Chapter 7: Conclusions and Policy Implications

7.1 Introduction

In Chapter 1 the hypotheses to be tested in this study were outlined as follows:
In sub-Saharan African (SSA) countries:

1. the availability and level of retirement benefits reduce saving,
2. retirement benefits contribute towards economic growth, and
3. the level and availability of retirement benefits correlate negatively with fertility.

By testing these hypotheses, the objectives were stated as an effort to identify factors that may affect the performance of retirement programs and also to raise awareness with policymakers in SSA countries regarding the impact that such retirement programs may have on the alleviation of poverty in their countries. As outlined in the previous chapters, the results turned out to be contradictory. For example, retirement benefits crowd-out saving in some regions (West Africa), while they crowd-in saving in other regions (SADC). In the per capita growth regressions, social security negatively affects per capita growth in both regions, except when all countries are pooled together (see Table 6.5).

However, this is in contradiction to the general hypothesis based on empirical and theoretical studies, that social security is positively related to per capita growth. The latter correlation is based on the fact that social security contributes to higher levels of saving, which can be translated into productive investment which in turn increases the level of output. Furthermore, the results show that social security correlates positively with fertility in all regions. This result also contradicts what was reported in a number of empirical studies discussed in Chapter 2. In the latter discussion the availability of social security programs for the elderly on the premises that poverty risk is diminished through the availability of retirement programs negatively correlated with fertility and the planned number of children decreased accordingly.

Therefore, the outcome of this study should serve as a stern warning to governments in Africa that the structure and efficiency of retirement programs should receive urgent attention, especially in view of the African Union (AU) objectives of halving poverty by 2015. Starting with the micro and macro effects of retirement programs the role these programs play in terms of saving and growth is especially disconcerting.

This chapter is structured as follows: Section 7.2 presents an overview of the effectiveness of current social security systems affecting retirement, including regulatory arrangements and their impact on economic performance and on fertility. Section 7.2.4 outlines the limitations of the study and provides some direction for future studies on this topic.

7.2 An Overview of the Effectiveness of Current Social Security Systems on the Economies of SSA Countries

This section presents the main conclusions emerging from this study regarding the effects of social security on the performance of the economies of SSA countries. The section starts by discussing the regulatory arrangements, followed by the impact of social security on the economy and fertility.

7.2.1 Regulatory arrangements

The regulatory systems of existing social security programs in the majority of sub-Saharan countries seem to be outdated and require urgent and thorough reconsideration to ensure that retirement systems support the objectives of reducing poverty among the elderly.

As part of retirement system reforms, replacement and coverage rates should receive special attention especially in view of the growing informal sector in these countries.

Replacement rates are low in the majority of SSA countries and even where data is available such rates are difficult to calculate accurately given the many country unique differences that have to be accommodated. For example (see Annexure 2), in Benin regulation determines that only 20 per cent of the average monthly earnings during the last

10 years, plus an increment of 2 per cent for every year of insurance coverage beyond 15 years, be paid as a benefit to a retiree.

In the case of Zimbabwe, only 3 per cent of monthly insurable earnings multiplied by the number of years of contributions up to 30 years are payable to a retiree. An additional 2.25 per cent of monthly insurable earnings multiplied by the number of years of contributions over 30 years, are also payable. However, in some other countries, social security benefit payments are simply too generous, with replacement rates in excess of 60 per cent. For example (Annexure 2), in Congo (Brazzaville) and Chad, the maximum replacement rate payable to a retiree is 80 per cent with 60 per cent of the national minimum wage set as a minimum benefit payment. In addition, such low replacement rates are complicated by the fact that the majority of SSA countries do not adjust benefit payments to the cost-of-living.

When considering public-sector employee retirement schemes as well as relevant private enterprises, coverage rates are exceptionally low. This could be mainly attributed to the fact that large numbers of people reside in rural areas and are therefore not formally employed. Considering that SSA economies basically depend on agriculture and the informal sector (including domestic workers) the present legislation in SSA countries excludes the majority of the population from retirement programs. However, some countries allow for a more comprehensive coverage, although not sufficient. For example, Senegal and Sierra Leone allow voluntary contribution to social security for self-employed individuals. In the case of Benin all individuals are required to contribute to social security with additional voluntary contributions to provident funds allowed for citizens working abroad. Other countries simply exclude all these categories and consider only those formally employed. Therefore, for the rate of coverage to improve retirement systems in SSA countries should urgently be reformed, but not necessarily through privatisation.

Annexure 1 shows that retirement schemes in most countries are being administered by the respective governments. Thus, from an efficiency point of view it seems as if government managed social security systems provide the best option in Africa at this stage of its economic and political development (emergence of new democracies). Moreover, it seems that due to high transaction costs (including administrative expenses, marketing and advertisement) scale economies are better captured under government managed schemes as opposed to those managed privately. Therefore, the reforms should primarily be considered within the structure of government management through the introduction of a performance principal-agent management model as discussed in Chapter 3.

Such redesigning of retirement schemes should be targeting regional integration with scale economies to be captured both at country and regional levels. This implies that the number of operators in the industry can be more efficiently managed, avoiding excessive costs relating to the marketing and administration of the funds.

Depending on country or region specifications, such reforms should be done in phases, with some countries or regions reforming faster than others. These reforms could be initiated by setting the necessary institutional arrangements for future transformation into more competitive social security systems and considering the updating of existing legislation (described in Annexures 1 and 2). In the majority of cases, legislation was designed during 1960s through 1970s and the economic and political environments since then have changed so radically that this legislation is no longer relevant.

The growth of the informal sector is a major example of such changes in the economic environment. This sector needs to be taken into account when African governments make decisions regarding retirement programs. The informal sector is prospering in the majority of SSA countries and it involves billions of domestic and foreign currencies, which need to be mobilised into formal institutions. One way of convincing those in the informal sector to channel their proceeds into the formal sector is by setting up credible institutions (with comprehensive rules regarding the benefits an individual will be entitled to during his or her retirement). Individual accounts, as proposed by the World Bank and others seem to be viable option since it could serve as a saving account to which after reaching a certain age determined by law, retirement contributions could be made on a regular basis.

Another limitation that results from the current legislative constraint is the free movement of benefits within the region, in other words, a retiree should be allowed to receive his or her benefit in another country in the region. The Charter (2003) on social security in the SADC region constitutes a good example of the kind of arrangement that a region could start towards a more integrated social security system. Therefore, considering the heterogeneity within the region, countries in the same region should reduce the differences in their social security regulatory systems to a minimum.

While consolidating the management of these systems, more fundamental reforms should gradually be introduced, for example, liberalisation of the sector and investment in training expertise in the insurance and life industries that is capable of properly managing such funds. As part of the retirement reforms the integration of retirement programs within the overall strategies of poverty alleviation currently on course in many sub-Saharan countries should be considered. This emerges from the fact that legislation in the majority of retirement programs as analysed in Chapter 3 (see Annexure 2) allows for dependents of the member of a retirement scheme to benefit from contributions made during his or her working career.

In general, policymakers in SSA countries have to prioritise the efficiency and effectiveness of their retirement systems by initiating institutional changes that could accommodate the necessary changes in retirement programs. Given the relatively low level of economic development in many of the countries investigated, governments will have to initiate the reform programs. In the absence in most cases of private initiatives, government should also take long term responsibility for the administration of retirement programs. What is suggested is the introduction of a performance principal-agent management model with strong regulation and monitoring to ensure sound management principles. During the reforms replacement and coverage rates should be reconsidered. The growing informal sector especially needs to be considered and an increase in such rates will improve the standard of living of the elderly and their dependants, especially in rural areas. Different variations of social security (including retirement) are operational in the informal sector and it may be a useful exercise to investigate their potential in terms of supplementing the current systems. However, reform of the existing retirement systems should be featured by a step-wise approach considering the unique country characteristics in the region. No standard solution will be able to cater for all the countries investigated.

7.2.2 The impact of social security systems on saving and economic growth in SSA economies

The impact of social security on the performance of economies has been widely discussed in the literature, especially after the publication of a World Bank Report (1994) on this matter. However, despite the vast literature on the topic, no conclusive results have yet been produced with regard to what the ideal structure and functional operation of retirement programs should be to optimise economic growth and stability. There seems to be consensus though that social security financed by means of a PAYG system has devastating intergenerational transfer effects. As a result, the World Bank proposed a shift from this type of retirement scheme to a multi-pillar one. The main objective of such a shift is to reduce the implicit deficit borne by governments in the course of providing for retirement benefits. Given the fact that the majority of SSA countries are already highly indebted, retirement reform with increased benefits may be impossible especially if benefit payments are adjusted to the cost-of-living (see Table 7.1)

In fact, the way in which countries reform their retirement systems will impact on their economies differently depending on the level of replacement. If replacement is inflation adjusted (CPI or cost-of-living)[36], the impact on the economy may be worse than when the adjustment is based on the average annual growth rate in wages (Table 7.1).

The reason is because generally the inflation rates of the majority of SSA countries tend to be higher than the growth rates of productivity. Therefore, adjustments based on CPI would imply that SSA countries pay retirement benefits that are in excess of labour productivity. A solution may be to use a weighted average of CPI and the average annual growth rate in productivity of each sector. This will help to smooth both the effects of low productivity and high inflation. For example, a country like Benin will tend to have a high benefit to GDP ratio with adjustment of benefit payments based on CPI compared to the Ivory Coast with adjustment based on the average annual growth rate in wages (Figure

[36] The lack of data on debt contracted to finance social security prevent a more detailed and complete analysis related to this matter.

7.1, see also Figure 1 and 2 in Chapter 1), and, therefore, their budgets will be affected differently.

In addition the negative effect of inflation, the budgetary implication of retirement reforms largely depends on the number of retirees entering the systems. In a high inflation scenario retirees are worse off with the cost of living impacting negatively on their capacity to consume and maintain their standard of living. In general, countries with higher inflation tend to under perform economically, but are featured by relatively high benefit/GDP ratios (see Table 7.1 for the case of Nigeria and Zimbabwe). This phenomenon seems to confirm the results of the growth model in Chapter 6, where the inflation variable correlates negatively with per capita growth in SSA countries. Table 7.1 indicates that in the cases where countries adjust retirement benefits according to the cost-of-living, their debt/GDP ratios tend to be much higher than in the cases where benefits are left unadjusted or linked to increased productivity. In the longer term the problem of having to constantly adjust to the rising cost of living seems to be increasing.

Table 7.4: Comparing the government debt performance given replacement rates

Country	Replacement rates	Adjust/ to cost-of-living	Average inflation rate	Average growth rate	Average benefit/ GDP ratio	Expected effect on gov. debt	Country
	Min	Max					
Benin	60% of minimum wage	60% of average monthly earnings	Inflation or cost-of-living	7.97%	5.18%	0.27%	Higher
Cameroon	50% of legal minimum wage	80% of average monthly earnings	No	7.53%	4.76%	0.09%	Depends on new retirees entering the system
Ghana	50% of annual salary in the best 3 years of earnings, plus 1.5% for each 12 months		No	30.1%	3.14%	0.34%	Depends on new retirees entering the system
Ivory Coast	Depends on average earning over the worker's carrier		Annual change in average salary subject to contribution	6.77%	3.10%	0.12%	Lower
Nigeria	80% of minimum national wage	65% of average monthly contribution	No	22.91%	2.37%	1.71%	Depends on new retirees entering the system
Zimbabwe	I based on number of years of contributions		No	115.19%	-4.06%	3.38%	Depends on new retirees entering the system

The results obtained using the LSDV method of estimation show that social security crowds-out saving in the fourteen SSA countries, which confirms the hypothesis stated at the beginning of the research. These findings are in agreement with those in the literature (see Section 2.2 in Chapter 2).

Bootstrapping is used to confirm the LSDV results, which is recommended as a means to improve the level of significance of the coefficients of variables included in the model under investigation. This methodology has been widely employed in most recent studies to validate the results of estimations, especially in small samples. At the regional level the results of the effect of social security on saving are mixed. For SADC countries social security crowds-in saving while in the West African countries social security crowds-out savings.

The difference in the results may be due to the differences in structure, stability, macroeconomic and microeconomic conditions of countries in each region. These factors determine the economic policies adopted in every country and hence differences in the effect of social security programs. For SADC countries, where saving is not crowded out by retirement benefits paid, reforms should be focussed on strengthening the financial markets and finding ways in which contributions to retirement programs could be utilised more effectively in order to supplement current savings. In the case of West African countries, reforms will have to be more fundamental, starting with improvement in the management of schemes that currently exist. Only then will it be possible to restructure the financial markets to provide for the kind of financial instruments required by retirement funds and channelling such funds into the macro economy. Through a more diversified portfolio the return on retirement funds will be sufficient to compensate for the loss in income after retirement.

The results seem to implicate that regional integration (development blocks) will be conducive to reforms of the retirement industry with proper policy co-ordination that limits the level of instability both politically and economically. Chapter 3 (Section 3.4) explains the way in which uncertainty may inhibit the potential of retirement funds to impact positively on per capita income and therefore growth. In this regard Africa is unique with many exogenous factors like droughts, floods, and wars that have to be discounted in the risk profile of these countries. The underdevelopment of financial markets will first have to be addressed together with these factors before retirement programs could have a positive effect on economic growth and saving in particular, as suggested in the literature. By using bootstrapping techniques the LSDV regression results improved with more significant coefficients compared to those of the first order asymptotic model. This confirms the rejection of the hypothesis that social security contributes to economic growth in SSA countries.

Theoretically the funding of social security programs, whether through taxes or the issuing of debt does not seem to alter the impact of such programs on the economy's performance. In an intergenerational context, the introduction and funding of retirement programs would affect the economy positively when the economy is growing at a steady rate with the growth rate of the population and wages equal to that of the economy. Should the economy depart from this steady state position, future generations will be affected negatively due to the lack of saving of present generations.

In the context of SSA countries, such a steady state seems to be a pipe dream. In view of the weaknesses of traditional family structures where wages are highly volatile and future uncertainty and other social demise cause the population numbers to increase far more than the growth in income. The savings pool is highly dependent on foreign savings and donor funds, given the already indebted economies. Most SSA countries are not in a position to fund retirement through the issuing of debt. Due to the narrow tax base, payroll taxes also offer limited opportunity to fund retirement benefits and instead, inhibit economic growth through their crowding out of discretionary savings. Increased levels of debt slow the economic growth rate down and increase the risk factor through intensified social conflicts.

The fact that only a few SSA countries thus far have implemented provident funds as an alternative to traditional pension funds, may also affect the way in which social security impacts on the economies of these countries. The fact is that benefits from provident funds tend to exceed those of the conventional retirement schemes. The reason being that investment portfolios of the latter schemes, generally managed by government, tend to differ from those of provident funds. Such differences in the effects of social security schemes are at the heart of the controversy reported earlier between the supporters of the World Bank (1994) views like James (1996) and those opposing it like Orzig and Stiglitz (1999).

The results discussed here suggest that countries in SSA are expected to reconsider their regulatory systems and the structure of replacement rates, coverage and adjustment based on living costs. However, this is a dilemma for the majority of SSA countries with low and unstable per capita growth rates (see Figure 2 in Chapter 1). Government budgets in the majority of these countries are highly dependent on donor funding which are in most instances accompanied by conditions regarding the use of the money. Such effects could be worse in countries were government is the major employer and contributions from employees are not deducted from their wages for the purpose of retirement[37]. In such cases the entire burden is borne by the government and the implicit debt in order to pay for retirement benefits accumulates to such an extent that it impacts negatively on economic growth. Obviously the outcome of such a debt-financed retirement program will largely depend on the way in which the debt is financed.

7.2.3 The impact of social security systems on fertility

In the model where the impact of social security programs on fertility is analysed, the results show a positive correlation, thereby rejecting the hypothesis that social security contributes to a reduction in fertility rates in SSA countries. This result seems to imply that current retirement programs are not yet perceived as a substitute for children to providing for income during retirement. However, despite the fact that social security correlates positively with fertility, fertility rates correlate negatively with the number of years of schooling. This result is significant and in line with modern thought on this issue. The reason being that as individuals become more educated the possibility of being involved in formal retirement programs increases. This leads to a reduction in the number of children and consequently investment in human capital increases. Human capital in turn

[37] Some countries have dual contribution systems like Mauritius, and others like Botswana government simply take the responsibility of financing the full expenditure of their retirees. No contribution is required from employees to finance retirement putting heavy burden to the government budget for social programs.

plays an important role in the structure and performance of the economy which determines the income and revenue base from which retirement contributions can be sourced.

Thus, retirement reforms also implicate improved educational structures with better quality education that would enhance skills and enable people to become part of the economically active population with a steady income. Such investment in education should also be accompanied by increased levels of coverage, mainly in the rural areas and the informal sector. In such a reformed environment the expected negative correlation between retirement benefits paid and fertility would realise with a concomitant impact on economic growth and stability.

7.2.4 Some specific recommendations for reform in the retirement industry

In the discussion thus far there has been much reference of the role and impact of the informal sector. The majority of individuals are involved in informal economic activities and their capability to contribute towards some kind of retirement program largely depends on the possibility of accommodating them within the financial infrastructure of an economy. The design of institutions that deal with the informal sector may take the form of a national saving fund that operates like a bank, but with a clear mandatory objective of collecting long-term saving for retirement. Such saving institutions could be managed by means of a principal-agent model within a properly structured regulatory environment to ensure that the savings collected are administered safely and efficiently.

The way such saving institutions are devised will vary from country to country, depending on the country specific conditions. For example, it could be implemented through a few pilot projects in selected areas that could serve as a template for the rest of the country. However, given the nature and financial capacity of the individuals to be covered by the program, government has to back them up in its initial phase by supporting part of the administrative costs and raising awareness through a national program.

Moreover, in this initial phase, based on local available capacity and conditions, the new saving institutions may use facilities of already existing government or public enterprises such as, for example, post offices.

The use of post offices for collecting savings in rural areas can work quite and was proven in Mozambique before the country was interrupted by civil war. In South Africa, the Mzanzi project for low income saving is an attempt to cater for the poor that cannot access the formal banking systems due to the relatively high transaction costs involved. It differs from the model proposed here, in that savings are meant to be long-term, with clear and rigid rules when withdrawals are possible and who is entitled to the savings in the case of death of the contributing member.

The value of the benefit at retirement could then be calculated on the basis of contributions made and interest accrued by actual retirement. In this system members need not contribute on a regular basis (e.g. a fixed monthly amount) since in many instances income is volatile. However, a minimum contribution seems to be reasonable in order to cover the financial institution's service fees. A daunting feature of this model is the fact that benefit payments differ based on contributions and not some "minimum" determined in retirement legislation such as the old age pension scheme in South Africa. This proposal is also in line with that of the World Bank. The notion is that individuals would be encouraged to contribute more in order to enjoy a reasonable standard of living when retired.

A second recommendation is to broaden the scope of financial markets of the countries involved, to provide the type of financial instruments that would offer more lucrative returns to retirement investment. In many instances the problem seems to be outdated regulatory frameworks and capacity to be able to manage such a restructuring of current institutions. In many cases it would mean fundamental monetary reform which, in a globalised world seems to be unavoidable

7.2.5 Limitation and future research

A major limitation of the research results in this study is the substantial diversity in the structure and performance of the countries included. In addition the high level of political instability in some countries obscures the economic impact of retirement programs. The catastrophic impact of such instability on growth potential and on standards of living will necessarily handicap the economy. Thus in an analysis of this nature with pooled data from the countries included in the model it is extremely difficult to generalise when it comes to the application of policies. However, the lack of reliable data and the long lags in publishing the latest data limited one's choices to only that used in the models.

Also the fiscal impact of retirement benefits is difficult to estimate given the lack of data on the way in which current benefit payments are financed. Since most of the countries are highly indebted, it can be assumed that a large percentage of benefits paid are financed through debt, but it could also be through donor funding or taxes. As we simply do not know, this causes a problem in the analysis as the economic impact of each of these would be quite different.

This difficulty will have to be bridged in future research on this topic. In order to do that data will have to be that much more detailed. Another major shortcoming in this study must be addressed, is the role of private saving institutions in terms of retirement funding. Although it seems as if retirement and social security in general are mainly a government responsibility, the privatisation thereof should be investigated. A country like South Africa, has taken some interesting initiatives in this regard that could be investigated as a model for the rest if Africa, and specifically, West Africa where the problem seems to be worse.

A further problem is the general role that corruption and bad governance play in terms of the successful management of retirement programs. This problem has to be investigated through proper cost benefit analyses from other studies on governance in Africa, so that it can be resolved and management become effective.