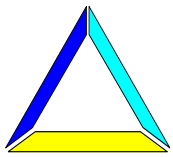
Institute for Economic Research and Policy Consulting in Ukraine
German Advisory Group on Economic Reform

Reytarska 8/5-A, 01034 Kyiv, Tel. (+38044) 278-6342, 278-6360, Fax 278-6336
E-mail: institute@ier.kiev.ua, http://www.ier.kiev.ua



V9

The pension system derailed: Proposals how to get back on the reform track

Executive summary

Recent sharp administrative pension increases, especially of the minimum pensions paid through the PAYG pension system, derailed Ukraine's ambitious pension reform. Pension hikes were not supported by economic or revenue growth. Consequently the PAYG pension fund accumulated large structural deficits. The precarious situation requires urging for stabilization measures. In our view the steps foreseen in the Decree #525 of Cabinet of Ministers will not be not sufficient and more radical measures are required. Already planned further increases of pension fund expenditures should be stopped immediately and expenditures should be cut. Improvements on the revenue side of the PAYG pension fund must start with broadening the contribution base, as raising the already prohibitively high compulsory pension contribution rate is not a viable option. The emergency repairs require a rebalancing between different occupational, social and tax groups, so that fair participation on the pension payment side is matched by a fair distribution of contributions. However, all proposed measures to reduce expenditures and to broaden the tax base will not immediately reduce the pension fund deficit to zero. Hence, the government will need to cover the deficits. The sustainability of the pension system will largely depend on the termination of existing disincentives to contribute to the pension fund.

Contents

1. Introduction
2. Pension increases and the financial destabilization of the pension fund
   2.1. Disproportionate increases of social expenditures
   2.2. Difficulties on the revenue side
3. Unbalanced contribution base of the PAYG system
4. Disincentives to participate in Standard Compulsory Social Insurance
5. Compulsory contributions to the PAYG: a good investment?
6. Policy recommendations for financial stabilization of the PAYG pension fund
7. Conclusions

1 Introduction

In 2003 Ukraine embarked on a comprehensive pension reform introducing a three-pillar pension system. This reform package followed the lead of more advanced transition countries and international best practice. The reform was designed to put the pension system on sustainable financial foundations. A stable mandatory first pillar in the form of a Pay As You Go (PAYG) pension was to be combined with an individually funded mandatory second pillar and a voluntary (private) third pillar outside the state pension system. The third pillar went into operation in 2005, while the introduction of the second pillar was postponed for the time being until 2007 or later.

However, in the forefield of the presidential elections in 2004, the Ukrainian government discovered the voting power of 12.2 m Ukrainian pensioners. Ukrainian society often associates the life of pensioners with a life in misery. Hence the government declared to fight poverty via the pension system. Since then several administrative PAYG pension increases followed, especially the minimum pensions rose sharply. Within a year minimum pensions more than doubled, increasing from UAH 102.80 on January 1, 2004 to UAH 284.60 in September of the same year. Successive governments have continued, although at a slower pace, the policy of administrative pension increases.

The past pension hikes were not supported by economic development, causing substantial economy wide distortions while the PAYG pension fund went into large deficit. The current imbalances of the PAYG pension system have effectively terminated the ambitious pension reform of 2003. The Cabinet of Ministers (CMU) acknowledged in December 2005 with the Resolution #525 the need for action and named some steps. However, in our view more urgent and radical measures are necessary to stabilize the pension fund and to prevent more serious spillover effects into fiscal and macroeconomic stability. Only then Ukraine could return to the sustainable but abandoned pension reform path initiated in 2003.

2 Pension increases and the financial destabilization of the pension fund

2.1 Disproportionate increases of social expenditures

The past increases of the pensions paid from the PAYG–pillar of the mandatory state pension insurance have outpaced GDP and wage growth in real terms. From 2003 - the year of the passage of the pension reform bill - until 2005, Ukraine's real GDP increased by 15 % while the minimum wage increased by almost 30% and the average wage by 78%. However, the real minimum pension increased by almost 190% (Table 1).

Table 1
Indices of real economic indicators (2003=100)

	GDP	Average wage	Minimum pension (aop)*	Minimum wage (aop)
2003	100	100	100.00	100
2004	112	117	170.29	106
2005	115	178	291.15	130
2006E	118	232	289.42	141

Source: Derzhkomstat, own calculations

Pension payments nowadays account for 43% of total social transfer payments and 21% of total household income. The expenditures of the pension fund in 2005 exceeded UAH 65 bn or roughly 15% of GDP.[1] Due to forecast sluggish growth in 2006, higher inflation and plans of more moderate nominal pension increases, pension fund expenditures are expected to amount to UAH 70.2 bn in 2006, i.e. to slightly decline to the still very high level of 14% of GDP (Resolution #309 from March 2006, of the CMU).

[1] This share is among the highest in the world.

2.2 Difficulties on the revenue side

In 2005 the pension fund collected UAH 39.6 bn from individuals and enterprises working under the standard social insurance scheme with a 34.3% compulsory pension insurance deducted from the employers gross wage (Table 2).[2]

The contributions from individuals working under the schemes of simplified taxation and the fixed agricultural tax (FAT) accounted for UAH 400 m and UAH 800 m respectively. Furthermore the PAYG pension fund received transfers from both the compulsory unemployment insurance fund and compulsory work accident insurance in the range of UAH 100 m each. Altogether the contributions total UAH 41 bn. The remaining pension fund revenues of UAH 8.2 bn stem from central fiscal transfers (UAH 6.7 bn), i.e. taxes,[3] and other sources.

Table 2
Pension Fund (PAYG) Budget (UAH bn)

	2005, plan	2006, plan
Revenues	**49.2**	**62.9**
Own revenues	41.6	50.6
Compulsory contributions of enterprises, institutions and organizations	37.2	45.4
Compulsory contributions of citizens	2.4	3.0
Compulsory contributions of payers, working in agriculture	0.8	0.6
Compulsory contributions from individuals working on simplified tax system	0.4	0.6
Central fiscal transfer (excl. central fiscal transfer for deficit financing)	6.7	9.7
From this, for the compensation to the Pension Fund of the losses from usage of special contribution rate by payers of FAT	1.2	1.7
Central fiscal transfer paid from special revenues received in the form of different special duties	3.6	4.6
Duty on currency exchange operations	2.1	2.6
Duty on sale of automobiles	0.6	0.8
Duty on purchase-sale of real estate	0.3	0.3
Duty on mobile services	0.6	0.8
Central fiscal transfer paid from other sources (e.g. taxes)	3.1	5.1
Funds of the Fund of compulsory state insurance in case of unemployment	0.1	0.2
Funds of the Fund of compulsory state insurance in case of working accidence	0.1	0.1
Expenditures	**65.5**	**70.2**
Expenditures at the expense of own revenues	59.9	62.0
Pension benefits to individuals receiving pensions according to the Law On Compulsory State Pension Insurance	56.5	59.3
Pension benefits to individuals receiving pensions according to other laws but at the level not exceeding the size of working-age pension	0.7	0.8
Additional payments to disabled veterans	0.2	0.3
Administrative costs	0.7	0.9
Expenditures at the central fiscal transfers	5.3	7.9
Pension benefits to lower ranked military service	0.4	0.4
Pension benefits, additional payments to pensions set by different state pension programs	3.0	4.6
Deficit	**-16.3**	**-7.3**

Source: Resolutions of the CMU #426 from June 8, 2005 (with amendments from February 1, 2006) and #309 from March 15, 2006.

[2] In 2006 the total pension contribution is set at 33.8%.

[3] The central fiscal transfers are financed through various taxes, such as the pension fund taxes on foreign exchange operations, car's sale, cellular services, etc. For an analysis of the distorting nature of the pension fund tax see: The pension funds tax on purchases of non-cash foreign currency: Time to go. IER policy paper V7.

The remaining gap between revenues and expenditures - the pension fund deficit - equaled UAH 16.3 bn in 2005. For 2006 the deficit is planned to reach just UAH 7.3 bn. The deficits of the pension fund need to be covered by governmental transfers. The central government financed share reached in 2005 about 35% of total pension fund expenditures. In 2004 and 2005 the pension fund deficit was largely covered through privatization receipts.

However, in 2006 and the following years additional financing needs to be raised either through taxes or higher governmental borrowing.

The significant size of the deficit will prevent the start of the second pillar of the 2003 pension reform, the individual accumulation pension system, because a necessary precondition for this reform step is the balance of the PAYG pension fund according to international accounting standards.

3 Unbalanced contribution base of the PAYG system

The most important sources of own revenues of the pension fund are compulsory pension contributions by employees. Under the standard scheme, 33.8% of the gross wage are deducted and transferred to the pension fund. The contribution rates to the pension fund under this scheme would start at present with monthly deductions of UAH 118 from the minimum wage (UAH 350).

The second largest share of contributions is paid by employees working in agriculture under the so called fixed agricultural tax (FAT). For 2005 and 2006 pension contribution from payers of the FAT was fixed by Law at the level of 20% of full pension contribution, and each following year the contributions from payers of FAT will increase by 20 percentage points annually until it reaches the regular contribution rate. At the moment the Pension Fund receives special central fiscal transfers to compensate for the losses resulting from this reduced rate of contribution from agriculture (set at 6.46% in 2006).

The third most important source of own fund revenues are contributions from individuals working under the simplified taxation scheme. However, the legislation as regards contributions to the pension fund is contradictory (see T11)[4]. Therefore, payers of the simplified tax contribute to the Pension Fund 42% of their simplified tax. Since 1999, this tax is set at the maximum level of UAH 200 per month. So the maximum contribution to the pension fund under the simplified taxation scheme would be at present UAH 84 or UAH 34 less then the contributions deducted from the minimum wage. However, the Law on Compulsory Pension Insurance stipulates that only contributions paid from the minimum wage are taken into account while calculating working record for pension benefits calculations. So, some individuals working on simplified taxation schemes can cover the gap of UAH 34 by direct payment of the difference between their contribution and minimum contribution to the Pension Fund.

The breakdown of the contributions made by different groups of the Ukrainian labor force reveals significant imbalances (Table 3).

Of the 20 m economically active Ukrainians, roughly 2 m work under the simplified taxation scheme about 4 m under the fixed agricultural tax, and 1.5 m are unemployed. The remaining roughly 12.5 m Ukrainians work under the standard social insurance schemes (table 3). However, this number might be significantly overestimated, as many more occupational groups have been granted exceptions and privileges, which usually are a combination of reduced contributions to the fund with disproportional rights for withdrawals. Furthermore, Ukrainian statistics report as economically active individuals between 15 and70 years of age. So it seems safe to assume, that significantly more individuals are not contributing to the pension scheme as no contributions are deducted from pensioners.

[4] Social security system and simplified taxation in Ukraine: how should they be combined? IER policy paper T11 (online http://ier.org.ua/papers_en/t11_en.pdf).

Table 3
Contributions to the PAYG pension fund revenues by groups in 2005

	Number of individuals (m)	Share in economic active labour force (%)	Contributions (UAH bn)	Contributions (%)	Average monthly contribution per individual (UAH)
Standard compulsory contributions (33.8%)	12.5	61.27	39.6	96.59	264.00
Contributions under FAT	4.1	20.10	0.8	1.95	16.26
Contributions under Simplified taxation	2	9.80	0.4	0.98	16.67
Transfer from the Unemployment fund	1.5	7.35	0.1	0.24	5.56
Transfer from Work accident fund	0.3	1.47	0.1	0.24	27.78
Total	20.4	100.00	41.0	100.00	167.48

Source: Derzhkomstat, own calculations

Table 3 illustrates that more than 96% of all compulsory contributions to the pension fund are paid by 12.5 m (or even less) individuals or about 60% of the total labor force working under the standard social insurance scheme. This group is very likely also contributing disproportionately high to the tax financed part of the pension fund expenditures (fiscal transfers and deficit). Hence, every Ukrainian participating in the standard compulsory social insurance scheme is supporting one pensioner while large parts of the rest of the labor force working under FAT and simplified taxation and the like are mostly free riding on the contribution side. However, when it comes to receiving pension payments more or less all pensioners in Ukraine are equal. This distribution of the social burden is clearly unfair and unjust and undermines the acceptance of the pension system.

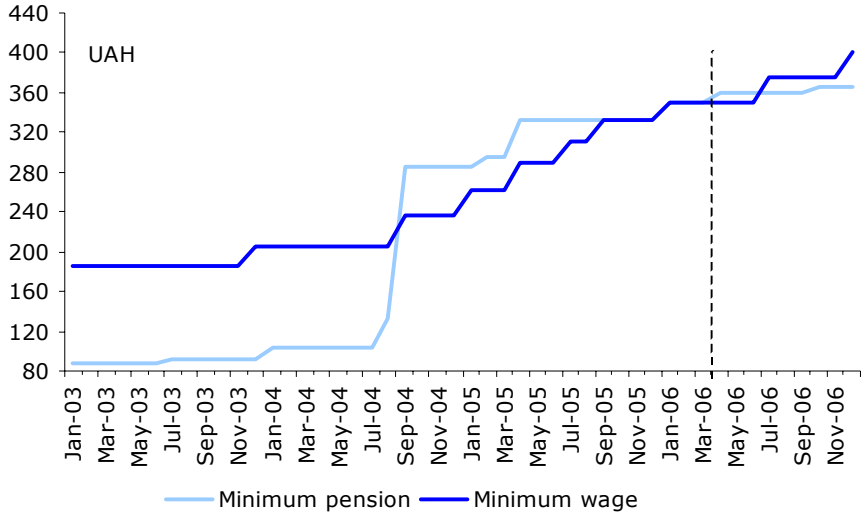
4 Disincentives to participate in Standard Compulsory Social Insurance

The recent sharp minimum pension increases created a situation in which the level of the minimum pension exceeded the level of the minimum wage (figure 1).

When personal income and compulsory social taxes are deducted from the gross minimum wage, this gap to the non-taxable minimum pension widens further. That laborers experience upon retirement a significant income increase is a quite uncommon situation. Because of the sharp pension increases, work income and pension income have lost any meaningful relationship.

Because the administrative pension hikes were not supported by economic development or higher revenues of the pension fund, the differentiation of pension payments according to the length and amount of contribution was abandoned. By the end of 2004 around 83% of all pensioners received an equal – the minimum - pension. By the end of 2005 due to further and now more selective pension increases - based on occupational and other criteria but not related to contributions paid - the share of pensioners receiving the minimum pension declined to 44%.

Figure 1
Monthly minimum pension and minimum wage



Source: Legislation of Ukraine.

The abandonment of differentiated pension payments clearly signaled to the population that it does not matter how much and how long someone actually contributed to the pension system during his/her working years, as most pensioners will receive anyway the minimum pension.

Consequently, this pension policy has created strong incentives to contribute to the PAYG system at the lowest possible, i.e. enforcing the commonly used practice of wage payments in the envelope.

5 Compulsory contributions to the PAYG: a good investment?

We next consider the compulsory contributions paid by and for individuals to the pension insurance fund as an investment in own one's future old age security. We calculated the internal rate of return (IRR) and the net present value (NPV) for men and women contributing to the pension system under the standard scheme. Both methods are standard procedures for evaluating investments.

The internal rate of return (IRR) method allows investors to consider the time value of money by finding the interest rate that is equivalent to the expected Hryvnia returns from the project. Once the rate is known, it can be compared to the rates that could be earned by investing in alternative investments.

The net present value (NPV) of an investment project is the difference between the sum of the discounted cash flows expected from the investment and the amount initially invested. NPV compares the value of a dollar today to the value of that same dollar in the future using a discount factor for taking inflation and risks into account. If the NPV of a prospective project is positive, it is more profitable than the underlying benchmark as determined by the discount rate and should be accepted. However, if the NPV is negative, the project should be rejected because it is not profitable.

We have made our calculations based on current conditions faced by individuals contributing to the pension fund under the standard compulsory social insurance scheme:

- The retirement age for men is 60 years and for women is 55 years;

- The average life expectancy for men (women) is 68 (78) years, i.e. men (women) receive on average their pension for 9 (21) years;
- The contribution period required in order to receive the minimum pension is 25 years for men and 20 years for women;
- The individual contribution rate to the pension fund is 2% of the wage
- The total contribution rate to the pension fund is 33.8% of the gross wage;
- For the NPV calculation we assumed a discount factor of 10%.

We have calculated the IRR and NPV for men and women working for minimum wage and receiving upon retirement the minimum pension, and for men and women working for average wages and receiving average pensions. We calculate the IRR and NPV for both, the individual compulsory contribution of 2% from the gross wage and the total compulsory contribution from the gross wage of 33.8% (this includes the 2% paid by the employee). The results are presented in table 4.

Table 4
IRR and NPV for pension investments

	2% contributions from gross employee wage				33.8% contributions from gross wage			
	Minimum wage/ Minimum pension		Average wage/ Average pension		Minimum wage/ Minimum pension		Average wage/ Average pension	
	Men	Women	Men	Women	Men	Women	Men	Women
IRR (Percent)	15.59%	21.67%	11.35%	16.86%	0.37%	4.30%	-0.03%	0.89%
NPV (UAH)	1,469.98	4,894.07	586.60	4,623.97	-10,653.32	-8,843.25	-30,050.49	-27,951.77

Source: Own calculations.

Due to missing data we cannot claim that these estimates are absolutely exact. Also somewhat stylized, they still reveal that the IRR significantly decreases with the length of the contribution period and the shortness of the payment period, as indicated by the difference between men and women. This provides incentives to contribute only for the minimum years required, i.e. 25 for men and 20 years for women.

The IRR also tends to fall as wages and contributions increase, as the IRR is higher for individuals with a minimum wage than for individuals receiving average (or higher) wages. Hence, the simple principle of fairness that those contributing more should receive more is violated. Unfairness is a strong incentive for evasion and underreporting, i.e. a reason for the common practice of shadow wage payments.

Finally, the investment into the compulsory pension insurance in this calculation is only then attractive if only the employee's contributions of 2% are considered. However, the full contribution rate of 33.8% should be taken into account, as the employer contributions to the pension fund should be to the benefit of that employee. When this is accounted for, the positive IRR and NPV turn out to be an illusion. While the IRR declines to nearly zero (except for women who earn the minimum wage), the Net Present Values turn out to be negative for all. Hence, informed agents would consider pension contributions a bad investment and would not voluntarily sink their money into them. Instead investors would choose other profitable projects, such as investments into real estate etc.

The results of the calculation from the payment side are directly linked to the unbalanced financing of the pension fund on the revenue side. Individuals facing compulsory pension contributions are maximizing their returns on investment by contributing only as long as absolutely necessary and as little as possible. Even if not every individual affected may carry out such exact calculations, agents and groups exchange information and group behavior adjusts over time to such incentives. With other words, the pension increase policies of the past have generated incentives to avoid

compulsory contributions to the pension system, thus stimulating shadow economic activity. Even worse, the pension system prevented to a large extent the de-shadowing effect and necessary to finance the introduction of the flat 13% Personal Income Tax.

Consequently, urgent reform measures are required. Reforms need to start with a financial stabilization of the PAYG pension fund.

6 Policy recommendations for financial stabilization of the PAYG pension fund

The large pension fund deficits - for the current year the deficit is planned around 10% of expenditures - requires prompt action. All recommendations for any financial stabilization start with cutting expenditures and increasing revenues. However, sharp (minimum) pension cuts are at present not a viable political option. Neither is an increase of the compulsory pension contributions above the present 33.8% rate, already one of the highest in Europe and already delivering poor results if considered as individual investments. Hence, the pension fund deficits need to be covered by the budget. However, tax financing should be increased only for the short term with clear time limits (e.g. for 2 years with additional transfers decreasing over time to zero, e.g. by the end of 2007) in order to gain the time needed to implement institutional changes to rebalance the system in a sustainable manner.

6.1 Stopping expenditure increases

A swift measure that should be taken immediately is to stop further pension increases. First, the minimum pension should be de-linked from the rather problematic subsistence minimum[5]. The misuse of the pension system as an alternative social security system should be stopped. Targeted social assistance to the poor should be the responsibility of a tax-financed social welfare system)[6].

Second, the formula for pension increases with an automatic indexation to inflation plus 20% of nominal wage growth should be cancelled. Only after a sizeable readjustment - when wages earned are significantly higher than relevant pensions received – should the indexation of pensions (including the minimum pensions) to inflation be reactivated. A sound relationship between wages and PAYG pensions would be in the range between 50 -70 % of the last years wage income before retirement. The actual share should depend on the individual length and amounts contributed.

Third, the contribution period required to become eligible for a minimum pension should be lengthened, as this would effectively reduce free riding and cut pension payments. This option would be appropriate and just for women, as their IRR are significantly higher then for men. We propose an immediate increase to a period of 25 years.

Fourth, payments of so called 'privileged' pensions should not be financed from compulsory pension contributions. Instead, the government should provide the financing from the budget. Furthermore, privileged pensions should either be paid only upon attainment of retirement age, or they should be subject to income and social taxes if paid before an individual reaches retirement age.

Fifth, Ukrainian legislation lists many occupations eligible for early retirement, such as miners, workers in chemical plants etc. The reasoning behind the legislation is often that people work in hazardous conditions. However, in a market economy based on private property, such early retirement schemes are implicit subsidies to the respective industries, as companies can bid lower wages for labor based on the promise of early retirement and at the same time have less incentives to improve working conditions. On the other side, an individual should not expect a state guarantee for working in a particular occupation. If a job is too hazardous, the individual should look for alternative jobs and income on the market. If they are at all necessary, such early retirement schemes should be moved outside the PAYG system and become part of wage bargaining at the

---

[5] For a more detailed discussion of the subsistence minimum see: Administrative increases of the minimum wage – facing the poverty-unemployment trade-off, IER policy paper T38 (available at http://ier.org.ua/papers_en/t38_en.pdf).

[6] See for details IER policy paper V2: A social welfare system to lift Ukrainians out of poverty (available at http://ier.org.ua/papers_en/v2_en.pdf).

company level. Individual early retirement schemes should not be paid for by society as a whole; they belong to the third pillar of the pension system and far outside the reach of politicians.

Sixth, an often proposed measure for stabilizing the PAYG pension fund is to increase the retirement age. The pension reform of 2003 foresaw increased benefits for those who retired later. However, this option should be considered as a long-term measure, as it would affect only new pensioners and do little to reduce the present pension fund deficit. The long term effects of the broader contribution base needs further investigation Taking Ukraine's demographic development into account higher intergenerational transfers do not seem to be feasible. An intergenerational rather neutral exception would be a parallel increase of the minimum contribution period and of the retirement age for women. We recommend that incentives for additional contributions should be linked to the second pillar, the individual fully funded pension insurance. The PAYG system should be limited to the provision of a differentiated but basic pension.

Finally, a significant cost reduction measure would be the streamlining of Ukraine's compulsory insurance system. We recommend elsewhere that both the work accident insurance and the temporary disability insurance fund be abolished[7]. The functions performed by the two institutions could be redistributed without loss of quality to other institutions, while substantially reducing administrative and transaction costs.

6.2 Improving the revenue side

Because raising the already prohibitively high compulsory pension contribution rate of 33.8% further is not an option, any improvement of the revenue side of the PAYG pension fund must originate from broadening of the contribution base. At the same time the broadening of the contribution base should be used to rebalance between different occupational, social and tax groups so that fair participation on the pension payment side is matched by a fair distribution of contributions. Most measures listed under point 6.1 above, such as ending all privileged and early retirement schemes paid from the PAYG and increasing the contribution periods, would not only reduce expenditures, but also substantially broaden the contribution base. In addition, we propose that the government implement the following steps:

First, contributions by individuals subject to simplified taxation needs to be raised. Currently, the 2 million or so payers of simplified taxes contribute 42% of their maximum UAH 200 tax rate to the fund, which translates into pension contributions of up to UAH 84 per month. But, the average contribution in 2005 from simplified taxation was just UAH 16.67! In comparison, the compulsory pension contribution from the set UAH 350 minimum wage amount to UAH 118.30 per month. The minimum contribution rate from simplified taxation should be at least equal to the contribution charged on the minimum wage. This measure would increase annual revenues by about UAH 2.4 bn. But before any such increases take place, the contradictory legislation should be clarified. Furthermore, the maximum amount of the simplified tax should be regularly and gradually adjusted. We propose an immediate increase to the level of the UAH 350.

Second, the government introduced in 2005 the first steps of bringing agricultural employment within the reach of the pension insurance. However, we recommend that this process be accelerated, so that the pension exemption is ended in 2007.

Third, the payment of privileged pensions should not be financed from compulsory pension contributions. Instead, the government should provide the required financing from the budget. Furthermore, privileged pensions should either be paid upon the attainment of retirement age or should be subject to income and social taxes if paid out prior to the attainment of retirement age.

[7] Towards Higher Standards of Living: An Economic Agenda for Ukraine. Institute for Economic Research and Policy Consulting and German Advisory Group on Economic Reforms with the Ukrainian Government, Kyiv December 2004, p. 16-26.

7 Conclusions

The PAYG pension fund of Ukraine accumulated large deficits in 2005 and will do so in the coming years as well. The government should take immediate emergency measures to reduce this structural deficit. The deficit's main causes are economically unjustified high pensions, after several administrative pension raises since 2004. Besides, the PAYG pension system bears some serious drawbacks in its current design. The most important of these is the unfair distribution of the contribution burden among different occupational and tax status groups, while on the receiving end all are more or less equal. This unbalanced and unfair burden sharing requires very high contributions from individuals working under standard socially insured employment contracts. At the same time the net present value of the compulsory contributions is negative. Unfairness and the perception that pension payments are bad investments erode the already small contribution base further. The government should take fairness and improved returns as guiding principles to convince people to participate in the PAYG pension system.

However, all proposed measures to reduce expenditures and to broaden the tax base will not immediately reduce the pension fund deficit to zero. Hence, the government will need to cover the deficits. However, the financial stabilization of the fund would make it possible to abolish distorting duties and taxes, such as the pension fund tax on foreign currency transactions, in the future. More important, a fair and balanced PAYG pension fund would very likely make reductions in the contribution rate possible, further broadening the social tax base.

Authors: Lars Handrich and Oleksandra Betliy

Lector: Stephan von Cramon-Taubadel