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Issues in pensions – Ukrainian Pension System

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A. Introduction

This document provides answers and structures issues regarding questions the Government of Ukraine has requested that the UNDP contract Edward Palmer to answer.

B. Financing the pay-as-you-go scheme

Pension Scheme Design – a vehicle for providing the basic incentive to pay contributions

Pension design itself can provide more or less of an incentive to pay contributions. To begin with, one of the challenges in setting up a public pension system is to minimize long-term free rider costs. This comes from providing incentives for workers who are in a grey zone where they can choose between formality and informality, to pay contributions – or to demand that employers pay contributions on their behalf – to a public pension system. In fact, it is generally recognized that it is especially important to give incentives to those in the younger population of workers who are confronted with the choice of whether to pay or not to pay their contributions.

There is a broad consensus among experts these days that pension system design itself can make a difference because pension system design communicates a message. For example, financial defined contribution (FDC) schemes, i.e., pre-funded schemes, create a tight link between contributions and benefits. Every unit of contributions paid by or on behalf of the individual goes to his or her personal account. That's why these schemes are also called personal account schemes. Notional defined contribution (NDC) is the pay-as-you-go equivalent of FDC. Every unit of money paid in contributions goes to an exactly equivalent right noted on the individual's personal account.

This was a central reason for the implementation of both NDC and FDC in Latvia and Poland, but also in Sweden, where the pre-reform system, even though it was based on earnings (but not explicitly contributions), had a very weak link between contributions and benefits. In Poland public opinion polls taken during the reform process indicated that getting what one pays for was what Poles believed was an important feature of the proposed two-pillar NDC – FDC reform (Chłóń-Domińczak & Góra 2006).

In Latvia, in the decade following the implementation of NDC in 1996, the growth of the covered labor force was over 6 percent per annum. System design, i.e., the introduction of NDC and later FDC, is believed to be one of the factors responsible for this (e.g., Palmer, Svensson, Stabina and Vanovska 2006). Others were modernization of the administration and collection processes and a long-running information campaign informing the general public of the importance of paying contributions in the NDC pension scheme. The transformation of the administration from a closed Soviet structure to a modern administration providing customer services undoubtedly helped to inspire trust in government and this, in turn, reinforced the positive incentive inspired by system design.

Ukraine's pay-as-you-go pension scheme

The pension benefit in the current Ukrainian pension scheme is calculated as a product of three factors: i) the covered average wage during a preceding calendar year; ii) the ratio of a person's wage, for which a contribution has been paid, to the average covered wage); and iii) the number of months in which contributions have been paid, multiplied by an accrual rate (1.35% for each year

since October 2008) and divided by 12. Note that this way of doing things is close to an NDC scheme, but lacks some of the main features, not the least the focus on the importance of *individual contributions*.

There are some important differences vis á vis NDC however. One very important difference is that there is no connection between the accrual rate and the development of longevity, i.e., there is no use of life expectancy in the calculation of the benefit. Another is that NDC is based directly on annual contributions which means that an individual who earns income in fewer than 12 months – for an example a farmer who sells all his produce in two separate months per year or a worker in a seasonal occupation – nevertheless benefits from *all* career life contributions.¹

Given the precise Ukrainian set-up, what can be communicated to people is that the number of months of paid contributions, which is an indirect way of saying total contributions paid, determine a pension. Albeit, the pension itself is still based on earnings, which is a semantic difference, which has communicative importance.

Clearly, it would help to provide a yearly statement of months with paid contributions from the year 2000, especially for young entrants. However, this may also create questions that are difficult for the administration to answer, for example:

- How are my contributions/months of paid contributions prior to 2000 worth?
- How can I calculate my future pension, given my work history?

To stress the importance of contribution years, the pension administration could do whatever is necessary to build up complete historical accounts, i.e., individual earnings per month, for the entire current workforce. This would make it possible to send out yearly statements to participants about their history of acquired rights up to the date of the most recent yearly statement. The statement could also include what a person can expect to receive, given

- an assumption about the growth of the individual's earnings, based on the individual's own historical earnings during an average of years;
- an assumption that the individual works every month until retirement;
- an assumption about the future growth of the country-wide earnings index.

Latvia, Poland and Sweden addressed the question of creating historical individual accounts within the framework of NDC. To do this each country its own way of converting rights prior to the introduction of NDC.²

- Sweden used the individuals own IT-based earnings records from 1960 and applied the NDC contribution to be applied forward to these to determine individual contributions. Contributions were then valued using an index of earnings growth from 1960.
- Latvia used workbook years of service prior to 1996, i.e., the year the NDC reform was introduced, and recorded contributions from January 1, 1996. These were then valued with either a market average wage in 1996 or the individual's own wage record during a series of years from 1996. Palmer et al. (2006) contains a discussion of the actual procedure. Seen in retrospect, given that there was no information on individual wages

¹ Assume two people, X and Y, who both earn 500 000 units of currency in a year, however person X earns his 500 000 in 7 months, with zero earnings in the other three, whereas person Y has recorded earnings in all months. If the formula is based on recorded individual months of earnings then even though both X and Y earn the same amount in a year, Y accrues more pension year rights. This sort of system breaks the link between money paid in contributions and pension rights earned. This makes NDC and FDC schemes much fairer.

² See Palmer (2006) for a discussion of these and similar issues.

or contributions prior to 1996, it may have been better so have used an average covered wage for all historical accounts, which is discussed in Palmer (2006).

- Poland calculated the hypothetical value of a pension if it were to be granted under the old system rules and the implied contributions per year, given the individual's historical records.

These countries provide examples of how individual historical accounts can be created. Once one has crossed this bridge it is a relative simple matter to a) provide individual information and b) promote the message of the importance of paying contributions-

Special privileges

The present Ukrainian pension scheme contains two types of early pensions: anticipated old-age pension and length-of-service pensions. These pensions are assigned to people who have certain service length according to a list of professions. Duration of service that gives the right to early retirement varies from 8 (for women) and 12 (for men) to 20/25 years; bridge period (number of years before you can retire) – from 5 to 15 years depends on the individual's occupation or professional category.

This set of rules indicates that presently there is no real link between contributions paid (or years of earnings with paid contributions) and benefit rights for a significant percent of the population. Some people get much more than others for a given amount of contributions paid – or, more precisely, given the construction of the Ukrainian pension scheme, number of recorded months of earnings.

Most countries in Central and Eastern Europe, including Russia, have phased out these rules, which were inherited from the Soviet times. When one examines the lists of occupations and professions that receive special privileges one usually finds that there is really no reason to provide early benefits for most of the categories on the list. The justifiable remainder should then be covered by separate (private) occupational schemes, financed with additional contributions from employers.

For example miners were on the lists of special privileges for countries coming from the Soviet regime. If early retirement is found to be necessary for miners then the cost of financing these extra years should be paid for through the price of coal, since these are labor costs. In principle, coal is being produced too cheaply – and at the expense of poor health for the miners. It is the consumers of coal-based energy who should pay the cost of the externality of producing bad health for miners.

This way of looking at the question has long-term consequences for what government should do. If producers are forced to bare the costs of early retirement due to poor work environments shifting the cost to producers provides an incentive for them to invest to improve working conditions, whereas the idea of providing early pensions, is equivalent to a public tax-financed subsidy to produce coal in hazardous conditions. In other words, the government is subsidizing dangerous working conditions for miners! By changing the approach and making the producer bare the costs hazardous methods will be replaced by modern technology and better working conditions. In sum, there is no reason for the state pension system to subsidize poor or hazardous working conditions through the pension system.

What's more, many countries have used special privileges within the pension system to provide extra remuneration to some categories of employees, for example judges, which has no logic whatsoever. These arrangements where they exist should be substituted by higher salaries, if this is the intention, which give higher earnings-related pensions. An early pension grant to special

professional groups, who probably continue to work and receive a pension, sends the wrong signal about the public pension system.

Neither is the Soviet practice of rewarding mothers early pensions related to the number of children good practice. Instead, what many Western European countries do – and those that do not should do - is to compensate women (parents) for periods associated with childbirth through provision of pension credits, which in the case of FDC schemes means that actual money should be transferred from the general government budget to individual accounts. In NDC the money can be transferred to the NDC fund.

Finally, many European countries have had seniority rules, *i.e.*, upon fulfilling a certain number of years of covered earnings (contributions) workers could retire earlier than the norm with a “full” pension. Countries where these “special privileges” have been a part of the public pension system (e.g., Italy, Germany) abolished them in order to encourage work force participation of older workers (Chłoń-Domińczak *et al.* 2011) discusses Italy. In addition, the coming of NDC, which relates benefits to life expectancy, spurred other countries to link the amount of benefits to life expectancy at retirement, even if they did/do not have NDC schemes.

Employer versus employee contributions

The conventional wisdom in economics is that although the payment of contributions may be administered by employers, in all cases where employers can pass on the cost of contributions, either in the form of higher prices or by holding back on future increases in wages and salaries. The latter process can in fact be very explicit. For example, in the occupational schemes in many Western European countries the trade-off between higher pension contributions or wage increases is an explicit component of wage negotiations. This suggests that employer contributions are normally *de facto* employee contributions. However, if this is not explicitly the case explicitly the cost can be expected to be passed through to wage earners after a period of several years of adjustment. For example, an analysis of extensive employer contribution increases in Sweden in 1975-76 (Palmer & Palme, 198X) shows that this was the long-run result.

In the absence of an explicit agreement to pass employer contribution costs over to employees, one must distinguish between the short and the long run when the government increases or decreases the contribution rate. The immediate impact will in fact be on profits, to the extent that employers cannot pass the increase through directly to price increases. This is why employers are generally opponents of employer contributions. And, for employers working in markets where there is strong international competition it may not be reasonable to attempt to pass on the costs through prices because this will only lead to decreased demand for their products, both at home and abroad (also shown Palmer and Palme’s study of Swedish contribution rate increases in the mid-1970s). So, there are many reasons to prefer employee contributions. Not the least can one claim for NDC and FDC – and similar – schemes that individuals pay *themselves* for what they get, a logic similar to paying premiums to a private voluntary pension scheme.

What is difficult is to convert from employer to employee contributions. This is because it creates extraordinary “profits” if employers do not compensate employees with the equivalent amount in wages or salaries needed to exactly pay the existing contributions. This suggests that a conversion should be accompanied by an agreement, legislation or both in order to assure that the process is fair. In other words, conversion is easy in principle but harder to accomplish perfectly in practice. This means that considerable preparation, negotiations etc. should precede any attempt to do make a conversion and that there should be sort of board set up to follow the process and deal with eventual claims.

The reasoning here suggests that if a country already has employer contributions and is determined not to increase these ever again – or to decrease them, shifting financing to other revenue sources, then there is no actual gain to converting – other than the “public message gain”.

Administrative routines

Administrative routines can make a difference. One of the reasons why individuals who are in the position to steer whether they pay contributions – or whether they encourage their employer to pay on their behalf – do not pay contributions is lack of trust in government and its institutions. Trust in government together with inefficient or unreliable administrative routines may be a significant determinant of the size of the informal economy.

Trust in government is created by a combination of good legislation and administration that is perceived as being efficient, fair and “user friendly”. The latter includes efficient routines for administering the collection of contributions – both money and information – and trust that the money and information is being handled without fraud or negligence.

It is usually argued that it is to everyone’s advantage – government, employers and individuals – if there is one institution, i.e., usually the tax authority, that is responsible for the collection of all taxes and mandatory contributions. This must certainly be the case in a developed economy – and for a country, such as Ukraine, that should be on a “fast track” with strong economic growth in the coming decades.

There are also examples of countries that have poor overall rankings in corruption but where the process of collecting money for the national pension system through a pension fund is trusted. This is because the institution in question has earned this trust. Hence, given the present framework, the Pension Fund should focus energy in creating trust in its operations and confidence in the professionalism of its employees.

From the point of view of the country, the argument against pension funds as collectors of contributions is that this gives employers and individuals the opportunity to choose to report more formal income, for example, to the pension fund, than to the tax authority. To avoid this, there must be considerable contact and coordination between the Pension Fund and the Tax Authority, whereas the alternative would be that the tax authority “simply” takes care of the business of collecting contributions along with taxes, transferring the sums of money and account information to the Pension Fund.

An environment with two public system collectors, one for taxes and one for contributions, may lower the general level of trust in government, as well as being inefficient seen in the perspective of what’s in the national interest. A double collection framework gives employers the opportunity to keep two sets of books, one for the tax authority and one for the pension fund and it creates two needs for audits, two judicial processes, etc. instead of one. Trust in government is, then, in addition to the argument of the efficiency gain deriving from the institution of a single collector an argument in favor of centralizing collection of contributions with the tax authority.

With the present advanced environment of IT technology the flows of money and information should occur electronically and on a monthly basis.(perhaps quarterly for the self-employed). This process can be organized around a set of standards for electronic accounting programs. By requiring electronic transfers of information on individual and business income the government is indirectly compelling businesses to use standardized accounting and information transfer routines for tax and contribution purposes, thereby moving Ukraine into an efficient information technological environment. This gives electronic accounts for individuals and businesses, which

replace all the paper work and also the need for local and regional offices to be involved in the collection of information.

Small employers and the self-employed can be represented by private accountants or accounting agencies that perform both accounting and information transfer services for them. Many countries in Central and Eastern Europe have moved in the direction of electronic information monthly transfers in conjunction with reforms of their pension systems, among them Bulgaria, Latvia and Poland.

If it is not already the case, Ukraine should consider requiring all self-employed to be registered as such with the tax authority. This gives them a tax number and an official right to do business. A person performing services or selling goods without a tax number would then be subject to legal consequences. This tax number is provided to customers on bills to be paid to declare that they have complied with this obligation. The legal implication of this is that doing business with a non-registered business or self-employed person is subject to a fine or other legal consequences also for the purchaser of such services.

In sum, a combination of pension scheme design that has a strong link between contributions and pensions, in the absence of special privileges and conditional early retirement, together with efficient administrative routines and institutions which enjoy the trust of the public can contribute strongly to creating an environment in which informality is minimized and the likelihood of contributions being paid is maximized. Looking forward, there's no reason why Ukraine shouldn't aspire to take all the steps necessary to move in this direction.

C. The administrative architecture of the second pillar

Why introduce a mandatory financial account scheme?

We begin by recalling the arguments for introducing a mandatory financial pension scheme. The arguments favoring the introduction of financial defined contribution (FDC) schemes are based on economic efficiency, on how this effects a country's supply of labor and saving, and, hence, economic growth potential.

1) Labor supply: The direct link between contributions and benefits in a financial defined contribution (FDC) scheme eliminates the tax wedge inherent in redistributive pay-as-you go schemes of the type Ukraine presently has, *i.e.*, where some groups get special privileges at the expense of others. In FDC individual contributions or contributions made on their behalf go to the individual's personal account. The contributions can in principle be viewed as individual savings (or premium payments) and not "lost" earnings. This line of reasoning means that there is no disincentive to work and the pension scheme can be viewed as being neutral in terms of affecting labor supply decisions.

2) Return on investments: The market rate of return, r , is expected to surpass the rate of growth of the economy, which is determined by the rate of growth of productivity, g , and the labor force, λ , *i.e.*, $r > \lambda + g$. For individuals this means that lower contributions are needed to receive the same pension level, which gives higher individual consumption over the lifetime. This is the main reason for mandating national pension schemes.

3) National saving: If individuals would have saved the amount of money equivalent to the contributions going to the mandatory financial scheme on their own (in the absence of the scheme) there will a one-to-one replacement of personal saving by mandatory pension saving. This is not

likely, however, in Ukraine. Instead, this saving can be viewed as forced saving in which case it will increase the country's overall saving (but at the expense of current consumption). The welfare logic in doing this is that it provides funds for the growth of Ukrainian investments in the Ukrainian economy, thereby promoting growth of domestic GDP. (Money is moved from consumption to investment.)

4) Financial market institutional development: The money going into the mandatory pension fund can promote faster development of financial market institutions and financial market instruments in Ukraine.

The question about the administrative architecture of the second pillar has to do with points 2), 3) and 4). To defend the introduction of the second pillar, first, the condition $r > \lambda + g$ must be fulfilled in the long run. This is the most important criterion. The next point is that it is desirable that some of the "forced saving" is channeled into profitable domestic investments, including government bond financed investments in infrastructure (schools, hospitals and health care equipment, roads, public transportation, etc.) – but given an otherwise balanced public budget. Finally, it is desirable that the system contribute to the development of financial market institutions (banking, insurance, investment funds) and, indirectly, domestic financial instruments (e.g., mortgage-backed bonds, corporate bonds, the domestic stock market).

Pros and cons of alternative administrative architectures

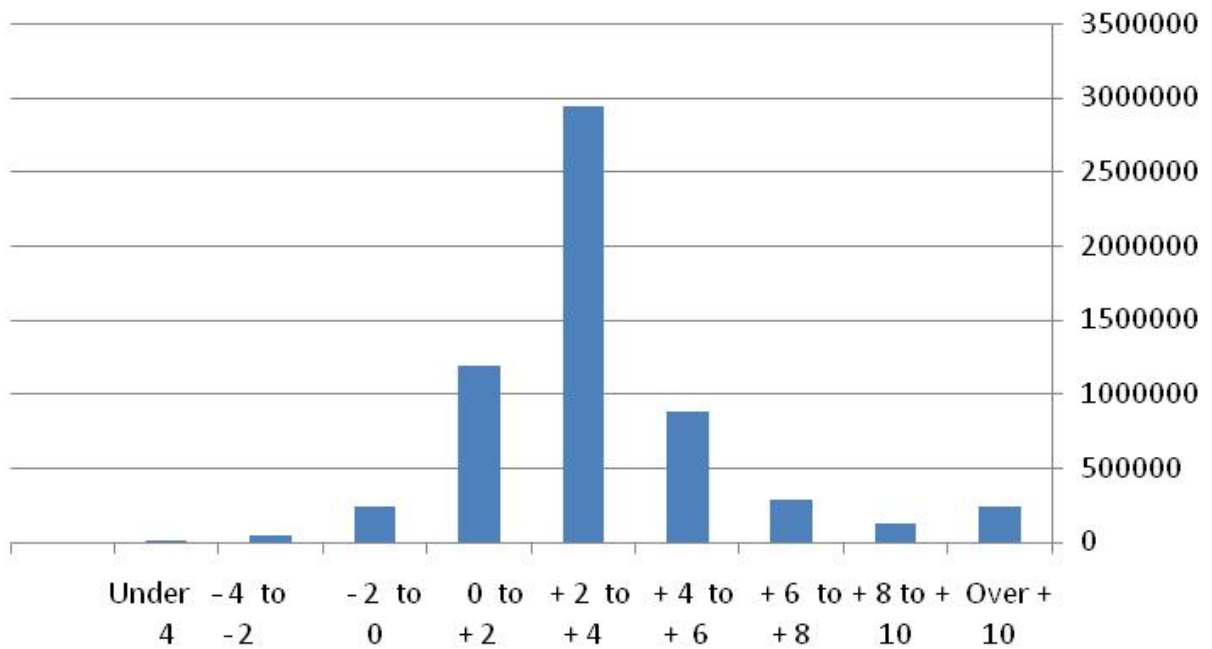
There are several candidates for the administrative architecture of a mandatory FDC scheme. The differences have to do with the number of fund managers and freedom of choice afforded the individual participants. Four main alternatives are considered here.

1) Unlimited funds and fund choices – the Swedish model

We begin with the extreme, a system where individuals are allowed to choose from among all investment funds registered to do business in the country. In this model, the public Pension Agency is a mandated clearinghouse that performs individual transactions vis á vis registered funds chosen by individuals. There is no personal contact between participants and funds, and hence no opportunity for funds to seek out clients through direct, individual contact. Clients can sell fund shares any day and the Pension Agency a net balance of buys and sells vis á vis a specific fund on a daily basis. Switching can occur freely on a daily basis.

Evidence from the Swedish mandatory scheme, which is set up along these lines, shows that there is little variation in the portfolio returns of individuals over the approximate 15-year period the scheme has been in operation. Participants have invested heavily in domestic and international equity funds (around 80 percent on average). The overall returns have been dominated by the systematic rather than the idiosyncratic (individual) returns, *i.e.*, by the development of the market in general. This is illustrated in the figure below that shows rate of return intervals on the horizontal axis and number of participants on the vertical axis. In the 15-year period covered in the figure (ending with the crash in 2008-2009) almost all participants fell within the range of zero to 6 % returns per annum. In December 2006 a similar calculation, which also shows individual characteristics ended with an annual average for the period 1995-2006. This also shows the effect of the most recent crash on returns. (figures below).

Average Returns for Participants, 1995-2009



Rates of Return since entrance, December 2006

Source: The Premium Pension Authority, PPM

	All	Active choosers	Default choosers
All	6.3	6.0	6.7
Men	6.3	6.0	6.6
Women	6.3	5.9	6.8
Age			
18-24	7.8	9.4	7.5
25-29	8.1	8.2	8.1
30-39	6.2	5.9	6.5
40-49	5.8	5.6	6.0
50-59	5.8	5.7	6.0
60+	5.9	5.7	6.2
Education			
Elementary	5.9	5.8	6.1
Secondary	6.1	6.7	6.0
University	6.2	5.9	6.6
University (+PhD)	6.2	5.9	6.8
Unknown	6.3	6.1	6.7

The interesting conclusion from examination of this data is that there is remarkably little variation between groups by age, gender and education (the second figure) or by fund choice (the first figure). This suggests once again that it is the development of the market – the systematic risk – rather than the fund choices that dominate the outcome. This suggests that people would have about the same outcome if fund choices were limited – or if no choice at all is provided – but with,

for example, a Public Pension Fund channeling all money into market index funds, with some combination of equities and interest bearing debt instruments.

2) One fund and no individual choice

The same Swedish mandatory FDC pension scheme also has a default fund, originally only for non-choosers. The fund has had an investment policy resulting in 80 percent of the fund's money being allocated to equities. Since May 2010 the fund has a new strategy for its participants. The whole account of persons up to age 55 will be invested in the equity market. From age 55 three percent of the equity account will be sold and reinvested in an interest fund, holding government debt instruments. This means that 30 percent will be invested in the interest fund at age 65 and 45 percent at age 75, where the portfolio change stops. This means that the fund runs two separate funds, an equity fund and a fund with interest bearing instruments.

This investment policy makes sense against the background that rates of return on equity funds (including reinvested dividends from share holdings) have done better than the economy in all countries where there is historical data to study. However, this is a long-run result, subject to considerable volatility, as the past decade has shown. This means that individuals may have to also consider the timing of their pension claims in terms of fund performance, which is an argument, first, for *not* mandating an age for withdrawal of an FDC pension, and, second, for mixing an FDC pension with a pay-as-you-go pension, *i.e.*, diversifying risks between the development of the economy and the financial market. The participant ought to be able to claim the pay-as-you-go pension, perhaps while continuing to work, if only part time, and postpone his or her claim on the FDC component until later.

We note that the Swedish default fund can also be actively chosen. Namely, there is an opportunity, for those who want to choose, choose to combine different percentages of these two funds. Note that this sort of model is similar to the 401K model in the US, which is also well-known in the pension literature because it is operated at a yearly cost of around 20 basis points (0,002 percent of assets); a system that is often put forth as one of the world's most cost efficient schemes.³

3) Several publicly managed funds and no individual choice

Assume that the government is considering setting up one or more pension funds under the mandated FDC scheme to invest the account holdings of individual participants on their behalf, but where no portfolio choice whatsoever is offered to the individuals themselves.

Here it is clear that a one-fund model potentially gives economies of scale and, by definition, is administratively more efficient than two or more funds. One can also argue that if the fund is to operate on the international market, even if it is very large, say with assets of 500 billion USD, it is not so large in an international perspective. This sort of fund would, however, be the dominant player in the Ukrainian setting and probably too dominant.

In order to avoid one-fund dominance "the" fund can be split up into several funds, each with its own board of directors and individual investment strategy. The overall results of these publicly managed funds would then together be "The Pension Fund's" outcome. One can also argue that many funds also spread the risk; whereas a single fund's strategy may prove wrong. In addition, it can be argued that competition among funds can create cost efficiency. Furthermore, with smaller funds individual funds would have less influence over the private enterprises in which they hold shares. In a sense, this diversifies ownership – albeit it is still the state that is the owner. In fact, in

³ The 401K system has been the topic of several studies in the US, e.g., Munnell & Sundén 200X).

many countries, the political process has steered systems away from frameworks where the “state” becomes the owner of private enterprises through share holdings.

Once again we can refer to experience from Sweden. This has been the framework for investing the considerable NDC reserve funds (about 30 percent of GDP) during the past almost 15 years, with four separate funds. The experience is that the funds’ financial results and the cost of running them are remarkably similar. This may not be so surprising since the main risk is the systematic risk, *i.e.*, the overall development of the world markets, which the Swedish market tends to follow. Because there are no apparent gains to having four funds and in view of the fact that most of their money is invested abroad many have argued for creating a single fund.

4) One state fund manager contracting out to numerous fund managers

Another variant of the “no-individual-choice” single fund-manager model would be for the Pension Fund’s board of directors to determine an overall strategy covering a set of different investment categories and then contract out the management of these to private domestic or foreign investment funds. For example, there could be one or more world market funds, one or more domestic market funds, one or more world or domestic bond interest funds, etc.

The question here is, however, is there really an advantage to contracting out as opposed to having the same competence in-house to manage different portfolio components? After all, the Pension Fund can hire the same competence that is in the market – with competitive salaries. And, the Pension Fund could combine its own investment portfolios with contracting out. One advantage to contracting out is that the world market components could be contracted out to institutional investment managers in, in principle, any country, although contracting out to foreign investors means that the foreign exchange risk has to be taken into consideration.

In contracting out, it should be possible for the Pension Fund to negotiate a very small fee for fund management since the national mandatory scheme *guarantees a steady flow* of new cash into the contracted fund and with no costs other than the marginal cost of running a given fund. In the short run the fund manager buys more shares in the various index fund categories. In the long-run the increasing scale of business might warrant changes in the composition of the fund, everything else equal.

5) Small number of privately managed pension funds with individual fund choice and limited investment choices

The typical model in Central and Eastern Europe, following the example of Chile, is to open the market for the entrance of pension funds. The pension funds compete to attract the customers. The typical structure is that a pension fund will offer a limited number of “funds” (perhaps only one or two) with different portfolio compositions of equities and interest-bearing paper. The number of funds is usually no fewer than 5 but there are examples of countries that have started with up to 15. The experience of the countries implementing their mandatory 2nd pillar with this framework is that the number of funds decreases with time and it is likely that a small number will dominate after some time in operation. There are clear advantages associated with large volume. In addition, it’s likely that there will be no new entrants after the initial start-up date.

The pension funds usually follow the traditional insurance company model, where each company performs essentially the same services, as is described in the following tableau:

Traditional Private Insurance Company Model

Each participating company provides the *entire* package of services:

- Client relations
- Fund management
- Participant fund transactions
- Provision of daily fund share value information
- Account keeping
- Contribution collection
- Annuity provision

The second pillars in Estonia, Latvia, Lithuania, Poland, Hungary, Bulgaria, Slovakia and Croatia have been set up following the Chilean model, as have second pillars in a large number of countries in Latin America.

Some of the functions in the above list are most efficiently performed by a clearinghouse, that is, by one institution that serves all of the funds. These are client relations, provision of information on daily fund share values, account keeping and collection of contributions. This leaves the fund management, which can be arranged in any of the ways already discussed, and provision of annuities for the funds. In the starting phase there will be no annuity business to speak of, which means that the main business of the pension funds is to invest money. For this model to be the preferred model, one must be able to argue in favor paying fees for five investment administrations – which in practice resembles the model 3) above. The main difference is that these funds would be privately owned, profit-making enterprises, whereas in model 3) the separate funds are all publicly owned.

Regarding annuity provision, it is not clear that there are advantages to providing annuities through a number of companies instead of a state monopoly, where the annuity pool is the entire country, especially at the outset when the number of pensioners and amounts of pensions are small. The argument for a monopoly provider is especially strong if the annuity products are only single or joint life annuities and if there is to be no risk discrimination between groups.

In sum, what this model does is to give a number of pension fund companies an opportunity to run investment portfolios, instead of using existing investment companies or outsourcing from a central Pension Fund.

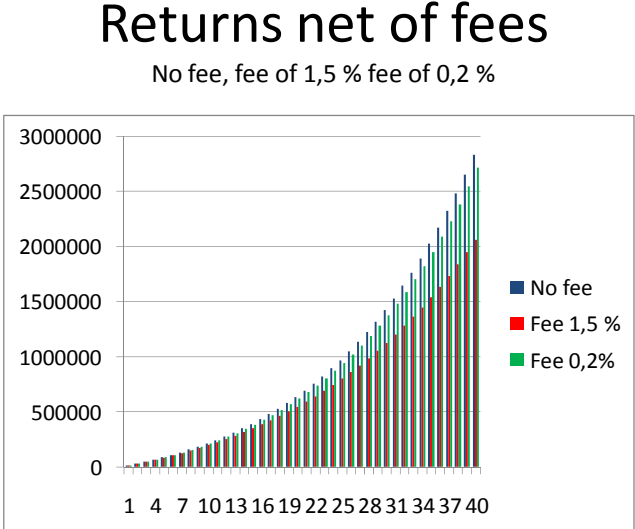
Beginning with Chile, the experience is that this method of organization leads to very similar investment portfolios, often in part a result of regulatory rules about portfolio composition and legal guarantees that countries have imposed on the funds, which tend to cause funds to keep a large percentage of their portfolios in bank deposits and safe securities, yielding a low rate of return and partially defeating the real reason to create the second pillar – while investing the remainder in the domestic stock market, which tends to deliver the same yield. .

Finally, it should be mentioned that there is a considerable literature written about the high administrative fees charged by private pension funds in the countries listed above. The experience of countries to date is that this model turns out to be an inefficient and expensive way to manage the mandatory savings of a national second pillar.

D. Minimizing of the administrative costs of the second pillar

One of the greatest concerns in designing second pillar pension schemes is to keep control over costs. The example of Chile, and many of its followers, has demonstrated that this is a serious problem. Costs seem to tend to explode where private pension funds are enlisted to run the second pillar (Model 5 above). It has not been unusual for costs to reach 1.5-2.0 percent of assets.

The following figure illustrates the effect on individual savings of high fees for administration.



The understanding of how costs can be minimized in a mandatory second pillar scheme can begin with the tableau above and the idea of the clearinghouse. The clearinghouse *centralizes* the functions of

- collection of contributions
- account keeping
- provision of information
- client relations

as has already been discussed. In addition it either centralizes or outsources investment decisions and provision of annuities. The clearinghouse concept brings all the clients under one roof when it comes to customer relations. It minimizes all costs around the scheme and allocates the major

administration cost to successful portfolio investment. This is illustrated by examining the costs of the Swedish 2nd pillar model. The main idea is in fact applicable to all the above models.

The Swedish model

The Swedish second pillar is a clearinghouse that outsources investment decisions to market funds through free individual choice. The funds that manage the participant’s savings are required to agree to a rebate schedule in order to participate in the scheme, where the rebate is based on the sum of 2nd pillar money channeled to the fund owner (company), which may have more than one fund in the system, rather than the sum of 2nd pillar money going to each fund owned by the same fund manager.

Breakdown of Total Costs of the Swedish Second Pillar,
Percent of Assets

	<u>2007</u>	<u>~ 2020</u>
Fund charges, gross	0.84	-
Rebate	-0.51	-
Fund charges, net	0.33	0.20-0.24
Pension Agency costs (incl. Contribution collection)	0.12	0.03
Total costs	0.45	0.23-0.27

Source: PPM’s Annual Report for 2007 and author’s approximation for 2020.

The rebate schedule requires the company to charge less the greater their asset holdings are, based on the fact that there are economies of scale that funds enjoy as they receive increasing amounts of money to invest in the “same” portfolio. There’s no reason why funds that manage large sums of mandatory savings shouldn’t be able to do this for 15-20 basis points, at least once the system has been operating a few years, since the company will be earning increasing profits mainly from the increase in the volume of money flowing into its funds. This is also why the Swedish system turns out to be so inexpensive to run. A large volume of 2nd pillar assets concentrated in funds managed by a very small number of companies, despite the fact that there are around 80 companies with altogether about 800 funds in the system (tableau below). It is in this manner that the Swedish system now operates on about 40 basis points and can run at about half this from around 2020.

Sweden's Second Pillar -The Market's Big Players Dominate Investment Management

- The seven largest providers of private insurance (with 95 % of total assets in private insurance)
 - manage 45 % of total second pillar assets
 - and manage 33 of the largest 45 second pillar assets.
- The big seven together with the default fund (≈30 % of total assets) manage 75 % of all second pillar assets.
- Conclusion: Established companies have taken the largest share of total business.

The world of DC pension schemes

The history of private insurance is intimately connected with defined benefit pensions and life insurance. Defined benefit connects the accumulation and pay-out phases through an estimate of life-long longevity from the time of entrance into the labor force. This, in fact, is what caused the demise of defined benefit schemes. It is extremely difficult to get the estimate of life expectancy from around age 25 right. Many schemes have floundered in recent decades because of this.

What FDC brings to the table is a clear line of demarcation between the accumulation and the pay-out phases of pension management. In FDC schemes, such as the Ukraine's, the accumulation phase is a pure savings program. The only important consideration is efficient portfolio management, *i.e.*, obtaining good investment returns at low costs for administration. So, this is what the construction of the system should be focused on. To this end, the market's investment funds are the most important institutional components of Ukraine's second pillar, not the private insurance business *per se*. This is what countries contracting second pillar management to pension funds have neglected to realize. And, this is one of the reasons why these second pillar schemes have turned out to be so expensive, especially as schemes tend to charge the same (high) costs for doing about the same thing.

Another look at the alternative models

In addition to the Swedish model, with free individual choice among all registered market funds, the cost-efficient alternatives are:

- Model 2: To construct a fund consisting of a single equity and a single "interest" fund, with no individual choice.
- Model 3. This model is similar to Model 2 but gives participants the opportunity to mix the equity and interest funds in proportions they determine themselves.
- Model 4. Outsource management of the whole portfolio to the private market, following a strategy designed by the Pension Fund's board of directors.

What is important to keep in mind is that there are studies indicating that paying more for highly competent investment personnel gives better results and that performance based salaries for portfolio managers may be better than high fixed salaries. The bottom line is that good investment services are important, either in-house or contracted. If contracting out portfolio management is the chosen alternative costs can be minimized by offering *volume* to portfolio managers. After all, the Pension Fund is a single customer, whereas in the normal course of business an investment fund will have to cover the unit costs of managing separately hundreds of thousands of individual customers. The Pension Fund has a strong bargaining position.

In sum, minimizing the costs of managing the savings in the second pillar entails recognizing the fact that what is important is investing the savings of the participants efficiently, *i.e.*, obtaining high returns with low costs for doing this. Models 1)-4) provide different alternatives for doing this, whereas experience with model 5) has proven disappointing in this respect. It appears that pension funds tend to act more as cartels, helping to hold up each other's profits, rather than as competitors reducing margins and profits down to a reasonable return over cost coverage.

E. Overlapping 2nd and 3rd pillars

In introducing this section we note that the financial markets of developed high income countries usually have a handful of very large financial concerns that are in three businesses simultaneously: Banking, investment fund management and private insurance. Pension funds, in the sense meant in Ukraine, combine the services of private insurance and investment fund management. At the same time there will usually be a larger number of smaller niche private insurers, a large number of investment funds and smaller banks that may have no other business than their primary business. As economies develop and become international, financial businesses have followed suit. This has tended to reduce the number of banks and insurance companies, while the number of investment funds has increased. In addition, investment funds (often managed by banks) have taken over much of the savings business, while the relative importance of deposits in personal saving has decreased.

The DC world – focus on the investment function

In the DC world, the way forward is to focus on the investment business, and investment funds, and not the insurance business, as we have established above. The "insurance" comes as a separate product, very neatly at the end of the accumulation period, normally in the form of a life annuity. The example of Sweden illustrates that the investment fund(s), through second pillar money is invested, may well turn out to be owned by the same financial concern that also operates private insurance. The way forward from the point of view of the mandatory public pension scheme is to focus on the investment function. The possible link between the 2nd and 3rd pillar schemes would be if the 3rd pillar schemes are DC, in which case money on accounts could be combined for conversion into annuity products at retirement.

Interaction of 2nd and 3rd pillar pension schemes

There is no real difference between second and third pillar schemes in terms of the functions listed above, with one exception. However, third pillar schemes may in fact offer defined benefits. This could be the case, for example, if third pillar pensions provide early retirement for specific occupations or branches, as we argued in the first section is how these benefits should be provided – if they are to occur at all. However, third pillar schemes can also provide a supplement to the public schemes and may be based on DC. In fact, there is no reason why early retirement benefits couldn't be based on a DC arrangement, if this is acceptable to those who contract them.

In principle, the same investment funds can be used for both the second and third pillars. There is an important difference attached to ownership, however. The owners of these schemes are different by definition. The government is the owner of the mandatory FDC scheme, whereas businesses, labor unions or a combination of these will be the owners of the group third pillar schemes. Because of the difference in ownership – and especially the difference in principle between the mandated public scheme and the “quasi-voluntary” occupational scheme – even though both may be DC schemes there is good reason to keep them separate during the accumulation phase. On the other hand, if the third-pillar scheme is also a DC scheme, it would be advantageous from the point of view of the individual to be able to combine the accumulated capital of both schemes at retirement to purchase a single life (or joint-life) annuity.

In sum, third pillar schemes may either enlist the services of – or create their own - insurance companies. There are many examples of third pillar occupational insurance companies around the world. Schemes that originate from employer-labor contracts could also join together and form a “third-pillar clearinghouse.” The 3rd pillar clearinghouse could provide all the functions discussed above in conjunction with 2nd pillar management and in addition contract out portfolio management to market investment funds. These funds could be independent funds or funds offered under the umbrella of an established private insurance company. It would even be possible to set the system up so that the insurance company would offer either a DC or a DB product, where the individual’s situation and/or preferences would determine the choice. DB products would probably be more suitable for early retirement benefits. It would also be possible to set the third pillar up so that individuals could choose among investment funds - for example under the umbrella of insurance companies, but without subscribing to other services provided by the insurance company.

The interaction between 2nd and 3rd pillar could then come about in the annuity phase. In principle, account balances in the 2nd and 3rd pillars can – and maybe should – be combined to construct one annuity product at retirement. This product could in fact be a choice between a single or joint life annuity, provided by a monopoly provider, *e.g.*, the pension fund.

Since every annuity has a capital value, *i.e.*, can be converted into an account sum, it is possible, for example, for an older male spouse to first contract a single life annuity and then convert this annuity to a joint annuity product when his spouse exits the labor force a few years later.

F. Effective supervision over 2nd and 3rd pillars.

Since the mid-1980s financial markets all over the world have demonstrated four trends: Consolidation of the banking sector, consolidation of the insurance sector, proliferation of investment funds and creation of large financial conglomerates that provide banking, insurance and fund investment services. In addition, the development of equity funds and equities as a new saving form for the individual saver, either independently or indirectly through banks or private insurance, has emphasized the importance of financial supervision and information for personal savers.

This development progressed hand-in-hand from around the mid-1990s. In insurance there has been a gradual switchover within insurance from DB to DC contracts. The coming of DC contracts has in turn shifted the longevity risk to the insured, which eliminates the insurance company’s systematic longevity risk. At the same time it means that individuals that are in DC schemes now clearly bear the investment risk. This emphasizes the importance of supervision and information from investment funds.

The trend towards mixing financial services under the same umbrella was certainly one of the factors leading to the consolidation of financial supervision under one roof – a Financial Supervisory Authority – from the end of the 1980s. In Sweden, where originally banking, insurance, investment funds and the stock market all had separate supervisory authorities these were all merged into a single Supervisory Agency in 1991. There are, of course, separate units within the supervisory agency that have specific functions. However, the fact that they are together in the same organization makes it possible to communicate easily across units and to put together qualified supervision of all of a company's financial activities.

In Sweden, where there is a clearinghouse for the 2nd pillar, the investment funds whose services are enlisted within this scheme are supervised in the course of normal activities by the Financial Supervisory Authority. Funds with both 2nd and pillar, 3rd pillar customers, as well as individual customers, are required to keep these accounts separate. In some occupational schemes it is possible for 3rd pillar participants to choose their own funds. These customers are usually given the same status as private individual voluntary participants in the funds.

In sum, countries that have been moving in the direction of a single supervisory agency covering the entire financial structure. There is no reason why Ukraine should not follow this trend.

G. Special arrangements for specified professional groups

The universal, mandatory Swedish pension system is composed of an NDC scheme and a FDC scheme. Within the framework of these two schemes there are no special groups. The same rules apply to all occupations, all employees and all self employed (including farmers). This was generally the case already in 1960, with the exception of farmers. In the early 1970s farmers were also integrated into the general public scheme. (They had first opposed participation and then about a decade later began to lobby to get special benefits. Instead of voting them special benefits the parliament voted to include them in the universal mandatory scheme.)

Those few groups that have special rights (some because of historical reasons) receive these through an agreement between the employers and the union representing them. This means that the employer agrees to set aside funds or to pay a lump sum to a fund to cover the early retirement of employees in the occupation/profession in question from a specified age. One thing that these agreements have in common is that the "early retirement" age is normally 60 (or 61).

In addition, it is important to point out that Sweden has four general labor-management agreements that cover about 90 percent of all employees. The general agreements allow for early retirement, in principle from age 55, but *at the expense of losing part or all of a supplement to the public pension*. People normally claim this supplement at or close to the age of 65. Very few persons claim this occupational benefit prior to the age of 61, because they do not want to experience the substantial reduction this brings for their life annuity. Also, increasingly more people postpone claiming their benefit until after the age of 65, which gives them a positive actuarial adjustment.

The following groups have an exceptional status within the occupational schemes:

A. Municipal and country council employees (persons working in health care, care of the aged and handicapped, social services, education, community maintenance, etc.)

Firemen. Firemen can retire between the age of 50 and 60 with 73.5 percent of their wage if they have at least 30 years of service as active firefighters. The extra financing is paid by the employer (municipality). Implicitly, persons claiming this benefit continue their pension at age 60 using the combined public and occupational benefits, which are both actuarially reduced due to the early retirement age. This is in fact, not very advantageous, which deters many from claiming the early benefit. There are no other exceptions among municipal and county council workers (which include, health care services, education, care services, social services, city maintenance, etc.).

B. Civil servants and other state employees. (Civil servants, military, judiciary system, polis, university employees, employees in the social insurance and employment services, etc.)

Among Swedish civil servants and other employees of the Swedish state the few special privileges that remained were abolished for *all* employees born 1963 and later. This means there are still some transitional groups who can claim a special occupational benefit according to the older rules. These are:

Military pilots. Persons born prior to 1963 and who are still military pilots when they reach the age of 55 can claim a special benefit. A similar rule applies to **military officers, train drivers and persons working in criminal care** when they turn 60.

Dancers can retire at age 41, with a pension, and usually continue to work in another profession.

C. Private employees.

Pilots had a special agreement establishing a pension age of 60 until 2002. Since 2002 they have had the same occupational rules as all other private employees, *i.e.*, the special privilege was abolished. The **sea officer's** union is the only group I have been able to find that has retained the special privilege to retire at age 60, drawing on a separate employer financed fund for this purpose. This is a "historical" benefit that has remained. There are very, very few persons covered by this benefit.

References

- Chłoń-Domińczak, Agnieszka, Marek Góra , 2006.** "The NDC System in Poland: Assessment after Five Years" in *Pension Reform through NDCs: Issues and Prospects for Non-Financial Defined Contribution Schemes* ed. Robert Holzmann and Edward Palmer. Washington, D.C.: The World Bank.
- Chłoń-Domińczak, Agnieszka,, Daniele Franco and Edward Palmerr, 2011.**
- Munnell, Alicia and Annika Sundén, 2004.** *Coming up Short - The Challenge of 401(k) Plans.* Washington D.C.:The Brookings Institution.
- Palmer, Edward and Mårten Palme, 1989.** "A Macroeconomic Analysis of Employer-Contribution Financed Social Security in Sweden" (with M. Palme) in A. Klevmarken and B. Gustafsson (eds.), *The Political Economy of Social Security.* Elsevier Science Publishers: Amsterdam.
- Palmer, Edward 2006.** "Conversion to NDC – Issues and Models" in R. Holzmann and E. Palmer (eds.) *Pension Reform through NDCs: Issues and Prospects for Non-Financial Defined Contribution Schemes.* World Bank: Washington DC..
- Palmer, Edward, Sandra Stabina, Ingemar Svensson and Inta Vanovska 2006.** "NDC Strategy in Latvia: Implementation and Prospects for the future" in *Pension Reform through NDCs: Issues and Prospects for Non-Financial Defined Contribution Schemes* ed. Robert Holzmann and Edward Palmer. Washington, D.C.: The World Bank.

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