## FINANCING SOCIAL PENSIONS

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#### A. Introduction

Social pensions—defined as non-contributory cash transfers given to older persons—are moving into the center stage in the old-age income security debate. To the surprise of some observers, this holds true both in the developed and the developing world. One notable and much discussed recent example is the major reform of the Chilean retirement income system in March 2008, which includes the introduction of a new guaranteed solidarity pension for older (low-income) retirees.<sup>1</sup>

At first, it might appear surprising that policymakers in countries all across the income and development spectrum are using the same policy tool—social pensions. A closer look, however, makes it obvious why this is and should be the case. All countries share a common interest in improving the social and economic situation of the elderly. Social pensions are a key policy tool in this respect, as they can be used to alleviate old-age poverty and help reduce inequality both among the elderly and of the elderly with respect to the other groups in the population—notably the working age population. In the developed world, social pensions often act as a complement to the predominant contributory pension schemes that are in place. They thus play the role of providing a minimum safety net to the elderly. For developing countries, social pensions usually have the a policy objective of ensuring that elderly citizens do not suffer from deprivation and poverty, particularly in the light of a lack of coverage by any type of contributory pension program for a large fractions of the population.

The present chapter focuses on the effects of social pensions on public finances. In the next section, we put social pensions in the context of other social assistance and insurance programs. Section 3 discusses the government's financing options regarding social pension programs. We anchor our discussion around two broad topics: public expenditure and revenues. The final section summarizes the key conclusions.

<sup>&</sup>lt;sup>1</sup> Law 20,255 published on 03/17/08 in the Official Gazette amending the social security system.

#### **B.** Conceptual Framework

The direct budgetary cost of a social pension program depends heavily on the precise details of the program, but also of on those of any other programs that are accessible to the elderly poor. Indeed, it is impossible to discuss the financing (and functioning) of social pensions without a reference to contributory schemes, as well as other general social insurance and assistance programs.<sup>2</sup> Interactions are numerous, and some prominent ones—such as impacts on labor supply and demand, as well as on private savings—are addressed in other chapters of the book. We limit our discussion to elements affecting the financing of social pensions and classify them in two categories: mechanical and behavioral. In contrast with behavioral effects, mechanical ones purely result from the institutional setting of the country and do not involve any endogenous behavioral response by either individuals or firms.

#### **Mechanical effects**

A first purely mechanical financing effect results from the degree of complementarity of social pensions with the overall legislative and regulatory framework. The magnitude of the social pension system—whether it is conceived as a sizeable element or rather as a marginal tool—as well as the degree of integration of the various public and private sector programs—whether the benefit entitlements are cumulative or mutually exclusive—are important determinants of its direct cost.

While the direct and narrowly defined budgetary cost of the social pension program may be lower in the presence of other programs or schemes than in their absence, this does not imply that the overall fiscal cost of the social pension is lower. In fact—in the absence of any behavioral response—part of the cost of ensuring a minimum level of resources to the elderly population is simply shifted and borne by a different budgetary position—or possibly even the private sector—without affecting social aggregate costs.<sup>3</sup> For example, a minimum pension guarantee under the form of a top-up to a public contributory scheme induces a

 $<sup>^{2}</sup>$  For the purposes of the present chapter, we consider that the term social insurance encompasses civil servant pension schemes—even when there are no contribution payments in a strict sense.

<sup>&</sup>lt;sup>3</sup> For simplicity, the above argument abstracts away from potential differences in the efficiency of social pension provision between a pure social pension scheme and a mixed social pension and assistance scheme.

significantly lower direct budgetary cost than a social pension that gives a basic income guarantee to all individuals, without affecting the aggregate fiscal cost.

Second, the coverage of the various schemes matters. While social pensions try to ensure that every older citizen or resident attains a minimum level of resources, coverage is not necessarily the paramount goal of contributory old-age pension and savings arrangements.<sup>4</sup> For example, contributory programs in developing countries are often restricted to a narrow subgroup of the population composed of civil servants and formal private sector wage earners.<sup>5</sup> However, the experience from many developed countries, with quasi-universal contributory pension schemes, illustrates that the distinction in terms of coverage between social and contributory pensions may be less stark in practice. Therefore, the coverage of and participation in the compulsory contributory systems (public and private), the scope of other voluntary arrangements (such as individual savings), as well as the overall income distribution (in the economy and among the elderly) are all important factors influencing the budgetary and social cost of a social pension scheme. Eligibility ages under the various pension schemes play a similar role. These explicit policy parameters have a direct influence on the coverage and hence the budgetary and social costs of the various programs.

Third, the benefit rules and the eligibility criteria heavily influence the level and time pattern of fiscal costs. The financial cost level can, for example, be affected by rules regarding targeting of social benefits through means- or income testing. The timing of the fiscal costs of a social pension can also be influenced by strategically choosing a specific type of social pension.<sup>6</sup> For example, by opting for a system of ex post redistribution through the pension channel rather than ex ante redistribution based on matched or subsidized contributions, fiscal costs are shifted into the future.

<sup>&</sup>lt;sup>4</sup>Social assistance programs in the European Union are designed on the basis of residence only, whereas contributory social insurance programs are relying on a place of work reference.

<sup>&</sup>lt;sup>5</sup> This narrow coverage raises a set of distributional and equity considerations, particularly if the contributory system is on an unsustainable intertemporal path.

<sup>&</sup>lt;sup>6</sup> For a summary of the different types of social pension schemes, see the introductory chapter YY.

#### Endogenous effects

Budgetary costs resulting from endogenous behavioral adjustments are an important component of total fiscal and social costs, and can by no means be neglected as being marginal.<sup>7</sup> Different types of effects can be identified of which we discuss the most important.

First, direct short-run effects result from people endogenously reallocating out of other programs into social pensions. This will change the budgetary splitting between different government departments, social programs and the coverage of private and public sector schemes. Insofar as all these programs are covered by the same level of government, these short-run effects will be rather limited—as there will be some off-setting. However, the situation is more complicated when different levels of government and/or the private sector are involved. In such cases, issues relating to fiscal federalism and decentralization of functions are affected and may induce unexpected and unintended redistributive consequences between regions and private entities in a country.

Second, and more importantly, medium- and long-run effects are likely to occur—negatively affecting the functioning of public and private contributory systems. For example, the introduction of a minimum social pension in a country with a Bismarckian system contributes to a weakening of the link between contributions and benefits. Similarly, individual and aggregate savings incentives may suffer. One of the most striking real-world examples of the latter effects has been the introduction of the Pension credit regime in the United Kingdom in the early 2000's. This program introduced a minimum income guarantee to low-income households and was designed to complement private pension income of older residents. Disney and Emmerson (2005) showed that one of the unintended results of the reform was a large (retirement) savings disincentive, ultimately leading to much higher entitlement probabilities and amounts than originally anticipated—with ensuing large projected fiscal costs once these low-savers will start to retire.

Third, the introduction of a social pension may well contribute to undermine the incentives for formalization of work relationships—particularly in the developing world. Social pensions

<sup>&</sup>lt;sup>7</sup> For a broader discussion of incentives and behavioral adjustment, see the discussion of chapter XX.

reduce the cost of remaining in informality by lowering the risk of poverty in old age, and hence reduce the medium to long-term incentives to formalization.

Fourth, people are likely to rely less on intra-family support—which in turn may have a substantial effect on the evolution of family structures and living arrangements over time. Kotlikoff and Spivak (1981) showed how families can protect against the risk of longevity by providing implicit annuity contract for the members. This is in line with the historical observations that families provided the main type of old-age income support. In developed countries—in the presence of formal old-age income systems—this role has been taken over by social programs that have progressively shifted this risk to the public sector with the ensuing budgetary costs and consequences. In developing countries, families still play a predominant role in providing income support—though major changes are occurring in the face of demographic and external shocks such as AIDS.

Finally, indirect or second-round effects may further reinforce the above endogenous behavioral responses. Those individuals and firms, who bear the fiscal burden of the social pension scheme through increased levels of taxation, are likely to adjust their behavior in reaction to the changed incentives generated by the overall tax-benefit system. In this regard, it should be kept in mind that key concept is not so much who pays the tax, but rather who supports the economic cost of the increased tax burden through lower after-tax producer prices or higher tax-inclusive consumer prices. Hence, a deadweight loss and tax incidence analysis is required to fully assess the budgetary and welfare impact of a social pension scheme on the various private and public sector actors.

### C. Public finance discussion

When considering the introduction or the expansion of a program, the fiscal cost of the measure has to be taken into account. In light of the above discussion regarding the scope of short- and long-term budgetary needs as well as their long-term overall fiscal implications, we now proceed to a discussion of the alternatives that policy makers face with regards to the financing of a social pension program. In this context, it is important to realize the large heterogeneity between countries both in terms of their revenue levels and composition.

Fundamentally, the issue is one of creating fiscal space for accommodating the social pension expenditures. This objective can be achieved in a number of ways, which we now discuss successively. In the short run, fiscal space can be generated by increasing government revenues, rationalizing other public expenditures, by borrowing as well as by using grants from the outside world. In an intertemporal sense, given that all borrowing enters the intertemporal budget constraint, it will ultimately have to be "paid back" by means of reduced expenditures or increased future revenues (and grants). Therefore, sound macroeconomic policies are an important ingredient to assure long-term fiscal sustainability.

### **Raising revenues**

Among the different forms of financing, raising additional revenues clearly stands out as one of the most frequently envisaged tools whenever a government faces additional spending. Amongst revenue measures, tax revenue is the predominant type of income.

While the overall spending on social pension programs may be considered as modest in absolute terms—some assessments put the cost of a social pension program at a mere 1-2 percent of GDP-such levels of increased own revenue may still prove elusive for some countries.<sup>8</sup> This is particularly so for countries at the low end of the income spectrum. Keen and Mansour (2008) provide an illustration of these limitations in their study of recent tax trends in Sub-Saharan Africa (SSA). Figure 1 documents the relatively low tax to GDP ratios for this group of countries over the last 25 years.<sup>9</sup> The left panel provides an overview of the aggregate tax to GDP ratio for this set of countries with countries grouped according to their income level. The right panel reports the same tax ratio when excluding tax revenues derived from the natural resource sector.

### **FIGURE 1 HERE**

The data in Figure 1 have some interesting implications for social pension financing. First, it documents that tax ratios in the low income countries have remained flat at a rather low level of 12-15 percent of GDP over the last 25 years. This persistence is all the more striking

 <sup>&</sup>lt;sup>8</sup> See Pal et alii (2005).
<sup>9</sup> Taxes are defined as central government tax revenue. Social contributions are not included.

given that numerous countries have attempted to increase their tax revenue performance, both by means of administrative reforms and tax policy measures. Similarly, the figure also reveals that growth in the average tax ratio in middle income countries has not necessarily been on a broad basis. This is particularly true for upper-middle income countries, where the increase in the tax ratio has overall mostly been driven by tax revenues related to the natural resource sector.

Figure 2 provides further insights into the issue. It documents the secular downward trend of trade tax revenue (customs and duties on imports and exports) in the overall revenue mix of countries all around the world. The downward trend is likely to be further reinforced by ongoing trade liberalization on a multilateral level (WTO) resulting in lower customs barriers. Similarly, regional trade agreements as well as the conclusion of Economic Partnership Agreements with the European Union will exert a sustained downward pressure on trade tax revenues. These trends are likely to have a particularly strong impact for less developed countries—like those in SSA—where trade taxes still represent a much larger fraction of total revenues than in the developed world. A second feature illustrated by figure 2 is the increasing role of indirect taxes, and more specifically the Value Added Tax (VAT) in the revenue mix of the government. Indeed, the introduction of a VAT system—complemented by excise duties—has often been used as potent domestic revenue alternative in the face of the above-mentioned trend towards lower trade taxes.

# FIGURE 2 HERE

Two further trends in SSA can be inferred from figure 2. On the one hand, taxes paid by the natural resource sector play an increasing role in tax revenues—with ensuing problems related to resource depletion and the volatility of the tax base.<sup>10</sup> On the other hand, income tax revenues have remained at a rather constant level—usually driven by a highly progressive Personal Income Tax (PIT) schedule and a high Corporate Income Tax (CIT) rate applied to a narrow tax base. This is unlikely to represent a steady state situation: Norregaard and Khan (2007) document and discuss the recent trends in Eastern Europe

<sup>&</sup>lt;sup>10</sup> This is not the only type of benefits generated by this sector to the public budgets. Other examples include production sharing agreements as well as infrastructure expenditures financed by mining and oil companies.

and other parts of the world towards lower CIT rates—as documented in figure 3.<sup>11</sup> This international rate competition represents a bigger revenue challenge for low-income countries than for high-income countries, given their greater reliance on CIT as opposed to PIT revenues.

## **FIGURE 3 HERE**

In light of the above discussion, which are the effective tax policy tools that a government can actually use to generate additional revenues for financing a social pension program? Two types of solutions—both pertaining to indirect taxation—stand out.<sup>12</sup> One strategy consists of an increase in indirect tax financing by broadening the tax base of the VAT through a rationalization of exemptions and a reduction of the reliance on reduced tax rates. By earmarking the proceeds to the social protection programs, the measure would prevent further increases the level of payroll taxation. One positive side-effect of this type of policy is that it allows a simplification of the operational procedures and hence facilitates administrative efficiency in the VAT field. However, the distributional impact of any such base broadening measure is theoretically unclear and needs to be carefully evaluated in a country-specific context.<sup>13</sup> Another strategy is to increase the VAT rate or introduce a separate supplementary VAT-like instrument to finance the growing cost of social protection expenditures. This basic idea—which has recently attracted much attention in Europe—is straightforward: make product and service imports and other factors of production-such as capital owners-contribute to the financing of the social protection system. While this logic might at first sight seem attractive, its overall effect on growth and employment is unclear both from a theoretical and an empirical point of view.<sup>14</sup> Notwithstanding this uncertainty, the

<sup>&</sup>lt;sup>11</sup> The downward trend in CIT rates is often accompanied by a trend towards a lower and flatter PIT schedule. Both changes are likely to affect the overall degree of redistribution of the tax system—with the sign and magnitude of the change heavily depending on the country-specific situation.

<sup>&</sup>lt;sup>12</sup> In the text we focus on the VAT as the key policy instrument. A similar case can be made for excise duties.

<sup>&</sup>lt;sup>13</sup> While it has repeatedly been shown that the VAT is often a regressive tax in developed countries (see Warren, 2008 or EU, 2007), the inverse may well hold true in numerous developing countries (see O'Donnell et al, 2008).

<sup>&</sup>lt;sup>14</sup> Besson (2007) provides a good survey of the efficiency and distributional arguments in the context of the 2007 French debate on a shift towards a social VAT.

effect of any kind of indirect tax financing on the integrity of the budgetary process itself is clearly negative. The increasing reliance on earmarked tax-financing affects the structural and conceptual integrity of the budgetary process, with its basic principle of budgetary unity and fungibility among different types of resources and expenditures.

## **Optimizing expenditures**

The conceptual idea is simple: budgetary resources should be spent in the socially most efficient way possible on those goods and services that generate the largest social benefit. Technically, this implies that at an allocative optimum, the marginal social benefit of any spending should be larger or equal than the marginal cost of public funds.<sup>15</sup> Social pension programs are no exception to this rule.

This has an immediate policy implication for governments introducing or scaling-up social pensions. They should subject current public spending programs to an efficiency test and evaluate whether there is room for optimizing expenditures to free up much needed budgetary margins.

A first approach is to consider reprioritizing expenditures so as to minimize unproductive spending and redirect the funds towards a social pension program. Frequently cited examples are cuts in subsidies to loss-making enterprises, as well as lowering the military spending. However, streamlining other types of social spending might also be desirable in some specific country contexts. This could particularly be the case for spending on civil servant or formal private-sector pension schemes, whenever these schemes are operating with large systemic deficits and/or on an unsustainable fiscal path. Indeed, depending on the situation, it could be argued that such social insurance schemes channel important current and future budgetary resources away from the broader population of taxpayers into a system benefiting a relatively narrow group of beneficiaries. By doing so, he systems could actually generate a regressive overall tax-benefit system,—which might in turn be counter to the overall societal objectives. Clearly, any such rationalization would need to be

<sup>&</sup>lt;sup>15</sup> Notice that this condition implies that for sufficiently high marginal costs of public funds, it can be optimal to have a zero level of spending on certain programs.

accompanied by a thorough analysis of incidence of the current system, as well as the distributional impact of a reform thereof.

A second approach would consist of an improvement in the productive efficiency of public spending, i.e., by a better use of resources to attain a better outcome. Again, any such reallocations would need to be preceded by a thorough analysis of the productive efficiency of the current system. There has been a very active literature in the field of efficiency frontier analysis applying the concept of a productive efficiency frontier to the health, redistribution and schooling sectors. The idea is to provide a relative performance evaluation of the different producers in a given sector. This relative benchmarking reveals how their use of productive resources compares with the best practice production frontier derived from the sample of observations—and hence serves as a useful information point for policy makers trying to optimize resource utilization. <sup>16</sup>

It is useful to focus on one often-cited means of attaining additional budgetary resources and a more efficient resource utilization: decentralization of policies or deconcentration of their administration. Clearly, service delivery of the social pension may be improved when pursuing a decentralization strategy as the program is brought closer to the people. This can lead to important efficiency gains and hence implicit budgetary savings that may contribute to a greater ease of financing the program. However, such decentralization can also lead to inefficiencies in the field of social pensions, particularly in the presence of a large national contributory (social insurance) system. In the latter case, implicit costs arising from administrative duplication as well as overlapping coverage may lead to a substantial increase in implicit and explicit budgetary costs. Hence, no clear recommendation for decentralization can be formed, and the case has to be evaluated against the backdrop of each country's institutional background.

# **External grants**

For many developing countries securing external grants to finance expenditures is a real alternative to domestic financing, particularly when donors have a willingness to support

<sup>&</sup>lt;sup>16</sup> See Herrera and Pang (2005) for a more thorough discussion applied to developing countries.

domestic budgets.<sup>17</sup> This is all the more so with regards to expenditures that help countries in their efforts to achieve the Millennium Development Goals (MDG).

With regards to a social pension scheme, such external financing has to be seen against the backdrop of the recurrent expenditure stream that a social pension system generates. It is unlikely that any foreign donor can credibly commit to finance a long-term public expenditure program, even in a low-income country, particularly in light of the numerous interactions with other public spending programs. Therefore, a key positive role that grant money can play is to act as a catalyst for launching a social pension scheme. This type of social pension financing's main drawback—from a pure public finance perspective—is that follow-up recurring costs will have to be born by the domestic revenue sources, and hence will sooner or later end up having to compete for scarce domestic fiscal resources.

## **D.** Conclusions

Social pensions are a key tool in the fight against elderly poverty and as such should become an integral part of poverty alleviation strategies. However, the benefits of any such policy have to be compared to its costs, notably at the level of the public sector. The direct costs of social pensions will heavily depend on the general social insurance and assistance landscape in the country, because they interact with other programs and systems and generate mechanical and behavioral responses. Short-term costs rapidly become substantial and even in best case scenarios attain 1 to 2 percentage points of GDP. While these static fiscal costs may still be considered modest, it is the overall budgetary implications—both current and future—that have to be kept in mind. This is a particularly important issue in low income countries such as those of SSA where the average tax to GDP ratio is barely 15 %—and in some cases even closer to 10 %.

On the financing side, any government has two broad levers at hand: raise additional government revenues, and optimize overall public spending. Raising additional government revenues—particularly under the form of indirect taxes—is a likely component of any financing strategy. However, the results of any such measure have to be cast against the backdrop of past, current and future performance in revenue collection. In light of the

<sup>&</sup>lt;sup>17</sup> See Asher (2005).

ongoing international and regional trade liberalization as well as the numerous tax incentives granted to new investments in a large number of countries, a large array of revenue needs will have to be satisfied by an ever more limited number of tax instruments. While these revenue needs include social pensions, they are clearly not limited to them. The rationalization of spending is thus an important complementary policy to finance social pensions. Evaluating the relative merits of public expenditure programs and optimizing the resource utilization of each one of them, both have the potential to unleash significant budgetary resources.

To sum up, for middle- and high-income countries, the above strategies can represent a potent and viable way of financing a social pension program. For some low-income countries, social pension programs may not (yet) be within reach. Even in best-case scenarios, such programs would involve spending a substantial fraction of government resources on income security for the old, in direct competition with other (more) urgent spending on human and economic development for the population at large (schooling, primary health care, etc). In those cases, even donor financing is not a viable alternative in the long-run—if only because of the recurring nature of spending needs. Such external support can however play the role of a catalyst for reform. In the longer run, domestic financing through the revenue or the expenditure side will inevitably need to be secured.

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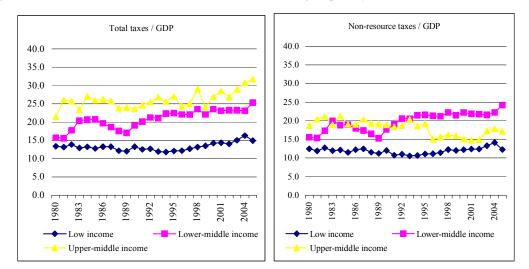


Figure 1: Tax trends in Sub-Saharan Africa—countries grouped by income level, 1980-2005

Source: Keen and Mansour (2008)

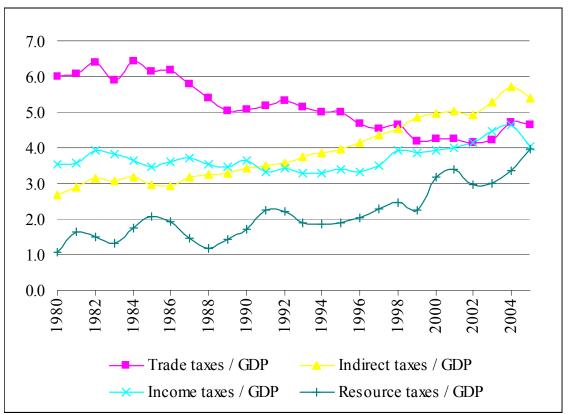


Figure 2: Main Components of the Tax/GDP Ratio in SSA Countries, 1980-2005

Source: Keen and Mansour (2008)

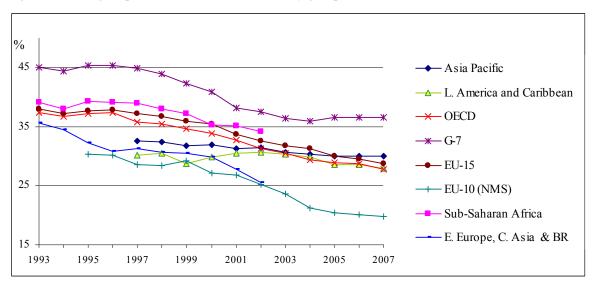


Figure 3: Average top CIT rate for different country groups, 1993-2007

Source: KPMG, Corporate Tax Survey (2007). The survey contains information on the top statutory rate on corporate income. Data for Sub-Saharan Africa and for Central Europe and the Baltic Republics (BR) is from Norregaard and Kahn (2007) and is based on the World Tax Database, University of Michigan.

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