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Individual Accounts as Social Insurance: A World Bank Perspective

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Individual Accounts as Social Insurance: A World Bank perspective

Robert Holzmann and Robert Palacios*

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I. Introduction

The trend toward including individual accounts as part of the mandatory pension system continues unabated. Nine Latin American countries have introduced individual accounts (Chile, Peru, Argentina, Colombia, Uruguay, Bolivia, Mexico, El Salvador and Nicaragua) and several more are preparing to do so (Ecuador, Dominican Republic). A similar trend has emerged in Europe where the former socialist countries are taking the lead: Hungary, Kazakhstan, Latvia and Poland have already passed reform legislation and many others including Croatia, Estonia, Macedonia, Romania and the Ukraine are preparing their own versions. There is also movement in this direction in Western Europe, even in countries with large, state defined benefit plans like Sweden. Several Asian versions of the individual accounts strategy are also emerging, ranging from the gradually liberalization of Singapore's Central Provident Fund to Hong Kong's new, employer based, defined contribution scheme. In fact, reforms that assign an important role to individual accounts are being discussed in dozens of countries in every region of the world.

Some observers consider such a reform approach as a shift away from a social insurance concept, and the tacit solidarity across and within generations. A discussion about individual accounts versus social insurance has recently taken center stage again in the US with the proposals to replace part of the existing unfunded, defined benefit scheme with prefunded, defined contribution accounts. But in many ways, the US discussion is of little relevance for most countries. The fiscal sustainability problem pales in comparison to most other advanced economies, coverage is practically universal and private pensions are well developed and play a healthy role in that country's capital markets. Contribution rates for pensions in many European and even a large number of developing countries are double those in the US. In short, the potential social and economic gains of systemic reform are much greater in the rest of the world. This is especially true in poor countries, where the costs and inequities of "traditional" public pension schemes have led to their demise and low credibility.

This brief note states the broad arguments for individual accounts.¹ The structure of the paper is as follows: Section II provides some needed clarification on "individual accounts", Section III outlines the main arguments for individual accounts while Section IV concludes.

* Holzmann, R. and R. Palacios (2001): Individual Accounts as Social Insurance: A World Bank perspective, in: Scheil-Adlung X. (ed.): *Building Social Security – The Role of Privatization*, ISSA (Geneva), pp. 45-61.

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¹ More detailed discussion of specific reforms and issues can be found at www.worldbank.org/pensions.

II. Some clarifications about individual accounts

In the popular pension discussion, “individual accounts” are often used as short hand for funded, privately managed, defined-contribution type pension arrangements. However, this can be misleading since each of the main characteristics of a mandated pension system – benefit type, financing and management - can be combined in essentially any form and often are. Of the 8 possible combinations shown in Table 1, the two cases not found in practice are fully funded and publicly managed, defined benefit plans and unfunded, privately managed defined contribution schemes. This fact is interesting in itself and suggests some natural selection process for pension systems that leads some combinations to become extinct or irrelevant.

Table 1: Examples of Mixing Benefit Types, Financing, and Administration

	Publicly Managed (GM)	Privately Managed (PM)
Defined Benefits (DB)		
Unfunded (UF)	Germany, France (basic scheme)	France (supplementary Scheme)
Fully Funded (FF)		Netherlands (supplementary scheme)
Defined Contribution (DC)		
Unfunded (UF)	Latvia, Poland and Sweden (1. Pillar)	
Fully Funded (FF)	Singapore, Malaysia	Chile, Mexico, Poland and Sweden (2. Pillar)

While the distinction between the 3 main pairs - DB/DC, UF/FF and GM/PM may seem apparent, the distinctions are actually less clear-cut.:

Defined benefit vs. defined contribution: It is easy to distinguish between polar cases, but in actual systems the differences are harder to pin down. A typical polar case of a DB plan provides x percent of final pay for each year of participation , e.g., 60 percent of final pay for 40 years in the scheme. A typical polar case of a DC system provides the accumulated contribution payments plus accrued interest at retirement, which may be then transformed into an annuity. However, if we consider a DB system based on lifetime earnings (such as the German and the French point system) and compare it with an unfunded individual account system or ‘notional defined contribution’ (such as in Latvia, Poland and Sweden), the two kinds of benefit schedules are not very different at all. Indeed, a DB point system which takes account of the remaining life expectancy at retirement and an unfunded IA scheme with earnings growth are algebraically identical.²

² An unfunded DC system, or notional accounts system, mimics the a funded DC system, but remains unfunded. As in a conventional DC plan, individuals accrue their contributions and interest payments, but the interest rate is linked to a return consistent with its source of financing and unfunded status (i.e. wage growth related). At retirement, the notionally accumulated amount is converted into a pension taking into account the remaining life expectancy and, possibly, the notional interest rate. See Disney, 1999 and Valdes-Prieto, 2000 for a critical assessment, and Palmer, 2000, for a presentation of main principals of notional accounts based on the Swedish reform).

The other possible distinction between DB and DC concerns who bears the income risk, which is said to be the plan sponsor in a (funded and unfunded) DB scheme, and the insured in a funded DC scheme. However, as witnessed by the many contribution increases, benefit changes and special taxes on retirees in pension reforms over the last decades, neither contributors nor retirees are immune to risks under a funded or unfunded DB schemes. The risk under a notional accounts system is equivalent or potentially lower than in an unfunded DB scheme (assuming that the former has an automatic mechanism for adjusting the annuity value with changes in life expectancy that the DB scheme does not). It is also worth noting that in many funded DC schemes the government reduces risk to the individual through guarantees (of a minimum rate of return and/or minimum pension), and/or acts as a guarantor of last resort.

Unfunded vs. funded schemes: The typical and often politically flavored distinction is that in one scheme the contribution revenues are used to pay current benefits (and hence exhibits solidarity between generations), while in the other, claims on future retirement income are prefunded (i.e., money is put aside). But such a distinction may not be very relevant at the macroeconomic level (depending on various factors). In the end, both schemes require a subsequent generation to fulfill the generational contract, either in the form of current contributions (in unfunded schemes) or through the purchase of accumulated assets (in funded schemes). Money put aside for retirement alone does not change this fact and even the idea of investing in demographically younger countries (i.e., emerging markets) can probably help only at the margin to cope with an aging population (Holzmann, 2000b).

Prefunding of demographic bulges (such as preparing for the retirement of the baby boom generation) may help somewhat to achieve more intergenerational equity. But from a macroeconomic perspective, a similar outcome can be achieved by reducing the public debt, creating public assets, or even by leaving the next generation a lower environmental liability (e.g., nuclear waste cleanup). Managing a large reserve fund of a public scheme on the other hand, creates problems of its own: How can investment decisions be insulated from political interference, how will the power of a large state pension fund to move markets be wielded, and how will the government behave as a shareholder in terms of corporate governance? While a few international experiences may hold out hope, (e.g., the Canadian investment board experiment begun in 1998) the experience is short and may not be easily transferred to other countries, in particular developing countries. The past experience with public management of public reserve funds is not encouraging (Iglesias and Palacios, 2000).

Publicly vs. privately managed schemes: Again such a distinction is easy for polar cases. At one extreme, a monopolistic public administration can handle contribution collection, record-keeping, benefit disbursement, and asset management. At the other extreme, these functions are performed by competing, private financial institutions subject to the discipline of individual consumer choice of product and firm. In reality, most systems lie along this spectrum. For example, the public sector increasingly outsources functions such as filing and record keeping (information technology), asset management and benefit disbursement. On the other hand, the function of the private sector in a funded system can be reduced to asset management since contribution collection, filing, and benefit disbursement may be done by clearinghouses (such as in Mexico and Sweden).

In summary, equating “individual accounts” with a scheme in which the individual bears the entire risk, which is fully funded, and in which all functions are performed by the private sector is simply wrong. There are many cases in which such an approach is sensible. However, individualization of accounts at different points along the spectrum can provide critical advantages which are discussed next.

III. A case for individual accounts

There are many arguments for moving from typical unfunded, government managed and defined benefit scheme toward individual accounts – unfunded and/or funded, publicly and/or fully or partially privately managed. The main arguments for individual accounts have to do with (i) political economy; (ii) population aging and (iii) incentive effects. There are additional arguments for considering (iv) a move toward funding and (v) the use of the private sector for most or all of the administration.

(i) Individualization – breaking the reform deadlock

The attempt to reform a public pension scheme is typically triggered by short-term financial disequilibria which are further reinforced by concerns for long term population aging, perceived distortionary incentives of the current scheme, and unequal treatment between occupational groups, gender and generation. In principle, all of these concerns can be addressed by a comprehensive but nevertheless parametric reform of the unfunded DB system. Standard measures include the use of lifetime earnings instead of final or best years, reduced accrual rates, actuarial decrements/increments for earlier/postponed retirement, increase in the standard/minimum retirement age, a shift to price from wage indexation, etc.. These parametric reform solutions have been known for many years and were (Holzmann, 1988) and are still proposed in many circumstances (Chand and Jaeger, 1996) by advisors from international organizations like the World Bank and the International Monetary Fund. They were also intensively discussed in Latin America and the transition economies of central and Eastern Europe, before systemic reforms were eventually implemented, and continue to be discussed in many EU countries. These reform discussions are often protracted and years often go by with little or no progress. Where major reforms have taken place, in countries such as in the UK or Sweden, they are characterized by individualization and a shift toward full funding of part of the system.

The reason behind the reform deadlock and the possibility to overcome it through individualization plus funding is essentially political. First, reforms to the existing schemes inevitably fall short of putting systems on a financially sustainable basis. Politicians have little incentive to do so, creating a credibility problem for the reform and hence an incentive to oppose any reform from the very beginning. Second, in most countries there is not only one but several public schemes which need to be reformed and agreeing on the financially sustainable lowest denominator hits the opposition of all others scheme which provide more generous benefits in a non-transparent manner. In contrast, proposals for individual accounts that are based on individual equity – i.e., you get what you pay in – are more difficult to reject. Last but not least, mixing individual accounts with some

change in funding creates coalitions and support among younger cohorts.³ As long as credible guarantees to leave existing benefits for those close to retirement or already in receipt of a pension can be made, the opposition from older cohorts can be successfully defused.

Individual accounts, plus expectations of higher rates of return for part of the contributions which is funded, creates a paradigm shift which is able to break the reform deadlock (Holzmann, 2000a). The alternative is protracted debate and delayed reform, with major strains on the relationship between generations and occupational groups and a weakening of social cohesion. It is the unreformed schemes, with their high and rising contribution rates, past and prospective ad hoc benefit cuts, and unequal treatment between different groups of the population which are a threat to 'solidarity', not individual accounts and funding. Furthermore, individual accounts provide a more transparent setting for meeting redistributive or 'social insurance' objectives, in contrast to the old scheme with its opaque benefit formulas and non-transparent cross-subsidies between schemes.

Matching public contributions (such as in Mexico) or minimum pension guarantees for low income groups (such as in Latvia) can be used to guarantee higher replacement rates and redistribution, protect against poverty in old-age, and provide incentives for formal labor market participation.⁴ Second, subsidiary social objectives can be pursued through compensating contribution payments for periods of maternity, unemployment or military service. The requirement to make the payment from other social insurance budgets or general revenues enhances transparency.

(ii) Individualization – a better concept to cope with population aging

Confronted with an aging population, both unfunded and funded schemes will be forced to make difficult choices. Either contribution rates will have to rise during active life, benefits will have to be reduced after retirement, the ratio of working years to retired years will have to be increased or some combination of all of the above.

Much of the current and future aging problem will be due to a positive trend, namely increasing life expectancy. Assuming that individuals prefer a smooth consumption profile over their life cycle, they will have to work longer in order to maintain a certain level of income during their old age. In addition, the possibilities for more flexible labor market options in the future, the increased importance of the service industries and increased labor mobility (including international) all point to the need for new thinking on retirement and pension provision.

Broadly speaking, this kind of flexibility is more difficult in a defined benefit framework. Benefit rules must be extremely complicated in order to avoid labor supply distortions. For example, adjusting the retirement age to changes in life expectancy to keep the DB system financial sustainable requires a political decision, as does the provision of decrements and increments for earlier and later retirement. The international evidence

³ Strong evidence of this support can be seen in the voluntary switching process whereby younger cohorts disproportionately vote with their feet for individual accounts in reforming countries (Palacios and Whitehouse (1999).

⁴ Simulations for the US indicate that matching contributions can emulate the same distributive effects as the current, progressive pension scheme (Kotlikoff, Smetters and Walliser, 1998).

shows that actuarially fair principles are extremely difficult to apply in public schemes.⁵ In contrast, DC systems –can provide this flexibility without resorting to a series of contentious political decisions to increase the retirement age or to implement actuarial benefit adjustments for advanced or deferred retirement. Since the accumulated amount and the remaining life expectancy essentially determine pension level through the annuity calculation, decrements and increments are calculated automatically, and when life expectancy increases, individuals receive a lower pensions and react accordingly to a lengthening of their work life. Also, partial retirement and reentering full employment at later age can be easily accommodated with fewer distortions according to individuals' preferences.

(iii) Individualization – a better way of dealing with labor market incentives and changing family patterns

Funded and unfunded individual accounts are not only able to render retirement decisions more neutral compared to traditional DB schemes, they have also less distortionary effects on labor supply during work periods. Since in traditional DB schemes the link between contributions and benefits is generally not very tight, a significant part of the contributions are considered taxes. Even if it is tight, the link is not very transparent with a similar effect on labor supply and tax evasion. An individual account does not eliminate all tax aspects of mandated contributions since imperfect credit markets, shortsightedness, etc. would lead individuals to a different voluntary savings pattern. But the perceived tax component under individual accounts will probably be considerably reduced, and the labor market outcome and the incentives to join the formal labor market will be improved.

Individual accounts also allow higher mobility of labor between professions and nations. DB systems are often differentiated between occupations (such as civil servants and the private sector), impeding labor mobility especially as a worker gets older. Similar mobility restrictions exist between countries with different DB systems. Even if the same benefit structure under two DB system does exist, the mobility between the schemes will generally lead to a benefit loss. These impediments can be eliminated in a DC regime.

Individual accounts are also better equipped to handle changes in family patterns, i.e. the increase in divorce, multiple marriages or relationships over the life cycle, widowhood, and the resulting need for independent old-age security for women. Under an individual account system, accumulated resources (actual or notional) can easily be split after a divorce for the period marriage, aggregated with own and prior contributions and interest received, and supplemented by public resources in a transparent manner (e.g., for periods of child rearing, etc.).

⁵ For a survey of rules for early or late retirement, see Whitehouse (1999).

(iv) Why add funding to individual accounts

Unfunded individual accounts can go a long way towards providing income security for old age. Yet unfunded DB and DC schemes both share the same problem since they are exposed to the same fiscal and political risks. At the same time, funding may contribute to increased saving, capital accumulation, and output under certain conditions.⁶

The internal rate of return of an unfunded scheme depends on the growth of the wage bill while the rate of return of a funded scheme depends on returns on capital. These returns are imperfectly or even negatively correlated so that the income risk can be diversified under a mixed system that consists of an unfunded (DB or DC) pillar, and a funded (DB or DC) pillar (see Holzmann, 2000a). The diversification can and should be further increased by investing part of the funded scheme internationally. Full international investment (e.g., according to the proportion of countries' market capitalization), however, is an interesting but only theoretical benchmark since many conditions to make it optimal do not hold in reality.

Prefunding part of retirement income is also a means of coping with the political risk. No pension system is fully immune to political risk and thus political decisions which negatively influence retirement income through contribution and benefit changes, taxation, or inflation. However, individualized and funded provisions create a strong political constituency against such changes, and international financial markets are a check against unsound economic policies.

As evidenced by recent reforms, problems with individual and funded provisions can emerge, but they are not insurmountable: These problems relate to the administrative costs and the potential for reducing the net rate of return for members during the accumulation period (discussed below) as well as the possibility for high costs in the annuitization process, if the market is not functioning properly. The provision of annuities is important in order to insure against uncertain longevity and outliving one's resources but poorly regulated markets and uninformed consumers can lead to high costs. Appropriate regulation and information in a competitive market environment can address these problems, and mandatory annuitization can reduce the potential for adverse selection issues (Walliser, 2000). Clearly however, this is an area where more analysis and new approaches are required.

(v) Why consider private management of funded accounts

Since individual and funded accounts – alone or mixed with unfunded retirement provisions – seem to go a long way, one may correctly ask why private management of these funds should be considered at all. Would not centralized public funds be cheaper due to potential economies of scale and the reduced need for marketing? Perhaps, but does public management provide the best risk-adjusted rate of returns, and is it conducive to economic development?

⁶ There is an extensive literature on this topic which cannot be discussed in this brief note. For a review, see World Bank (1994).

High administrative costs of privately managed individual accounts have been criticized and in some cases, there does appear to be ample room for improvement.⁷ However, the real problem with high costs is the potential that the net returns on investments will be reduced to levels that make the individual accounts poor vehicles for long term savings (Whitehouse, 2000). In addition, recent reforms have introduced innovations to keep a lid on costs, such as competitive tender arrangements in Bolivia, checks on marketing costs, or clearinghouse arrangements which can reduce private sector involvement to a mere asset management function (such as in Sweden). But the discussion of costs versus individual choice is far from finished (James et al., 2000).

But from an individual and societal point of view, higher costs have to be compared with the rate of return as well as the quality of services delivered. And in both cases public management does not fair well. Most public pension funds are subject to a series of restrictions and mandates that lead to poor returns. Political objectives often lead to social and economically targeted investments and forced loans to the government to finance its deficits. These investments yield returns that are often below bank deposit rates and almost always below the growth of incomes. This contrasts with privately-managed pension fund returns, which generally exceed income growth (see Figures 1 and 2 attached).

The low rates of return found in many publicly-managed schemes over the last few decades have direct and indirect negative consequences. Direct consequences are felt by members of partially funded schemes that must pay higher contributions during their lifetimes or receive lower benefits. For provident fund members, poor returns (or prescribed yields) directly reduce their retirement savings and make it impossible to maintain pre-retirement consumption levels. Indirectly, the presence of these reserves may lead to higher non-pension government deficits if target deficit levels are based on the consolidated budget (Buchanan 1990). Also, the diversion of an important pool of long term savings to projects with low returns or for higher government consumption implies an important opportunity cost for the economy. Private capital markets are robbed of liquidity and good projects do not find financing. The larger the fund relative to the capital markets, the greater is this cost.

Public management also creates problems with regard to corporate governance. Large public funds would become the largest shareholders in the economy. In many developing countries, this would imply a significant renationalization of private industry. On the other hand, private management can produce positive effects on corporate governance and enterprise performance. The divergence of continental European and US economic development is increasingly linked to difference in governance structure due to differences in financial market structure and pension fund activities (Boersch-Supan and Winter, 1999).

Equally important, private pension funds as institutional investors can make an important contribution to financial market development which in turn can contribute to more sustainable economic growth. These effects are especially important for developing countries where pension funds and insurance companies can lead to quantitative and

⁷ See Rofman (2000) regarding costs in Argentina, for example.

qualitative improvements in capital markets. There is increasing evidence of the positive growth effects of adding liquidity and depth to stock markets in particular.⁸ The Chilean experience of pension reform, financial market development and high economic growth lends further empirical evidence to this hypothesis (Holzmann, 1997). Recent cross-country analysis lends further support to the close link between contractual saving and high equity financing (compared to debt financing) of enterprises, longer maturity of debt instruments, and higher liquidity (Catalan et al., 2000)

4. Conclusion

Individualization of pension accounts can significantly improve the social insurance aspect of public pension schemes. Since on a global basis, many of these schemes need urgent and comprehensive reforms, individualization can help to make them financially sustainable, more equitable and even more redistributive than the current arrangements.

Individualization of pension accounts is not equivalent to funding or private management. While partial or full funding and partial or full privatization can add value to the individualization approach, individual accounts which are unfunded and publicly managed have advantages of their own: They can break the deadlock in reform, allow a better way of coping with aging, and provide a better way of dealing with labor market distortions and changes in the family structure. Adding full or partial funding can reduce the political and income risks while having positive impact on saving and financial market development. Adding full or partial private management can increase options and individual choice, enhance corporate governance and improve the rate of return of the managed assets.

These perceived or actual advantages of an individualized account approach are the reason why an increasing number of countries are making it part and parcel of their reform effort. Clearly, any new reform approach is confronted with new problems, such as initially high administrative costs of funded and individually managed accounts. But innovations which are undertaken as part of these reforms cause optimism that the net gains, in particular in the context of developing countries, are positive and large (Holzmann and Stiglitz, 2000/01).

⁸ See for example Levine and Zervos (1996) and Levine (1997).

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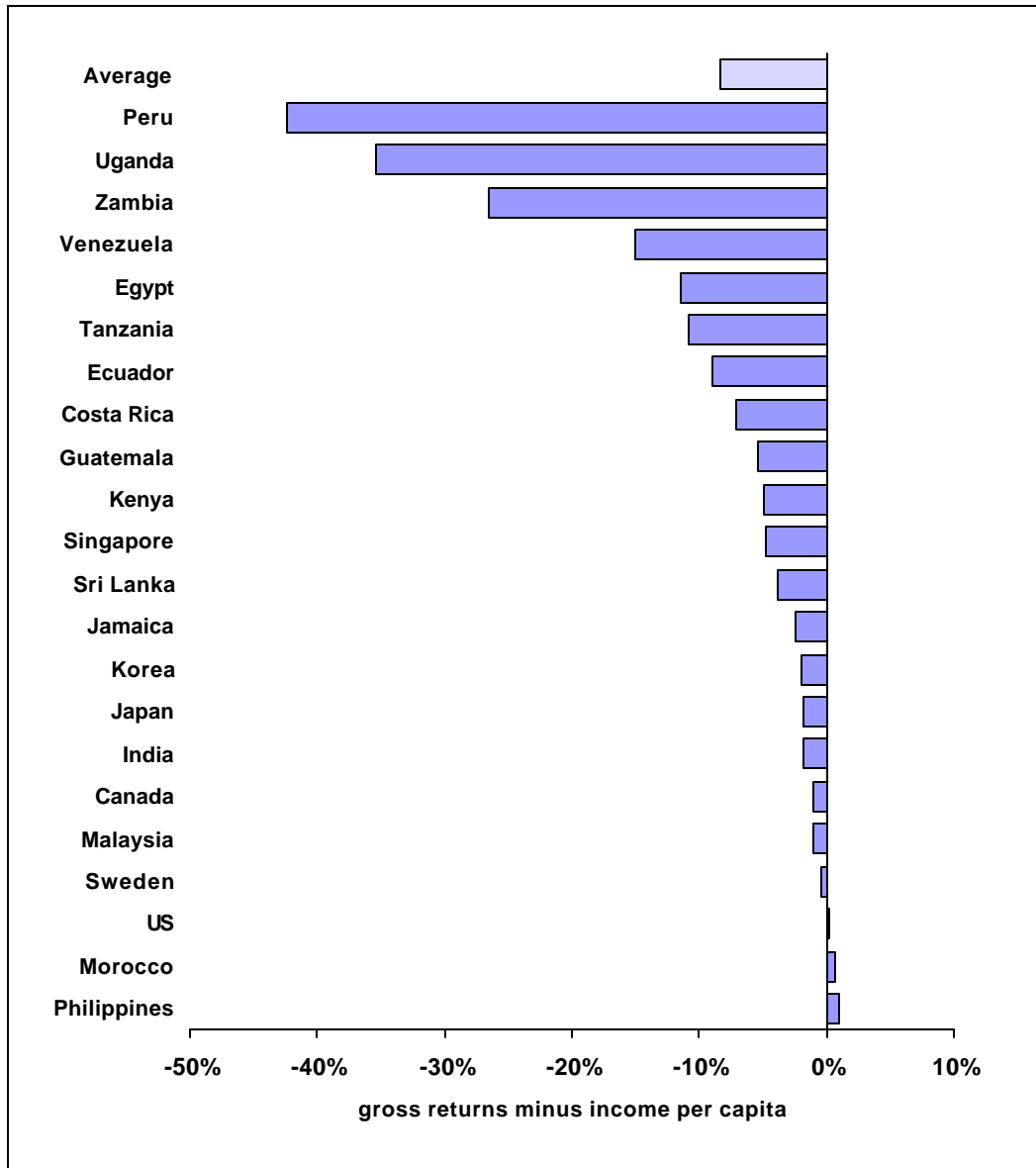
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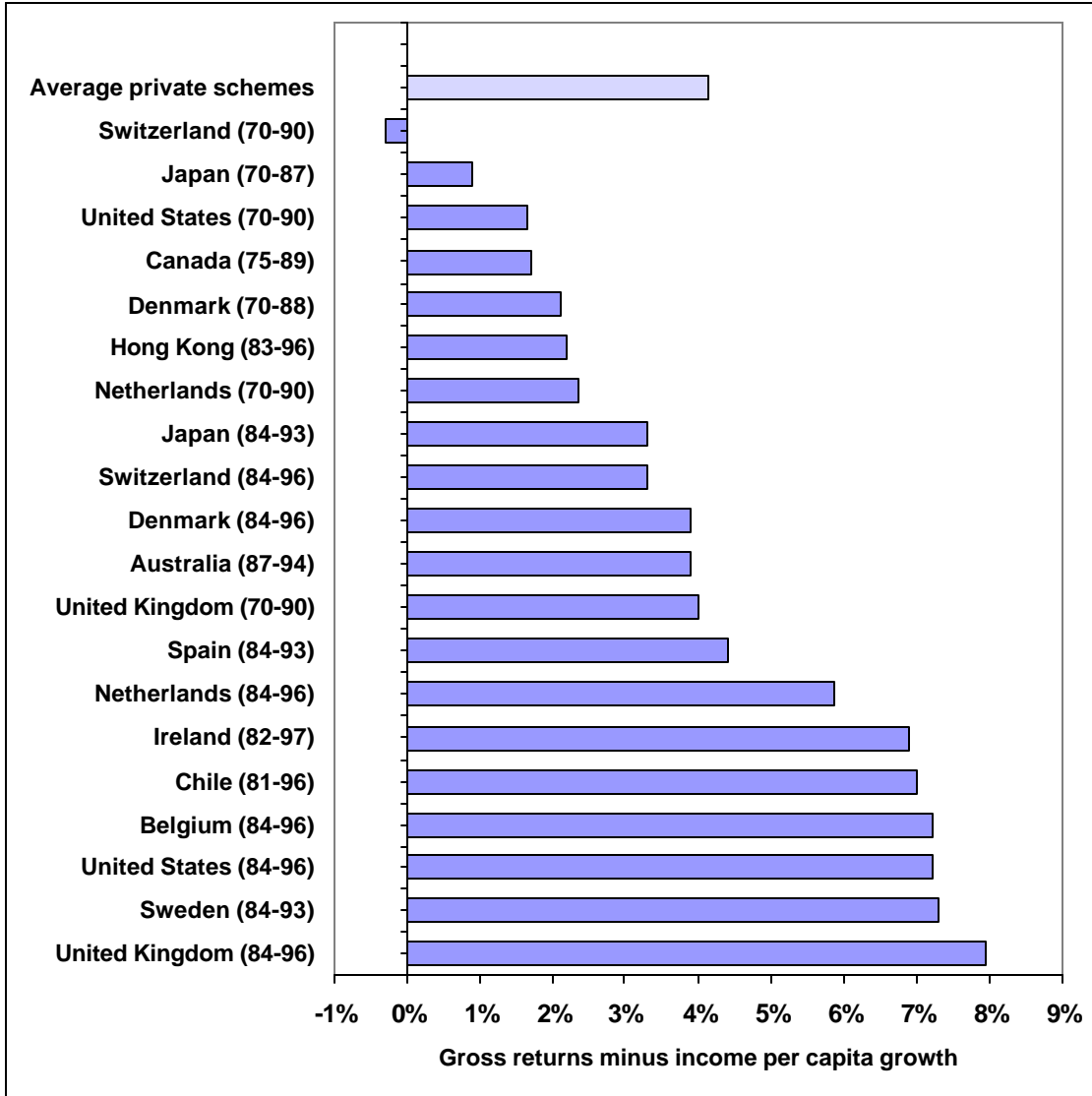
Figures: Figures 1 and 2

Figure 1: Difference between real annual compounded returns for publicly-managed pension funds and real income per capita growth in selected countries



Source: Iglesias and Palacios (2000).

Figure 2: Difference between real annual compounded returns for privately-managed pension funds and real income per capita growth in selected countries



Source: Iglesias and Palacios (2000).