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Pension Reform in the New EU Member States

Will a Three-Pillar Pension System Work?

ABSTRACT: *The new European (EU) Union member states from Central and Eastern Europe face a huge challenge in reforming their pension systems in/after transformation from a socialist to a market-based system. This paper discusses the question of whether a three-pillar pension system would be appropriate for these countries.*

The new European Union (EU) member states of Central and Eastern Europe (NEW-8) began the 1990s with a daunting legacy. Their public pension schemes were structured along socialist principles, and contributions were collected solely from employers (often at flat rates based on payroll). This led to an immense challenge in the transformation process, that in itself a tremendous challenge, of course.

The main features of the NEW-8 pension systems in the mid-1990s were:

1. high system dependency ratios;
2. low retirement age;
3. high replacement ratios (in some countries);
4. Unfavorable demographic trends and growing financial imbalance (e.g., dramatic decline in birth rates, increasing life expectancy, danger of labor emigration); and
5. high contribution rates, weak link between contribution and benefits, and limited compliance incentives.

Furthermore, the underreporting of wages became widespread, implying a drop in pension revenues, and requiring state subsidies.

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The financial pressures from the transition to market economies have had a major impact on pension reforms in the NEW-8. For example, mass redundancies in the process of restructuring former state enterprises led to large-scale early retirement at a high cost to the state.

However, the pension-financing problem was not just confined to the expenditure side. Individuals acquired pension rights on the basis of their employment history, while financing was based on payroll taxes levied at the company level—there were no effective links between entitlements and contributions at the individual level. In a situation with falling employment, a growing shadow economy, and major difficulties in collecting social-insurance contributions, the old system of financing and of acquiring pension entitlements could not be sustained as it produced major deficits in pension and social-protection funds.

Individual accounts, with stringent and transparent links between individual contributions and the buildup of benefit rights, seemed to offer an attractive solution to the pension system problems of the NEW-8. Furthermore, as capital formation in the economy was insufficient and the need for investments in all areas was massive, the idea of prefunding a part of future pension provisions became attractive also from a macroeconomic perspective. However, against the diverse historical and political background of the individual NEW-8 states, these countries have decided to go their respective ways in reforming their pension systems.

Pension Reform Process in the NEW-8

Over the last decade, pension reform has been a major issue on political agendas across Europe. In the EU-15 (i.e., the EU member states prior to the 2004 enlargement), changes in pension schemes have primarily come in response to current and prospective population aging. However, population aging is also one of the most pressing future problems in the NEW-8 (see Figures 1 and 2). Through increases in pension and health-care expenditures, population aging is expected to have a negative impact on medium- and long-term fiscal sustainability. This is one of the major fiscal risks in the NEW-8 as pension and health-care spending in many countries are the biggest items among all budget expenditures.

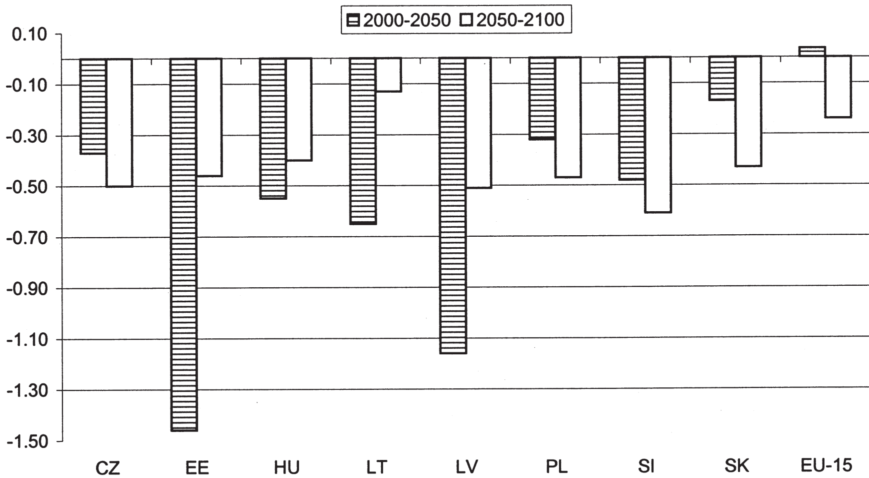
In facing this problem, most NEW-8 countries have been adopting parametric changes in their pension pay-as-you-go (PAYG) pillars. Their primary objective has been to link pension benefits closer to pension contributions and to bring the unfunded public scheme closer to an actuarial balance. The measures include cuts in pension benefits, increases in the retirement age, increases in pension contributions, or combinations thereof.

The Status Quo in the NEW-8's Pension Reform Process

With respect to their pension reforms, the NEW-8 form three clusters:[1]

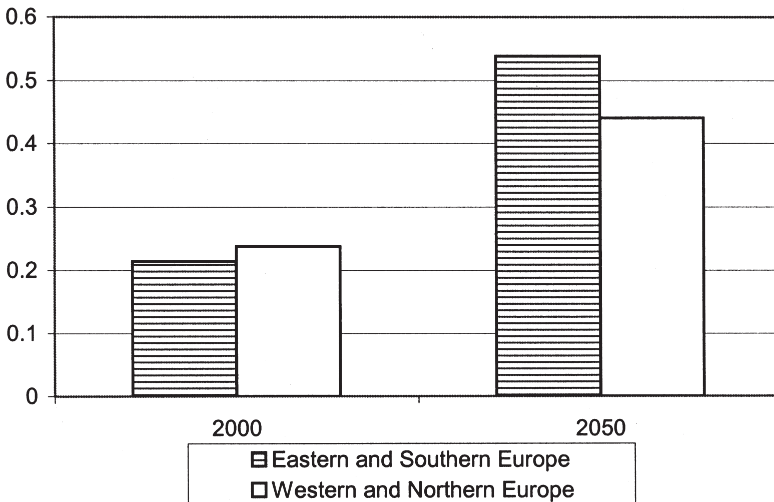
1. Latvia, Poland, Estonia, Hungary, and, most recently, Slovakia, have adopted major changes and introduced a second pillar of mandatory, fully funded,

Figure 1. **Average Annual Rate of 2002 Population Change, Medium Scenario** (percentage)



Source: United Nations (2004) (author's calculations).

Figure 2. **Old Age Dependency Ratio** (percentage)



Source: United Nations (2004) (author's calculations).

privately managed schemes. Latvia and Poland have furthermore introduced a new first pillar, based on the principles of notional defined contribution (NDC). (Latvia was the first to set up a pillar informed by the NDC principles developed in Sweden, but it took time before it added the fully funded second-pillar element and a voluntary third-pillar supplement. In Poland, first-pillar reform and the introduction of a funded second pillar happened simultaneously.)[2] Estonia has established a PAYG-defined benefit scheme similar to the German model, whereas Hungary and Slovakia have reduced their existing first pillar (a PAYG-defined benefit scheme) to make room for the mandatory, second pillar of private schemes. (Estonia did not follow the precedence established by Latvia. Major reform in 1997 changed the first pillar to a PAYG-financed, earnings-related scheme, similar to the German points-based system. Only five years later, and as a separate reform step, did Estonia implement a mandatory, fully funded second-pillar scheme, where savings are managed by private pension funds. Hungary shifted a portion of its pension provision to a mandatory pillar of private schemes in a 1998 reform. Slovakia introduced a similar reform at the end of 2003.)

2. By contrast, Lithuania and Slovenia have retained their PAYG-defined benefit systems financed from social security contributions and general taxation. (Lithuania has implemented some parametric reforms. In Slovenia, the government had to withdraw its proposal for a three-pillar system in the face of massive popular protest. Instead, it has sought to consolidate the existing system through various parametric reforms.)
3. The Czech Republic is located somewhere between these two clusters. Early in the transition period, it opted for a universal, defined-benefit system financed on a PAYG basis without adding a mandatory pillar of fully funded private schemes. (With reform in 1993, and a follow-up in 1995, the Czech Republic was the first postcommunist country to implement a major reform of its public pension system. Yet policymakers were more concerned with removing incentives to early retirement and establishing a universal and equitable defined-benefit system financed on a PAYG basis than with introducing elements of funding and privatization. There is no mandatory funded pillar, and the voluntary third pillar is of negligible importance.)

The basic characteristics of the reformed pension systems in the NEW-8 states are summarized in more detail in Tables 1 and 2. Table 1 describes the current pension systems in the Central European new EU member states (CEC-5), whereas Table 2 includes all new EU member states and, in addition, the development process in each state.

Further Steps Planned in the Short Term

Hungary intends to increase the first-pillar old-age pensions by introducing a thirteenth-month pension gradually over four years. Latvia plans to introduce the higher

Table 1

Pension System in the CEC-5

Czech Republic	
Two-pillar system, of which one pillar has compulsory membership.	
Compulsory membership:	for employees, self-employed persons, persons having equal status (students, nursing staff, etc.)
Minimum contribution periods:	15 years prior to the age of 65
Standard retirement age:	between 53 and 57 years for women, graduated according to the number of children; 60 years for men
Amount of pension:	depending on income and periods of insurance
First pillar: pension system with compulsory membership financed by contributions based on the idea of solidarity.	
Second pillar: voluntary private pension insurance (which, however, is still in its initial stage).	
There are hardly any company pensions.	
Hungary	
Three-pillar system, of which two pillars have compulsory membership.	
Compulsory membership:	for employees, cooperative members, self-employed persons, unemployed persons, soldiers
Minimum contribution period:	first pillar—15 years as a rule (20 years for full pension); second pillar—180 months
Standard retirement age:	62 years in case of both pillars
Amount of pension:	first pillar—average monthly income and periods of insurance: at least 16,600 Hungarian forints
	second pillar—depends on the kind of pension fund chosen: at least 25 percent of the first pillar
First pillar: state pension (pension system under which pensions are financed by the contributions of the working population)	
Second pillar: private pension (setting-up of a compulsory pension fund)	
Third pillar: voluntary private pension (or life) insurance	
Persons who were already insured in the state social insurance prior to January 1, 1998, could choose a private pension fund at their discretion. Persons who have not chosen a pension fund will receive their pensions exclusively from the state pension insurance.	
Poland	
Three-pillar system, of which two pillars have compulsory membership.	
Compulsory membership:	for employees
Minimum contribution periods:	20 years for women, 25 years for men
Standard retirement age:	60 years for women, 65 years for men
Amount of pension:	depending on the reference wage or salary and the number of years of insurance

(continues)

Table 1 (Continued)

First pillar: Each person or employee maintains a separate account with the social-insurance institution. The overall contribution or a portion thereof is paid to this account, depending on whether the person is entitled or obliged to participate in the second pillar. All persons subject to social insurance are obliged to participate in the first pillar.

The second pillar consists of a private pension fund. Participation in the second pillar is obligatory for all persons born after December 31, 1968. Persons born between December 31, 1948, and January 1, 1969, may participate on a voluntary basis. Persons born up to December 31, 1948, are entitled to participate only in the first pillar. Part of the pension contribution by the insured person for participating in the second pillar is transferred from the accounts maintained with the social-insurance institution to the private pension fund selected by the entitled persons.

Participation in the third pillar is on a voluntary basis. This pillar comprises life insurance premiums paid into an investment fund by the employee or the employer.

Slovakia

Two-pillar system, of which one pillar has compulsory membership.

Compulsory membership:	for employees, cooperative members, self-employed persons, unemployed persons, soldiers
Minimum contribution periods:	25 years for full pension; in case of partial pensions: 10 years for women, 20 years for men, 20 years for military service
Standard retirement age:	62 years for women and men (step-by-step adaptation from the previous 57 years and 60 years, respectively)
Amount of pension:	depending on the duration of employment, occupational hazard, gender, amount of income during active service

First pillar: pension system with compulsory membership financed by contributions based on the idea of solidarity.

Second pillar: voluntary private pension insurance (which, however, is still in its initial stage). There are hardly any company pensions.

Slovenia

Three-pillar system, of which one pillar carries compulsory insurance.

Compulsory membership:	for employees, self-employed persons, trainees/apprentices, civil servants, farmers, unemployed persons
Minimum contribution periods:	15 years
Standard retirement age:	graduated by the number of years of insurance; 58–65 years for men, 58–63 years for women
Amount of pension:	depending on previous income, years of insurance

First pillar: state pension (pension system with compulsory membership under which pensions are financed by the contributions of the working population)

Second pillar: private pension (setting-up of a compulsory pension fund)

Third pillar: voluntary private pension (of life) insurance

Contributions to the second and the third pillars are made on a voluntary basis.

Source: Bank Austria Creditanstalt (2004).

Table 2

Basic Characteristics of (Reformed) Pension Systems in the New EU Member States

	Main reforms	Statutory schemes		Private pillars
		PAYG	Funded	
Czech Republic	1993, 1995	Defined-benefit PAYG financed from social security contributions.	None	Voluntary, tax expenditure subsidized of moderate importance.
Estonia	1997	PAYG earnings-related similar to German system.	Mandatory, fully funded DC (2002). To be administered by private funds.	Voluntary, tax expenditure subsidized of minor importance.
Hungary	(1994) 1998	Defined-benefit PAYG financed from social security contributions.	Mandatory, fully funded DC (1999) administered by private funds.*	Voluntary (1994) mutual benefit funds, tax expenditure subsidized of moderate importance.
Latvia	1995, 1998, 2000	NDC based.	Mandatory, fully funded DC (2001) administered by private funds.*	Voluntary (1998), tax expenditure subsidized of minor importance.
Lithuania	2003/2004	Classical PAYG DB with flat rate and earnings-related part financed from general taxation and social security contributions.	None	"Hybrid" voluntary pillar financed with public pension revenues. No fund established yet.
Poland	1998	NDC based.	Mandatory, fully funded DC (1999) administered by private funds.*	Voluntary, tax expenditure subsidized of moderate importance.

(continues)

Table 2 (Continued)

Slovenia	Three-pillar reform rejected 1999, existing pillar strengthened thereafter.	Classical PAYG DB financed from social security contributions and general taxation.	None	Voluntary, tax expenditure subsidized of minor importance.
Slovakia	Major reform planned for 2003–2004.	Defined benefit PAYG financed from social security contributions and general taxation.	Mandatory, fully funded DC (2004). To be administered by private funds.	Voluntary, tax expenditure subsidized of minor importance (1996).
Cyprus	1995 (introduction of social pension)	Classical PAYG DB financed from social security contributions and general taxation.	Mandatory pension schemes/provident funds for the broader public sector.	Voluntary, of minor importance.
Malta	No major reforms recently.	Classical PAYG DB financed from social security contributions and general taxation.	None	Voluntary, of minor importance.

Source: Commission of the European Communities (2004: 106).

Notes: DC = defined contribution. DB = defined benefit. PAYG = pay as you go, that is, financing current benefits out of current revenues. NDC = notional defined contribution, that is, a system with individual contribution accounts where benefits for individuals are calculated as a sum of individual contributions times a factor of real growth in the economy in the contribution period. * Whether these elements in overall provision should be categorized as the second part of first-pillar provisions or actual second pillar depends on the jargon applied. In the Swedish system, the NDC and the fully funded DC element are integral parts of the first pillar.

indexation of pensions. The objective of those measures is to improve the social situation of pensioners.

In addition to parametric changes, the majority of the countries have introduced a three-pillar pension system, including a state-managed, PAYG pillar, and two fully funded pillars (one obligatory and one voluntary). In their 2003 preaccession economic programs (PEP), Lithuania and Slovakia presented plans to implement a multipillar pension scheme (in 2004 and 2005, respectively). The introduction of the second (funded, obligatory) pillar requires a high degree of administrative preparation in order to avoid implementation problems. For instance, in Poland, there have been delays in transfers of social-insurance contributions from the Social Insurance Institution (ZUS) to private pension funds. In addition, the classification of the second pillar in the European System of Accounts 1995 methodology outside government would increase the deficit figures for countries that pursued this kind of pension reform. The main measures in PEP concerning pension reform are described in Table 3.

Assessment of the Various Reform Approaches in the NEW-8

Comparison to the EU-15

Compared to the EU-15, the statutory contribution rates for pensions tend to be high in the NEW-8 (typically 25 percent or more of gross earnings). The resulting replacement rates, however, tend to be low. This is due to low employment rates, particularly for women and older workers, and the former weak links between contributions and benefits. (The present generations of pensioners with claims under the old pension systems still have to be provided for.) In addition, in many NEW-8 countries (such as Slovenia, Poland, Hungary, the Czech Republic, and Lithuania), there is a low average exit age from the labor market, which constrains revenues and raises costs.

As it will take decades before benefits from fully funded schemes reach the intended levels, benefit adequacy and employment rates will thus continue to be pressing short- to medium-term issues in these countries. As mentioned above, in the longer term, the NEW-8 will also face the challenge of an aging population. This will imply additional spending pressures on pension schemes. By 2050, according to present trends, the NEW-8 can expect to have old-age dependency ratios (the number of people aged sixty-five and over as a percentage of people aged fifteen to sixty-four) at around 50 percent, which will be higher than in the EU-15 (see Figure 2).

Pension Design Clustering in the European Union

The main difference from current arrangements in the EU-15 countries is that five of the NEW-8 countries have established (as part of their statutory arrangements)

Table 3

Main Measures in the Preaccession Economic Programs Concerning Pension Reform

	Funded pillar–developed	Planned reforms
Czech Republic	X	First pillar: parametric reforms within fiscal consolidation, notional defined contribution reform foreseen for 2010. No plans for the compulsory funded pillar.
Estonia	√	
Latvia	√	More generous indexation rule in the notional defined contribution pillar.
Lithuania	X	Introduction of a voluntarily pillar as of 2004.
Hungary	√	Gradual introduction of the thirteenth-month pension. Increase contribution rate to mandatory funded pillar.
Poland	√	
Slovenia	X	Parametric reforms in the first pillar.
Slovakia	√	Introduction of a compulsory funded pillar planned for 2005.

Source: European Commission (2003: 37).

a second pillar of mandatory, fully funded, defined-contribution schemes in which pension savings are administered by competing private pension funds or insurance companies.[3]

Flat-rate, public, first-pillar arrangements are less common in the NEW-8, where pension systems tend to fit either the so-called Bismarck or the NDC models (see Table 4).

Among the EU-15, only Sweden has a system with a mandatory, fully funded element (with a contribution rate of 2.5 percent versus a rate of 6–9 percent in the overall provision). Others—the Netherlands and Denmark—have a significant second pillar of fully funded occupational pensions based on collective agreements, and the United Kingdom and Ireland rely to a large extent on voluntary funded provision, either through occupational or personal pension schemes (Commission of the European Communities 2004: 29).

The difference as regards the reliance on funded, privately administered elements in pension provision is therefore more one of degree and approach than of principle.[4]

Enlargement will not bring basic changes to the general objectives of the European Union with respect to pension reform: the present European Union overall strategic approach to pension reform embodied in the Laeken objectives of adequacy, financial sustainability, and adaptation to labor market and societal changes will continue to be considered as appropriate to address the medium- and long-term challenges to pension systems in the European Union. However, pension reforms will continue to remain the responsibility of the individual member countries.

The differences between pensions in the EU-15 and the NEW-8 are less than it would appear. Moreover, with developments toward a somewhat larger role for funded elements in overall provision already underway in several old and new member states, recent enlargement is unlikely to lead to a new orientation of EU coordination on pensions.

Given the present vulnerabilities of pension systems in the NEW-8, the EU process of the Laeken pension objectives would most likely lead only to an extra emphasis on securing the adequacy of benefits, higher employment, and longer work lives as core factors in the sustainability and effective regulation and sound management of pension funds.

Against the challenge of aging populations, a major criterion in assessing various pension systems should be which system could best trigger positive savings effects and, thus (according to the Laeken objectives), ensure that older people are not placed at risk of poverty, and that access for all individuals to appropriate pension arrangements is provided.

Future Plans and Challenges: Some Fragmentary Aspects and Assessments

In Hungary, the first pillar is planned to be restructured and turned into more of an NDC system beginning in 2013. Furthermore, from 2013, a new benefit formula is scheduled to be used to calculate the pensions by which the relatively generous public benefits are to be pared down and the degree of equivalence strengthened.

The official figures are predicated on optimistic assumptions concerning the trend in employment, which the Organization for Economic Cooperation and Development (OECD) regards as unrealistic. The status of the new two-tiered system ought to be clarified. Further development of the Hungarian capital market would also be helpful.

In the Czech Republic, further planned reforms are to see to the creation of an occupational pension fund tier. The Czech Ministry of Finance predicts that, by 2030, contribution rates would have to climb from the current 26 percent to 44 percent if the public pension fund is to remain in equilibrium under the present conditions. Therefore, there is urgent need for reform.

In their present form, the Czech and the Hungarian pension systems will hardly be sustainable. The strongest sign of this is that the pension contributions in both countries still amount to a very high 26 percent (for employees with average in-

Table 4

Reformed Pension Systems in the European Union According to Main Features

	PAYG flat-rate public first pillar	PAYG earnings-related, public single or first pillar			Prefunded "mandatory" or "major" pillar
	"Beveridge"	"Bismarck"	"NDC"		
Austria					
Belgium					
Denmark					
Finland					
France					
Germany					
Greece					
Ireland					
Italy					
Luxembourg					
Netherlands					
Portugal					
Spain					
Sweden					
UK					
Cyprus					
Czech Republic					
Estonia					
Hungary					
Latvia					
Lithuania					
Malta					
Poland					
Slovakia					
Slovenia					

Source: Commission of the European Communities (2004: 109).

comes). Without the prospect of a substantial reduction in this burden, such contribution rates must eventually become a serious obstacle to economic growth. This threatens to lead to a vicious circle, as steady economic growth would, in turn, facilitate the provision of future retirement incomes.

The necessary further scaling-back of public pension systems should be accompanied by redoubled efforts to accumulate private capital for funded pensions. Furthermore, it seems that the notion of a compulsory private scheme, in particular, is meeting strong resistance in the Czech Republic. On the other hand, membership need not be compulsory if a high degree of coverage can be attained by other means, through tax incentives, for example. (Relatively generous tax privileges have been instrumental in making the third pillar a popular success in the Czech Republic and Hungary.)

In Poland, the new architecture of pension provision, with its relatively strong second pillar, may be considered comparatively resistant to demographic shocks. Moreover, given its present condition, the Polish pension fund market in particular has considerable potential. In Hungary, too, the pension fund industry can be expected to grow briskly if reforms are instituted without delay. To be sure, growth in pension fund assets is likely to put the absorptive capacity of financial markets in the NEW-8 member countries to a severe test. Most of all, accession to the European Economic and Monetary Union will trigger a quantum leap. The new member countries' pension capital will then have access to the eurozone.

In Slovenia, changes to the system of voluntary pension insurance may lead to an increase in the number of participants in the system. Further changes also relate to a mixed system of pension indexation, where pensions are adjusted annually in accordance with the change in the average wage.

In general, against the background of the demographic challenge and the socialist legacies (there remains considerable support for a PAYG-dominated system in most of the NEW-8), it appears that there is no alternative for the NEW-8 countries other than to switch to a multipillar pension system and to foster second and third pillars. (The most serious challenge for most NEW-8 countries is ensuring the transition from a PAYG-dominated system, a transition that has been delayed by close to a decade.) But in some countries it may take longer, mainly because of political–economic hindrances (discussed below); and the specific regimes in the individual countries may eventually be different. The latter, however, need not matter, as there is no optimal system solution for all NEW-8 countries. We shall discuss this in the following section.

Pros and Cons of Various Pension Systems

One-Pillar Versus a Multipillar System

A one-pillar system is the traditional PAYG system. A PAYG system is based on intergenerational transfers, while a fully funded (FF) system is based on savings.

PAYG schemes pay pensions out of current contributions or taxes. They are in danger of becoming massively underfunded when the number of people drawing pensions begins to markedly increase relative to the number in the active labor force paying into the system. Furthermore, the PAYG payroll tax imposes an excess burden on workers that tends to result in a reduction of the labor supply.

An alternative one-pillar system would be full privatization, for example. Full privatization offers the opportunity for swift and consistent restructuring of retirement provisions. This can generate a strong impetus for savings and the development of financial markets. However, the preconditions for quick expansion of these markets must exist or be created.

Privately funded FF pillars are expected to help diversify assets and thereby to ease the burden of impending population aging, thus shifting a segment of contributions out of the PAYG system while payment obligations from the prereform system remain intact. Furthermore, it is hoped that replacing PAYG systems with FF systems will increase labor market efficiency, spur domestic capital accumulation, and counteract rising dependency ratios. The theoretical and empirical evidence of these effects is ambiguous, however. It is argued that benefits from increased capital market efficiency may not materialize in a small open economy, in which domestic investment is independent of domestic saving (see Schimmelpfennig 2000). The main disadvantage of full privatization may be seen in excessive risk taking.[5]

In contrast, partial privatization implies that a PAYG tier is retained in a modified form: the public system is downsized and complemented by the creation of occupational pension funds (as in the Netherlands or Switzerland). Neither approach is intrinsically better than the other. In gradual privatization, the above-mentioned problems may be less serious. Moreover, the aim of risk diversification makes a balanced three-pillar architecture desirable; while the public systems are subject primarily to the threat of political intervention, funded systems entail the risk of unsatisfactory investment returns.

Partial privatization is part of a multipillar pension system. A three-pillar system (as suggested by the World Bank 1994; cf. Holzmann 1997) is structured as follows: the first pillar is PAYG and provides a minimum pension, the second pillar is FF and mandatory, and the third pillar is FF and voluntary.

The new second pillar is the centerpiece of the pension reform in, for example, Poland. Private savings are there accumulated in personal accounts kept as private pension funds. Membership is compulsory for all employees born after 1969 (see Table 2). The funded pension plans are run on the defined-contribution principle, that is, the amount of benefits paid depends solely on the amount of contributions and the realized return on investment. Only at the disbursement stage are pensions taxed.

The compulsory pension fund system appears to be popular with Poles; however, there is need for further reform in Poland, too. There are considerable payment arrears, and there are still a host of inactive accounts to which no contributions

have ever been credited. Conversion of the first pillar into a lean defined-contribution system would satisfy the demographic imperatives more effectively. The major problem is the financing of the transition process from one system to another. This is associated with high transition costs that have mainly to be carried by the current generations. Hence, opposition to such reforms is to be expected.

There is no doubt that the PAYG system offers a much lower rate of return than the capital market does. However, this may just be the mirror image of the introductory gains of older cohorts. It may be impossible to design a Pareto-improving transition to a funded system. The PAYG system imposes a burden on later generations; however, one may claim that any pension system is a zero-sum game for all the participatory generations in the sense that the present value of all contributions equals the present value of all pensions. Funding might still be advisable due to the sharp increase in the old-age dependency ratio. In the PAYG system, people essentially expect to receive a pension from their children, but, as the aged increasingly outnumber youth, a double burden ensues: raising children and paying for the old.

The above argument can only lend support to partial funding. In other words, funding with real capital is needed only to the extent that "funding" with human capital is lacking. One should ask those who have saved on human capital to use their funds to provide real capital instead.

ND Versus NDC Model

Some NEW-8 countries, such as Poland, have introduced (or are planning to introduce) a modern, three-pillar system in which they also overhaul the traditional first pillar. In Poland, the new first pillar is based on the NDC model, a PAYG system. Its basic principle is to make the PAYG system approach work more like privately funded systems, with strict equivalence of contributions and benefits. Above the minimum pension, the amount of an individual's NDC pension essentially depends only on the level of contributions made per year to personal retirement accounts (added to the Demographic Reserve Fund). This permits the efficient countering of financial bottlenecks. Participation is mandatory for all employees born after 1969.

The NDC model implies that an individual notional (unfunded or virtual) account is established for each worker. NDC retirement benefits are then directly linked to the size of these national accounts at the time of retirement. NDC schemes are designed to reward those who remain in the labor force at length and to penalize those who retire early. They are expected, in the long run, to help keep pension benefits in balance with available payroll-contribution revenues. They are contended to be more transparent, less vulnerable to political risk, and more likely to contribute to the development of financial institutions.

A major alleged strength of NDC relative to FF is that it exposes pension benefits to less market risk. This is supposed to spread the economic burden evenly over more generations of workers, to bear lower administrative costs, to be less

vulnerable to various forms of corruption in comparison to FF, and to be more suitable for countries that do not have well-developed financial institutions and capital markets. None of these alleged benefits have been empirically demonstrated, however.

One of the major criticisms of the NDC approach is that assets in NDC accounts are not capital assets. Moreover, a shift to NDC may result in greater income inequality among retirees. An NDC system shifts some risks from the government to individual contributors, thereby putting women at a disadvantage because of lower periods of employment and, hence, lower contribution rates.

Another criticism of the NDC system is the allegedly high administrative costs of privately managed, defined-contribution accounts (individual accounts) and the costs of annuitizing accumulated assets upon retirement. In addition, recent global financial crises have focused attention on the problems of income security under individual account systems (see Holzmann and Stiglitz 2001).[6]

Furthermore, even though one may argue that an NDC system makes parametric reforms (necessary to stabilize the PAYG pillar) easier, because it exposes the trade-offs and clarifies concepts, this does not change the macroeconomics of PAYG systems, and therefore does not substitute for the introduction of prefunded second and third pillars. NDC can be implemented as individual account systems; however, it can also be mimicked by a set of rules in a conventionally defined-benefits PAYG system, as the proposed new German public pension system demonstrates.[7]

However, both the NDC and FF pillars may be unsuitable for many low-income countries lacking the administrative capacity to collect contributions, to keep track of those contributions, and to pay benefits when they are due.[8] These capacities are or will likely soon be available in most NEW-8 countries, so that an NDC system, supplemented by privately prefunded pillars, appears to be a workable and appropriate approach for most of these countries.

Political Economy Aspects of Implementation

In this section, we shall (1) consider what explains the pension reform choices of the NEW-8, described above; (2) give a personal assessment of the question "Does it make sense for individual NEW-8 countries to switch to a multipillar system?"; and (3) express some fragmentary explanations of the political–economic motives behind the various reforms and nonreforms in the individual NEW-8 countries.

I can here stress only a few of the relevant aspects and cannot refer to all NEW-8 countries in the same detail. In general, one can say that the main causes for the different pension reform choices made by individual NEW-8 countries are a mix of different traditions (cultures), legacies, geographic proximity, common societal values and attitudes (and linguistical and historical connections), and, last but not least, political contingencies. I would support the hypothesis that, in the medium term, all the NEW-8 countries will (must) move toward a multipillar system (convergence), which, however, may differ in respective details.

What Explains the Choices of the NEW-8?

One possible explanation is that slow economic growth has worked against the proliferation of voluntary schemes in some of the NEW-8 countries (e.g., Poland and Slovakia). Also, small populations and undeveloped financial markets may have discouraged private companies from starting funds in some of the countries (e.g., Lithuania). Furthermore, in some of the countries, such as Slovenia, tax incentives for voluntary savings have proven effective, though costly, in encouraging savings. The Slovenian pension system has three pillars. The second pillar is a collective and (since 2000) individual pension scheme that has strong tax incentives.

The high administrative costs of individual accounts have led some NEW-8 governments to promote occupational arrangements in which employers contribute to the scheme and oversee its operation (e.g., the Czech Republic). In many of the countries, such arrangements have proven to have stronger management and higher yields than individual savings schemes, in which employers play no role. Moreover, such schemes add to the bundle of conditions subject to collective bargaining and thus may help improve benefits and extend coverage. In addition, occupational pensions often feature forms of governance that allow workers and employers to manage the schemes jointly.

In the Czech Republic and Slovenia, the privatization of pensions has been vigorously debated. In each case, government decisions to forgo privatization were based in part on the recognition of the high transitional financing costs associated with moving from PAYG to advanced funding. The Czech and Slovene governments were also subject to strong opposition to privatization from trade unions, that argue such would undermine the principle of universal social insurance. In addition, as both the Czech Republic and Slovenia had relatively low levels of external debt, they arguably were less subject to the influence of international financial organizations, which favor privatization strategies (see Müller 2002).

Political considerations may explain why policymakers in the NEW-8 have demonstrated varying degrees of willingness to introduce a mandatory private pension provision. In the Czech Republic, legislation approved in the late 1990s and in the early 2000s envisaged the creation of second-pillar pension funds, but the mandatory nature of pension contributions to private funds was abandoned in January 2002 by a center-left coalition government. Among the Visegrad four, the Czech Republic has done the least to reform its pension system. The main problem lies in the insufficient reform of its PAYG system, which remains relatively generous. Pensions are indexed to rises in nominal wages, which in recent years have outstripped inflation. Employees were obliged to contribute to private pension plans following legislation adopted in the late 1990s, but, as mentioned, a succeeding government abolished the mandatory nature of these contributions. Employees of all age groups are now free to decide whether they want to join second-pillar funds.

Slovakia was the late starter in pension reform among the NEW-8, but it has succeeded in implementing significant reforms. In contrast, Slovenia can be re-

garded as an example of a gradualist approach toward reform, which is still behind, though it started earlier with bold plans. A government white paper from November 1997 contained radical proposals for a fundamental restructuring of the pension system: a large downsizing of the first (public) pillar and the introduction of a mandatory, privately funded second pillar. These reform proposals were strongly influenced by measures championed by the World Bank. (Since 1989, NEW-8 pension reforms have been assumed to generally follow the "neoliberal" recommendations of international financial organizations.) However, because of strong opposition from various groups—trade unions, opposition parties, and certain influential economists—the proposals were watered down considerably.

Poland is often cited as an example of a NEW-8 country that quickly introduced a system in line with the model proposed by the World Bank (though it was concretely influenced by the Swedish system). In contrast, the Czech pension system was marked by a series of reforms through which the old socialist model deviated toward (or came back to) the Bismarckian model.

In Latvia, the pension program inherited from the former Soviet Union was reformed in line with the Scandinavian trajectory. In Estonia, the institutional architecture is typically multitier, and private companies play a more relevant role compared with Latvia. Lithuania is closer to the Bismarckian model: supplementary schemes are voluntary instead of mandatory. For a detailed analysis of the (differences in the) Baltic pension reform programs, see the recent OECD study (OECD 2004).

The "Bismarckian family," then, includes the Czech Republic, Slovakia, and Slovenia. Pensions there are fundamentally related to the original German imprint. The "Nordic family" includes Poland, Hungary, and the Baltic states. Here, pension systems are largely based on earnings-related programs. The Nordic system is hugely based on the first pillar, which represents the major source of income for pensioners, while occupational schemes are voluntary (instead of mandatory) and less developed (especially in Finland, the Baltic countries, and Poland).

Does It Make Sense for the Individual NEW-8 Countries to Switch (or Stick) to a Multipillar System?

The following assessments can only be fragmentary considering that the NEW-8 countries are different in various aspects.

Many economists argue that the macroeconomic benefits of a multipillar pension system are not warranted. There is insufficient empirical evidence to prove that switching to a privately managed funded pension scheme leads to a rise in economic growth. Economists point out that its impact on savings and investment will likely depend on other macroeconomic parameters.

The Polish experience shows that managing a system of national accounts is not easy, and, at the initial stage, may become a headache for the public sector.

Due to difficulties in launching a centralized information technology (IT) system and in identifying individual pension accounts, the Polish Social Insurance Institution has run a large debt to open pension funds.

In the Czech Republic, the current pension system does not guarantee that in the future the private sector will assume pension liabilities to the employed, currently fully shouldered by the state. However, the number of participants in private pension funds is high: as of the end of the first quarter of 2003, 54 percent of the total workforce were members of private pension schemes. The Czech government recently considered a fiscal reform package that includes a less generous method for indexing PAYG pensions, stricter rules for early retirement, and the introduction of notional accounts. The reform draft also proposed hiking the minimum pension age (e.g., for men from sixty to sixty-three years of age), but gradually, over a decade or more. All of these changes concern only the first pillar of the pension system, the state pension fund. It is still unclear if the government will try to go further and make participation in private pension funds mandatory for at least part of the labor force. This will depend largely on coalition politics in the current parliament.

Given that establishing a second pillar involves substantial administrative costs, the potential fiscal benefits of private pension schemes should be weighted against these costs in each particular case. Empirical evidence on the economic impact of switching to a multipillar pension system is scant. From a macroeconomic perspective, it is often argued that the only pension reform measure that is unambiguously beneficial for economic growth is raising the minimum retirement age.

It seems that by revamping their pension systems, Poland and Hungary have reacted in a timely manner to worsening demographic trends and prevented a ballooning of government deficits and future debt. Policymakers in the NEW-8 have demonstrated varying degrees of willingness to introduce mandatory private pension schemes. This may be justified by dissimilarities in the parameters of their economies.

Another conclusion is that the recently implemented or planned pension reform in the NEW-8 has not solved the issue of pension provisions for good. For example, the Hungarian Finance Ministry estimates that thanks to recent pension reform, the deficit of the first-pillar PAYG mechanism will remain under or around 1 percent of the gross domestic product (GDP) until 2030; however, it will then jump to around 2 percent of GDP in the early 2030s. The government would have to take further reform steps before that, including possibly implementing a further hike in the retirement age or a switch to a more economical pension-indexation method. Governments in other NEW-8 countries may also need to revisit the issue of pension provision in the future to change the parameters of their pension systems, if necessary, in response to unanticipated demographic or macroeconomic shocks. In the meantime, policies aimed at increasing labor participation and boosting economic growth should help raise the welfare of future generations of pensioners.

While some common elements seem to be consistent with the argument of a progressive convergence between different models, comparisons among different European pension systems may lead to a different conclusion. Notwithstanding the existence of common challenges, pension institutions are hugely influenced by past choices. Such a process is often termed "hybridization": new systems are the effect of the interaction of different sets of institutions and goals.

Political–Economic Motives

In Poland and Hungary, one could observe divisions of interest between the Finance Ministry, supporting market-oriented pension reforms with a high share of capital-funded provision for old age on the one hand; and the ministries of labor and social affairs, with reform proposals oriented toward a "reform within the system," on the other. A similar split is evident among economists (typically for the market-oriented approach) and lawyers (typically for gradual reform) in both countries. Also, there have been influential self-governing institutions for social security that have played a role in the pension reform debate, taking stands toward gradual reform.

The conflict of interests between the Ministry of Finance and the Ministry of Social Affairs has not existed in the Czech Republic and Slovakia. Compared to Poland and Hungary, the Czech Republic and Slovakia (the former Czechoslovakia), have presented a different picture of political actors. This might be explained by the fact that Poland and Hungary were reform countries even before 1989, and the discussion on pension reforms there started early. In contrast, in the former Czechoslovakia, the reform process and the discussion about it started much later in the 1990s, and has intensified since 1995, at least in the Czech Republic. In that year, a comprehensive strike was organized by trade unions to protest against the raising of the official retirement age mentioned above. In the 1998 election campaign, a pensioners' party's main political goal was a more regular indexation mechanism for pensions. Throughout the 1990s, then, pension issues became increasingly politicized.

The situation and developments in Slovakia have been different. The political actors in pension politics in Slovakia are difficult to identify; political processes there have often been characterized by a lack of transparency.

Analyses of economic transformation in Poland stress the role of strong and aggressive trade unions. In the early 1990s, the Solidarity trade-union movement was an influential actor fighting for the improvement of pensioners' income by advocating indexation and valorization. Nevertheless, Solidarity's role has changed, and in the late 1990s they supported privatizing pension reform in Poland.

Generally, in all the NEW-8, the roles of employees/trade unions and employers' organizations were rather limited early on. However, with continuing transformation, employees and employers have acquired an increasingly influential role in the pension reform debate.

An important reason for the feasibility of radical economic reforms has been identified as "the honeymoon effect" in the transition societies: even a short honeymoon period after the break with communism allowed comprehensive economic reforms and market changes in distribution. Social reforms nevertheless were not among these early radical reforms. In the field of pension reform, the ability to reform is more protracted. In Poland, there was a broad and long-standing consensus among most societal actors on the necessity of reform; the socialist government introduced reforms before 1989, and this agenda was advanced by successive liberal governments.

In the Visegrad states, German and Austrian influences were the starting point for their social security development. The Central and Eastern European countries are often said to have reestablished traditions interrupted by the long socialist period, including those in the field of social security. However, the construction of multipillar systems there does not simply rely on past ways; rather, we see an internationally inspired new combination of social insurance in the first pillar with a funded and mandatory second pillar (the latter vigorously advocated by the World Bank).

Recent years are characterized by the strong promotion of liberalization and social security systems and a targeting of the welfare state primarily on minimum social protection. One can connect this development to the "globalization" discussion in politics and economics, emphasizing aspects of international competition and the impact on social policy, as well as the growing activity of the World Bank in the field of social security, which began in Latin America in the 1980s and has spread to Central and Eastern Europe since the mid-1990s. Foreign experts seem to have acted in some respect as "gatekeepers" in the reform discussion—especially during the early years—and have concentrated on the demographic problems to be solved by capital-funded systems.

One can identify certain paradigmatic approaches within the different international agencies (e.g., the International Labour Organization and the World Bank). However, the positions of many of these agencies have changed over time. Reforms that have been introduced, with the assistance of the World Bank, in Latvia, Hungary, and Poland, do not copy the approach advocated, but they are in line with the World Bank's multipillar approach and the division of labor between the public and the private sectors. It has been argued that the radical reforms in Poland and Hungary were a response to their external debt, plus a higher degree of pressure from the World Bank, whereas the lower external debt of the Czech Republic allowed it to take its own approach to pension reform. Nonetheless, the Czech Republic had also discussed the introduction of a mandatory second pillar with increasing seriousness in the years since 1997–98.

Last, but not least, transition societies have observed changes taking place in neighboring countries that have been faced with the same problems under historically specific conditions. They have profited by their neighbors' experience and learned from their mistakes. This "transitional learning" has been observed during several phases of welfare-state development and in different countries.

(Transnational learning, or the "wait and see" model [Abbott and DeViney 1992], describes policy adoption as taking place in only a few countries, while others stand by and observe the success or failure of the strategy.) There is no evidence that there has been direct transnational influence among the NEW-8 countries. However, reforms and their outcomes have been discussed by experts of these countries as well.

When examining the circumstances that enabled pension privatization in the NEW-8, the driving forces of pension privatization have proven to be the neoliberal-minded ministries of finance and economics, backed by international financial institutions' policy advice and financial support.[9] Many local pressure groups opposed structural pension reform. These groups' room for maneuvering was shaped by economic conditions, political and institutional factors, and earlier policy choices.[10] (For a more detailed and a different discussion of the political economy of pension reform in transition economies, and the role of the multilateral lenders and bilateral donors, see Müller, 2003, and Holzmann et al., 2003.)[11]

Against the background of an aging electorate (see Figures 1 and 2), one can argue that the longer the NEW-8 countries wait to initiate necessary pension reforms, the more difficult they will be to implement.[12] Pension reforms require the support of a majority of voters, and reforms that aim at reducing the size of unfunded pension systems are likely to be opposed by the aged.[13]

Conclusion

Various aspects should be taken into consideration when assessing the value of the pension system reforms in the individual NEW-8 countries.

1. Even the best technically prepared pension reform fails if it does not reflect the preferences of a country and is not credible to its citizenry.
2. It is an old principle that children (have to) care for their parents in old age. However, such insurance systems tend to create moral-hazard problems. Some adults choose to forgo children (thus saving costs/burden of raising children). Others do not work (hard enough), thus saving costs/burden of paying contributions to the pension system.[14]

   This danger is partly met by introducing NDC systems, that is, through strengthening the link between contributions and benefits at the individual level. However, as we have seen, these have caveats of their own.
3. The public (particularly in the NEW-8) usually wants a government to fulfill/organize an insurance function (depending on the dominant view of the role of the state). Therefore, there is the need for a publicly prefunded pillar, or, at least, for the government to provide a minimum pension for everybody, which could be financed through taxes.
4. There is good reason for introducing a privately prefunded pillar (to be supplemented by voluntary private funding) when the old-age dependency ratio is

high or is expected to rise drastically over the coming years. This is the case in some of the NEW-8 countries. More important than the system question, however, may be the extent to how properly designed the chosen system is and whether (and under which costs) it can be implemented. Whether a pension system is appropriate or useful in a specific country is, therefore, a question of the historical path and the nature of the debate in each country.

5. In addition, even if a three-pillar pension system appears to be appropriate for an individual NEW-8 country, it will likely not be enough. It may also be important for such a country to raise the retirement age (if possible), decrease benefits, raise contribution rates, and strengthen fiscal consolidation.[15]
6. The "coronation path" (the best option) in the NEW-8, however, would be to increase economic growth to a sufficient extent.
7. Nonetheless, good macroeconomic policy is an unavoidable precondition and a necessary insurance against the long-term challenges of population aging and the danger of fiscal nonsustainability.
8. Against the rising difficulties of implementing the necessary pension reforms in an aging society, the NEW-8 countries are required to speed the implementation of these reforms.

Notes

1. See Commission of the European Communities (2004).
2. See Chlon-Dominczak and Gora (2003) for more details on the Polish way of pension reform.
3. See Commission of the European Communities (2004).
4. One would expect a more far-reaching (paradigmatic) nature of reforms in the NEW-8. However, reforms there were primarily motivated by practical concerns and inspired by innovations in the EU-15 countries.
5. Large transaction costs, difficulties in regulating private providers, lack of sophisticated financial education (even in advanced countries), and the existence of efficient public trust funds have led some observers to raise doubts regarding the widely suggested private management of the second prefunded pillar (see, e.g., Holzmann and Stiglitz 2001).
6. However, this and other aspects also refer to FF systems.
7. See Börsch-Supan (2003).
8. Another perceived limitation of the NDC model is that it is less likely to assure adequate pension benefits for women, low-wage earners, and those with irregular employment histories. Furthermore, Orszag and Stiglitz (2001) present ten myths they believe are present in many discussions of prefunded individual accounts.
9. Chlon-Dominczak and Gora (2003) found in a recent study (published in Holzmann et al. 2003), based on a survey given to experts and decision makers, that international institutions that provide technical and financial support for the reforms in Central and Eastern European countries played a role almost equally as important as governments did. Domestic experts and trade unions also played important roles. The role of private financial institutions was less important.
10. Various case studies have stressed the importance of political leadership and the ability to communicate a coherent neoliberal vision. It has also been shown that a preceding crisis may induce radical change. Furthermore, it has been argued that the larger the im-

plicit pension debt, the smaller the likelihood of radical pension privatization. Another argument focuses on the influence of international financial institutions.

11. The political economy of pension reform literature usually begins with the premise that path dependencies created by existing political institutions and policy structures constrain the development of new domestic policies. Radical change is explained through a model of shock and response in which domestic policymakers tend to enact policy change when faced with a crisis. When asking why policymakers choose one or another response, the answer usually involves politics, which is understood as a competition for resources among self-interested actors and interest groups.

12. Public choice considerations suggest that an aging electorate increases the relevance of pension spending on the agenda of office-seeking policymakers and tends to increase the size of unfunded pension systems. Calibrating the strength of these effects for the larger EU countries and the United States, Galasso and Profeta (2004) found that the latter political aspect always outweighed the former.

13. See, for example, Übelmesser (2004).

14. Private funding may provoke similar problems, just as state commitment may create similar moral-hazard problems.

15. MacKenzie et al. (2003: 115) argue that "[p]ension privatization, if not offset by fiscal consolidation, can loosen the fiscal stance in some circumstances." In other words, a "simple conversion of a public pay-as-you-go system to a private defined contribution one is not a guaranteed path to higher national saving. In most cases, higher savings can only be assured by making the pension system less generous. . . . Thus, the decision about whether to privatize or overhaul a public pension system may ultimately have more to do with political and philosophical considerations than with economic ones" (MacKenzie et al. 2003: 126–127).

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