value of Pension Benefits

	<b>Adjustment in Real Value of Pension Benefits</b>	<b>CSPS</b>	<b>SIS and SSS</b>	<b>TOTAL</b>
	1	2	3	4
1	4.61%	540%	922%	1,462%
2	4.00%	486%	813%	1,299%
3	3.00%	416%	672%	1,088%
4	2.00%	358%	557%	915%
5	1.00%	312%	465%	777%
6	0.00%	276%	392%	668%
7	-1.00%	245%	330%	575%

Note: In this table, it is assumed that pensions will be adjusted for the rate of domestic inflation in addition to any real adjustment in the amount of pension benefit.

Thus far the analysis has dealt with the long term implications of the pension systems in the TRNC. The examination will now focus on the impact on the annual budgets of the TRNC in the immediate time horizon as well over longer time spans. Adding together the annual fiscal burdens of the civil service pension system with the SIS and SSS systems, it is found that in 2015 the amount of the deficit of the combined systems will absorb 56.16% of all the tax revenues raised by the tax system in the TRNC (Table 6, column 2). For the next 15 years, until 2030, it is expected that the subsidy will continue to be above 50% of tax revenues, and for the next 20 will move along a decreasing trend until in 2045, it will reach 19.94% of the total tax revenues. After this year, the ratio is expected to increase again as the new entrants to the new SSS system will start retiring and drawing pension benefits.

This means that unless Turkey is willing to expand its contribution to fund the public sector budget of TRNC, drastic actions will be forced on the TRNC budget makers if they are committed to pay the benefits promised by the pension systems. Such options are rather limited and include the cutting of the wage bill of the public sector (that is bloated with excess political hires), and/or all public sector enterprises that are incurring losses (for political or non-political reasons) to be put on a private for-profit basis.

The budgetary subsidy to the pension systems ranges from 14.07% of GDP in 2015 to 11.88% in 2035 and to 5% in 2045. This reflects the proportion of GDP that needs to be allocated, essentially to the consumption of the elderly (or not so elderly) in the TRNC. In order for the country to experience economic growth, it will need to make investments to increase the capital stock. Hence, if additional capital accumulation is to take place, it will be critical to encourage foreign investment or to receive fiscal transfers from Turkey to offset this dramatic transfer of resources to the TRNC pensioners.

Table 6: Total Annual Pension Deficit (APD) / Tax Revenue & Total Annual Pension Deficit / GDP Ratio

	<b>Years</b>	<b>APD / TAX REVENUE</b>	<b>APD / GDP</b>
	1	2	3
1	<b>2015</b>	56.16%	14.07%
2	<b>2020</b>	55.31%	13.86%
3	<b>2025</b>	53.97%	13.62%
4	<b>2030</b>	52.85%	13.24%
5	<b>2035</b>	47.42%	11.88%
6	<b>2040</b>	32.04%	8.02%
7	<b>2045</b>	19.94%	5.00%

Another problem that many European and other advanced countries are facing is the aging of their overall populations. The demographic trends are such that people are living longer, hence, drawing pension benefits longer, while the labor force is not growing in a corresponding fashion to support such a growing population of pensioners. The demographics in the TRNC are such that by 2015, there will be only two members of the labor force supporting one pensioner. In Europe, which has long

recognized this trend as being a serious problem, the support ratio currently is slightly more than 3.5 labor force member per pensioner (Germany 3.5, France 3.5, UK 3.6 Spain 3.7, Greece 3.4, Netherlands 4.0 and Turkey 9.8; Economist, 2011).

The TRNC as a small country is attractive to immigrants and workers. However, if it wishes to solve this problem through immigration it will have to change a number of its current policies. For example, Canada has increased its population through immigration by about 1% each year for the past 50 years. Similarly, cities such as New York and London have experienced very rapid changes in population over time, through immigration. However, the nature of the population, and the culture of the region has also changed a great deal. This is an option that the TRNC will have to face very soon. At the present time there are labyrinths of regulations that discriminate against non-citizens in the operation of businesses or employment in the TRNC. If the government and the current TRNC residents have any plans for fixing the support ratio problem in this way, they will have to re-examine these policies carefully.

Table 7: Support Ratios for the TRNC

	2015	2020	2025	2030	2035	2040	2045
<b>Dependency Ratio (with 2% Labor Force Growth)</b>	2.18	2.06	1.92	1.96	1.90	2.19	2.57
<b>Dependency Ratio (with 0% Labor Force Growth)</b>	2.00	1.74	1.49	1.39	1.24	1.30	1.40

Table 7 shows the likely effects of a policy change on the support ratio. A policy that results in keeping the growth of labor force constant over time would yield a ratio of 1.40 contributors per a retiree by 2045. This would cause serious fiscal problems over the existing ones. However, a 2% increase in the labor force would improve the ratio from 2.18 in 2015 to 2.57 in 2045. This improvement comes from the increase in the permanent members of the labor force. In addition to this, if appropriate policies are implemented to increase the number of temporary workers, with no pension rights, the support ratio is expected to improve further and approach the EU average over time.

In 2008, the TRNC undertook a reform of both its Civil Service pension systems and its private sector coverage through the Social Insurance System. A new pension plan was constituted, the Social Security System (SSS), to which all new employees in both the civil service and the private sector would become participants.

To see if the reforms went deep enough to make it long run sustainable a set of actuarial estimations were carried out to determine if the contributions over a participants working life would be sufficient to finance the pension promises through a fully funded pension plan (Altiok and Jenkins, 2012b). To carry out these estimations a real rate of return (or a discount rate) of 3% has been used.

Table 8: Present Value of the Fiscal Subsidy Required per Member of the New SSS Pension System

<b>Starting Wage Rate (2009 prices)</b>	<b>Men</b>	<b>Women</b>
613 euros/month	64,601	51,129
920 euros/month	96,901	76,694
1,226 euros/month	129,201	102,258
1,839 euros/month	193,802	153,387

In Table 8, the results of these estimations are reported by income level. For individuals who start their employment earning just the average starting wage of 613 euros per month in 2009 prices, the present value of the funding deficit for men is 64,601 euros, and for women, 51,129 euros. The present values of the funding shortfalls increased to 193,802 euros and 153,387 euros, for men and women, respectively, when their initial starting salaries were 3 times the average starting salary in the country, or 1,839 euros per month. Not only is the new system not fiscally neutral, but it provides a proportionally higher subsidy to high income workers relative to the subsidy given to lower income workers. This is an odd design. In most countries of the world it is usually the case that it is the first tier of pensions that is designed to give minimum income support to the poor in their old age. This is the group that receives public support often at the expense of lower pension benefits received by better off

individuals. In the reformed SSS system in the TRNC, the opposite have been the guiding principle. It is the high income earners that will get rewarded by such budgetary largesse.

A further examination of the SSS allows us to estimate what would be the required contribution rates, expressed as a percentage of wages that would equate the present value of contributions to the present value of the pension benefits. In Table 8, the contribution rates required to fund the basic system that is now law, where people retire at age 60 with 25 years of experience, would be between 33.5% and 42.3% for men and 30.7% and 38.5% for women. This is compared to the legal contribution requirement of 12.5%. In Europe, the simple average rate of the contribution rates is 25% (European Commission 2007 and OECD 2005).

Table 9: Contribution Rates as a percentage of Gross Wages Yielding a Zero Present Value of Lifetime Liability of the SIS Pension Plan (at discount rates of 3% and 4%)

<b>Discount Rate</b>	<b>Men</b>	<b>Women</b>
3%	42.3%	38.5%
4%	33.5%	30.7%

Given the weak administration for the enforcement of tax payments in the TRNC, it is highly unlikely that such contribution rates would be voluntarily made by participants if the systems remained as a PAYGO system where the individuals' pension benefits are not tied directly to the amount of the contributions they make (Besim and Jenkins, 2003). There might be some chance of raising the rates substantially if the pension system were a defined contribution system where the participants had an actual claim on the contractual savings made through this financial vehicle. Another alternative (employed by Uruguay, when it found itself in such a fiscal situation) would be to abolish the personal income tax on labor income and just impose the social security contributions on such earned income (Bernardi et al., 2007).

The financial support to North Cyprus pensioners comes not only from the country's taxpayers but also from the temporary workers who come to work in the TRNC. In recent years, the TRNC has provided a

very fertile set of work opportunities for a wide range of skilled and unskilled workers from Turkey. These workers pay social security contributions and their pension years of service earned in the TRNC are recognized as years of service by the Social Security System of Turkey. However, Turkey presently does not require the Social Security System of the TRNC to transfer the contributions made to the TRNC SIS or SSS systems to its Social Security System when the person becomes eligible for a pension benefit in Turkey.

One possible solution to the SSS fiscal problems in the TRNC would be to encourage more workers to come from Turkey on temporary bases. In Table 10, the estimates are reported on the present value of the contributions made by the estimated current stock of temporary workers, 11,232, and if this stock were increased up to 25,000 workers. The present value of these contributions ranges from 370 million euros with 11,232 temporary workers, to 824 million if the TRNC relaxed its work permit regulations to allow 25,000 to work in the TRNC at any given time.

Table 10: Present Value of Contributions by Different Stock of Temporary Workers to the SSS Pension System

<b>Stock of Temporary Workers</b>	<b>PVCTW</b>
<b>11,232</b>	<b>370,299,718</b>
15,000	494,524,196
20,000	659,365,594
25,000	824,206,993

Given the magnitudes of the deficit of the TRNC pension system, it is clear that the benefits that the TRNC would receive through inviting a much larger stock of temporary workers to join the labor force in the TRNC will not be significant to alleviate the problems created by the historical pensions systems, or those about to be created by the new SSS system. A more fundamental restructuring of the pension systems is required for sustainability of the old age support system and the fiscal solvency of the country.

## **Conclusions**

A policy consideration that the TRNC should consider is to allow its residents to receive tax deductions if they contributed to private pension plans that adhere to certain standards instead of contributing only to the public system. Presently only inefficient life insurance policies receive such tax treatment. Such a provision was part of the pension reforms implemented in the 1990's by the UK. The advantage of such private defined contribution plans is that they are portable. A resident of the TRNC would not lose pension benefits if they moved from the TRNC on either a temporary or permanent basis. Given the nature of employment in a globalized world, and the very small size of the TRNC, such a pension system would be of great benefit to its citizens. Already today, many TRNC professionals move out of the country to work for a number of years. At the present time there is no effective way to continue in the same pension system when one's career objectives are best served by movements across labor markets.

Hence, in addition to increasing the retirement age and reducing the pension benefit formulae, it might be welfare improving if the opportunity were given for people to opt partially or wholly out of the public PAYGO system. However, in its present very subsidized state, very few informed people are likely to want to leave the generosity of the PAYGO system. Already 15 countries have taken this route for pension reform, including Poland and Sweden (Pinera, 2001).

If the SSS system as now constituted is going to continue to exist, a massive increase in the rates of contributions will be required. Given the propensity for tax evasion on labor income in the TRNC (Besim and Jenkins 2005), it might be preferable to abolish the personal income tax since an insignificant amount of tax revenue is raised in any case except from public employees (Jenkins, 2001). Instead it might be more promising to administer a higher rate of social security contributions on income that would eventually be counted in the basis for calculating social security benefits. In this

way, evasion of SSS contributions would automatically lower the amount of future pension benefits paid. This is very unlike the current income tax system where tax evasion has no repercussions on the amount of benefits the individuals will receive from the government.

If such a large proportion of the GDP of the TRNC continues to be allocated to support the non-working population of the country, it will not be able to finance the investment needed for its own development. Hence, it will be necessary to bring large amounts of foreign capital and encourage further foreign ownership of assets in the economy in order to achieve the capital accumulation that is necessary for an acceptable rate of future economic growth. The fiscally unsustainable civil service and social security pensions systems that were created to give TRNC citizens an incentive to stay on the Island during its years of uncertainty are now creating overwhelming financial and fiscal pressures. These pressures are the driving forces behind major policy decisions that will have to be made concerning population, social policy and budgetary finances that are likely to reshape the nature of the TRNC society for decades to come.



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