

**Pensions and Social Protection in Central Asia and South  
Caucasus: developments in the post-Soviet era**

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## **Abstract**

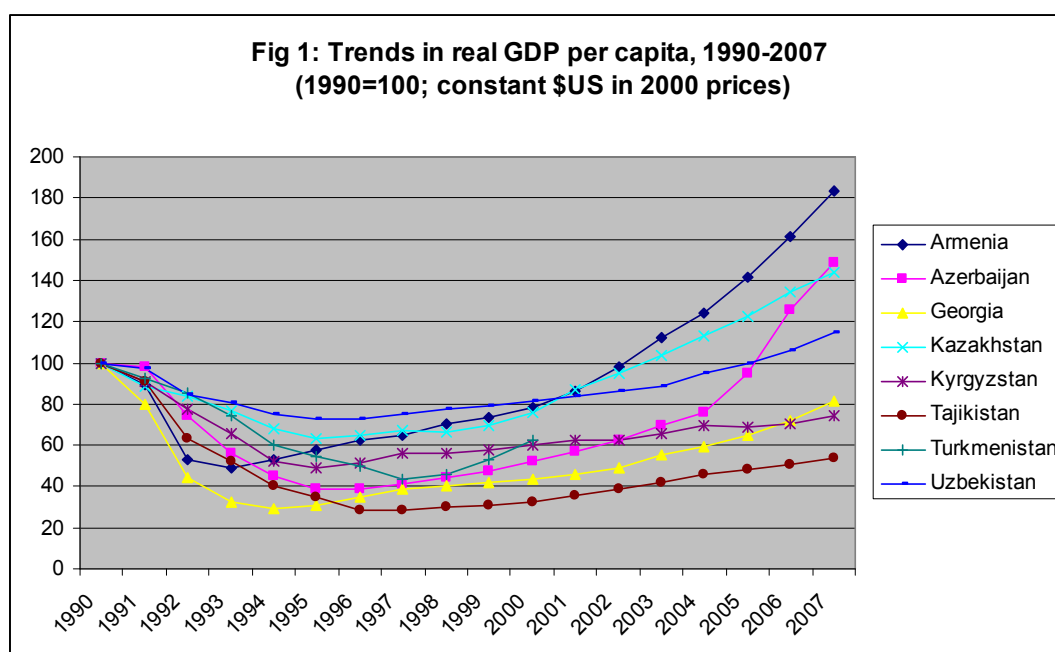
At independence all the countries of the Former Soviet Union (FSU) inherited a extensive system of social welfare, including a comprehensive pay-as-you-go pension system characterised by low retirement ages, relatively generous opportunities for early retirement for selected groups and high replacement rates. The economic dislocation of the early 1990s had significant consequences for the pension systems in the region. Rising unemployment and economic restructuring reduced the contribution base, increasing system dependency rates. In the face of falling public expenditure many countries undertook wide ranging reforms of the pension system – including tightening eligibility criteria, increasing retirement ages, and moves away from defined benefits towards defined contribution systems. This paper details the impact of transition on pension systems during the 1990s, through to the mid 2000s in the region as a whole. It then focuses on the first wave of pension reforms and the current pension systems in the region today in four case study countries: Armenia, Kazakhstan, Kyrgyzstan and Tajikistan.

# **Pensions and Social Protection in Central Asia and South Caucasus: Developments in the post-Soviet era**

## **I. Introduction**

At independence all the countries of the Former Soviet Union (FSU) inherited a extensive system of social welfare, including a comprehensive pay-as-you-go pension system characterised by low retirement ages (60 for men and 55 for women) and relatively generous opportunities for early retirement for selected groups of workers such as miners, agricultural workers, members of the armed forces, ballerinas and ‘hero mothers’ amongst many other. Pensions were calculated as a fixed earning related component plus an additional component based on years of services which took into account periods of employment, child care and numerous other ‘special circumstances’. As most Soviet citizens were employees of the state, either in industry or as agricultural workers, or fell into some other special category, entitlement to the government financed Old Age Pension was almost universal. For the minority of those who had not accumulated sufficient years of service to qualify, the Social Pension provided a safety net of around the minimum wage.

In the years immediately following the collapse of the Soviet Union, most of the newly independent Countries of the FSU underwent a period of severe economic dislocation. The interruption of traditional trade relations along with the withdrawal of subsidies from Moscow resulted in a dramatic contraction in GDP. Between 1990 and 1995, GDP per capita more than halved in all the countries of Central Asia and the Caucasus, with the notable exception of Uzbekistan (see Figure 1 below). Since the mid 1990s there has been a slow return to positive economic growth (see Alam et al, 2005; Falkingham, 2005). However, a decade after independence only Armenia and Kazakhstan were back at pre-independence levels. Even by 2007, levels of GDP per capita in Georgia and Kyrgyzstan were still at around four-fifths of those pre-independence, whilst in Moldova GDP per capita remained at less than two thirds (62%) and Tajikistan just over half (54%).



Source: UNICEF Transmonee Database 2009

The relatively generous Soviet pension system combined with a rapidly contracting contributions base due to falling tax revenues as State run enterprises contracted, unemployment rose and the informal sector expanded, resulted in most pension systems in the region rapidly becoming unsustainable. The growing private sector quickly learnt how to evade mandatory pension contributions (Seitenova and Becker, 2004). With declining revenues, pension funds in most countries of the FSU quickly fell into deficit and benefit payments fell into arrears. Rapid inflation acted to erode the value of benefits. For example, in 1992, consumer price inflation exceeded 3,000 percent in Kazakhstan, effectively reducing the value of pensions and other welfare benefits to below the minimum necessary for subsistence (Seitenova and Becker, 2004). The impact of the decline in the real value of pensions on the welfare of older people was further exacerbated by the contraction of non-cash subsidies in areas such as health care, heating and sanatorium. During this period in some countries, some state enterprises offered to pay their contributions in kind resulting in pensioners receiving their benefits in-kind. This was less of a problem where the in-kind payments could easily be converted into

cash or consumed (e.g. flour) but there were significant welfare implications when pensions and other benefits were paid in vodka, as was reported to be the case in one instance in an oblast (region) in Russia in the early 1990s (Falkingham, 1999).

With problems of both fiscal sustainability and benefit adequacy, it is no surprise that most of the newly independent states of the FSU considered or undertook radical changes to their pension systems. As early as 1992, Kyrgyzstan – often considered as an early adopter of reform – began a process of reducing the scope of special privileges such as additional years of service for particular occupations. By the mid 1990s many countries in the region had introduced reforms, with common themes including: (i) a shift away from pensions based on a defined benefit towards those based defined contributions; (ii) a move from a PAYG to a funded system and (iii) from a system where the pension ‘risk’ was based on the collective, to one where risk was increasing individualised. Most countries also attempted to raise the age of retirement, with mixed success.

Both Kyrgyzstan and Kazakhstan introduced far reaching pension legislation in 1996-7, with Kyrgyzstan bringing in a notional defined benefit pension and Kazakhstan initiating more ambitious reform moving towards a fully funded, mandatory and individually based defined contribution scheme along the lines introduced in Chile in the 1980s. Other countries in the region were slower to reform. For example, the first wave of pension reform in Armenia was legislated in 2002 and implemented in 2003, whilst in others such as Tajikistan and Uzbekistan the reform process is just beginning.

This paper reviews the transformation of social protection for older people in Central Asia and the south Caucasus. It begins by reviewing the main features of Soviet old-age pensions in section II. Section III then presents an overview of the demographic and socio-economic profile of the countries in the regions, drawing out the implications for social protection. Particular attention is paid to the changing age structure of the population and labour force participation rates as well as trends in poverty. Section IV details the impact of transition on pension systems during the 1990s, through to the mid 2000s in the region as a whole. Section V then focuses on the first wave of pension

reforms and the current pension systems in the region today in four case study countries: Armenia, Kazakhstan, Kyrgyzstan and Tajikistan. This section draws on both published literature and also original analysis of recent household survey data. In particular in the case of Tajikistan, household survey data is used to assess how social networks and informal strategies, including remittances, are compensating for the inadequate provision by the state. Section VI then concludes, drawing out the implications for policy and assessing the role that social pensions may play in the region.

## **II. The inherited legacy: Soviet old-age pensions in brief**

The Soviet Union provided its citizens with a comprehensive system of social protection that included a range of cash and non-cash benefits. Social insurance benefits provided workers with coverage for maternity, sickness, disability, survivorship and old age whilst social assistance benefits were available for those with inadequate employment records to qualify for insurance based benefits. The system was effectively universal as the vast majority of the population were employed in either the military, a government department (e.g. education and health), a state enterprise or a state-owned (sovkhoz) or collective (kolkhoz) farm. Full employment was guaranteed by the state and unemployment<sup>1</sup> was virtually unknown, a fact reflected in the fact that the Soviet system of social protection did not encompass formal unemployment benefits.

The cash benefit system was supported by an extensive system of non-cash benefits, including subsidies for heating and many foodstuffs (most notably bread) as well as universal education and health care, supposedly free at the point of delivery<sup>2</sup>. In addition many workers received subsidised housing, kindergarten places and annual holidays in

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<sup>1</sup> Although there was no formal unemployment in the Soviet system, under-employment was widespread, reflecting excess labour capacity within many enterprises. See Kaufman and Hardt, 1993 for a more detailed discussion.

<sup>2</sup> Although both education and health services were 'free', there is evidence that people accessing health care during the Soviet period, especially at tertiary level, incurred significant out of pocket costs in the form of gifts (both cash and in-kind) to health care workers. There is also significant evidence that out of pocket payments rose substantially following independence. For a more extended discussion see Lewis (2000), Falkingham (2004) and Falkingham, Akkazieva and Baschieri (2010).

sanatorium 'owned' by their enterprise. Entitlement to a subsidised annual holiday extended into retirement.

Under the Soviet system, both social insurance and social assistance benefits were effectively non-contributory in nature as no contributions were payable by the employees, although contributions were paid by the enterprise. Eligibility for benefits was based on the citizen's employment record. This included credits for years as a university student, years of service in the armed forces, time out for child care as well as years of employment. Moreover in some occupations more than one year of service was credited for each year of employment. Thus in these occupations it was possible to accelerate the accumulation of 'contribution years'.

Normal retirement ages in the Soviet system were low, at 55 years for women (with 20 years of service) and 60 years for men (with 25 years of service). Moreover there were numerous exceptions allowing people to retire earlier. People working in occupations classified as 'arduous' (such as milk-maids or goat herders) or 'hazardous' (such as mining) or who had engaged in work associated with the Chernobyl disaster could retire between 5-10 years earlier due to these occupations attracting additional credits. An early pension was also available at age 50 for mothers who had raised more than 3 children or who had cared for a disabled child, and a woman awarded the title Hero Mother of the Soviet Union (awarded for 10 or more children) could retire at any age after receiving her award.

As well as a relatively low retirement age, the normal pension formula was extremely generous being set at 60 percent of the highest past wages averaged over 12 months for workers with a full employment record. Above that the base pension was then increased by one percent for each year of service above the minimum. Given the relatively modest number of years required for a full employment record and the extensive system of credits, most people retired with a state old age pension providing a replacement rate in excess of two-thirds of their previous highest wages.



Although the eligibility criteria for an old age pension were 'low' by most pension system standards, there was still a minority of the population who failed to qualify. Where individuals were not eligible for an old age pension, a social pension was payable. This was set at the level of the minimum wage, which in turn was set in reference to the 'social minimum' which was calculated by the State Statistical Agency (Goskomstat) using a basket of goods and services that were thought to reflect the socially acceptable minimum for the community. This basket allowed for a generous level of consumption of both food and non-food items and contained relatively high proportions of high cost foods such as animal fat and meat, reflecting the fact that the social minimum was based on the idea of social solidarity rather than simply meeting basic needs (Falkingham, 2000). Poverty did not officially exist under the Soviet system, although it was recognised there were 'malooobespechenny' (or 'under-provisioned') families. There was a distinction between 'under provisioned' older people who entitled to the social pension, and under provisioned families with children who were entitled to social assistance based family allowances.

In summary, the main features of the Soviet Pension system were:

- Virtually universal coverage
- Non contributory for employees (contribution paid by employee)
- Low retirement age (60 for men and 55 for women), plus generous opportunities for early retirement
- Low eligibility requirements (minimum service record of 25 years for men and 20 years for women)
- Extensive and generous system of credits (university education, military service, child birth, arduous and hazardous employment)
- Generous earning related benefit (60% of highest average earning for minimum service record *plus* 1% for each additional year above the minimum)
- High average replacement rate

plus

- Non-contributory social pension for those who were not eligible for an old age pension, providing a minimum income guarantee.

The generosity of the Soviet pension system meant that even prior to the break up of the Soviet Union the system was coming under pressure. In August 1990, in response to the economic problems of the 1980s, the Soviet government took the first steps towards moving away from a pay-as-you-go system towards a funded system by establishing the USSR Pension Fund. The Fund was established as an independent ‘financial banking system’, separated from the State budget and funded by contributions from all types of enterprises and organisations. Through the setting up of the USSR Pension Fund, the Soviet Government was signalling its desire to ultimately create a funded pension system (Seitenova and Becker, 2004). However before this could occur the Soviet Union was dissolved, and in 1991 each of the newly independent states inherited their own national Pension Fund based on the 1990 Soviet law. In the next Section we go on to look at trends in the demographic and socio-economic profile of the countries of Central Asia and the South Caucasus following independence.

### III. Demographic and socio-economic trends in Central Asia and the South Caucasus

#### Demographic trends

##### *Declining fertility*

The republics of Central Asia and the South Caucasus exhibited the highest rates of fertility in the USSR and as such had relatively youthful populations. In 1989, the Total Fertility Rate (TFR) of 5.1 children per woman in Tajikistan was the highest in the Union, followed by Turkmenistan (4.3) and Uzbekistan (4.1). Fertility rates were lower in the South Caucasus than in Central Asia, but remained above replacement rate (i.e. 2.1 children per woman) in both Armenia and Azerbaijan (Table 1). Over the following two decades, the TFR fell in all countries in the region. In part this was the continuation of an already established downward trend. However the decline in TFR was steeper than a pure trend based explanation would suggest, pointing to couples adjusting their family formation plans in response to the economic uncertainty and political unrest (Agadjanian and Ekaterina, 2003; Clifford, Falkingham and Hinde, 2010). Today in most countries in the region fertility levels are around or below the replacement rate, with only Tajikistan above three children per woman.

**Table 1: Trends in fertility and life expectancy, 1989-2009**

	Total fertility rate		Male life expectancy at birth		Female life expectancy at birth		Life expectancy at age 60 Both sexes 2005-201
	1989	2009	1989	2009	1989	2009	
Armenia	2.6	1.7	69.0	70.6	74.7	77.1	19.5
Azerbaijan	2.8	2.2	66.6	68.2	74.2	72.8	18.9
Georgia	2.1	1.6	67.3	68.3	75.0	75.2	18.7
Kazakhstan	2.8	2.3	63.9	59.2	73.1	71.5	15.5
Kyrgyzstan	3.8	2.5	64.3	64.5	72.4	71.9	17.1
Tajikistan	5.1	3.4	66.7	64.5	71.8	69.7	18.6
Turkmenistan	4.3	2.4	61.8	61.1	68.4	69.2	16.7
Uzbekistan	4.1	2.2	66.0	62.8	72.1	71.2	18.3

Source: data for 1989 from UNICEF Transmonee database 2009; data for 2009 from ILO (2010).

### ***Stable or rising mortality***

The most fundamental measure of the well-being of a population is how long its members can expect to live on average. The negative impact of the transition process on the well-being of the population is reflected in the decline in life expectancy at birth for both women and men in a number of countries. With the exception of Tajikistan, where the country was affected by armed conflict for much of the period 1992-1997, the deterioration in life expectancy was most marked in Kazakhstan where male life expectancy fell by a staggering 5.9 years, from 63.9 in 1989 to a low of 58.0 in 1996 (Falkingham, 2000). Since then there has been some recovery, but even in 2009 male life expectancy at birth in Kazakhstan remained relatively low at under 60. Similar patterns were also observed in Russia and parts of Central and Eastern Europe (McKee, 1998).

Today life expectancy at birth is significantly higher for both men and women in the South Caucasus than in Central Asia, with the best performer being Armenia (70.6 years for men and 77.1 years for women in 2009). The lowest levels of life expectancy at birth for women are observed in Turkmenistan (69.2 years), whilst Kazakhstan remains the worst performer for men.

Life expectancy at birth is influenced by mortality rates across all ages. Table 1 also shows the latest estimates of life expectancy at age 60 for the countries in the region. This is of central relevance for pension systems as it illustrates how long a person who starts drawing a pension at age 60 may be expected, on average, to receive pension benefits. The ranking of countries according to this measure is somewhat different to that using life expectancy at birth as it excludes the effect of both infant and maternal mortality. Interestingly, someone who has survived to age 60 in Tajikistan will be expected to live, on average, a further 18.6 years whilst a 60 year old in Armenia may expect to live a further 19.5 years.

### ***Outward migration***

The early 1990s were marked by significant out-migration of people from Central Asia and the Caucasus as well as movement between the countries of the region (Table 2). For

example, it is estimated that during the period 1990-2000 Kazakhstan experienced net out migration of over 1.5 million people, of which nearly a million was net migration to Russia and 850,000 to outside the FSU. At the same time Kazkhstan experienced a net inflow from other republics in the FSU, notably from the other Central Asia republics. Many of the first wave of migrants were ethnic Russians who ‘returned’ to Russia in the early 1990s. However, since the mid 1990s there has been a considerable flow of migrants workers (Mansoor and Quillin, 2007).

**Table 2: Net migration by destination during the 1990s, Central Asia and the South Caucasus**

	Total	Russia	Other FSU	Non FSU
Armenia 1990-2001	-60.4	-125.6	97.5	-32.3
Azerbaijan 1990-2003	-284.6	-252.9	1.3	-33
Georgia 1990-1992		-85.2	-24.4	
Kazakhstan 1990-2000	-1581.1	-957.6	227.6	-851.1
Kyrgyzstan 1990-1996	-392.1	-278.8	-8.2	-105.1
Tajikistan 1990-1995	-357.1	-258.3	-64	-34.8
Turkmenistan 1990-1995	-52.4	-51.2	0.1	-1.3
Uzbekistan 1990-1998	-728.3	-542.8	-46	-139.5

Source: Table 1.1.6 Mansoor and Quillin (2007)

For all the countries in the region Russia has been the dominant destination, and the majority of migratory moves have been within the countries of the FSU. In the early 1990s there were large migrations of ethnic Germans from both Kazakhstan and the Kyrgyz Republic to Germany, the presence of whom in the region was the result of both voluntary and forced migrations of Germans to Central Asia during the Soviet period. Over 800,000 Germans left from Kazakhstan and nearly 100,000 from Kyrgyzstan in the period 1992-1995 as the German government granted citizenship to anyone with proof of German ancestry<sup>3</sup>. The United States has been the primary destination outside the FSU for migrants from Armenia, with most of these joining the already large Armenian diaspora community there, while Israel has been a top Azerbaijani destination (Mansoor and Quillin, 2007). It should also be noted that these figures provide a lower estimate of

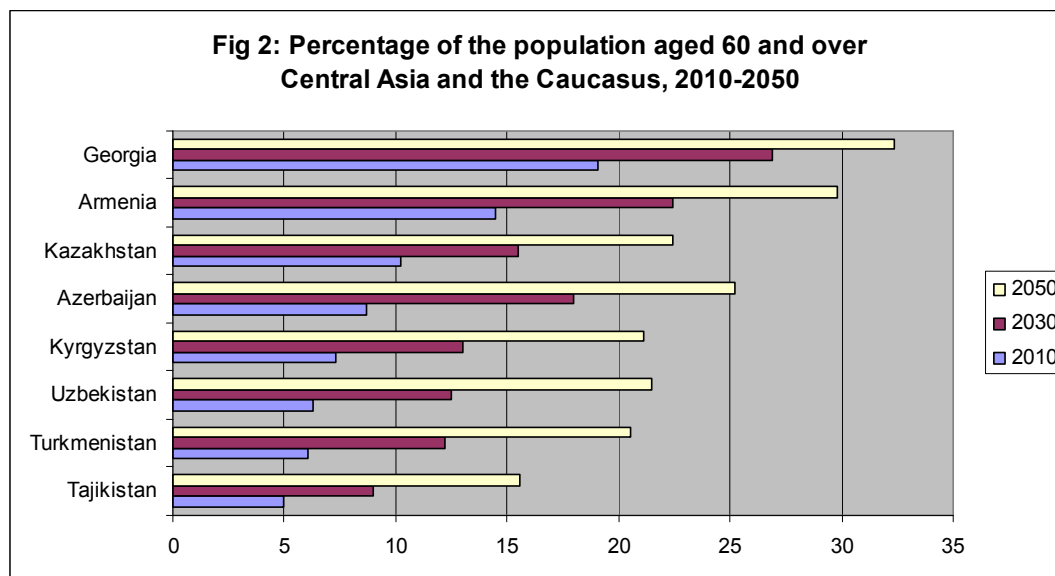
<sup>3</sup> This liberal policy has since been reformed with the introduction of tighter immigration criteria following the difficulties of integrating relatively large numbers of Russian speaking Germans experienced in the early 1990s.

the true migratory flows in the region, with the figures only capturing a fraction of a much larger undocumented and circular migration from all the countries to Russia. The figures also do not reflect the significant number of internally displaced persons (IDPs) in some of the countries because of past or on-going conflicts.

One consequence of the high levels of migration has been the growth in remittances as a share of GDP in the region. In 2004, remittances from migrants represented over 20 percent of GDP in Moldova and over 10 percent in Armenia, and Tajikistan. By 2008, Tajikistan topped the global legal table with remittances estimated to contribute a staggering 45.5% of GDP, with Moldova in second place at 38.3% (Ratha, Mohapatra and Xu, 2008).

### ***An ageing population***

One consequence of the decline in fertility along with the relatively high levels of survivorship will be a significant shift in the age composition of the population over the next three decades (Figure 2). In ‘low fertility’ Georgia, the proportion of the population aged 60 and over was already 19 percent in 2010; by 2030 this is projected to rise to 27 percent and by 2050 nearly a third (32%) of the population of Georgia will be aged over 60. This contrasts with the situation in ‘high fertility’ Tajikistan, where in 2010 just 5 percent of the population were aged over 60. However even here it is projected that individuals aged 60 and over will account for nearly 16 percent of Tajikistan’s population by 2050.



Source: UN (2009) World Population Prospects. The 2008 Revision

### **Socio-economic trends**

At independence all of the newly formed republics of Central Asia and the Caucasus inherited high levels of human capital. Education and health care were free and there were extensive social services and transfers. They also, however, inherited economic structures that were heavily dependent on Soviet supply and trade networks. Russia was the main source of inputs and the main market for outputs. Transport and other infrastructure were designed with the view to meeting these needs and not necessarily those of the local economy. High social spending was supported by large budgetary transfers from Moscow. It is estimated that in the late 1980s/early 1990s such transfers were worth between 12 percent of GDP in Kazakhstan to as much as 40 percent of GDP in Tajikistan.

As highlighted in Figure 1 above, the transition to independence was accompanied by a severe economic dislocation in all countries in the region as the complex inter-dependent production and trade networks of the Soviet Union were dismantled. Real wages fell, joblessness increased, school enrolment dropped and general health deteriorated

(Falkingham, 2000; 2005). The dramatic declines in GDP affected all sections of the population and the proportion of the population living in poverty rose sharply.

### ***Rising poverty***

Even before independence, the Soviet Republics of Central Asia and the Caucasus were amongst the poorest of the USSR. Atkinson and Micklewright (1992) using a threshold of 75 rubles as the national ‘poverty’ line, estimated that around 31 million people, or 11 percent of the total population of the USSR, were poor by this standard. The proportion living in poverty however varied considerably across the Republics, with over half of those living in Tajikistan having a per capita income of less than 75 rubles compared to just 2 percent in Estonia. Since households in Central Asia tend to be bigger than in the European republics, per capita income may tend to exaggerate differences in living standards between the republics. At the same time differences in prices across the republics are ignored by the single cut off measure of 75 roubles and prices were higher, on average, in Central Asia than in many of the other republics which would imply that living standards were overestimated in the region (Atkinson and Micklewright, 1992). Whatever the case, it appears from Table 3 that it would be untrue to say that poverty was unknown in Central Asia and the Caucasus before the transition.

**Table 3: The proportion of the population of Central Asia and the south Caucasus living in poverty, 1989 to mid 2000s**

	(1) Percent of population with per capita monthly income below 75 Rbs, 1989	Year	(2) Percent of population living below \$2.15 PPP (mid-late 1990s)	Year	(3) Percent of population living below \$2.15 PPP (latest year)
Armenia	14.3	1998	58	2003	43.3
Azerbaijan	33.6			2005	2.0
Georgia	13.0	1997	45	2005	30.4
Kazakhstan	15.5	2001	31	2003	17.2
Kyrgyzstan	32.9	2000	78	2004	51.9
Tajikistan	51.2	1999	91	2004	50.8
Turkmenistan	35.0			1998	49.6
Uzbekistan	43.6			2003	76.7

Source: Column (1) from Table 8.4, Atkinson and Micklewright (1992); Column (2) from Table 1, Alam et al (2005); Column (3) from ILO (2009).

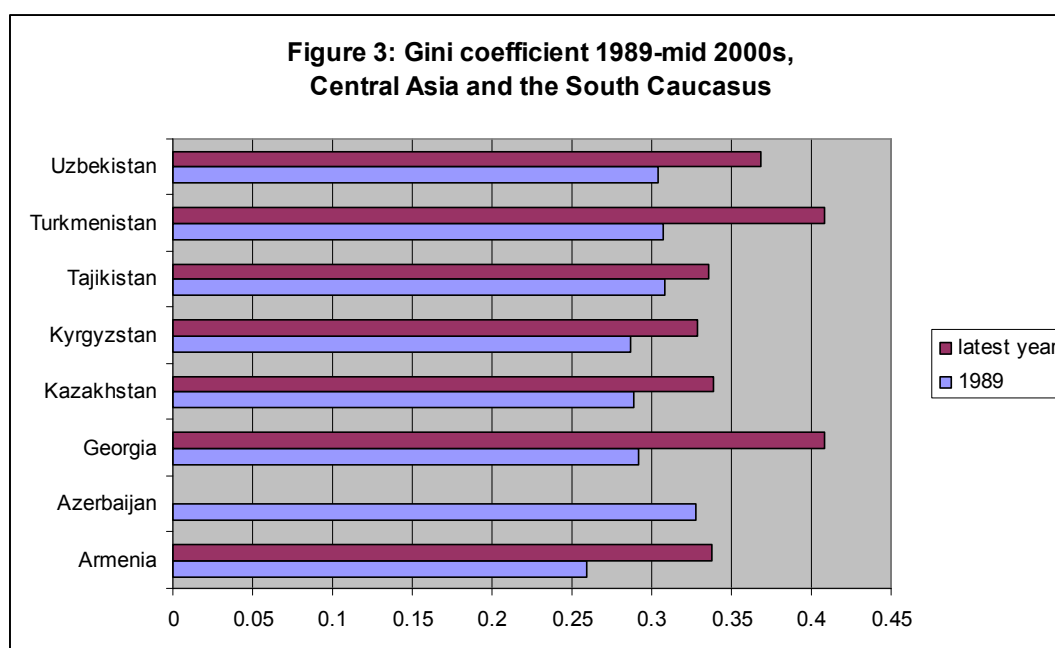


The transition to a market economy may not have originated poverty in the region, but it certainly exacerbated the existing disadvantage of the 'old poor' (pensioners, families with large numbers of children and single parent families), and gave rise to new groups of poor such as the families of workers 'on leave without pay', the long-term unemployed, agricultural workers, young people in search of their first job, and a growing number of refugees, both economic refugees and persons displaced as a result of civil conflict (Falkingham, 2000). By the mid-late 1990s over half the population of Armenia (58%) and three quarters of the population of Kyrgyzstan (78%) were estimated to be living on less than \$2.15 PPP, whilst in Tajikistan over nine in every ten people (91%) were poor by this standard (Table 3). With positive economic growth returning in the late 1990s, poverty rates have fallen somewhat, but remain an issue for concern in many countries. The data for the latest year available show that in 2004 over half the population in Kyrgyzstan and Tajikistan remain living in poverty, with rates lowest in oil rich Azerbaijan (just 2%) and highest in slow reforming Uzbekistan (77%).

### ***Widening inequality***

The rise in poverty has been accompanied by a widening in inequality in both wages and income. In the Soviet Union the overall distribution of income was much more egalitarian than in most market economies (Atkinson and Micklewright, 1992; Milanovic, 1998). This was due to both the higher level of social expenditure – social transfers made up 14 percent of total gross income (USSR, 1988 Family Budget Survey) – and lower wage differentials. Over 96 percent of the work-force were employed by state-owned enterprises (including kolkhozes). Thus, virtually all income, either transfers or wages, was received through the intermediation of the State.

The restructuring of economic activity and greater private sector income, along with the privatisation of state assets and redistribution of wealth and the growth of open unemployment, have resulted in a growing gap between the income of the rich and poor (Falkingham, 2005). Figure 3 highlights the rapid growth in income inequality in all the countries in the region. To put these figures into context, the Gini coefficient for India in 2005 was estimated to be 0.325.



Source: Data for 1989 from Table UI3, Atkinson and Micklewright (1992). Data for latest year (see Table 1 for year) from ILO (2009).

### ***Falling labour force participation and growing unemployment***

Within the Soviet Union there was officially full employment and open unemployment was unknown. Economic restructuring and the transition from public to private ownership of many enterprises led to many firms laying off formerly underemployed workers as keeping an artificially inflated workforce on the wage bill became too expensive. Consistent data on unemployment levels remains hard to find in the region as official data on registered unemployment undercounts the true extent of unemployment; only those workers who qualify for unemployment benefit have an incentive to register and in many countries the qualifying criteria as so tight as to exclude the vast majority of individuals.

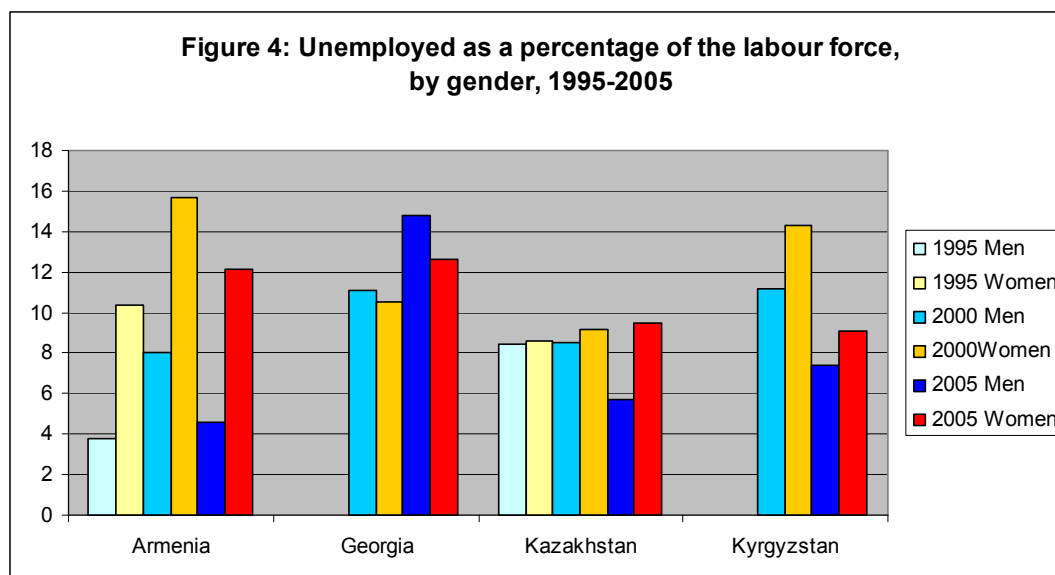
Table 4 below shows unemployment as a percent of the labour force for both men and women over the period 1995-2005. It is notable that unemployment rates are highest in Georgia where there have been several ILO sponsored labour force surveys (and thus reasonable data) and lowest in Uzbekistan where the data rely on officially reported estimates. In most countries in the region, unemployment rose significantly during the

early-mid 1990s, reaching a peak in the late 1990s following the Russian fiscal crisis and has contracted somewhat since then as countries moved back into positive economic growth. For those countries with reliable survey data (Armenia, Georgia, Kazakhstan and Kyrgyzstan) rates remain high at between 7-14%. In all countries, with the exception of Georgia, unemployment rates are higher amongst women than men (Figure 4). In part this reflects the gendered nature of employment during the Soviet period, with women being concentrated in the government sector, particularly health and education both of which have suffered large job losses.

**Table 4: Unemployment as a percentage of the labour force (both sexes) in the countries of Central Asia and the South Caucasus, 1995-2005**

	1995	2000	2005
Armenia	6.7	11.7	8.2
Azerbaijan	0.8	1.2	1.4
Georgia		10.8	13.8
Kazakhstan	10.4	8.1	6.6
Kyrgyzstan		12.5	8.1
Tajikistan	2.0	2.7	2.0
Uzbekistan	0.4	0.4	0.3

Source: Table 10, ILO (2010)



Source: Table 10, ILO (2010)

Historically labour force participation rates for women were very high, especially in comparison with other Asian societies. The Soviet system provided for free child care at most enterprises and there was an extensive network of subsidised kindergarten. Women were expected to work and gender differentials were relatively narrow. Over time labour force participation rates amongst both men and women have fallen, but the decline has been sharper for women, with the result that there are now significant differences between men and women in all countries, with male labour force participation rates being 10-20 percent higher than those amongst females (Table 5).

**Table 5: Labour force participation rates in the countries of Central Asia and the South Caucasus, 2010**

	15-64		65 and over	
	Male	Female	Male	Female
Armenia	82.8	69.2	15.6	8.5
Azerbaijan	71.2	65.1	10.8	9.4
Georgia	78.0	59.4	50.9	37.7
Kazakhstan	80.7	73.3	13.9	9.7
Kyrgyzstan	83.3	59.2	18.8	7.1
Tajikistan	81.6	60.6	15.9	5.8
Turkmenistan	77.6	66.9	8.2	5.0
Uzbekistan	74.5	62.4	18.9	10.9

Source: ILO (2009) Economically Active Population Estimates and Projection 1980-2020.

In 2010, labour force participation rates for men aged 15-64 varied from a low of 71 percent in Azerbaijan to a high of 83 percent in Kyrgyzstan whilst for women of the same age they ranged from 59 in Kyrgyzstan to 73 in neighbouring Kazakhstan. Interestingly, participation rates remain relatively high amongst both men and women aged 65 and over. This is especially the case in Georgia where 51 percent of men and 38 percent of women aged 65 and over are still in the labour force.

## **IV. Trends in pension provision in Central Asia and the South Caucasus, 1990s to 2000s**

As discussed in Section II, all the countries of the FSU enjoyed close to universal coverage during the 1980s. Section III has highlighted that the economic dislocation of the early 1990s, along with privatisation and enterprise restructuring led to the emergence of open unemployment, widening gender differentials in labour force participation rates and rising inequality. As well as increasing the demands on the social protection system through rising poverty, the economic restructuring also had significant consequences for the pension systems in the region. This section examines the key trends in pension provision in Central Asia and the south Caucasus during the last two decades.

### ***Declining coverage and shrinking contribution base***

Pension system coverage during the Soviet period was virtually universal. The economic restructuring of the 1990s resulted in a dramatic decline in both the number of contributors and the level of contributions collected. Tables 4 and 5 in section III above have highlighted the drop in labour force participation rates and the rise in unemployment; both of these trends have reduced the number of contributors. This has been exacerbated by significant out-migration of younger workers in some countries, further reducing the domestic labour force. The change in the structure of employment, with a move away from large state enterprises to small private firms, increasing levels of self-employment and employment in the informal sector has been accompanied by widespread tax evasion (IMF, 2001; World Bank, 2001), affecting both contributors and contributions. Although the majority of Central Asian states still have relatively ‘youthful’ populations due to historically high fertility rates, it is important to note that pension system dependency rates are relatively high – reflecting the low proportion of the working age population who are currently contributing to the state Pension Fund.

Table 6 shows the percentage of the working age population who are active contributors to the state pension system along with the percentage of the population above the legal retirement age who are in receipt of a pension. In contrast to the virtual complete

coverage of the working age population in the Soviet period, even by the mid 1990s coverage had fallen sharply, with rates of just 42 percent in Kyrgyzstan, 44 percent in Kazakhstan and 49.4% in Armenia. Only in Georgia did coverage of the working age population remain reasonably high (72%). By the middle of the last decade, coverage had fallen even further to under a quarter of the working age population in Armenia, Azerbaijan and Georgia and under a third in Kyrgyzstan. However, coverage rates improved between the mid 1990s and 2000s in Kazakhstan. The reasons for this are discussed further in the case study in Section V below.

**Table 6: Active contributors and older people in receipt of state pensions in the countries of Central Asia and the South Caucasus, mid 1990s-mid 2000s**

	% working age population who are active contributors				% of pop above legal retirement age in receipt of pension	
	Year		Year		Year	
Armenia	1995	49.4	2004	24.5	2006	93.1
Azerbaijan	1996	46.0	2003	23.0	2003	97.9
Georgia	1996	72.0	2004	22.7		
Kazakhstan	1997	44.0	2003	61.8	2004	76.0
Kyrgyzstan	1997	42.0	2006	28.9	2005	100.0
Tajikistan					2004	89.6
Uzbekistan	1995	15.0			2005	100.0

Source: data for 1990s from Table 4.15 Palacios and Pallarès-Miralles (2000); data for mid 2000s from Table 21 ILO (2010)

Despite a contraction in the contributory base, the proportion of the population over the legal retirement age in receipt of a pension has remained high. In the mid 2000s, over nine in ten potentially eligible older people were in receipt of a state pension in Armenia and Azerbaijan and 100% in Kyrgyzstan and Uzbekistan. Only in Kazakhstan were old age benefit recipient rates relatively low (76%) and even here they are high compared to other countries in Asia.

### ***Falling public pension expenditure***

During the first years of independence, with increasing numbers of beneficiaries and falling contributors, the system dependency ratios in the region reached very high levels by international standards. In order to cope with the increasing financial pressure, countries introduced steps to contain the rise in spending in a number of different ways. Georgia was one of the first countries to raise the statutory retirement age, introducing

legislation in 1995. As already mentioned, the Kyrgyz government introduced measures to reduce the number of special privileges to try and reduce early retirement. In Kazakhstan and elsewhere, pension benefits were not up-rated in line with prices. Incomplete indexation led to a fall in the real value of benefits, keeping the growth rate of average pensions below the rate of growth in nominal GDP. Finally, growth in pension expenditure was constrained by the accumulation of significant arrears. In the mid 1990s, as shown in Table 7, spending on public pensions as a share of GDP ranged from just 1.7 percent in Georgia in 1996 (reflecting in part the rise in retirement age which came into effect the year before) to 6.4 percent in Kyrgyzstan. These levels are significantly lower than those observed in parts of Central and Eastern Europe during the same time period; spending on public pensions reached 14.4 percent of GDP in Poland in 1995, 13.6 percent in Slovenia and 10.2 percent in Latvia, primarily as a result of the Government trying to maintain replacement rates (Palacios and Pallarès-Miralles, 2000).

**Table 7: Public pension spending as a percentage of GDP in the countries of Central Asia and the South Caucasus, mid 1990s-mid 2000s**

	Year		Year	
Armenia	1996	3.1	2004	2.4
Azerbaijan	1996	2.5	2003	2.7
Georgia	1996	1.7		
Kazakhstan	1997	5.0	2004	2.9
Kyrgyzstan	1997	6.4	2005	4.8
Tajikistan	1996	3.0		
Turkmenistan	1996	2.3		
Uzbekistan	1995	5.3	2005	6.2

Source: data for 1990s from Table 4.16 Palacios and Pallarès-Miralles (2000); data for mid 2000s from Table 26 ILO (2010)

The reforms introduced in the region since the mid 1990s have acted to further constrain public spending. In 2004/5, public pension spending as a share of GDP had actually fallen even further in Armenia, Kazakhstan and Kyrgyzstan, whilst in Uzbekistan, where reform has been slow spending rose to account for 6.2 percent of GDP – a level still not high by international standards.

### ***Rising contribution rates***

One response to high system dependency ratios has been to increase contribution rates. In the initial stages, the cost was largely borne by employers with employee contributions remaining either low or non-existent. By the mid 1990s, employer contributions were around a third of the gross wage bill in Armenia, Georgia and Kyrgyzstan (Table 8). In the countries where pension reform has been most advanced, there has been a rebalancing between employer and employee contributions. In Kyrgyzstan, employee contribution increased to 8 percent, whilst Kazakhstan went further and abolished employer contributions altogether - relying on a 10 percent employee contribution to an individually based fund (see Section V below).

**Table 8: Pension contribution rates as percentage of gross wage in the countries of Central Asia and the South Caucasus, mid 1990s-mid 2000s**

	Mid 1990s		Mid 2000s	
	Employer	Employee	Employer	Employee
Armenia	35.0	1.0	Flat rate	3.0
Azerbaijan			22.0	3.0
Georgia	37.0	1.0		
Kazakhstan			-	10.0
Kyrgyzstan	33.0	2.5	21.0	8.0
Turkmenistan			20.0	1.0
Uzbekistan			31.0	2.5

Source: data for 1990s from Table 4.18 Palacios and Pallarès-Miralles (2000); data for mid 2000s from Table 16 ILO (2010)

### ***Increasing retirement ages***

As already highlighted, another response to increasing system dependency ratios was to increase retirement ages. Normal retirement ages within the Soviet pension system (60 for men and 55 for women) were low by international standards and the numerous opportunities for early retirement meant that the effective average age of retirement was even lower. Moreover people could continue in paid employment whilst drawing a pension. Given the relatively high life expectancy at 60 shown in Table 1 above, the low retirement ages meant that many pensions were payable for 20-25 years.

Since 1991 all the countries in the region, with the exception of Uzbekistan, have introduced reforms raising the age at which people are entitled to a public pension and



tightening the circumstances under which exceptions are allowed. Some countries have gone further than others. For example, in Georgia the retirement age has been raised by five years to 65 for men and 60 for women and there are now *no* special circumstances allowing early retirement. Moreover pensioners above retirement age who are in gainful employment must satisfy an earnings test<sup>4</sup>. However in Azerbaijan extensive elements of the old Soviet system remain; for example, an early pension is payable at age 57 for men (52 for women) with at least 25 years (20 for women) including at least 12.6 years (10 for women) work in unhealthy or arduous conditions. An early pension is also provided for mothers who have raised at least three children or one disabled child from birth to age 8.

Interestingly, following the dissolution of the Soviet Union, the award of Hero Mother was withdrawn in most countries. For example, it was discontinued in Tajikistan in 1996 as part of an effort to reduce fertility. However there have been campaigns to bring it back in some states<sup>5</sup>. In Kazakhstan, mothers of 10 or more children have since 1995 been awarded the Altyn Alka (АЛТЫН АЛКА, "Golden pendant") and mothers of eight or nine children have received the Kumis Alka (Кумис алка, "Silver pendant").

**Table 9: Qualifying age for public old age and social pensions in the countries of Central Asia and the South Caucasus, 2008**

	Old Age Pension		Social Pension	
	Men	Women	Men	Women
Armenia	63	61.5 (raised to 63 in 2011)	65	65
Azerbaijan	62	57	67	62
Georgia	65	60	70	65
Kazakhstan	63	58	63	58
Kyrgyzstan	63	58	63	58
Tajikistan				
Turkmenistan	62	57	62	57
Uzbekistan	60	55	60	55

Source: SSPTW, Asia and the Pacific, 2008

In all the countries of the South Caucasus (Armenia, Azerbaijan and Georgia), the qualifying age for the social pension is several years higher than that for the old age

<sup>4</sup> Given this, it is interesting to note the high rates of labour force participation in Georgia at ages 65 and above in Table 5.

<sup>5</sup> For example, the award was restored in Ukraine in 2004.

pension, whilst in Central Asia there is no distinction in the age at which either pension may be drawn (Table 9). The qualifying conditions for a social pension also vary. In Armenia social (old-age) pensions are paid to men and women at age 65 with less than 5 years covered employment. In Azerbaijan it is payable to non-working citizens who are not eligible for the old-age pension. Although there is a work test, there is no means test, whilst in Georgia the social pension is paid to an individual ‘without other means of support’ implying that the benefit is means-tested. In contrast in Kyrgyzstan, the social assistance allowance (old-age) is paid to all persons not eligible for an old-age pension and there is no work or income test.

***Declining replacement rates, falling benefit levels***

Benefit replacement rates during the Soviet period were high, with most people retiring on a pension two-thirds or higher of their average best earnings. Replacement rates were an early casualty of the declining tax base immediately following independence. Limited comparative historical information is available but as Table 10 shows for those countries where there are data for the mid 1990s, the average values of old age pensions were around a quarter to a third of the average wage.

**Table 10: Replacement rates of public pensions in the countries of Central Asia and the South Caucasus in the mid 1990s (average pension as a share of average wage)**

	Year	Average Replacement Rate (%)
Armenia	1996	24.0
Azerbaijan	1996	29.0
Georgia	1996	36.0
Kazakhstan	1996	31.0

Source: Table 4.19a Palacios and Pallarès-Miralles (2000)

Today the level of public pensions is still a matter of concern, with newspaper articles frequently highlighting the fact that pensions on their own do not afford older people an adequate standard of living. In Azerbaijan, Kazakhstan and Kyrgyzstan, the social pension is paid at a level below the minimum old age pension, meaning that the most vulnerable older people are exposed.

**Table 11: Value in national currency of old age and social pensions in the countries of Central Asia and the South Caucasus, 2008**

	Minimum (or base) old age pension	Social pension	Monthly minimum wage
Armenia	6,800 drams	6,800 drams	
Azerbaijan	75 new manat	45 new manat	60 new manta
Georgia	70 lari	70 lari	
Kazakhstan	7,900 tenge		13,183 tenge
Kyrgyzstan	530 soms	200 soms	
Tajikistan			
Turkmenistan	550,000 manat	550,000 manat	
Uzbekistan	50% min wage		18,630 soms

Source: SSPTW, Asia and the Pacific, 2008

***Reforming pension systems: moving away from PAYG***

Given falling contributions and constrained government expenditure, several countries in Central Asia and the South Caucasus have reformed the funding basis of their pension system. The majority of countries in the region continue to provide retirees with some percentage of their former salary per year of contribution. In Georgia and Tajikistan, where pension fund revenues are very low, benefits are the same for the majority of people and there is now very little differentiation according to past salaries. Kyrgyzstan has adopted a variant of a PAYG system called ‘notional accounts’ in which each contribution made by individual workers is tracked in an individual account with a hypothetical interest credits to contributions. At retirement the balance in this notional account is converted into a pension. However benefits are still paid out of current contributions and hence the system retains its PAYG element. At present only Kazakhstan has moved away from a PAYG funding basis. Workers’ contributions are credited to individual savings accounts and invested in a range of financial assets rather than being used to fund current pension obligations. The contributions plus interest earned on each account will be used to provide a pension when the first wave of contributors retire.

Box 1: Types of Pension Schemes in Central Asia and the South Caucasus

<p><b>Conventional PAYG</b></p> <p>Today's contribution fund today's benefits</p> <p>Pension based on a defined benefit</p>	<p>Armenia (to 2011), Azerbaijan, Georgia, Tajikistan, Turkmenistan, Uzbekistan</p>
<p><b>Notional accounts</b></p> <p>Today's contribution fund today's benefits</p> <p>Pension based on a defined contribution</p>	<p>Kyrgyzstan</p>
<p><b>Fully funded</b></p> <p>Individual's contribution fund individual's benefits</p> <p>Pension based on a defined contribution</p>	<p>Kazakhstan</p> <p>Armenia (from 2011)</p>

## V. Case studies

All the countries in the region have either undertaken or are in the process of planning pension reform. This section draws on four case studies to examine the impact of the reforms, drawing out the implications for the well-being of older people of moving away from the Soviet old-age pension system. The four case studies chosen represent differences in both the timing and extent of reforms. **Kyrgyzstan** was an early reformer, adopting notional accounts in 1997. Although in theory the reform looked radical in setting up individual accounts, in practice the reforms introduced were quite modest in nature and a minimum contributory pension still linked to employment remains.

**Kazakhstan** also reformed its system in the mid 1990s, but in comparison with Kyrgyzstan its reforms were much more radical in nature, abandoning the old PAYG Soviet system with defined benefits and switching to a fully funded defined contribution system. The first wave of reforms in **Armenia** took place somewhat later than the two Central Asian republics but the country is now in the process of adopting a second wave of legislation, with a proposed move to a fully funded model from 2011. Finally pension reform is only now been discussed in **Tajikistan**. The system remains largely unchanged

except for some minor changes to eligibility for special privileges. Benefits have only been up-rated periodically with the result that the real value of benefits has fallen, raising the question of whether the system now provides adequate income security and the relative role of family/community support networks versus the state in maintaining well-being in later life. In discussing the reforms particular attention is paid to the issues of universality and minimum income guarantee and the effects on people's well-being.

### **Kazakhstan**

As discussed in general above, when Kazakhstan declared its independence from the former Soviet Union in 1991, the country saw deteriorating economic conditions, which directly impacted on the living conditions of the population for the best part of the 1990s (Becker and Urzhumova, 1998). For example, in 1992, consumer price inflation exceeded 3,000% and the country's GDP fell by 11.3% (Seitenova and Becker, 2004). Between 1994 and 1997, the Pension Fund deficit increased from 12% to 53% of the country's GDP, while the rapid increase of unemployment meant that by 1998 there were 83 pensioners and other benefit recipients for every 100 contributors (Seitenova and Becker, 2004, Fig 1 and 4).

The declining performance of the pension system resulted in June 1997 in the emergency introduction of the "Law on Pension Provision in the Republic of Kazakhstan", which transformed the PAYG system to a fully-funded, defined-contribution system. All accruals under the old system were frozen and workers of all ages were moved immediately into a new system of mandatory individual accounts. Retirement ages were raised from their Soviet-era levels from 60 to 63 for men and from 55 to 58 for women. During a transitional period, a residual PAYG pillar remains, paying benefits to existing pensioners and people with accrued rights under the pre-reform system entering retirement up to around 2038 (40 years from the reform). This is funded through a tax on employers. This was initially set at 15 percent with the expectation that it would be

gradually reduced over time as existing obligations decreased<sup>6</sup>. For future pensioners, from 1998 onwards a new mandatory, defined-contribution scheme was introduced, funded through 10% of the employees' wages. All workers are mandated to join the new scheme. During the transition period, retirees will receive benefits from the old PAYG pillar based on the number of years of contributions and also receive benefits from the new funded pillar for the relatively small percentage of their working career during which they contributed to the new funded scheme.

The transition to a fully-funded, defined-contribution pension system aimed, on the one hand, to provide social protection to the majority of the working population through a sustainable mechanism, and to facilitate the growth of the capital market through the management of pension investments. For example, the World Bank projected that between 2004 and 2025, the country's pension expenditure would increase from 5% to 6% (Chawla, M. et al, 2007, Fig. 4.6). In addition to encouraging the wide participation of employees, the government of Kazakhstan was assisted by the Asian Development Bank in developing more reliable mechanisms for the collection of contributions and tackling significant institutional obstacles to the transition to the new pension system, such as the computerization of social insurance records for the country's millions of contributors. Finally, the transition was supported by significant investment in public information campaigns on the new pension system by the Asian Development Bank, the United States Agency for International Development and the World Bank (Andrews, 2001).

There are some encouraging signs regarding the 'success' of the Kazakh pension reforms. In contrast to other countries in the region, Table 6 above shows that coverage rates in terms of the working age population who are contributing to the state pension scheme have increased, from 44% in 1997 to 62% in 2003 – the highest rate in the region. However the picture in terms of coverage of older people i.e. proportion receiving a benefit, is less optimistic. Only, three-quarters of the population aged above pension age

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<sup>6</sup> The Social Insurance tax was actually raised to 26% in 1999 and then reduced to 21% in July 2001. This rate was maintained until January 2004 when a new social tax was introduced, ranging from 13% to 5%. In 2009 a single social tax rate of 11% of payroll was introduced. (Seitenova and O'Brien, 2010).

were in receipt of a pension in 2004. However the introduction of a ‘demogrant’ or ‘citizens pension’ in 2005 is expected to have boosted this number.

The initial reforms enacted in 1998 included no minimum guarantee or floor regarding the level of retirement income a worker could expect to attain from their new individual account. This was in contrast to Chile, where return guarantees and minimum annuity levels were built into the system from the start. However, in June 2005 the President of Kazakhstan signed in law a number of revisions including provision for a citizen’s pension that is to be provided to all persons reaching retirement age regardless of work history or contributions to the pension system. When introduced, the level of the new basic pension was set at 3,000 tenge per month, equivalent to around 40 percent of subsistence minimum, with a target of being increased to 75% of the subsistence minimum in the future (Hinz, Zviniene and Vilamovska, 2005). However as of March 2010, the citizen’s pension remained payable at 40% of the subsistence minimum (Seitenova and O’Brien, 2010).

Although there is little doubt that the PAYG system before the 1997 reform was unsustainable, the transition to a fully-funded defined-contribution system should be regarded with due caution. In particular it is far from clear that the 10% contribution rate will yield sufficient funds to purchase a pension that will provide an adequate standard of living or maintain replacement rates. According to estimates by the World Bank, additional voluntary contributions and intra-family transfers will be required in order to reach the intended replacement rate of 60% of prior earnings, which was the government’s initial target with the reform (Andrews, 2001).

The move from a defined-benefit to a defined contribution system means that workers with interrupted employment histories or low lifetime earnings, many of whom are women, risk facing vulnerability in later life as the ‘insurance’ element of the pension system has been removed. In addition, the 5-year gap in retirement ages can further exacerbate women’s disadvantageous position well into later life. Although the new citizens pension introduced in 2005 should provide a safety net there are issues over its

adequacy and there is a risk that people with an entitlement to a low DC pension may find themselves excluded –the so-called ‘private pensions trap’.

Ultimately pension returns will be determined by the rate of return to pension assets, and the new pension system in theory allows for additional voluntary contributions on top of first- and second-tier pension protection; however the implications for gender inequity should not be underestimated.

### **Kyrgyzstan**

Following independence, Kyrgyzstan experienced similar budgetary problems to its neighbouring states. Discussions regarding the reform of the pension system began as early as 1994, with the country receiving significant international technical assistance under an EUTACIS grant and support from the World Bank. In 1996-7 Kyrgyzstan adopted two major laws reforming the pension system, raising the retirement age and introducing notional accounts, whilst maintaining a minimum contributory based pension.

Under the new system the individual pension is divided into two parts: a base pension and an insured pension. The base pension is a flat rate benefit paid to all retirees with complete contribution histories (25/20 years for men/women), with the level guaranteed and set by the government. The insured pension is then paid on top of the base pension and in theory is calculated as the amount accumulated in the individual’s ‘notional account’ multiplied by an actuarial coefficient. This coefficient is set annually by the government and reflects the age of retirement and average life expectancy at that age. Notional accounts, however, require individual record-keeping, a system of which has only been introduced relatively recently. Thus prior to the establishment of the individual record keeping system, the insured part of the pension is calculated as 1% times the number of years of service multiplied by the monthly wage, with a cap of 15 times the minimum wage.



The reforms have had limited success in reducing the pension fund deficit. Unlike in Kazakhstan where employer contributions were reduced to 15% to pay for the transitional pillar and with employees bearing entire the burden of a 10% contribution rate, in Kyrgyzstan in 2004 the contribution rate to the State Pension Fund was 29%, with 21% paid by the employer (3% to base and 18% to notional account) and 8% by employee (3% to base and 5% to notional account) (Becker, Seitenova and Urzhumova, 2005). The high tax burden on employers has exacerbated already pervasive tax evasion, and as a result coverage has fallen. In 1997 42% of working age population were estimated to be contributing; by 2006 this had fallen to just 29% (Table 6 above).

**Table 12 Percentage of households with persons of normal pension age, average amount of pension, Kyrgyzstan 2008.**

Kyrgyzstan	%	% receiving a pension	Average amount of pension
HH with No pensioner	75.0	23.0	11713
HH with 1 pensioner	18.7	100.0	16945
HH with 2 pensioners	5.3	100.0	30603
HH with 3 pensioners	0.0	100.0	54989

Source: Authors' own analysis Kyrgyzstan HBS 2008.

Note: total number of households = 4995, per capita average pension per household with a pensioner 16597.

The first pillar guaranteed contributory minimum pension is supported by a zero pillar social pension. Together these mean that according to ILO estimates presented in Table 6 above, 100 percent of older people are in receipt of pension – either old-age or social pension. This finding is supported by the authors own recent analysis of the 2008 Kyrgyzstan Household Budget Survey, conducted in 2008. The results in Table 12 are presented according to the number of people of normal pension age in the household. Interestingly three-quarters of all Kyrgyz households do not contain a person over 'retirement age', yet nearly a quarter (23%) of such households reported being in receipt of income from an old age pension – reflecting the continuing persistence of early retirement of some categories of workers. All households containing a person of pension age report being in receipt of income from a pension and the average income from this source rises according to the number of pensioners. Overall, the average per capita

pension per household with a pensioner was 16,597 per year. In 2008, the \$2.15 PPP was equivalent to 1,036 soms a month or 12,604 a year. Thus the average pension is just sufficient to lift an older person out of poverty.

### **Armenia**

Armenia has been slower to implement reform than its two Central Asian colleagues. Although there have been increases in the pension age to 63, the pension system remains funded on a PAYG basis with the pension formula based on length of service but not salary levels<sup>7</sup>. Benefits have been adjusted on an ad hoc basis according to available resources. In recognition of the low value of the pensions, the Government increased all pensions by 60% on 1<sup>st</sup> January 2008 and introduced an annual schedule of increases such that the average pension would reach the level of the minimum consumption basket by 2012 (USAID, 2009).

As is the case elsewhere, the pension system has come under pressure from a declining revenue base. According to ILO estimates, in 1995 just under half (49%) of the working age population was contributing to the pension scheme. By 2004, this had fallen to under a quarter (24.5%) (Table 6 above). Research carried out by the GoA in conjunction with USAID as part of the Pension Working Group estimates that only 32% of the economically active population makes social contributions. Three key groups are excluded. First, the agricultural sector which accounts for around half of the economically active population are not required by law to contribute to the social security system. This means that a significant proportion of workers are no longer accruing service and over time an increasing number will receive only a social pension. Second, there is a growing informal sector whose workers are not covered. Finally, migrant workers are also not accruing service; it is estimated that around a fifth of all Armenian households have at least one member involved in migrant labour (USAID, 2009). This drop in coverage presents a challenge both for the current pension system in terms of its revenue base and also for the future welfare of these workers in their retirement.

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<sup>7</sup> One of the main elements of the 2002 law, implemented in 2003 was to remove the earnings related element.

It is recognised that the current pension system is unsustainable and reforms have been legislated to switch fully funded model from 2014. For those with at least 10 years of social tax payments, a first pillar ‘Employment Pension’ will be available comprised of two parts: 1) a flat-rate Basic (or minimum) Pension and 2) an additional element reflecting years of contributions prior to the reform. The Employment Pension will be financed by a 26% contribution, split between employer and employee. The new second pillar will consist of Individual Funded Pension Accounts financed by a 10% contribution (5% worker and 5% state up to a ceiling after which the contribution from workers is tapered, so that high income workers pay the full 10%). A zero pillar ‘Social Pension’ for those without 10 years of social tax payments will be set at 80% of the Basic Pension. Thus the Armenian system will contain elements of both the Kazakh and Kyrgyz reforms and combine both PAYG and funded elements as well as a social safety net.

What will be the implications for older people? The ILO estimates that 93% of current older people in Armenia are in receipt of pension. Again these estimates are confirmed by our own analysis of the 2008 Armenia ILCS (Table 13). Overall, the average per capita pension per household with a pensioner was 26,212 per month. In 2008, the \$2.15 PPP international severe poverty line was equivalent to 12,250 soms a month. Thus the average pension was just sufficient to lift an older person out of severe poverty. However the minimum social pension, set at 6,800 in 2008 was not.

**Table 13 Percentage of households with persons of normal pension age, average amount of pension, Armenia 2008.**

ARMENIA	%	% receiving a pension	Average amount of pension
HH with No pensioner	61.0	20.8	21204
HH with 1 pensioner	27.9	97.5	26734.8
HH with 2 pensioners	11.0	99.2	49612.5
HH with 3 pensioners	0.1	100.0	70310.5
	100%		

Source: Authors’ own analysis Armenia ILCS 2008.

Note: total number of hh 7872, per capita average pension per household with a pensioner 26212.

The proposed reforms may have the effect of reducing the fiscal burden and improving the sustainability of the system. However they will not impact on the significant proportion of the population who are excluded from making social contributions – agricultural workers, informal workers etc - who will be increasingly reliant on the social pension. Thus the value at which this is paid will be critical in ensuring their welfare. Furthermore, as discussed above in relation to the Kazakh reforms, increasing the link between work history and pensions also has an important gender dimension which needs to be considered.

Finally it is important to also note some of the concerns raised by participants in the focus group discussions carried out as part of the preparation for the reforms (Dallakyan, Hakobyan and Daniellan, 2008). The results demonstrated that there was little understanding of how the current system operates and most people were not aware of the upcoming reforms. There were mixed views on the underlying reasons for the expansion of jobs without formal labour contracts. Employers thought that people did not want to work in the formal sector in order to have higher take home pay, whilst employees believed that employers did not want to give them contracts to avoid pensions contributions to the government. Interestingly in the context of the move to individual accounts, some people voiced concerns against saving accounts because many people had lost their savings after the collapse of the Soviet Union. People also questioned whether the government had the financial aptitude necessary to administer pension savings efficiently and lack of trust in the Government was identified as a major barrier to implementing the reforms efficiently. Time will let whether these concerns were warranted.

### **Tajikistan – the role of public versus private transfers**

At independence, Tajikistan inherited a comprehensive system of social protection, including social assistance (cash compensation payments, assistance in kind and other non-contributory benefits and services), social insurance type benefits (pensions, unemployment and family benefits), and social care (residential care and social services). Since 1991, although the system has come under increasing fiscal pressure, entitlement to

a social insurance old age pension remains largely unchanged<sup>8</sup>, and depends upon average earnings over a specified number of years and the length of service. Men with a full employment record of 25 years and women with 20 years are entitled to receive a full pension, equivalent to 55% of average earnings over the two years prior to retirement or of the average of any continuous period of five years during working life (Gassmann, 2004). There has been a gradual increase in the age at which older people can draw their pension and from July 2001 this was raised to 63 for men and 58 for women, up from 60 and 55 respectively during the Soviet period. Opposition parties are now campaigning for a return to the soviet-era retirement age or even lower (IWPR, 2009).

**Table 14 Percentage of older people living in a household receiving support from various sources and average amount amongst those who receive it, Tajikistan 2007.**

	<i>Percentage of people of pension age</i>	<b>Mean monthly amount, amongst those who receive it (hholds with pensioners only)</b>
<i>Public transfers</i>		
Old age pension	84.9	56.0
Disability pension	14.8	25.6
Survivor pension	1.1	17.2
<i>Private Transfers</i>		
Money from family in Tajikistan	7.5	165.1
Money from family abroad	5.1	160.5
Money from NGO, churches	1.4	291.8
<i>Remittances</i>		
Money from hh members from abroad	21.1	783.1

Source: Falkingham at al (forthcoming) analysis of TLSS 2007.

Note: total number of observations = 1901

Entitlement is however only half of the story, with indexation and the value of benefits being the other. Legally, pensions are meant to be regularly adjusted to overall price increases in the country, but in practice such adjustments have been rarely made due to limited funds and the average value of social insurance pensions has fallen considerably, leaving many older people dependent on other benefits or on private transfers from relatives, neighbours and community groups. Table 14 shows both the percentage of older people living in households in receipt of various public and private transfers as well as the average (mean) value of the transfer for those households who receive it. Several

<sup>8</sup> There has been some rationalisation of the number of exceptions and special categories for pensions.

things stand out. Firstly, the majority (85%) of older people are in receipt of an old age pension. However, the average value of this pension is just 56 somoni (equivalent to around \$30 PPP) a month. On its own the old age pension would not be sufficient to provide for a minimum subsistence standard of living.

Secondly, Table 14 also shows that around a fifth of pensioners live in households receiving remittances from household members living abroad and around one in ten receive money from other family living in Tajikistan or abroad. Although a minority of older people receive private transfers and remittances, where they do, these can make a significant difference to household income with the average value of remittances from household members abroad being 783 Somoni (equivalent to around \$420 PPP) per month.

As a result of the political and economic disruption, Tajikistan has experienced almost unprecedented levels of population mobility. In common with other ex-Soviet republics, Tajikistan was affected by a huge wave of out-migration of the non-titular population in the years immediately preceding and subsequent to independence. The civil conflict in the early post-independence years led to the internal displacement of around 500,000-600,000 people, while an estimated 70,000-100,000 fled to Afghanistan (Foroughi 2002), although it is thought that the overwhelming majority of these groups had returned to their permanent place of residence by 1997 (Rowland 2005). Since the mid-1990s, there has been a rapid growth in 'labour migration' for economic reasons and Tajikistan is now thought to have one of the highest rates of per-capita labour emigration in the world (Erich 2006). A survey carried out by in 2003 showed that 26% of all households had at least one household member working abroad, with the vast majority of migrants being men working in Russia (Olimova and Bosc, 2003).

In recent years, remittances have come to constitute an important part of the social safety net in Tajikistan (World Bank, 2005). Murghal (2007) estimates that remittances sent by absent international migrants to families represented over a quarter of Tajikistan's GDP in 2004. More recent data suggests that remittances had grown to account for 50% of

GDP in 2008 (Ratha, Mohapatra and Silwal, 2010), putting Tajikistan at the top of the world league table, followed by Tonga (38%) and Moldova (31%). Understanding the relative roles of the state (in terms of public transfers) versus the family and community in alleviating pensioner poverty is, therefore, particularly pertinent given the recent negative impact of the global financial crisis on the flow of remittances.

**Table 15 Percentage of pensioners living in income poverty (poverty line 139 somoni,  $\theta=0.75$ ), before and after transfers.**

	<i>A</i> (before all transfers)	<i>B</i> (A + remittances)	<i>C</i> (B + private transfers)	<i>D</i> (C + public transfers)
Lone pensioner	67.5	60.5	53.9	34.2
Two person, pensioner hh	68.7	63.9	52.5	43.7
Pensioner + working age adult	68.8	57.6	48.7	43.5
Pensioner + 2 or more WAA	46.9	35.7	31.5	26.6
Pensioner + WAA + 1-2 children	51.5	41.3	40.8	35.9
Pensioner + WAA + 3-4 children	56.4	48.7	48.1	43.5
Pensioner + WAA + 5+ children	52.4	38.7	38.1	35.7
Pensioner + children	83.6	35.3	32.7	26.4
All individuals (whole pop)	55.6	44.1	42.5	37.3

Source: Falkingham et al (forthcoming) analysis of TLSS 2007.

Falkingham et al (forthcoming) have explored the relative role of public and private transfers in keeping older people out of poverty in Tajikistan. Column A in Table 15 shows the percentage of older people living in households with adult equivalent incomes below the absolute poverty line of 139 somoni, *prior* to the receipt of remittances from household members abroad, other private transfers and all public transfers including the pension. The table distinguishes between older people living in different household types. Before transfers, over two-thirds of lone pensioners and pensioner couple households would be living in income poverty compared with just over a half of the population in general. Most strikingly, however, 83.6% of households with pensioners and children but no working age adult would be poor. Column B shows the impact on poverty rates of receiving remittances. There is a significant drop in poverty for all groups, with the reduction being greatest for households containing pensioners and children only, and least marked for one pensioners and pensioner couples. This serves to highlight the fact

that remittances from household members working abroad tend to flow to households containing their children; if grandparents are co-resident with these children they also benefit, but if they live in a separate household (i.e. alone or in a couple only) they are less likely to benefit.

Column C in Table 15, then illustrates the impact of other private transfers. Again poverty rates fall for all groups. Here however it is the lone and couple pensioner households who benefit most with a 7-11 percentage point reduction in poverty rates. Finally column D shows the impact of public transfer. The impact of these are most marked for lone pensioners.

The magnitude of the reduction in headcount poverty rate is summarised in Table 16. In virtually all cases, receipt of private transfers – especially remittances - results in a reduction in poverty of greater magnitude than that resulting from receipt of public transfers, reflecting their higher average value. For lone pensioners and couple pensioners, however, it is the *combination* of both public and private transfers that results in marked falls in poverty, highlighting the fact that many of these households rely on both types of transfers and loss of one or other would tip pensioners back into poverty.

**Table 16: Change in poverty rate of older people after receipt of transfers**

	B-A After <b>remittances</b>	C-B After <b>private</b> transfers	D-C After <b>public</b> transfers
Lone pensioner	-7	-6.6	<b>-19.7</b>
Two person, pensioner hh	-4.8	<b>-11.4</b>	-8.8
Pensioner + working age adult	-11.2	-8.9	-5.2
Pensioner + 2 or more WAA	-11.2	-4.2	-4.9
Pensioner + WAA + 1-2 children	-10.2	-0.5	-4.9
Pensioner + WAA + 3-4 children	-7.7	-0.6	-4.6
Pensioner + WAA + 5+ children	-13.7	-0.6	-2.4
Pensioner + children	<b>-48.3</b>	-2.6	-6.3
<i>All individuals (whole pop)</i>	-11.5	-1.6	-5.2

Source: Falkingham et al (forthcoming) analysis of TLSS 2007.



## **VI. Policy implications and conclusions**

The countries of Central Asia and the South Caucasus inherited extensive and generous systems of social welfare that rapidly became unsustainable. Since 1991 the system of social protection for older people has been transformed in all countries in the region. Even in countries where there has been *no* reform of the pension system itself, the change in the real value of benefits has meant that the system has moved from being one where replacement rates were high and the standard of living in old age was guaranteed to one where many older people are living on or below the subsistence minimum.

As we have seen in Section III, key trends across the last two decades include:

- Declining coverage and a shrinking contribution base
- Falling public pension expenditure
- Rising contribution rates
- Increasing retirement ages
- Declining replacement rates and falling benefit rates
- Move away from defined benefit PAUG to defined contribution funded systems

The reduction in coverage as some groups such as agricultural and informal workers opt out of the formal pension system to avoid the high associated payroll taxes, marks a move away from the universal principles of the Soviet system. Accompanying this is the risk of increasing exclusion in later life, with greater reliance on minimum pensions and targeted social assistance, or on the family. In many countries, remittances now form a growing part of household income. However the sustainability of this source of income in the longer term remains questionable.

The move to defined contribution systems increases older people's reliance on financial markets in time of asset price volatility in a region that remains underdeveloped in terms of financial instruments and where there is low financial capability amongst population. In a survey in Armenia in 2008 only 3% of respondents knew what an asset manager did (Dallakyan, Hakobyan and Daniellan, 2009)

One of the most pressing concerns for the future remains the issue of adequacy for current and future pensioners. In contrast to many countries in developing countries with similar levels of per capita GDP, most countries in this region have a zero pillar social pension, and the first pillar often also incorporates a base or minimum pension. The critical question is the *level* at which these are set. Our analysis shows that for those who qualify for a contributory pension, the average level of benefits is just above the subsistence minimum. However for those on a social pension, benefits are insufficient to lift them above this level. Thus although there are well developed social protection systems, it is important not to be complacent. Rather the analysis suggests more research is needed – both to understanding the reasons behind the widening coverage gap (at a time when coverage is expanding elsewhere) and to assess the role played by social pensions and how they interact with the contributory system. Unlike elsewhere, the need for social pensions has grown out of the contraction of the formal contributory system. Many people have accrued contributions but whether these will be sufficient to provide an adequate income in old age remains to be seen.

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