Comparative Experiences in Social Security

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I.

As we all learned (or can learn) from Ulrich-Peter Ritter (1999), comparative research can start from different grounds:

- we can compare the different systems,
- the policies and the institutions,
- the phenomenon,
- and last but not least the problems.

Social Security is since the late 40ies of the 20th century on the international agenda – and there are almost as many systems (or solutions of the problems to solve) as there are countries or nations. The main reasons for this "diverging development" lies, in my opinion, in the different history of each nation – not only economic history but political and institutional history as well. And these "historical" aspects shine through every time when reforms (even only of parts) of the existing social security system are considered. These problems stay in the centre of this discussion: **How**, in what **ways,** and with what **success** different nations have reacted to the new challenges and risks of the changing (world) economy, population developments, family structures etc. by re-designing social security.

In the following, I want to give a structure for discussing of reform projects as they are made and/or ongoing in the world[1]. But before, two remarks are worth noting. First, the notion of social security will not be discussed here – what is social?, what is security? –, let us take the notion as vague as it is. Second, there are a lot of changes going on in the world: population growth, "double ageing societies", family structures, economic changes like opening of new markets, falling down of the "iron curtain", globalization. All these changes have more or less deep and severe consequences for social security, because they are bringing new risks or changing old ones. In particular, this is true for the phenomenon called globalization which brings with it more competition on the capital markets and new risks, but also new instruments to cope with these risks. And it is true for the new and stronger emphasis on market forces during the 1980s, and the associated thrust to curb centralised government inefficiencies. And it is also true for the ageing of the baby-boomers which presents special problems for social security: While currently, a large working population is supporting a relatively small, retired population, the opposite will happen in the next decades. This has consequences not only for the aged, but for the economy as a whole. In other words, to prepare for the retirement of this generation, higher savings are necessary, either now by

[1] For a (almost) complete list see Palacios/Pollaris-Miralles (2000).

the now working ("baby-boom") generation, or later by the up-coming next generations. This choice involves, however, a difficult problem of intergenerational equity and risk sharing.

Given these (and other) changes in risks and the economic situation, adaptations or reforms or even transformations of the social security systems built to protect societies against these risks must be considered. And it is especially important and interesting to see how different nations/systems have reacted or will react to these changes.

II.

The economic and demographic changes raise a number of issues, in particular however, around provision of services for the aged: As people get older, the command over resources is less flexible, productivity declines, and health and care service requirements increase. One possibility of taking into account these contingencies is to introduce insurance to cover at least the monetary consequences of ageing.

There are many reasons why such insurance will not be provided efficiently, and in some cases may not be provided at all, in unregulated private markets (see Zweifel/Eisen 2002). Therefore, many countries have responded in different ways to these needs. However, it is conventional, to identify three "pillars" or "layers" of retirement support, although the definitions of these layers themselves are not yet standardised[2].

For ease of comparison[3], the first layer is kind of a safety net, which allows recipients to avoid (abject old age) poverty. In some countries this layer takes the form of a minimum social security pension to workers, contingent on a minimum number of years of contributions, as in the United States or Chile. On the other hand, it can be thought of as social assistance ("Sozialhilfe"), available to the poorest section of the (aged or not) society, independent of age or contributions, as in Australia or Germany.

The second layer is a compulsory earnings- or employment-related pension. This is often publicly provided as in much of continental Europe, is not funded but follows the pay-as-you-go (PAYG) principle. Alternatively, it can be organized as a mandatory saving system, either publicly organized through national provident funds such as in Singapore, or privately organized as in Australia or Chile.

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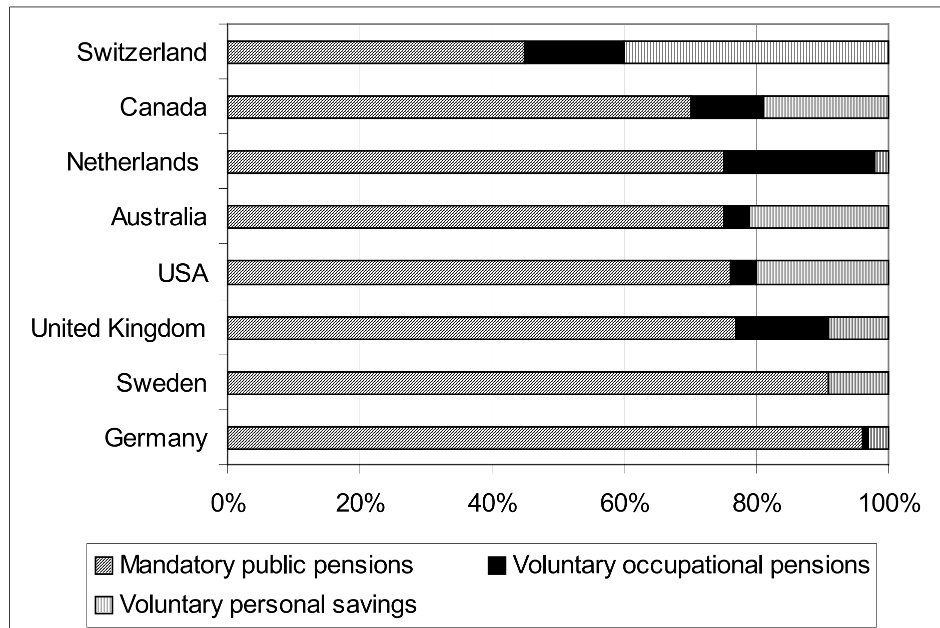
[2] I prefer to call these parts of the retirement provision policies "layers" instead of "pillars" because it is not easy to think of building a house or portions on so different "pillars", some very thin, some very thick.

[3] Here I follow the classification of Bateman et al. (2001, Introduction) which differs from traditional usage and that from the World Bank (1994). In the World Bank classification this second layer is called the first layer. The second layer is then thought of as mandatory employment-related but funded.

The third layer comprises voluntary savings. This may be linked to employment as in the 401 (k) plans in the United States, or it is a concessional long-term saving vehicle, such as the Peps (Personal Equity Participation Scheme) in the United Kingdom or the “Alterssicherungs-Fonds” in Germany. Also non-tax-preferred voluntary saving (as in Chile) is included here. As can be seen from Figure 1, these layers can be combined in various ways.

The Multilayer System in OECD Countries, Mid-1980s
(Percentage of Nonwage Income from public pensions, occupational pensions, and personal savings)



Source: Worldbank (1994), Figure 7.1, p. 250.

III.

In order to evaluate the needs and the ways of different adaptations or reforms steps of the Social Security System, I propose the following agenda:

First, the distinction has to be made whether the reform is only “parametric” or “structural”[4]. Without going into details, “**parametric reforms**” mean to simply altering the values of one or more key parameters of the typical unfunded PAYG plan. Critical parameters are the number of beneficiaries, the number of contributing employees, the contribution rate, the value of the benefit. These parameters can be changed in various ways, e.g. by increasing the retirement age,

[4] Disney (2000) distinguishes four types of reforms: parametric, actuarially fair, clean-break privatisation and partial privatisation. In my opinion the first two are essentially “parametric”, the second two encompass (really) structural reforms.

by altering survivorship provisions or vesting periods, or modification of the indexation rule. "**Structural reforms**" on the other hand are thought of alterations in policy design, involving a transition from reliance on public provision to public mandation. In most cases, the administration of the program is undertaken in the private sector, as in Chile, Switzerland and now in Australia. Some countries, e.g. Argentina, Denmark, Poland, the Netherlands, and the UK, combined structural and parametric reforms, called **hybrids**. These usually involve piece meal reforms, in which reduction of government provision is accompanied by increased mandation[5].

Second, criteria to evaluate the various retirement income policies have to be developed. It seems convenient to divide these into two parts, those criteria related to the risks "old age insurance" should cover, and those related to allocative efficiency, and distributional equity of resources as well as general macroeconomic effects.

Following Bodie (1990), the most important risks a risk-averse individual wants to insure against are:

- **Coverage risk**: whether a labour force participant is covered or falling outside of the retirement income plan.
- **Replacement rate risk:** whether or not retirement income allows to maintain a certain standard of living or eliminates at least old age poverty.
- **Longevity risk**: Whether or not the retiree is exhausting his/her savings for retirement before dying.
- **Inflation risk**: whether or not prices increase, which will erode purchasing power of lifetime savings, are covered.
- **Investment risk**: whether or not the amount saved for retirement will be adequate because returns of the assets in which money is invested are uncertain and highly volatile.
- **Growth risk**: the standard of living relates not only to the question whether retirement income is adequate with respect to the pre-retirement income, but also to the (increasing) income of the then working population; therefore, this risk means whether or not the pension adjusts to the rising income of those working.
- **Political risk**: whether or not retirement income is – at least to a certain degree – isolated from daily political decisions[6].

The three macroeconomic criteria relate on the one hand to allocative distortions due to income taxation and social welfare safety nets as well as inter- and intragenerational redistribution and risk sharing; on the other hand to those

[5] Germany would also be a case here, however, the government did not mandate, see "Riester-Rente".

[6] There is a lot of evidence around the world that public PAYG systems are susceptible to political decisions (in favour of certain groups of people or otherwise). However, also mandatory private retirement plans are not well insulated from political risk . In particular, the changes of taxes on contributions, earnings and benefits are important here.

criteria which are sometimes summarized under the heading pros (and cons) of mandatory private retirement provision. Income taxation by taxing the returns on savings makes consumption in retirement more expensive. A safety net can be exploited (or misused) by those with adequate lifetime income and therefore lead to distortions in labour markets etc. when it is "cheaper" not to pay taxes or contributions and to rely instead on the safety net[7]. To introduce individual (retirement) accounts worsens the **social allocation of risk** (in particular the intergenerational risk-sharing) which can best be provided by social security based on PAYG. Also only within this system a certain kind of (intra-generational) **income distribution** is possible. The first layer cannot normally provide for these two functions because it is too "small".

The literature about the **pros and cons** of mandatory private retirement plans is now myriad, but still controversial as evidenced by Orszag and Stiglitz (2001) (see also Eisen (2000) for an overview). So only some catchwords will be given here: Economic growth and capital formation, national savings, rate of returns, labour market and welfare effects, development of capital markets, capital market instruments, and risk reduction and greater risk diversification by combining public and private provisions à la Merton et al. (1987).

Third, there is a need to evaluate also the pure transformation phase. These relate to questions like: How "old" claims are treated? Who pays for the "old" system? How many people are still in the old system? How many are in the "new" system, and how many are "active payers"?

In the following, Angelika Bucerius describes the Argentinean partial privatization reform of 1994, which can count as a structural reform, called here "a systemic pension reform". The new system consists of two layers, a PAYG uniform pension and the choice of either an additional public or private pension as second layer. While the public alternative is financed on a PAYG basis and organized by the state, the private alternative is based on individual fully funded pension accounts managed by private fund administrators.

In the second paper, Dimitrios Gotsis gives an account of the Polish pension reform of 1999, which is clearly a case of hybrid reforms. The new Polish pension system does not eliminate the old pension system but adds on it. However, it adds three layers, accompanied by a tax-financed minimum pension. The first layer is a PAYG pension system, the second layer is fully funded and there is a list of pension funds which can be selected by the participants. The third layer is also a fully funded scheme but totally voluntary, while the first two are mandatory, at least for those born after January 1, 1969.

However, while Bucerius is critical in her evaluation of the reform ("the expected positive effects of the new pension scheme ... have not been met"), Gotsis describes the Polish reform "as an example for a successful transition". Maybe, that this is a too optimistic picture because there are some regulations which involve high moral hazards.

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[7] See e.g. Saez (2002).

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