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ANALYTICAL REVIEW OF THE PENSION SYSTEM IN KENYA

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1. Introduction

An increasing number of African countries have recently initiated reform of their pension and social protection systems. Over the last decade, Kenya has also undertaken a major reform of parts of its pension system. Whereas the primary motivation for reform of pension systems in many countries worldwide has been to address the growing fiscal burden of pension liabilities, in Kenya the major driver for reform was to strengthen the governance, management and effectiveness of the existing pensions system.

A new Retirement Benefits Act was enacted in 1997 and a comprehensive framework of regulations was implemented three years later in 2000. A regulatory authority, the Retirement Benefits Authority ('the RBA') was established at the same time to regulate, supervise and promote the retirement benefits sector in Kenya.

Reform of the National Social Security Fund ('the NSSF'), the mandatory scheme for all formal sector employees in Kenya (other than public service employees) has also been firmly on the national agenda with wide debate on the nature and extent of role the NSSF should play as part of the pension and social protection system in Kenya.

Kenya also has a separate pension plan for public service employees financed on a pay-as-you-go basis which is currently also part of the broader pension reform programme under consideration.

A decade into the reform is a good time to take stock and assess the reform initiatives and the results achieved. Some of the positive effects of the legislation have started to be seen and thinking is now shifting to policy issues and the challenges of increasing coverage, benefit adequacy and the growth of retirement savings. Indeed over the past three years in Kenya, there has been consensus on the need for further reform of the system. The achievements of the past decade, particularly with respect of voluntary employer sponsored occupational schemes, provides a good basis on which to implement further reforms to increase coverage and reduce post-retirement poverty levels.

The purposes of this paper are to (i) present an analysis of the current pension system in Kenya and the reforms undertaken to date, (ii) identify key areas and weaknesses of the existing system which merit further attention and (iii) suggest strategies that may enable the objectives of broader pension reform to be met.

This paper is structured as follows. The next section describes the current pension system in Kenya. Section 3 outlines the key tenets of the new regulatory framework and evaluates the results to date. Section 4 makes the case for further reform and the need for a coordinated strategy to reform. Section 5 suggests possible reform strategies for the different elements of the pensions system in Kenya and a suggested order of priorities. Section 6 summarises the key conclusions and lessons that may be learnt from the pension reform in Kenya.

This paper is prepared as a discussion document and hopefully highlights some of the key issues that policy makers and stakeholders may consider as part of the continued debate on pension reform in Kenya.

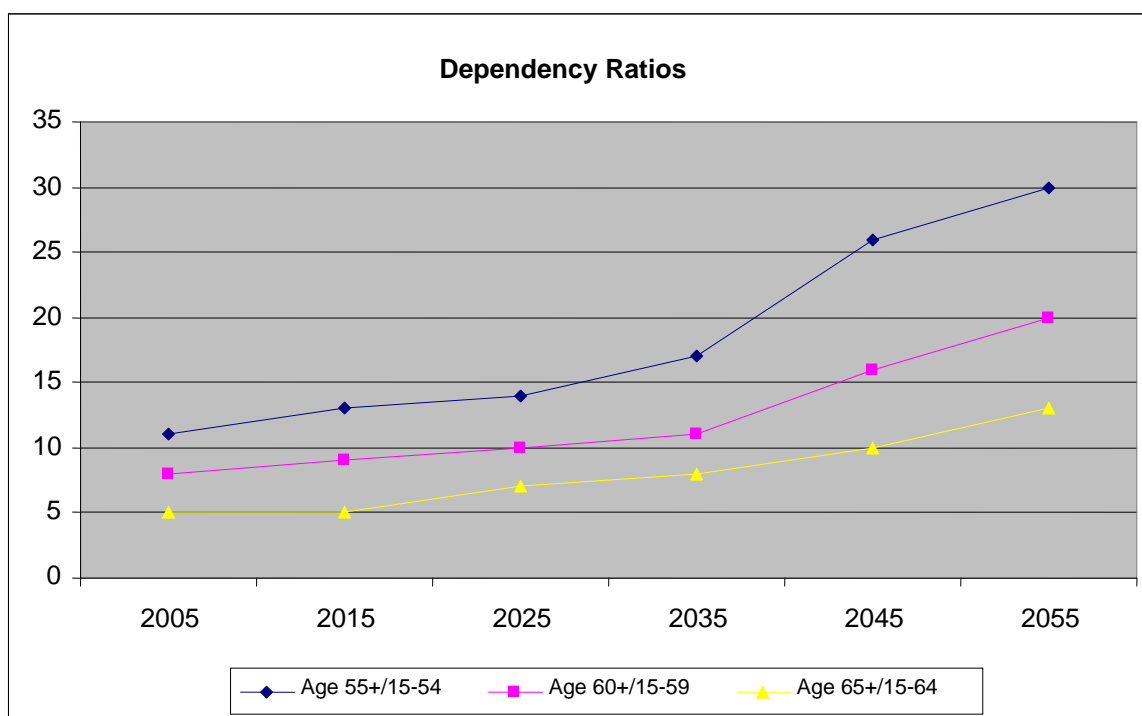
The views expressed in this paper are those of the author and not representative of his profession or employer. The author acknowledges the contribution of colleagues and in particular, Angela Okinda for assisting with some of the analysis in this paper and for reviewing the paper.

One of the key challenges faced in this analytical review has been the lack of readily available data and this has limited the scope of the analysis and the level of detail that can be presented.

2. Situation Analysis and the Current Pensions System in Kenya

i. Kenya's population and employment structure

Kenya's population at the last census in 1999 was indicated at 28.7m. The population is currently estimated at 36.1m¹ and is projected to increase to 55.4m by 2050. The proportion of the population above age 55 is estimated at 6% whilst 41% of the population is estimated to be below age 15. The population of Kenya is thus still young, but is projected to age and by the time today's labour force market entrants retire, the proportion of the population above age 55 is expected to almost triple. The dependency ratio (ratio of elderly to active labour force) is also expected to increase from 12% to 30% by 2050²



Source: Can we afford age old pensions by Charles Machira

¹ Source: Economic Survey 2007.

² Interpolated from UN World Population Prospects base year 2000 projections.

Total employment outside rural small scale agriculture and pastoral activities was estimated at 8.7m in 2006. Of this, formal sector employees comprised 1.9m (or 21% of total recorded employment) and the informal sector (commonly referred to as the '*jua kali*' sector) which covers informal urban and the agriculture workers comprised 79% of the total recorded labour force. More importantly, over 80% of the new jobs in the last three years have been created in the informal sector³ As the table below shows, the proportion of formal sector employees has declined from 77.5% in 1988 to 21.3% in 2006.

Year	Total '000	Wage Employment (%)	Self Employed & Unpaid workers (%)	Informal Sector(%)
1988	1736.3	77.5	2.5	20.0
1989	1796.2	76.2	2.5	21.3
1990	2395.0	58.8	2	39.2
1991	2557.1	56.4	2	41.6
1992	2753.2	53.1	2	44.9
1993	2997.5	49.2	1.9	48.9
1994	3355.1	44.8	1.7	53.8
1995	3855.1	40.4	1.6	58
1996	4325.8	37.4	1	61.1
1997	4698.4	35.1	1.4	63.5
1998	5083.2	32.7	1.4	65.9
1999	5477.5	30.5	1.2	68.2
2000	5893.0	28.4	1.1	70.4
2002	6873.5	24.7	0.95	74.3
2003	7339.4	23.5	0.90	75.6
2004	7822.8	22.6	0.85	76.6
2005	8271.5	21.9	0.81	77.3
2006	8740.5	21.3	0.77	78.0

Source: Various Economic Surveys

Thus akin to many other countries in Africa, a significant majority of workers in Kenya belong to the informal urban or agricultural sector with the relative size of the formal sector workforce declining significantly as a percentage of total employment over the last two decades.

Also worthy of noting that females constitute 50.1% of the total population but only about 29.4% have formal employment and earn on average 33% less than their male counterparts⁴.

³ Source Data: Economic Survey 2007

⁴ Maureen Were and Jane Kiringai, 2004

ii. Relevant macro-economic and poverty incidence data⁵

Kenya's GDP was estimated at K Shs 1,642bn (or US\$ 22.01bn) in 2006 and per capita GDP at K Shs 45,485 (or US\$ 650). Agriculture remains the mainstay of the economy contributing 23% of GDP. Other key contributors to GDP include tourism and manufacturing.

Government monetary policy has been directed at attaining and maintaining inflation at a rate of 5% or below, although actual rates have been higher.

Overall poverty incidence is reported to have declined from 52.3% in 1997 to 45.9% in 2006. Overall poverty incidence is estimated at 49.1% in rural areas compared to 33.7% in urban areas implying that poverty in Kenya is still more pronounced in the rural population.

According to the Welfare Monitoring Survey of 1994, only 3.1% of the elderly above 55 years reported receipt of any form of pension income, 90% of whom were male and only 0.2% of the total population reported receipt of pension income. Studies suggest that the incidence of poverty in Kenya and in many countries in Africa among the elderly (i.e. households with elderly only, elderly with children and elderly-headed households) is much higher than the average incidence of poverty.⁶

iii. Relevant financial sector data⁷

Compared to other countries in East and Central Africa, the financial services sector in Kenya is relatively more developed with close to 45 banking institutions and a similar number of insurance companies. Over the past five years, there has been a rapid growth in the customer base of banks and in the growth of consumer banking products. The level of penetration of life insurance remains low at less than 1% of GDP.

During the past few years, Kenya has made important progress towards improving the financial markets, including the dematerialization of securities, automated trading, the introduction of risk rating agencies and the introduction of new performance measurement indices, all of which have improved the investment environment in which pension schemes operate in.

The Government bond market has expanded significantly in the last seven years with bond tenors ranging from 1 to 15 years and this year (2008) seeing the introduction of a 20 year fixed rate Government bond. The Nairobi Stock Exchange has also experienced significant growth with a marked increase in market capitalisation to almost K Shs 1,000bn this year through an improvement in performance as well as a modest number of new listings and share offers.

There are 11 registered stock brokers, 14 fund managers and 9 registered custodians.

Kenya also has a vibrant cooperative sector with over 11,000 registered cooperatives, a membership of over 7 million and assets estimated at K Shs 30 billion.

⁵ Source Data: Economic Survey 2007

⁶ Aging and Poverty in Africa and the Role of Social Pension Nanak Kakwani and Kalanidhi Subbarao

⁷ Source Data: Economic Survey 2007

iv. Current pensions system in Kenya

The current retirement benefits system in Kenya can be classified into the following scheme types:

<i>Scheme Type</i>	National Social Security Fund	Public Service Pension Schemes	Occupational Schemes	Individual Schemes
<i>Legal Structure</i>	Act of Parliament	Act of Parliament	Established under Trust	Established under Trust
<i>Membership</i>	Employees in formal sector establishments with 5+employees excluding public service employees	All public service employees, including civil servants, teachers and disciplined forces. Separate scheme for armed forces	Formal sector workers in companies that operate retirement schemes	Open to all on voluntary basis
<i>Funding</i>	Funded	Non funded	Funded	Funded
<i>Regulation</i>	RBA	Act of Parliament	RBA	RBA

Source : RBA Website

In order to assess the aspects of the current pensions system, the following criteria⁸ are used:

- ***Adequacy*** – benefits are for the full breadth of the population, sufficient to prevent old age poverty and provide reliable means to smooth lifetime poverty for the vast majority of the population.
- ***Affordability*** – both within the financing capacity of individuals and of society, and without undue displacement of other social or economic imperatives, or untenable fiscal consequences.
- ***Sustainability*** – which refers to financial soundness over an appropriate time horizon under a broad set of reasonable assumptions.
- ***Robustness*** - capacity to withstand major shocks, such as significant shifts in economic prospects or demographic trends.

a) The mandatory scheme for formal sector employees – the NSSF

Establishment

The National Social Security Fund (‘the NSSF’) was established under an Act of Parliament in 1965. The NSSF is established as a provident fund operating on a defined contribution basis.

An amendment to the NSSF Act in 1997 defined the NSSF as a retirement benefits scheme and thus brought the NSSF into the regulatory ambit of the Retirement Benefits Authority.

⁸ Old Age Income Security in the 21st Century Robert Holzmann and Richard Hinz

Coverage

The NSSF covers formal sector employees in Kenya other than employees covered under the public service pension scheme. All employers are required to register with the NSSF but only employers with five or more employees are required to contribute to the NSSF. The total cumulated membership of the NSSF as per its records is estimated at 3.4m, but the active contributing membership is currently estimated at just over 1m. The number of registered employers with the NSSF (cumulative) is just over 74,000.

The NSSF introduced voluntary membership and contributions in 2006 and embarked on a marketing campaign to attract voluntary membership, particularly from the informal sector. The success or otherwise of this campaign to date is difficult to establish, although the number of such voluntary members is indicated at 13,000. No data is available to assess the frequency and amount of such voluntary contributions and the costs of collecting and administering such members relative to the voluntary contributions.

Statutory Contributions to the NSSF

Statutory contributions to the NSSF are set at 10% of an employee's pay, half of which is paid by the employer and half by the employee. There is a monetary ceiling on the maximum combined contribution to the NSSF of currently K Shs 400 per month (or at only 1.3% of average monthly formal sector earnings in Kenya of K Shs 31,357⁹). There have been only two adjustments to the statutory ceiling on contributions since the inception of the NSSF (i.e. an increase from K Shs 80 to K Shs 160 in 1977 and from K Shs 160 to 400 in 2001).

The Retirement Benefits Act includes a provision for employers with the consent of their employees to opt out of making statutory contributions to the NSSF and make contributions to another approved scheme. This clause in the Act has not been activated and no other scheme to date has been approved to receive statutory contributions.

Benefits Provided

The NSSF provides lump sum benefits on retirement at or after age 50, earlier invalidity, to survivors on death of a member and on permanent emigration from Kenya. A modest funeral grant and a maternity grant were introduced in 2004. The Act provides for interest at a minimum rate of 2.5% per annum to be credited to individual member accounts.

Institutional Framework

The NSSF is governed by a Board of Trustees appointed by the Minister responsible for matters relating to labour and social security. The composition of the Board is on a tripartite basis with representation from the Government, employers and workers.

The NSSF Act provides no explicit framework for investment and custody of the NSSF assets. The investments are currently managed in-house through an Investment Committee and an Investment Department. There is no external/separate custody of the assets.

⁹ Source : Economic Survey 2007

Analysis of Emerging Experience¹⁰

An analysis of the emerging experience of the NSSF indicates the following:

- There has been an increase in the number of active contributing members from 750,000 in 2003 to almost 1m as a result of the improved state of the economy and improvements in the levels and enforcement of compliance¹¹
- Contributions to the NSSF have increased from 2002 as a result of the increase in the statutory monetary ceiling on contributions in 2001. The level of standard contributions has more than doubled from K Shs 2.2bn in 2002 to K Shs 4.9bn in 2007;
- The level of benefit outgo has remained static at just over K She 2bn in the last 8 years reflecting a combination of a decrease in early withdrawals as well as the impact on benefit outgo of the lower allocation of interest to members' individual accounts;
- Total reported assets of the NSSF increased from K Shs 39.7bn in 2002 to K Shs 81.3bn in 2007;
- The portfolio weighting in land and property assets has decreased from a peak of 78% in 2000 to 34.6% in 2007;
- The proportion of the total assets invested in quoted domestic equities was 47.7% reflecting a relatively higher weighting in domestic equities compared to other large retirement funds in the country. Further the NSSF had a dominant shareholding in a number of companies listed on the Nairobi Stock Exchange. The portion of the NSSF assets invested in Government securities was 10.5%. There was no offshore investment;
- The net return earned on the NSSF assets (using cash flows) over the three years to 2007 at an annualised 10.5% has not compared unfavourably with benchmark returns and the returns earned by other asset management firms in Kenya over the same period¹²;
- The rate of interest credited to member accounts has varied substantially from the net (of expense) rate of return earned on the Fund assets. The interest credited to members between 1993 to 2002 was substantially higher than that earned and from 2003 to date was lower than the returns earned. Since 2003, the interest credited to member accounts has been at the minimum annual rate of 2.5% although an increase to 5% has been proposed from 2009;
- The rate of interest credited to members also falls well short of the returns allocated by other retirement schemes in Kenya. This does create a disincentive to participate in the NSSF, encourages non-compliance and undermines support amongst members of the NSSF;
- Although there has been an improvement in operational efficiencies, the level of administrative and staff expenses remain high compared to country and international

¹⁰ NSSF Audited Financial statements 2001 - 2007

¹¹ NSSF Benefits Staff

¹² Alexander Forbes Consulting Actuaries Schemes' Survey

benchmarks, especially noting that the NSSF operates as a provident fund and does not disburse pension payments. Total expenses as a percentage of contributions have decreased from a peak of 127% in 2000 to 82% in 2003 largely reflecting the effect of the increase in the contribution ceiling in 2002. The current (2007) expense ratio is 46%, but is projected to increase to 60% of contributions in 2008. Expenses as a percentage of investment assets have averaged 4% in the six years to 2007. The per capita cost of the NSSF's total expenses assuming an active membership of 1m is about K Shs 3,500 per annum;

- Total expenses have been higher than investment income other than for 2007. The total outgo of the NSSF in terms of benefit payments and expenses has been higher than contribution income, but the difference has been covered by investment income.
- Even though a special department has been established to address the issue of the suspense account (i.e. contributions not allocated to individual member accounts as a result of incomplete or incorrect data), the size of the suspense account remains significant at almost K Shs 6bn, but has reduced as a percentage of total member accounts.
- Based on the NSSF's published financial statements for the year ending 30 June 2007, the reported assets adequately covered the disclosed liabilities to members. A more careful analysis of the values placed on the assets and liabilities, the individual member data, the nature of the assets and any contingent liabilities is required in order to express an opinion on the NSSF's financial position.

Analysis of NSSF with respect to Criteria

Adequacy

- The level of benefits, given the low monetary ceiling on contributions, is woefully inadequate. Indeed given current contribution levels, what is likely to be available to sustain one in retirement after 30 years of contributions to the NSSF is projected to be less than average earnings for just one year ;
- The high costs of administration, low investment returns and even lower returns credited to members also impacts on members' benefits;
- Further there is no consistency between the rates of return earned and those credited to members' accounts;
- The NSSF only provides lump sum benefits and there is no provision for annuitisation. There is a tendency for lump sum benefits to be poorly applied or squandered resulting in inadequate protection against poverty in old age;
- The range of benefits is limited, there is no pooling or sharing of risks and no minimum level or 'safety net' of benefits;
- The coverage of the NSSF is limited. The NSSF covers about 53% of formal sector employees in Kenya and 11.4% of total recorded employment. The percentage of the formal sector employees excluding public service employees covered by the NSSF though is almost 70%.

Affordability

- The level of contributions at effectively only 1.3% of average earnings (higher where earnings less than national average earnings) can be regarded as affordable.
- From a socio-economic perspective, however, past investments in low yielding property and land assets could be deemed to have displaced other economic imperatives through an inefficient allocation of capital.

Sustainability

- If NSSF remains a defined contribution scheme, assets should be in balance with liabilities by design;
- But differences in returns allocated to members viz returns earned can create mismatches between assets and liabilities;
- Legislatively stipulated minimum annual credit to members of 2.5% regardless of net return earned also impacts financial position
- Hence, the importance of regularly evaluating asset-liability relationship.

Robustness

- NSSF is not a pure defined contribution scheme, but overall ought to have the capacity to withstand major shocks subject to adopting a proper and more equitable basis of allocating net returns to members and asset liability management.

Discussions with the NSSF indicate progress in a number of areas including increased computerisation, improvements in processes, turn around times for benefit payments and customer care standards. A new customer service charter was launched in 2007 and for the first time ever the NSSF published its financial statements for the year ending 30 June 2007 in the print media. In spite of these improvements and the significant changes that have been made at an institutional level, there remain concerns over the institutional structures at the NSSF and their effectiveness. Nevertheless, with its established structures and wide branch network of 35 regional offices and provided that the institutional weaknesses are addressed, the NSSF can provide a good platform on which to implement further reforms of the pension system in Kenya.

Reform of the NSSF and its conversion to a pension scheme has been a Government policy objective for some years. The Government's Economic Recovery Strategy for Wealth and Employment Creation 2003 – 2007 explicitly provides for the NSSF Act to be reviewed to convert the NSSF into an autonomous pension fund with an increased coverage and range of benefits. A bill to convert the NSSF into a social insurance pension scheme has been presented to Parliament and possible reform options for the NSSF have been the subject of debate with stakeholders.

b) The pension scheme for public service employees and armed forces

Establishment

The provision and management of retirement benefits for public service employees is governed under a Pensions Act and Regulations. Certain provisions of the Constitution of Kenya are also relevant especially in the context of considering reform options for the current arrangements.

Coverage

The Public Service Pension Scheme ('PSPS') covers approximately 406,000 civil servants, teachers and police and prison staff and just over 180,000 pensioners. Separate arrangements apply for the armed forces and other military personnel.

Contributions

The PSPS operates on a defined benefits basis and is non-contributory other than modest contributions at 2% of salaries by male employees towards widows' and orphans benefits.

Benefits

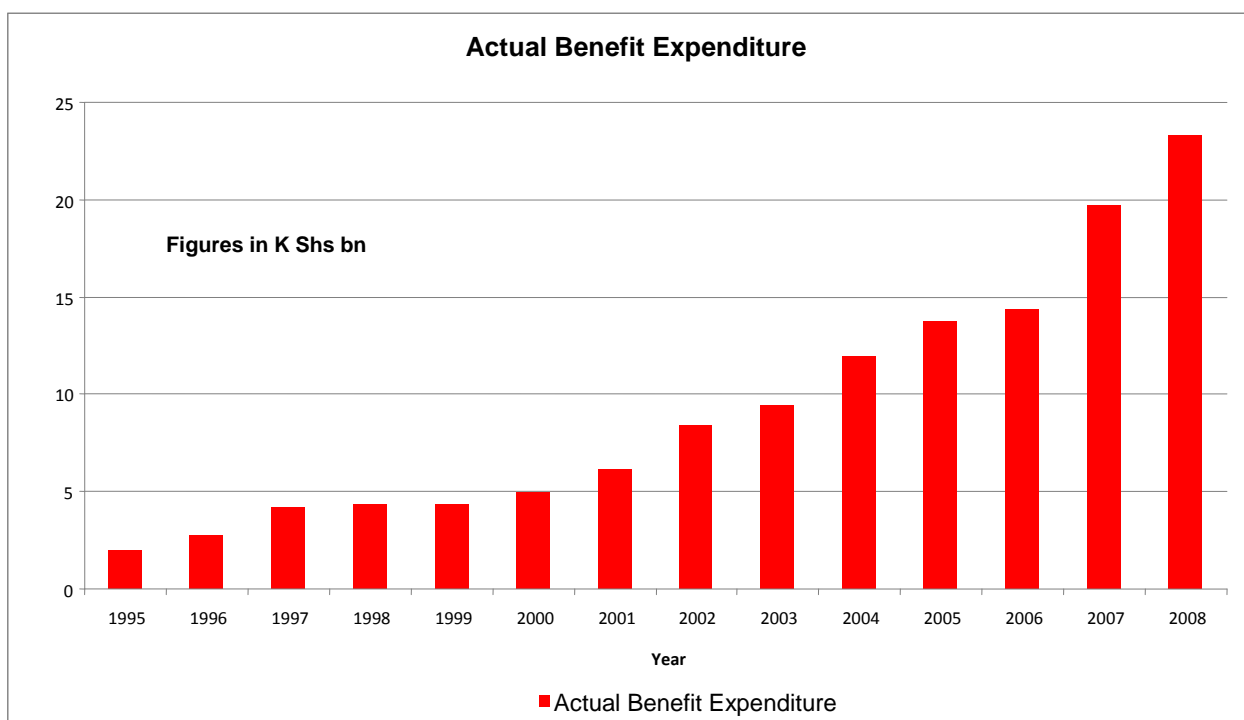
The Scheme provides a pension of 2.5% of final basic salary for each year of service on retirement from service at 55. Unreduced pensions are payable on retirement at or after 50 with the parent Ministry's consent or earlier on ill health retirement. The pension fraction targets a retirement pension of 75% of basic salary after thirty years of service (or an average of 50% of total remuneration for all categories of public service employees). A higher pension fraction applies for armed forces and military personnel. Retiring staff may opt to take up to 25% of their pension in the form of lump sum with a generous uniform commutation factor of 20:1 applying.

No guaranteed pension increases have applied in the past; there have only been four pension increases in the forty years to 2004 with the last increase having been in 1991. Modest pension increases at 3% every two years have been introduced since 2005.

Benefits vest after ten years of service and there is no portability of benefits and individuals who resign from service before retirement are not entitled to any benefits.

Benefit Expenditure

There is no pre-funding of liabilities; The scheme is financed on a pay as you go basis with pension costs met from Government revenues. The level of benefit expenditure has been increasing at an average of 19% per annum over the last 10 years and is shown in the graph below.



In 2007, benefit expenditure totaled 1.4% of GDP. The pension obligations already incurred would need to be quantified, but is expected to be a significant proportion of GDP¹³. In cash terms, the increase in expenditure over the last decade is only the start of a trend which would be expected to continue for the next two decades even if the existing scheme is closed to new entrants.

A significant portion of the benefit expenditure is in respect of lump sum pay outs from commutation of pensions. The cash flows also show the impact on benefit expenditure of salary increases and corresponding increases in average new pensions coming through in payouts.

Benefits Administration and Processing

The calculation of benefits and processing of the monthly pension payroll is handled by the Department of Pensions, a department under the Ministry of Finance. The Department of Pensions does not currently hold data in respect of in-service public service employees with the process of processing of benefits initiated by the Directorate of Personnel Management. Pension payments are paid through individual bank accounts although a significant number of pensioners without bank accounts are paid through a savings bank, the Post Office Savings Bank.

The Department of Pensions has 150 staff and internal administration is expected to improve with the installation of a new computer system to automate the pension payroll. The total operational costs of the Department are at just over 1% of the total pension's expenditure, with a significant portion of the expenditure relating to the costs of disbursing the pension payments.

¹³ Author's approximate calculations

Institutional Structures

The current Pensions Act does not contain any explicit provision on the constitution, operation and management of the PSPS; nor are there explicit provisions for disclosure and governance structures.

The current Constitution of Kenya provides that any modifications to the PSPS must not be less favorable for existing employees than the existing arrangements. This does limit the ability to reform the current system for existing staff although an amended scheme may be considered for new staff.

Analysis of PSPS with respect to Criteria

Adequacy

- Although not all remuneration is pensionable, the pension accrual fraction at 2.5% with the generous commutation terms targets a reasonable initial pension although the lack of full indexation impacts on the purchasing power of pensions with time;
- There is no portability of benefits or provisions for retaining deferred benefits restricting job mobility amongst public service employees;

Affordability and Sustainability

- From the Government's perspective, the benefit expenditures is projected to increase as a percentage of GDP and the increase in the fiscal burden could impact on other priority expenditures;
- A key premise of the PSPS of salary sacrifice during a working career in return for a 'job for life' and a relatively more generous pension after retirement has been distorted by the pay reviews in the past six years with further reviews for some categories of staff proposed;
- The Government would need to assess whether the ongoing pension costs based on the improved salaries remain affordable and consistent with its remuneration policies.

c) Voluntary occupational schemes

Establishment

Occupational schemes are schemes set up by employers for the benefit of their staff. Such schemes are voluntary and are established under trust.

Occupational pension schemes are regulated by the Retirement Benefits Authority under the Retirement Benefits Act. There are no minimum requirements in relation to the levels of contributions by employers and staff. Nor are there any minimum requirements in relation to the types or levels of benefits other than legislative restrictions in relation to minimum retirement ages, vesting, portability, preservation and accessibility of benefits. There are however extensive requirements in relation to the governance and management of such schemes and for the protection of members' benefits stipulated in the Act and the Regulations made under the Act.

Coverage

The total number of occupational schemes is currently indicated at 1,379 of which 10.4% are defined benefit schemes and 89.6% are defined contribution schemes. The total contributing membership of occupational schemes is estimated at about 300,000 (or 16% of formal sector employment) all of whom are also required to be members of the NSSF and make statutory contributions to the NSSF.

Two thirds of the schemes have a membership size of less than 100 and as the governance and compliance requirements on schemes increase, the operational and cost efficiencies of small stand alone schemes may be impacted.

An average of almost 60 new occupational schemes have been established each year since 2000. The table below shows the number of new retirement schemes registered since 2000:

Duration/Year(s)	No of Schemes Established	Cummulative Schemes
2000	79	79
2001	74	153
2002	58	211
2003	41	252
2004	66	318
2005	56	374
2006	44	418
2007	40	458

Source: RBA

Based on market surveys, the most common rate of contribution to occupational pension schemes by employees is at 5% of salaries and typically ranges from 5 – 10% for employers inclusive of risk benefit costs. The table below shows the total contributions to occupational schemes over the four year period to 2006 compared with the aggregate contributions to the NSSF over the same period showing that contribution inflows to occupational schemes were higher than those to the NSSF.

	Occupational Schemes Contributions K Shs bn	NSSF Contributions K Shs bn
2003	6,405	3,602
2004	11,516	3,847
2005	12,803	4,267
2006	13,816	4,457

Source NSSF, RBA

Investment of Pension Assets

The total assets of occupational schemes are estimated at K Shs 181bn and are more than double those of the NSSF. Thus, the occupational retirement schemes sector in Kenya whilst smaller in terms of membership than the NSSF is larger in terms of invested assets reflecting the higher average contributions to occupational schemes.

51% of the total schemes by number are invested in guaranteed funds (i.e. invested with insurers on a pooled basis) whilst 49% are on a segregated basis; by value, however, over 90% of the total assets of occupational schemes are currently invested on a segregated basis. The schemes invested in guaranteed funds tend to be smaller schemes.

Positive real returns and stable operating costs have led to a positive growth in asset accumulation in the occupational sector (see Section 3(iv)).

Analysis of Occupational Schemes with respect to Criteria

Occupational schemes tend to target a higher income replacement with the contributions for many of the occupational schemes targeting income replacement of 60 – 75%. A 1994 Survey by the RBA however showed an actual average income replacement ratio of only 22%¹⁴ for retirees from occupational schemes and this was largely attributed to shorter service durations and non-preservation of benefits on leaving service.

d) Individual personal pension plans

Establishment

Individual schemes or personal pension plans comprise schemes set up by institutional providers to target individual members not necessarily tied to an employer or any formal setting.

Coverage

Although the number of IPPs in the market have grown from 1 to 17 in a ten year period, the membership at currently less than 10,000 individual lives has failed to track this growth. The majority (11 out of 13) of the IPPs in the market are offered by insurance companies.

Investment of Pension Assets

The Retirement Benefits Authority has been promoting and encouraging the growth of such schemes as a means to increase coverage amongst the self-employed and the estimated IPPs asset value of K Shs 2 billion is expected to grow with more focus and strategic action by stakeholders and market players.

e) Taxation of pension system

The tax regime for pensions in Kenya is the EET regime i.e. contributions tax-deductible, investment income exempt and benefits taxed. There is a percentage limit on contributions (30% of pay) and a monetary ceiling on the tax deductible contributions (of currently K Shs 240,000 per

¹⁴ Retirement Benefits Authority Survey 2004.

annum). The monetary ceiling has not been adjusted for the last three years and is only irregularly reviewed.

Pension payments after attainment of age 65 for pensioners are tax exempt.

3. The New Regulatory Framework in Kenya

i. Motivation for new Legislation and Regulatory Framework

The pre-RBA era in Kenya saw a retirement benefits sector with little effective regulation and supervision. The interests of retirement scheme members and their beneficiaries were not sufficiently protected. There was concern about the design and financial viability of certain schemes in the country unless appropriate remedial action was taken. There was poor administration and investment of scheme funds with particular concerns on concentrations of investment, particularly in property. In the majority of cases, this was inadvertent and unintentional, but without adequate controls and supervision, there was always a risk of mismanagement and outright misappropriation. Further disclosure and accountability were lacking. The NSSF had also been riddled with governance issues and concerns over its investments and payment of benefits. Not surprisingly, confidence in the sector was low.

The primary motivation for reform and enactment of the retirement benefits legislation in Kenya in 1997 was thus to strengthen the governance, management and effectiveness of the NSSF and of the occupational pensions sector.

The enactment of the Retirement Benefits Act ('RBA') (1997) and the establishment of the Retirement Benefits Authority ('the Authority') in 2000 marked the beginning of a regulated, organized and more responsible retirement benefits sector in Kenya.

ii. Fundamental Tenets of New Legislation

Through the regulatory framework and policies, new legislation since then has been founded on the following two (2) tenets:

1. Improvement of protection of member's benefits
2. Improved governance of schemes.

A closer look at the tenets

a) Improvement of protection of member's benefits

The new legislation provided for registration of existing and new retirement benefits scheme in the country with a transition period for compliance for schemes existing on the date of implementation of the new framework.

The law placed greater emphasis on protection of members' benefits through the imposition of design and viability checks, minimum funding requirements for defined benefit schemes and restrictions on adverse amendments to members' benefits. Key amongst the measures to safeguard members' benefits was the separation of roles between scheme sponsors, trustees and professional advisors. In particular, in-house investment and custody of scheme funds which was the norm before 1997 was no longer allowed under the Act with all schemes required to appoint external professional

investment managers and custodians registered by the RBA. Investment guidelines were set out in the new Regulations which prescribed maximum limits on the amounts that may be invested in various asset categories including property and offshore investments and these were aimed at reducing concentration of risks and achieving more diversification of assets.

Since the promulgation of the initial regulations in 2000, there have been additional regulations to improve the protection of member's benefits. Some of these measures include:

- Reduction in the period for full vesting of benefits initially from five years to three years and now down to one year;
- Compulsory preservation of a portion of benefits on leaving service before retirement although the introduction of compulsory preservation has been resisted by members of schemes and employers ;
- Explicit clarification on treatment of death benefits under trust based schemes;
- Requirement for legally enforceable contribution schedules, penalties and interest on late contribution payments and criminalization of non-remittance of employee contributions deducted from pay;
- Prescribed time period within which benefit payments to be processed and provision for interest on late payments,
- Protection of members' benefits on winding ups and liquidation of schemes or scheme sponsors.

b) Improved governance of schemes.

The Act preserved the Anglo-Saxon model of trust based schemes in Kenya, but made explicit some of the requirements of trust law through regulation and made trustees the linchpin of the new legislation.

Legislation guided the composition and election/nomination of trustees to include member participation of at least one-third of a board of trustees (later increased to at least 50% for defined contribution schemes).

Schemes were required to conduct annual audits and periodic actuarial reviews and new disclosure requirements, including a requirement for annual benefit statements and annual general meetings for scheme members have also been introduced. In particular, the Regulations provide for submission of various documentations and reports to the RBA including trust deeds, amending deeds for prior approval, annual audits, actuarial valuations, investment policy statements, service provider agreements, quarterly investment and custody reports from service providers, quarterly contribution records, etc. Inspection of these documents and the timeliness of submissions enables the RBA to track a scheme's compliance levels with legislation and exposure to risk.

The Authority also has the powers to and has carried out scheme inspections in certain instances where there are indicators of poor scheme governance. The penalties and fines associated with non-compliance are stated in the Act and serve as a deterrent to would be offenders. The provision of a 'whistle blowing' mechanism by both the members and professional advisors leads to timely information that allows the Authority to take the necessary steps in good time.

Scheme administration which was recognized as a key risk area has recently debuted into the priorities list with the amendment of the Act to provide for registration of administrators and the formalization of regulations for administration of schemes in 2007 to improve the operation and management of schemes.

Again, as for the first tenet above, there has been a progressive increase in the level of responsibility placed on trustees and service providers and the level of accountability demanded of them.

iii. Role and effectiveness of the regulatory authority - the RBA

The Retirement Benefits Authority was established in 2000 to regulate and supervise establishment and management of retirement benefits schemes, and thereby protect the interest of members and sponsors of retirement benefits schemes. The Authority's mandate extended to promoting the development of the retirement benefits industry, advising the Minister for Finance on the national policy to be followed with regard to the retirement benefits industry and most importantly to implement all government policies relating to the retirement benefits industry.

In addition to its supervisory role, the RBA has also been at the forefront in:

- Seeking additional tax incentives for saving through retirement benefits schemes;
- Promoting the growth of umbrella (multi-employer) and individual retirement schemes;
- Encouraging development of the annuities market and alternatives to annuity purchase;
- Education campaigns to sensitize more Kenyans on the need to plan and save for retirement;
- Carrying out surveys of retirement benefits schemes and members;
- Engaging stakeholders in discussions of exposure drafts of proposed regulations, etc.

Towards Risk Based Supervision:

The main focus of the compliance based supervision utilized from inception of the Authority until today has been compliance with the regulatory framework and the retirement benefit legislation. However, analysis of this system has led to identification of gaps in the effectiveness of current supervisory practice. The RBA has indicated a shift to a risk based approach to supervision under which the RBA will direct resources and regulatory focus to the areas that pose the greatest risk to achieving statutory objectives. Adapted from the Australian model, progress has been made to implementing RBS approach, including:

- Adoption of new risk based model
- Training of technical staff
- Development of compliance visit manuals
- Progress in carrying our initial risk assessment audit of all registered schemes through on and offsite audits

- Sensitisation of service providers.

The risk mitigants that have already been identified by the Authority for prioritisation in RBS include the quality of the board of trustees, operational systems, information systems and financial controls, risk management systems and internal audit and compliance levels.

The challenges surrounding the implementation of RBS have impacted on the full implementation of the new model. RBS is still fairly new and untested in the retirement benefits sector and thus, there is very little supporting documentation to assist in the implementation of RBS. In addition to this, there is no standard framework or minimum requirements that must be satisfied by RBS and stakeholders are unclear concerning their level of involvement and their role in RBS; leading to unmatched expectations and demands.

The effectiveness of the RBA to date evaluated through the IOPS Principles of Pension Supervision can be rated as satisfactory. Overall, the RBA has been sufficiently equipped to fulfill its roles and has shown itself to be a proactive and responsive regulator and this is reflected in the outcomes to date. Clearly, the success or failure of the RBA is judged on its primary responsibility of ensuring effective regulation of the sector. It is important that its sector development responsibilities do not detract the RBA from remaining focused on its primary regulatory objective.

iv. Evaluation of Outcomes of the Retirement Benefits Legislation

Impact on NSSF

Under the legislation, the NSSF is deemed a retirement scheme and thus subject to the new legislation and under the regulatory ambit of the RBA. In the early years following the implementation of the new legislation, there was considerable friction between the NSSF and the RBA with the former contesting the basis of the regulatory oversight by the new regulator and the latter adopting a lukewarm approach to enforcement.

Nevertheless, the legislation has prompted a review by the NSSF of its role and operations resulting in:

- An improvement in operational efficiency and customer care standards at the NSSF;
- A review of the investment portfolio and a realignment of the investment portfolio towards closer compliance with the investment guidelines prescribed in the legislation;
- A review of the role and mandate of the NSSF.

In recent years, a more harmonious relationship and more consultative approach to addressing the issues has emerged and it is hoped that this will result in a better appreciation of each side's view points and enable effective solutions to be found.

Impact on Occupational Schemes

The primary focus of the new legislation and regulatory thrust of the RBA was to improve the governance and management of occupational schemes. By any reasonable measure, the new regulatory framework can be rated as having achieved some success in streamlining the occupational pensions sector and introducing transparency, accountability and professionalism in the management of these schemes.

Most of the new requirements put onto the statute what one would consider good practice and the well run occupational schemes had little difficulty in complying with the new requirements. Schemes which did not comply were given time to comply with the new requirements.

A fairly successful strategy adopted by the RBA has been to work with trustees and sponsors of schemes that did not meet the prescribed minimum solvency standard for defined benefit plans of an asset coverage of at least 80% of a scheme's liabilities. Whereas clearly there are weaknesses in the solvency standard as currently defined in the legislation, the RBA has been instrumental in encouraging the development and implementation of remedial plans to restore many of the schemes to financial balance through a combination of benefit redesign and financing plans.

Although not the primary driver, the additional legislative requirements for defined benefit schemes have accelerated the trend from defined benefit to defined contribution schemes in Kenya.

Contrary to initial fears, the new regulatory framework does not appear to have dramatically increased the costs of running pension schemes. Indeed an analysis of the available data does suggest that the expense ratios of most occupational pension schemes other than for smaller schemes are well within and in fact lower than international benchmarks.

Impact on occupational scheme members

The legislation has had a remarkable impact on occupational scheme members, particularly in terms of protecting members' benefit rights and reasonable expectations. The requirement for member representation on boards of trustees has led to an increase in member involvement in the running of schemes and the disclosure requirements have improved confidence in schemes and in the retirement benefits sector more generally. Members are increasingly more conscious of their benefits and rights.

Nevertheless there is a need for continual and enhanced education to increase members' as well as trustees understanding of their retirement benefits schemes and the factors impacting the levels of benefits, particularly for defined contribution schemes.

Impact on benefit adequacy

Since the legislation does not prescribe minimum contribution or benefit levels for retirement schemes, it has had limited impact on increasing benefit adequacy other than incidentally through the impact on benefit levels in defined contribution schemes of improved investment management and operational efficiency. An RBA survey undertaken in 2004 -2005 indicated an average income replacement ratio of retiring members of only 22%.

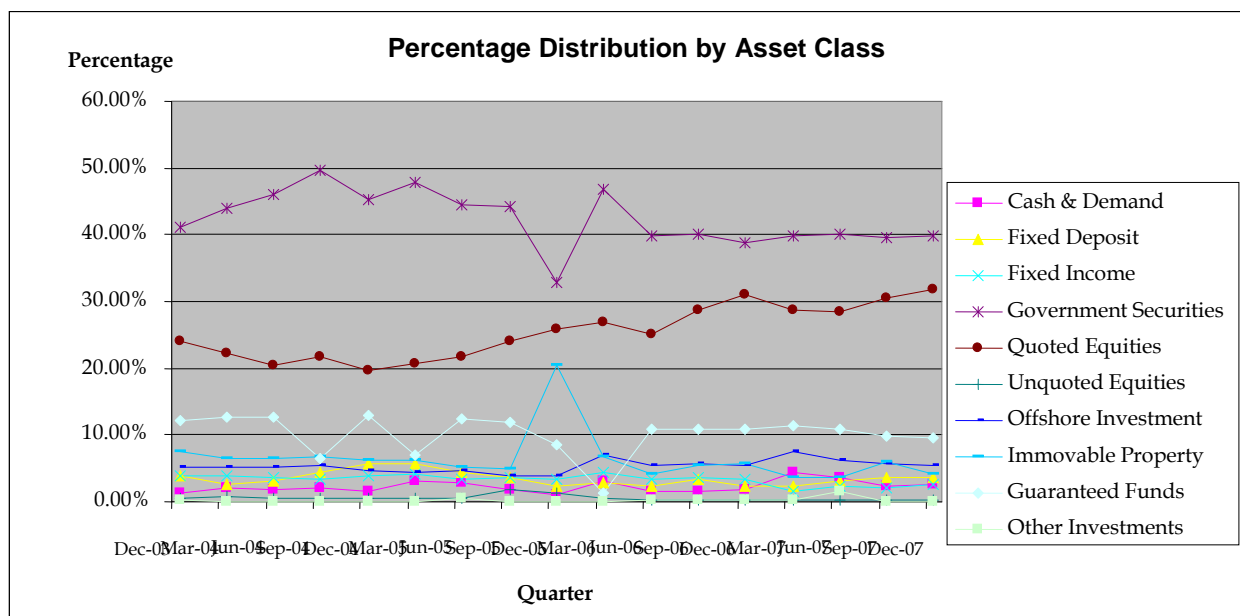
The reduction in the period for full vesting of benefits to one year and the introduction of compulsory preservation of part of the benefits is expected to increase the level of benefit adequacy from the current levels.

Impact on Coverage

The legislation has thus far had a limited impact on the coverage of retirement benefits in the country but the positive effects of the legislation does provide a basis on which to introduce further reform to increase coverage and social protection.

Impact on Occupational Scheme Investments

Assets under management for occupational schemes have increased from K Shs 120bn in 2002 K Shs 181 billion with about 1379 registered schemes. The graph below show the evolution of the aggregate investment portfolios of occupational schemes from December 2003 to December 2007



Source data from RBA (excl NSSF)

Across the various asset classes from 2002 to 2008,

- Government securities remain the most utilized asset class with the representation of assets fluctuating between 35% and 50%, averaging around the 40% mark in the last eight (8) quarters.
- Equities have experienced consistent positive growth from just over 20% to exceed the 30% mark in December 2006 and since September 2007
- Sliding from 11% in 2002 to below 9% in 2007, Guaranteed Funds are slowly experiencing a decline despite the overall growth in assets size
- The proportions invested in property have declined for most of the schemes which had significant exposures to property before 2000 as scheme comply with the 30% limitation on property investment
- Other asset classes fluctuating within the 0%-6% bracket include fixed assets, cash and demand and other investments.
- Offshore investments have stayed beneath the 10% mark despite the 15% allowance by investment guidelines.

The gross returns on occupational schemes participating in the Alexander Forbes Survey Consulting Actuaries Schemes' Survey over the one and three years to 30 June 2008 are tabulated below

	Performance per annum		Asset Class Allocation			
	1 year %	3 years %	Equity %	Fixed Income Interest %	Property %	Offshore %
AF Average	13.47%	13.74%	29.39%	62.55%	1.79%	6.40%
AF Weighted	14.09%	13.36%	31.95%	54.06%	7.07%	6.14%
Inflation	11.1%	12.21%				

There has been an increase in the types of instruments available for investment and some relaxation of the regulatory investment guidelines with more of a focus on scheme based investment strategies. As part of the closer integration within the East African Community, from 2007, investments in Tanzania and Uganda are treated as domestic investments for the purposes of determining a scheme's exposure to offshore investments.

Impact on Service Providers

The new legislative requirements have seen a number of local and international asset management and pension administration firms enter the market resulting in an increase in competition, lower fees and enhanced service levels.

Impact on financial markets

The efforts at streamlining the occupational pensions sector and in particular the requirement to appoint external investment management have seen a positive impact on the country's financial markets.

Pension schemes have had a positive influence on the expansion of the capital markets which have recovered from the depressed levels of the early 2000s. Holdings of Government debt securities by retirement schemes has grown from US\$300m in 2002 to US\$900m at the end of 2006 (or 18.7% of total Government debt instruments). The pensions sector has played a role in helping the Government to lengthen the maturity of its debt profile from reliance on short dated securities to more long dated securities. Retirement schemes through their fund managers have also become major players in the stock market with retirement scheme holdings holding about US\$740m in domestic equities at the end of 2006 representing 6.3% of market capitalisation, but a reasonable proportion of the free float of quoted equities. There is evidence of more liquidity on the capital markets and greater volumes of trading.

In terms of macro-economic impact, the level of national savings has increased from 8.4%¹⁵ in 2002 to 17.1%¹⁶ with pension savings thought to be one of the key contributors to the increase in national savings.

4. The Case for Further Reform and for a Coordinated Strategy for Reform

i. The Case for Further Reform

As the analysis in the previous section of this paper shows, the reform of the pension system in Kenya to date has had a positive impact on the occupational pension sector, but a more limited impact in terms of addressing the key weaknesses of the current system of poor overall levels of coverage and benefit adequacy.

The key motivations for further reform include:

Increasing overall coverage

Under the present system, the NSSF and the PSPS in aggregate cover about 76% of the formal sector employment, but only 16% of total recorded employment. Occupational pension schemes whose members also contribute to the NSSF cover only 3.4% of total recorded employment.

Low income, informal sector workers and the life time poor have virtually no coverage other than reliance on intergenerational financial and non-financial support.

Change in social fabric of country

The social fabric of Kenya and indeed most countries in Africa is changing. There has hitherto been a reliance on the traditional forms of old age support such as extended family and community support, social culture and even taboos. However with the impact of urbanization, the breakdown of extended families and cultural values and the AIDS/HIV pandemic, these informal support systems are being stretched to beyond breaking point and even crumbling suggesting that lesser reliance can be placed on informal family support systems as a means of keeping the elderly out of poverty.

Demographic aging

Population aging is taking place in Kenya with the number of elderly as a percentage of the population expected to triple by 2050; hence reinforcing the need to ensure that some form of old age protection is provided to the elderly.

Changes in employment structures

Formal sector employment in Kenya is growing much more slowly than the informal sector. Whereas the reform to date has focused on the formal sector pension systems, there has been an inverse relationship between the reform focus and the relative size of the formal and informal sectors of the economy.

¹⁵ Economic Survey 2007.

¹⁶ Economic Survey 2007.

Benefit Adequacy

The level of benefits provided by the NSSF are woefully inadequate to provide any form of income replacement. Contributing members may prefer this situation as they may not value the benefits much while the real value of the deductions from their pay has fallen rapidly. If benefit adequacy levels and by corollary contribution rates are not increased, inevitably, the scheme will become irrelevant to most Kenyans thinking of saving for retirement.

On the other hand, occupational pensions schemes, whose members are also members of the NSSF, target a higher income replacement and the level of income replacement is expected to further improve with the introduction of compulsory preservation, reduced vesting periods and improved management and governance of schemes. Nevertheless without a requirement for minimum contributions or benefits, the overall outcomes are likely to remain unsatisfactory. Also like the NSSF, many of the schemes are structured as provident funds and provide lump sum benefits rather than pensions impacting on the nature of protection afforded in retirement.

The PSPS provides a reasonable target benefit to public service employees although the lack of indexation of pensions impacts on the purchasing power of pensions with time. There is also a need to provide for deferment and portability of benefits so as not to hinder job mobility in the public service.

Fiscal pressures and sustainability of elements of existing pension system

The fiscal pressures of financing the growing pension benefit expenditure in respect of public service employees analysed in Section 2 suggests an urgent review of the scheme to ensure a system that is more affordable, fairer and does not give preference to one group of the working population to the detriment of others and other competing demands on public expenditure.

A systematic review also needs to be carried out of parastatal and quasi-Government institution schemes to ensure that those schemes with actuarial deficits and structural weaknesses are restored to appropriate financial balance and have affordable ongoing pension costs through a combination of structural and parametric changes.

Generally, for all occupational defined benefit schemes, there is a need to prescribe more robust minimum solvency standards and for more regular oversight.

A separate but related point is the need for defined contribution schemes to have appropriate risk management and investment policies and to communicate these to their members.

g) Improvements to regulatory framework and capacity

As the pensions industry in Kenya evolves and grows, it is also becoming more complex. Benefit and investment options are becoming more innovative and complex and choices are wider. The financial markets are becoming more sophisticated. Individual schemes are becoming larger and so are their exposures. If broader reforms to introduce higher mandatory contributions are introduced, the regulatory capacity will need to be correspondingly increased.

Continuous improvement to the regulatory framework (e.g. through the introduction of risk based supervision) and enhancements to the regulatory capacity are necessary to ensure that the regulatory framework remains effective.

Behavioural obstacles to saving

The RBA has embarked on education campaigns to sensitise Kenyans on the need to plan and make provision for retirement. For many workers in Kenya as indeed in other low income countries, alternatives such as housing, education and health care tend to be regarded as more important priorities than saving for pensions. Nevertheless, a number of behavioral obstacles to saving for retirement even when affordable remain, such as procrastination, myopia, inertia. These behavioral obstacles support the case for introducing a modest element of compulsory pension saving for formal sector employees through participation in mandatory scheme(s).

ii. The case for a coordinated reform strategy

The current pension system in Kenya is fragmented and different elements of the system have evolved separately. The reform initiatives undertaken have also been piece-meal and institution specific rather than in the context of an overall policy objective. In some instances, different arms and institutions of Government have appeared to pursue different if not conflicting policy objectives. The dichotomy of debate has detracted attention from the wider policy objectives.

A more co-ordinated approach to pension reform in which all Government policy arms and stakeholders actively engage and dialogue is necessary if progress is to be made in deepening pension reform in Kenya. This is best done through developing a national pensions policy which addresses all elements of the existing pension system.

5. Principal Objectives and Possible Options for Further Reform

Following on from the motivations for further reform outlined in Section 4 above, four key objectives for the next phase of pension reform in Kenya are suggested as follows:

1. Strengthening the institutional structures of the current pension system;
 - i. Reforming the PSPS through a combination of parametric and structural reforms;
 - ii. Expanding coverage through appropriate policy measures, including exploring the feasibility of introducing a universal subsistence level tax financed state pension; and
 - iii. Increasing overall benefit adequacy levels of the pension system through a phased increase in mandatory contributions.

The first two reform objectives above are aimed at addressing the weaknesses of the existing pension system whilst iii) and iv) aim to broaden the pension system in Kenya by increasing coverage and improving benefit adequacy respectively.

The challenges of achieving these objectives are not unique to Kenya. Several other developing countries have embarked on similar reforms and lessons can be learnt from the successes and mistakes of other countries' experiences. It is recognised that there is no single right pension system and each country must develop a pension system or implement a reform programme that is appropriate to its socio-economic environment and level of development. It is also important for the reform not to

create undue labour market distortions, discourage participation in the pensions system, increase business costs or reduce competitiveness.¹⁷

Undertaking a comprehensive reform of the type required to achieve the proposed objectives requires a co-ordinated strategy and a significant amount of ground work in terms of evaluation of policy and implementation choices extending to enactment of enabling legislation, building of institutional capacity and sensitisation of approved reform programmes.

It will also be critical to prioritise the reform objectives in implementing the reforms. Priority should be accorded to addressing the first two items, although much of the ground work for items iii) and iv) can be undertaken concurrently with the other items.

The detailed reform objectives and road map to achieving the reform objectives are best captured in the envisioned national pensions policy that the Government has proposed. In a paper of this type, it is only possible to suggest outlines principles/or options for achieving each of the proposed objectives. This is done below.

i. Strengthening the institutional structures of the current pension system;

The NSSF is currently the only scheme mandated to receive mandatory contributions. Hence, irrespective of the NSSF's role(s) in a post-reform pension system (see v) below), an important immediate priority is to strengthen the governance and institutional framework of the NSSF, and in particular, the management of the NSSF's investments. Some of the specific steps that may be considered in this regard include:

- Regulatory oversight by the RBA;
- Implementing rigorous governance framework setting out roles and responsibilities and principles for accountability, transparency risk management and independent oversight
- Documenting and implementing comprehensive investment policy with clear objectives, asset allocation guidelines, investment mandates and performance benchmarks;
- Appointing of external fund managers and custodian
- Reappraising and restructuring of NSSF investments in property assets;
- Upgrading IT system to ensure effective and efficient administration and controls;
- Expediting reconciliation of suspense account;
- Implementing cost management strategies to reduce overall operating costs;
- Regular assessments of financial position.

¹⁷ Old Age Security in the 21st Century Robert Holzmann and Richard Hinz.

It is acknowledged that considerable progress has been made by the NSSF in recent years to address some of the institutional weaknesses and many of the above steps are already in the process of being implemented.

In relation to collection of mandatory contributions, there is merit in considering whether the revenue collection authority, the Kenya Revenue Authority may be used as a collection agent by the NSSF for the purpose of collecting mandatory contributions on its behalf in order to reduce administration costs through economies of scale, improve compliance levels and benefit from more accurate data particularly earning data especially if contribution levels are increased.

The principles above also apply to voluntary occupational and individual plans through their regulation and supervision by the RBA. Stronger prudential standards would need to be developed for schemes that seek in time to qualify to receive mandatory contributions.

ii. Reforming the PSPS through a combination of parametric and structural reform

The restrictions in the Constitution of Kenya in relation to making adjustments to benefits for existing public service employees limit the scope for redesigning the existing arrangements for current staff. However, consideration may be given to closing the current PSPS to new employees and implementing parametric reforms to mitigate the potential future fiscal pressures.

A new scheme possibly operating on a notional defined contribution basis could then be considered for new entrants to the public service and as an option for existing staff with the benefit design and contributions set at a level that are considered appropriate and affordable.

There has been debate on the merits or otherwise of pre-funding the PSPS. Whereas it may not be practical or appropriate to fully fund the PSPS at this time, it would however be desirable to fund to an extent that can be affordable by the Government provided that the funding can result in a real increase in national savings and an efficient application of these savings.

Irrespective of the extent of funding, it is also imperative for the Government's pension costs to be carefully monitored and controlled through regular actuarial analysis and assessment of unfunded liabilities, ongoing costs and projections of benefit expenditure.

iii. Expanding coverage through appropriate policy measures, including exploring the feasibility of introducing a universal subsistence level tax financed state pension

The significantly larger size of informal sector employment relative to the formal sector, high levels of unemployment, rural based populations and demographic aging suggest that, fiscal conditions permitting, there is merit in introducing a universal basic state pension to all Kenyans above age 60, say.

Studies¹⁸ carried out on the feasibility and fiscal implications of introducing a universal old age pension in Kenya show that a social pension would provide an important safety net in old age and alleviate old age poverty.

¹⁸ Poverty, Old-Age and Social Pensions in Kenya, Nanak Kakwani, Hyun H Son and Richard Hinz "The Case for Social Pensions: Are we ready to introduce universal old age benefits in Kenya?" Charles Machira.

The study by Kakwani et al showed that a monthly grant of 20% of per capita GDP targeting elderly persons 60 years and older with a benefit level of 60% of GDP would cost 0.98% of GDP. Their simulation results showed even with this modest benefit level, the level of poverty incidence amongst the elderly would be reduced by 18% and overall national poverty by 2.36%. The study thus recommends that a social pension of 20% of per capita GDP for Kenyans age 60 and older ought to be a feasible pension option for Kenya.

The separate study by Charles Machira illustrates that under reasonable economic conditions, a social pension set at 50% of the absolute poverty line in the Welfare Monitoring Survey of 1997 targeting elderly persons 60 years and older would be expected to cost about 1.4% of GDP and this figure would be expected to remain stable over the next 35 years.

Introducing a social pension entails administering eligibility criteria and efficiently paying small amounts to a largely rural based population¹⁹. This ought not to be an insurmountable problem in the Kenyan context and could be quite easily implemented through a combination of using the Post Office network of over 400 branches across the country and the NSSF's 35 branch offices.

Further analysis based on the current household survey data will be required prior to implementing a universal pension. The Government needs to weigh the additional expenditure entailed of 1 – 1.5% of GDP against other competing priority expenditures but must take cognisance of the significant impact on coverage and poverty alleviation that a social pension would provide.

iv. Increasing overall benefit adequacy levels of the pension system through a phased increase in mandatory contributions.

The level of mandatory contributions to the NSSF of a maximum of K Shs 400 per month (or US\$5) equating to an average of 1.3% of average earnings in Kenya is not sufficient to provide any reasonable measure of income replacement and need to be increased if it is desired to improve benefit adequacy. The monetary ceiling on contributions has not been increased since 2001 with inflation having severely eroded the real value of the contributions.

Voluntary occupational schemes which aim to provide higher income replacement levels currently only cover about 22% of formal sector employees. Hence, an increase in mandatory contributions is required if those not participating or able to participate in voluntary schemes are to be able to achieve improved benefits.

Increasing the current level of mandatory contributions may also be justified on the grounds of protecting workers from their own “myopic behaviour” and failure to save for their old age and protecting society from the moral hazard of those who do not provide for their old age because they anticipate that society will take care of them²⁰.

In order to determine the level of mandatory contributions that would be appropriate and how these should be managed, the following issues are relevant:

1. The level of income replacement it is desired to provide as well as the levels of death and disability benefits. A modest income replacement level is initially recommended;

¹⁹ Old Age Income Support in the 20th Century.

²⁰ Regulatory Controversies of Private Pension Funds Dimitri Vittas.

2. The rate of contribution required to finance the desired level of target benefit;
3. Whether the benefit should be on a defined benefit or defined contribution basis;
4. Whether benefits must be taken as a pension or lump sum;
5. Whether and the extent to which opting out of the NSSF would be permitted for the mandatory contributions.

An overall contribution rate of 10% (5% employees, 5% employer) would target a satisfactory retirement benefit. It is suggested that the introduction of contributions be phased in with the phasing in process being agreed with employers and employee bodies and be designed to work towards the necessary contribution rate over a period that will minimise the impact of the new scheme on the cost of employment.

A further consideration would be whether or not any part of the benefits from the increased mandatory contributions should be on a defined benefits basis to provide some form of minimum benefits so that the outcomes are more defined. If a universal social pension that provides reasonable benefits is introduced, then this would be less of an issue since the universal pension would provide a safety net.

Also important would be to determine whether part of the benefit may be taken as a lump sum or paid in the form of regular pension through annuitisation or phased withdrawal (income drawdown).

There is need to consider how to share the contributions between the NSSF and the other types of pension schemes in Kenya today.

Overall, the level of economic and financial service development in Kenya and the regulatory and supervisory arrangements do provide an enabling environment for introducing a higher level of mandatory contribution than the amount that currently applies of K Shs 400 (or US\$5) per month.

Regulatory Framework

Both the regulatory framework and the regulatory capacity of the RBA will need to be strengthened in anticipation of a wider and stronger supervisory role for the RBA in an extended pension system.

6. Conclusions and Lessons from Pension Reform in Kenya

Akin to many developing countries in Africa, Kenya's current pension system is characterised by poor overall levels of coverage and benefit adequacy, small size of formal economy relative to informal economy, low levels of disposal income, insufficient insurance against longevity and competing priorities.

Nevertheless, there are important differences. Many African countries have dominant mandatory state schemes with little or no private pension systems. Kenya on the other hand, has had a smaller state scheme, the NSSF that has enabled a larger occupational pension sector. The level of financial sector and capital market development, stable macro-economic environment and existence of a regulatory framework make Kenya better positioned to embark on more fundamental and deeper reforms of the pension system. Compared to the experiences of the Latin American and Eastern bloc countries, other than addressing the institutional weaknesses in the current system and the financial

sustainability of the unfunded PSPS, there are fewer legacy issues to be dealt with. This ought to make it easier to implement broader reform of the system.

The results of the reform so far have been positive in remedying some of the governance, benefit security and investment management problems of the pre-reform period, particularly in the voluntary occupational pension sector. The requirement for external investment management has seen a positive impact on the country's financial markets. The pensions sector has played a key role in helping the Government to lengthen the maturity of its debt profile and retirement schemes through their fund managers have also become major players in the stock market. National savings as a percentage of GDP have increased and increased pension savings are thought to be one of the key contributors to the increase.

Based on the results of the reform to date, there is now a better appreciation on the part of policymakers of the potential of a well developed pension system to contribute to economic growth and development of the country's capital markets and reform of the pension system is acknowledged as one of the key policy measures to achieving the country's Vision 2030.

There has been less of an appreciation of the potential of the pension system to alleviate poverty and achieve income redistribution, although the RBA has been at the forefront of championing a state financed universal basic pension. Introducing a social pension would provide an important safety net in old age and alleviate old age (as well as household) poverty and fiscal conditions permitting, this ought to be an important part of the policy options for widening coverage.

The successful reform to date provides a good basis on which to consider a deeper and broader second phase of pension reform. The key objectives of further reform are suggested as strengthening the institutional structures of the current pension system, reforming the PSPS, assessing the feasibility of introducing a basic universal grant financed from the national budget and increasing the level of mandatory contributions to the NSSF with participation by voluntary schemes for some element of the increased mandatory contributions .

Undertaking a comprehensive reform of the type required to achieve the proposed objectives requires a co-ordinated strategy and a significant amount of ground work in terms of evaluation of policy and implementation choices extending to enactment of enabling legislation, building of institutional capacity and sensitisation of approved reform programmes. It will also be critical to prioritise the reform objectives in implementing the reforms.

The detailed reform objectives and road map to achieving the reform objectives are best captured in the envisioned national pensions policy that the Government has proposed. An important lesson of the pension reforms in Kenya is to have a co-ordinated approach to pension reform in which all Government policy arms and stakeholders actively engage and dialogue.

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DRAFT PAPER PENSIONS IN AFRICA¹

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¹ This paper was prepared by Fiona Stewart and Juan Yermo of the OECD, with thanks to Montserrat Pallares-Miralles of the World Bank

Introduction

This paper discusses why the development of pension systems is important for the African region. It also looks at the current pension arrangements in selected African countries.

The paper is designed as an overview/ background document to provide context and assist discussion at the OECD/IOPS Global Forum on Private Pensions to be held in Mombasa, Kenya on the 30th/ 31st October, 2008. The OECD and IOPS acknowledge the leadership of other organizations in terms of development and African specific issues – notably the World Bank, International Labor Organistaion (ILO) and IMF.

Why Pensions in Africa?

At first sight, pensions may not appear to be the most pressing issue for the African region. Whilst social security is to some extent discussed, private (or rather funded) pensions are rarely debated. One may well ask why address this topic at all, given more critical policy priorities for the region such as education, health, poverty alleviation or agricultural development, and given the lack of demographic pressure in general?

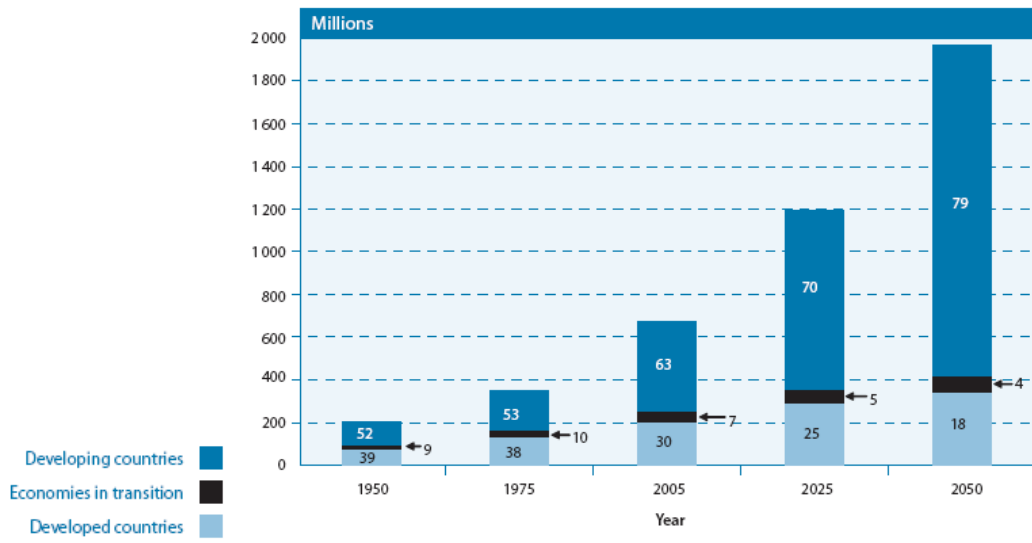
The urgent issue for pension reform in Africa is not only the need to introduce social protection systems - to help alleviate demographic pressures, poverty amongst the elderly and provide support for households headed by grandparents following the HIV AIDS pandemic and regional conflicts. In addition there is a vital need for reform of existing pension systems in the region, the cost of which is often crowding out spending on other key areas (such as health and education). Coverage of these systems is low (under 10 or often under 5 percent of the population) and usually only for civil servants or a minority of relatively highly paid workers in formal sector employment, making for highly regressive systems, with cross-subsidies required from indirect taxes (usually VAT) as pension payments from these systems frequently exceed contributions. The need for efficient pension arrangements in the region is undoubted – though the challenges for introducing them remain great (notably the large informal sector of workers).

Demographics

Though less of an issue currently than for other regions of the world, Africa too will age. The United Nations estimates that by 2050 there will be almost 2 billion people over 60 worldwide, close to 80% of whom will be living in developing countries (see Chart 1). As elsewhere, the over 60s – and particularly the over 80s – represent the fastest growing population group on the African continent, with the numbers of older people increasing by 50% between 2000 and 2015 and nearly fivefold by 2050 (Help Age International (2006a)).

Even now one in five (an estimated over 100 million) of the world's poorest people - living on less than a dollar a day – are over 60 (van Dullen (2007)). As in other regions of the world, social pressures from urbanization and declining family size will make it harder for elderly Africans to rely on family support. Global experience shows that issues surrounding aging populations - including pensions - cannot be addressed too early and developing countries should try to use their 'demographic sweet spot', when dependency ratios are falling and before the impact of aging hits, to address these challenges.

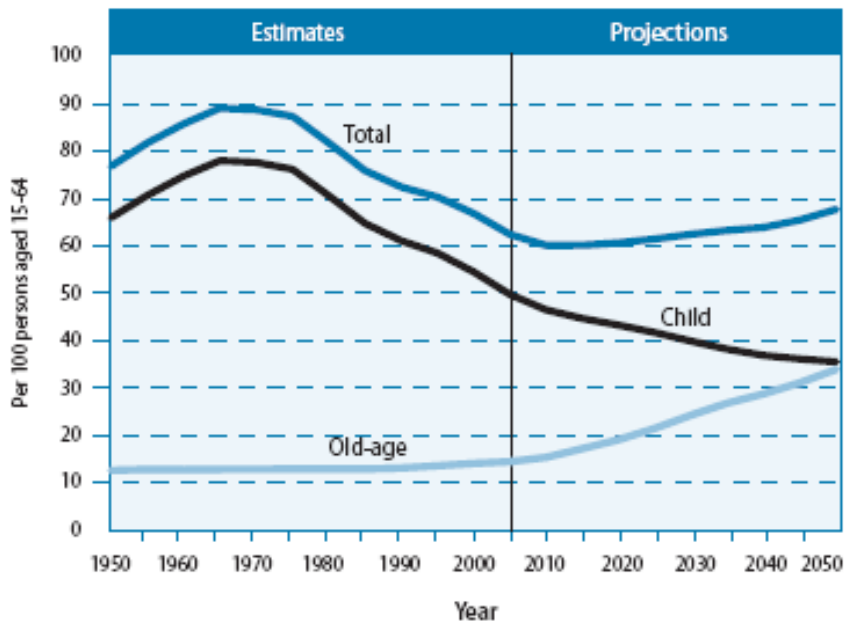
Chart 1: Size and Distribution of World Population aged 60 years or over by groups of Countries



Source: United Nations World Population Prospects: The 2004 Revision, vol.I

Note: The graph shows estimates (until 2005) and medium-variant projections (after 2005). Percentages are shown inside the bars.

Chart 2: Child and old-age dependency ratios 1950-2050, developing countries



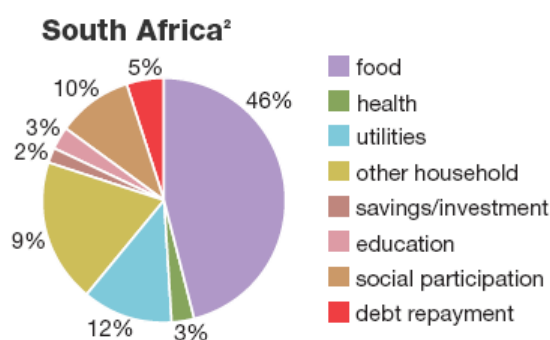
Source: UN/ DESA

Poverty Alleviation

Pensions play an important role in poverty alleviation of the elderly - one of the most vulnerable groups in any society, particularly older women. Yet, according to the ILO, only one in five workers is covered by adequate social security schemes², whilst the World Bank (Holtzman, Hinz (2001)) point out that 85% of the world's population over 65 has no retirement benefit at all. In sub-Saharan Africa less than 10% of the older population has a contributory pension (Palacios, Pallares-Miralles (2000)).

Basic, social support can be implemented via public pension arrangements. Indeed social protection is increasingly considered as contributing to the development process in the same way as health and education (van Dullen (2007)). It is beyond the scope of this paper to enter the debate over which type of social pension is most appropriate -contributory vs. non-contributory / universal vs. means tested etc. - (see referenced ILO and World Bank papers as an introduction to the topic). However, irrespective of the type of arrangement, in addition to reducing poverty amongst the elderly, providing pensions has also been shown to have implications for broader society, as benefits are shared with household members – for example via providing food, clothing and school materials for grandchildren.

Chart 3: Pension Spending by Older People



Source: Moller, Ferreira(2003)

Indeed, older persons can often act as de facto heads of household, caring for relatives infected with HIV/AIDS and looking after orphaned children. Around 30% of households in sub-Saharan Africa are headed by a person aged 55 and over, with over two-thirds of these households including at least one child under the age of 15 (Help Age International (2006a)). Over 60% of orphaned children in Namibia, South Africa and Zimbabwe, and 50% in Botswana, Malawi and Tanzania, live with their grandparents (United Nations (2007)).

Receiving and sharing a pension cements intergeneration relationships and makes the elder more integrated into communities, rather than feeling like a burden on their families.. The following examples of the positive social impact which pension can have are taken from Help Age International's Social Protection Facts and Figures (Help Age International (2006b)):

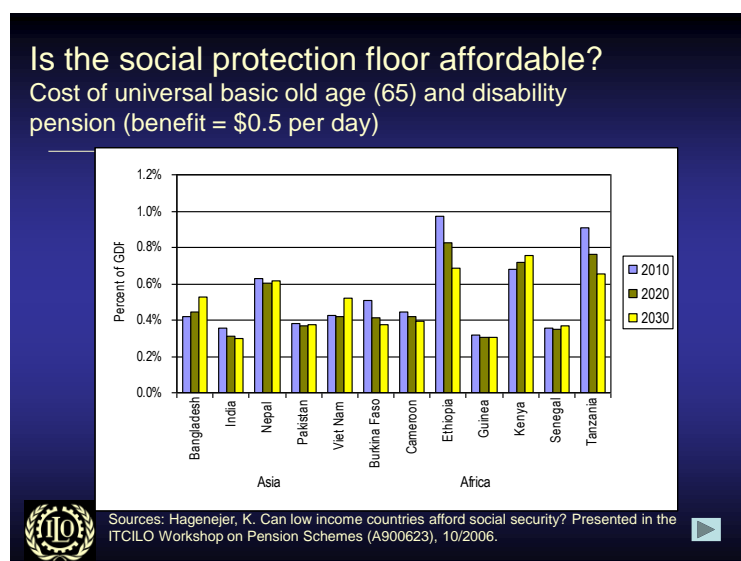
² Statistics quoted by Vinícius Carvalho Pinheiro, ITC - ILO at the OECD/IOPS Global Forum on Private Pensions, Istanbul, Turkey, November 2006 <http://www.oecd.org/dataoecd/62/23/37696140.pdf>

- Pensions reduce the poverty gap ratio by 13% in South Africa and increase the income of the poorest 5% of the population by 50%;
- In South Africa, families receiving a pension are 11% less like to become poor;
- In Tanzania, where there is no pension, out of 146,000 children orphaned by HIV/AIDS, only 1,000 attended secondary school, because their grandparents could not afford the fees;
- In Zambia, a pilot cash-transfer scheme to older people caring for orphans has improved school attendance;
- In South Africa, girls living in a household with an older woman who receives a pension are 3-4 centimetres taller than girls in households with older women who do not receive a pension.

In addition the ILO³ point out that providing social pensions in Latin America has helped to reverse rural-urban migration, decrease birth mortality rates and provided much needed liquidity to households (allowing them to shift from subsistence to surplus agriculture, invest in rural production and increase consumption and provide credit for pensioners).

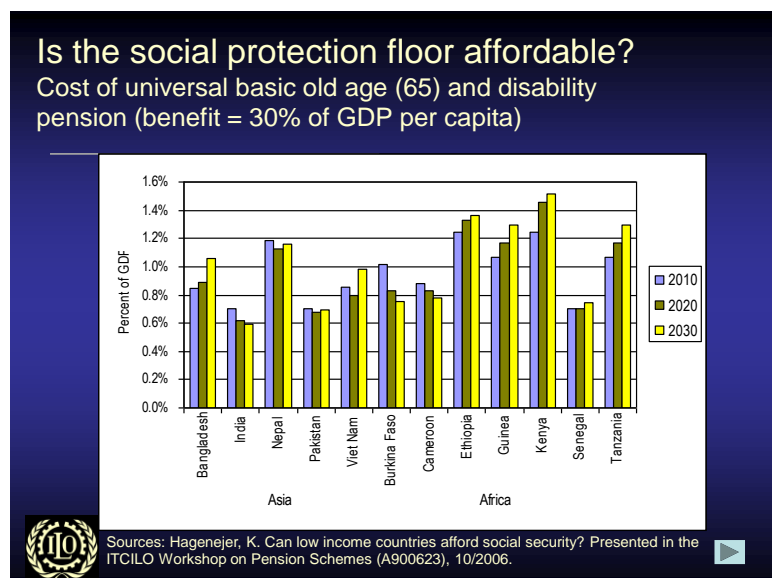
Examples from developing countries have shown that implementing a basic pension need not be particularly complicated or expensive, as social pensions can cost only a few percent of GDP (source of following charts see footnote 1).

Chart 4: ILO Estimates Cost of Social Protection – Flat Benefit



³ See footnote 1

Chart 5: ILO Estimates Cost of Social Protection –Percentage of GDP



For Africa, the fiscal cost of providing a *universal* noncontributory social pension to all of the elderly has been estimated at 2 to 3 percent of GDP, a level comparable to, or even higher, than the levels of total public spending on health care in some countries (Kakwani and Subbarao (2005)). However, such estimates depend on parameters such as benefit levels and entitlement ages that can be adjusted in order to keep the fiscal cost manageable. That said, the debate over whether cash payment based pensions are the best way to tackle the broader social challenges mentioned needs to be considered, but is outside the scope of this paper.

Alleviating Government Costs⁴

In addition to social pensions being affordable for many emerging economies, developing funded pension systems can also reduce government expenditure, thereby releasing funds to direct to other key policy challenges and initiatives. The reform of unsustainable pay-as-you-go (PAYG) pension systems can help reduce the fiscal burden that such schemes place on the population, and indeed avoid burdening future generations. Such concerns are greatest in countries with high levels of labour market informality, as is the case in developing countries in Africa and elsewhere, as large groups of the population may not have access to the pension system but support it indirectly via the tax system. Spending of pensions (particularly on pensions for civil servants and other special schemes) has increased enormously in the region, and is crowding out spending on other deserving programs.

The potential for major fiscal imbalances and regressive distributional outcomes is compounded when the pension scheme is designed to cover only specific workers with a high degree of political power. In Africa this is often the case of civil servants pension arrangements. In all countries the formula used to calculate the pension for civil servants tends to be more generous than for private sector workers. The impact of a more generous formula and a more mature system along with a lack of

⁴ This section is taken from Yermo, J. (2008), "Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries", *OECD Working Papers on Insurance and Private Pensions*, No. 15, OECD Publishing. <http://www.oecd.org/dataoecd/26/53/40194872.pdf>

reserves results in a build-up of large deficits that are ultimately a burden on the rest of the population, and the crowding out of other important expenditures.

To give one African example, civil servants in Uganda are covered by the public service pension scheme, run by the public service pension fund.⁵ Despite the name, the system is financed directly from the government budget; there are no statutory contributions. Civil servants can retire at the early age of 45, vesting periods are only 10 years, the benefit accrual rate is 2.4% per year, the reference wage for pension calculations is the last salary and benefits are indexed to wages. A similar scheme covers staff of the armed forces. By contrast, the civil service scheme in Botswana now operates on a fully funded, defined contribution basis, with no burden on the rest of the economy except the contribution rate of the government which is transparent.

Box 1: Pros and caveats of an integrated / harmonized system

There are separate pension schemes for civil servants in about half of the world's countries, including some of the largest developing economies, such as Brazil, China and India. However, there appear to be strong arguments for integration, particularly in smaller and /or low income countries. Various countries have already followed this path. The long-term goal thus should be a single, national scheme for reasons of equity, administrative efficiency and labour-market flexibility. This does not preclude, however, additional top-up schemes designed to achieve specific human resource objectives.

The **main pros of harmonizing and integrating the pension systems** can be summarized as follows:

- a) Labour market distortions and inequity between formal sector workers in the same country are reduced. There is no obvious reason public policies dealing with lifetime consumption smoothing or survivor's insurance should differ between public and private sectors (except perhaps, for military personnel).
- b) With integration, duplication of administrative functions, such as recordkeeping, is not needed. To the extent that there are economies of scale in recordkeeping, payment of pensions and other activities of mandatory pension funds, with no integration, this duplication represents an unnecessary cost that ultimately reduces the financially sustainable benefit level.
- c) To harmonize the pension rules of the civil servants with the ones of the national pension system would mean a reduction of pension liabilities. Indeed the fiscal implications of harmonizing can be considerable. Civil servants pension schemes offer more generous terms, tend to have lower funding ratios and have higher per member liabilities than other schemes. In many countries, civil service pensions are becoming a major fiscal burden, threatening to crowd out other programs, especially in low-income countries with limited tax bases. With harmonization and integration fiscal liabilities decrease.

The **main caveats** that need to be considered with integration can be summarized as follows:

- a) Integration may involve a new budget outlay, as the government makes its employer contributions to a parastatal institution. It is important therefore to estimate the path of transition financing and determine the pace of the integration accordingly.
- b) A rapid integration will imply higher transition financing needs but will eliminate some of the distortions of dualism more quickly. On the other hand, a slower transition, for example, one wherein only new hires were obliged to join the national pension scheme, would be easier to accommodate in the short run, easier to administer and more politically palatable. Slow transitions would, however, allow distortions to persist for decades and would not go as far in improving the long term fiscal situation.
- c) It is very important to look at the adequacy and sustainability of the national scheme into which civil servants would be integrated.

Clearly reforms to the two schemes should be linked. Parametric reforms to the civil service scheme that are phased in over time can reduce the disparities between the two and make integration easier. Reforms that increase the solvency and credibility of the main national scheme increase the benefits from integration. In short, pension system reform should, to the extent possible, be holistic.

⁵ For a full description of the scheme, an analysis of its sustainability and proposals for reform see Bogomolova et al. (2006), An Assessment of Reform Options for the Public Pension Fund of Uganda, *World Bank Policy Research Working Paper 4091*, December 2006.

Macroeconomic benefits of prefunding pensions

Many countries around the world are partly prefunding their otherwise pay-as-you-go (PAYG) financed social security systems by establishing or further developing existing public pension reserve funds (PPRFs). This trend is parallel to the growing shift towards fully-funded, privately managed pension systems, which has in turn heightened the role of pension funds in retirement income arrangements. Though benefits of prefunding have been found in other regions, which the preconditions exist to allow such rewards to be enjoyed in many African countries may be debated.

Prefunding pensions, whether it is via the establishment of public pension reserve funds or the development of fully-funded, private pension systems can help governments respond more effectively to the fiscal pressures that will result from ageing populations. While prefunding may not in itself offset the decline in domestic growth rates that may result from worsening dependency ratios, it can help to solvent some aspects of the demographic shock. In particular, prefunding social security systems can facilitate tax-smoothing, that is, maintaining relatively constant contribution rates to the social security system. While such objectives could also be met by appropriate management of the public debt, assets in the reserve fund are assigned to financing the social security system. Savings in the form of public debt reductions, on the other hand, may end up being used for other future outlays of the government.

Prefunding pensions can also serve important macroeconomic goals:

- *Raise national savings:* In the case of public pension reserve funds, a legal commitment to use reserve fund assets exclusively for future pension expenditures and to invest in a diversified manner forces the government to reduce current expenditure or raise taxes to maintain current fiscal objectives. Hence, public saving will rise and the overall debt position of the government may improve. If a private pension system is introduced, as long as there is not a perfect substitution between pensions and other forms of saving, total private sector saving will be raised. The impact on savings is greatest if the system is made mandatory.
- *International diversification:* by establishing reserve funds or pension funds a country is better able to access output produced in foreign countries which may not be suffering the same demographic and economic shocks, raising national welfare.
- *Financial market development:* In developing countries, where financial systems are underdeveloped, prefunding pensions may contribute to economic growth by improving access to finance for productive activities. Pension funds and other institutional investors can also help improve the operation of financial markets by making markets more liquid, efficient and transparent by for example, encouraging the modernisation of market trading and engaging in shareholder activism. They can also act as a countervailing force to commercial banks and stimulate financial innovation. However, a high and sudden demand by pension funds for local assets could have a distorting impact, and therefore should be managed with care.

While it is difficult to quantify such macroeconomic effects and isolate them from other factors, the few studies that have attempted to do so have found relatively large effects especially for the Latin American region, the pioneer among the developing world in prefunding pension systems (see Box 2).

Box 2. Empirical evidence on the macroeconomic impact of pension prefunding.

One of the most researched cases is the Chilean one, which reformed its pension system in 1981 by replacing its social security system with a mandatory individual account system run by privately managed pension fund administrators. Lefort and Walker (2002) found evidence of a positive impact of pension fund equity investment on the cost of capital of firms as proxied by price-to-book ratios and dividend yields. Corbo and Schmidt-Hebbel (2003) find evidence of a direct impact of pension reform on total savings and hence on economic growth. They estimate that approximately half of the increase in total savings between 1981 and 2001 (4.9 percent of GDP) was due to the pension reform. They also estimate that the pension reform explains 20 percentage points of the 1 percent growth in Total Factor Productivity (TFP) growth over the period (as a result of financial development) and 0.5 percentage points of the 4.6 growth in real GDP over the period.

For other countries, the evidence on the impact on savings, financial market development and growth is mixed, but generally positive, especially as far as developing countries are concerned. López Murphy and Musalem (2004) show that the introduction of mandatory funded pension systems contributed to higher savings in a sample of developing countries that they analyse.

Various studies have focused on the impact of pension funds on the development of financial markets. Catalan et al. (2000) show that pension funds and other institutional investors have contributed to the development of equity markets and in particular explain the size of the stock market vis-à-vis banks. Impavido et al. (2003) however find little evidence of a relationship between contractual savings (pension funds and life insurance companies) on a cross-section of countries and an indicator of trading activity (traded values relative to GDP). The link is stronger for developing countries and for developed countries with bank-based financial systems.

Some recent studies have also looked at the direct link between the growth of pension funds and economic growth. Davis (2002) finds a significant direct effect of the share of equities held by pension funds and life insurance companies on TFP growth in 16 OECD countries. Davis and Hu (2004) using a dataset covering 38 countries also find a direct positive link between pension assets and the growth of output per worker. Both papers argue that an important aspect of the financial development channel is an enhancement of corporate governance. Even firms unaffected by shareholder activism, they conclude, have natural incentives to improve their performance so as to avoid the threat from pension fund activism in the future.

In Africa, infrastructure is one of the most promising venues for pension fund investment. So far, the most active investors have been pension funds in South Africa, but pension funds in other countries are also looking into the asset class. For example, Kenya is looking to the pensions industry to fund the country's infrastructure and domestic needs in partnership with the International Finance Corporation (IFC) and World Bank. The government announced in 2007 that it would issue asset-backed securities to pay for roads and housing under the 2006 initiative Efficient Securities Markets Institutional Development (ESMID) Africa, a \$5.5m with funding from IFC/World Bank, OMX and the Swedish Government. However, a clear distinction needs to be drawn between investment and simple expenditure, as pension funds in the region have previously been used to fund all manner of generic construction and other projects which make limited contributions to development and growth. As OECD guidelines stress, governance of infrastructure projects is key in all parts of the world⁶.

Two important questions for African countries wishing to introduce funded pensions are firstly, what form should such prefunding take and, secondly, what are the preconditions for ensuring that the much desired macroeconomic effects actually take place?

⁶ See *OECD Principles for Private Sector Participation in Infrastructure* www.oecd.org/daf/investment/ppp

For further background information relating to the Principles see www.oecd.org/daf/investment/ppp

Around the world, countries have chosen different routes to prefund pension systems. Many OECD countries have recently established reserve funds, which complement a long tradition of pension fund provision. The situation varies widely across non-OECD countries. In Latin America and most countries in Eastern Europe, pension funds have been recently established, partly replacing the PAYG financing system. This is leading to a rapid accumulation of funds in these countries. In addition, a few non-OECD countries, primarily in Asia, have relatively large reserve funds that support their social security systems, but a rather small pension fund sector (e.g. include China, Egypt, Jordan, Philippines and Saudi Arabia).

In general, prefunding via pension funds is preferable to reserve funds, as the former guarantee ownership or beneficial rights to pension plan members and are normally subject to a comprehensive regulatory and supervisory framework. Moreover, the financial advantages of prefunding generally apply whether this takes place via pension funds or reserve funds. A preference for reserve funds may arise if there are cost or/and investment performance advantages over privately managed pension funds, something which is unlikely to happen in countries with poor public sector governance. The governance of public pension reserve funds can be strengthened in such countries if they are given complete investment management autonomy and quasi-private status, as governments in Australia, Canada, and New Zealand have done with their public pension reserve funds.

A second question for African countries to consider is whether there are any conditions to ensure that the introduction of prefunding creates the macroeconomic benefits of the kind observed in Chile. It should be stressed that many countries in Africa are not in the position which the Latin American countries were when they introduced their pension reforms. As far as financial market development is concerned, three basic requirements are macroeconomic stability, the establishment of an appropriate regulatory and supervisory framework for the funded pension system, and the availability of custody, credit rating and other auxiliary services that pension funds rely on for their investments. The latter can be expected to be accessible internationally in today's global financial markets, so their absence in the local market should not be an impediment for introducing some form of prefunding.

Macroeconomic stability and low inflation are important because neither financial markets nor institutional investors can function effectively in situations of financial instability, such as those triggered by large fiscal deficits and high and volatile inflation.

The development of an appropriate regulatory and supervisory regime is also essential but may be a complex task for some developing countries. The investment rules in place in some Latin American countries, for example, have been designed in such a way which has not been conducive to growth in the local stock market as pension funds are forced to invest largely in government bonds. While quantitative investment restrictions may be necessary in the early years of a new system, it is important that such rules are gradually relaxed over time in order to benefit from the diversification of investments and their positive impact on the domestic economy. African countries intending to establish funded pension systems should consider reviewing the OECD's and IOPS' respective principles on the regulation and supervision of private pensions.

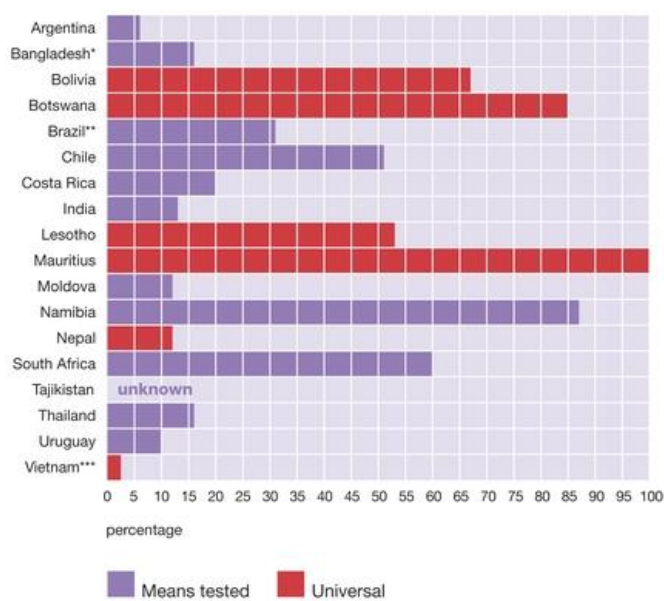
Pension Systems in Africa

Most sub Saharan African countries do not have meaningful publicly managed pension and social security systems, though some form of pension coverage is available in a limited number of countries. Where benefits are offered to formal sector workers, they are provided either by public service pension schemes (the public sector being by far the largest employer in most countries the region), national (usually mandatory) schemes covering private sector workers (which may also cover the public

sector), occupational schemes managed by employers other than the government and individual / personal pension schemes (usually offered by insurance companies on a voluntary basis).

For example, universal pension systems operate in Botswana, Mauritius and Namibia, whilst a means tested public pension is available in South Africa. Social pensions also operate in Lesotho and Senegal, whilst occupation pensions are available, albeit for a limited percentage of the population, in countries such as Nigeria and Kenya. However, it should be noted that the majority of people in the region work in the informal sector and are therefore not covered by these schemes, implying that they rely on informal arrangements and their own/ family resources.

Chart 6: Coverage: Percentage of over 60s receiving a social pension



* Figure is for people over 57 ** Figure includes women over 55
 *** Vietnam has one means tested and one universal social pension

Source: Help Age International

Table 1: Types of Social Security Programmes and Systems for Retirement Income

	Old Age, disability and survivors	Earnings-related	Means-tested	Flat-rate Universal	Provident Funds	Occupational Retirement schemes Voluntary = V Mandatory = M	Personal Retirement schemes Voluntary = V Mandatory = M
Benin	X	X					
Botswana ¹	X			X		V	
Burkina Faso	X	X					
Burundi	X	X					
Cameroon	X	X					
Cape Verde	X	X					
Central African Republic	X	X					
Chad	X	X					
Congo (Brazzaville)	X	X					
Congo (Kinshasa)	X	X					
Cote d'Ivoire	X	X					
Equatorial Guinea	X	X					
Ethiopia	X	X					
Gabon	X	X					
Gambia	X	X			X		
Ghana	X	X					
Guinea	X	X					
Kenya	X				X	V	V
Liberia	X	X	X				
Madagascar	X	X					
Malawi ²							
Mali	X	X					
Mauritania	X	X					
Mauritius	X	X		X			
Namibia ⁵	X			X		V	V
Niger	X	X					
Nigeria	X					M	
Rwanda	X	X					
Sao Tome and Principe	X	X					
Senegal ³	X	X					
Seychelles	X	X					
Sierra Leone	X	X					
South Africa ⁴	X		X			V	V
Sudan	X	X					
Swaziland	X	X			X		
Tanzania	X	X					
Togo	X	X					
Uganda	X				X		
Zambia	X	X				V	
Zimbabwe	X	X				V	

Source: ILO (See Appendix 1 for definitions)

Notes: 1 Botswana (old age + orphans) 2 Malawi no mandatory system for retirement income

3 Senegal (old age + survivor) 4 South Africa (survivor benefits mostly provided by unemployment)

Table 2: Relative Importance of Segments in the Financial Systems of Selected African Countries(% of total assets of the system, latest available data¹)

Country	Commerical Banks	Other (mainly) Deposit-taking Institutions	Microfinance Institutions	Rural Banks	Insurance Companies	Pension Funds²	Other
Botswana	40				1.6	17.4	6.8 ³
Central African Republic	68.5	34.4	2.7		7.6	21.1	
Comoros	94		6				
Congro, Rep. of	89.8		7		3.2	3	
Ethiopia	88.4	3			3		5 ⁴
Gabon	83.6	4.8			7.8		5 ⁵
Gambia	97		1		2		
Ghana	50.9	6			2	15.1	
Guinea	98.2	1.8	1.8				
Kenya	60.4	15	0.5		8.2		
Lesotho	91.8				7.8		
Madagascar	97.8	0.6	1.6				
Malawi	70.9	17.5			29.1		
Mali	98.7						
Mauritius	94.8	4.4					
Mozambique	94.9	4.3	0.1				
Namibia	38.1				24.8		
Niger	61.9	1.1	1.7	0.7	7.6		
Nigeria	90.5	8.12			2.1	0.6	
Rwanda	53	2.6	4.5		4.3	20.6	
Senegal			2.6				
Seychelles	87.1	6			2.1	5	
South Africa	25.3				14.6		
Swaziland							
Tanzania	78				4	13	
Uganda							
Zambia	59.6	23	0.2		3.8	16.7	
Zimbabwe	76.6	10.2	0.1		3	2	

Source IMF⁷

Notes: 1 Numbers do not always add up to 100%

2 In most countries state pension funds

3 Capital / investment funds

⁷ <http://www.imf.org/external/pubs/ft/wp/2007/wp0718.pdf>

An increasing number of African countries have recently initiated major parametric and systemic reform of their pension systems (often on the initiative of stakeholder, advisory committees and international organisations) and are beginning to adopt diversified approaches to pension provision in order to strengthen retirement security of their workforce. Many other authorities are in the process of formulating serious reform proposals and are exploring ways to encourage more saving over the long run.

In Africa, although the problems of the schemes that cover private sector workers have become increasingly evident, the motivation for reform has come more frequently from the fiscal pressures of civil service pensions (usually much more generous systems). In several countries, the need to address this short-term fiscal issue has led policy makers to reconsider overall pension policy. In particular, the alternatives to the current arrangements for civil servants include a new system that replaces the dualism with one in which all formal sector workers participate. Although it is still politically very difficult, a few countries have already considered and even implemented 'integration' of their pension systems (as discussed in Box 1). Reform is also being driven by an increasing awareness of old age provision as an integral part of social policy, fixing unsustainable existing schemes and making them more efficient in terms of administrative costs and returns (following serious mismanagement in some countries), as well as the desire to increase savings and develop financial markets in the region.

The structure and challenges to the pension systems in each country differ, with countries correspondingly adopting different reform agendas. The pace of reform also differs from country to country, ranging from the introduction of individual DC accounts in Nigeria, to extending pension coverage to the informal sector in Botswana; exploring ways to overhaul the civil service pension scheme in Kenya; to improving pension fund governance and reforming taxation of retirement funds in South Africa. Many countries - including Botswana, Kenya, Zambia - are reviewing their national social security and severance schemes to make them less expensive to administrate and more sustainable for retirees in the long run.

A major component of these announced reforms is the need to improve the quality and effectiveness of the supervisory oversight of the burgeoning pension system. In most countries pension and social security institutions are not regulated and supervision is fragmented and weak. Countries such as Zambia and Kenya continue to establish their pension fund regulation, whilst new supervisory authorities have been created in countries such as Botswana.

The challenges of systemic reform, where there is a shift from unfunded to funded schemes and possibly the introduction of private management of assets, are particularly great in Sub-Saharan Africa. Reformers face three major obstacles:

1. First and foremost, any diversion of contributions to a new funded scheme will force governments to find resources to covers the resulting gap. Since most of the countries depend heavily on foreign aid to supplement their budgets, there is little scope for financing the transition, at least not a rapid transition.
2. Second, existing public pension institutions are generally not equipped to meet the record-keeping requirements of a funded individual accounts scheme.
3. Finally, few of the conditions that make a privately managed, funded system viable – investment opportunities, solid regulatory institutions, and potential participants in the private pension sector –are present in most of the region.

Overviews of Selected Countries

Botswana

A universal, Old Age Pension System, was initiated in Botswana in 1996. Coverage extends to all citizens over 65 years of age residing in Botswana. The costs are born by the government, with 220 pula month provided in benefits, adjusted periodically according to changes in the cost of living.

The fund public sector employees scheme – the Botswana Public Officers Pensions Fund (BPOPF) - was reformed in 2001, moving from a DB to a DC arrangement. The fund has experienced strong growth as most public servants exercised their option to join the fund.

Occupational pensions are also growing, with assets having reached the current market value of around P33 billion.⁸ Of Botswana's 790,000 labour force, around 300,000 are in private, formal employment. Yet 84% of these workers do not have any occupational pension coverage, with around 33% of public sector workers also not covered, and there is little evidence of supplementary saving in individual products to close this gap (Genesis Analytics (forthcoming)).

A gratuity / severance scheme also exists in Botswana, with employers required to make a cash payment on the 5th anniversary of an employee's term of employment, and similar payments, at double the rate, at the end of every 5 years thereafter, with eligibility for pro-rata cash benefits on termination of employment. However, employers are not required to pre-fund these obligations, they often do not comply and the payments are not generally used to fund retirement income.

The government in Botswana is looking to reform their system, to increase administrative efficiency and sustainability. A Non-Bank Financial Authority has been created which oversees the pension fund industry.

Cap Verde

There are two contributory pension schemes for formal sector workers in Cape Verde. The "Administração Pública" (AP) scheme, which, according to the civil service census, has an estimated 14,600 contributors (i.e., police, teachers, and other civil servants), and the "Instituto Nacional de Previdência Social" (INPS), which covered approximately 36,400 private sector workers in 2004. The INPS is the National Social Security Institute of Cape Verde created in 1983 to administrate a compulsory social security scheme (not only covering pensions, but health benefits, family allowances and maternity benefits) for dependent workers in the private sector. The institution was designed to be self-financing through social contributions and investments. However, as a National Institute, the State is ultimately responsible for the provision of benefits and for the proper administration of the programs.

The integration of civil servants into the INPS has been under discussion for a few years and in February 2006 a new integration law was approved to be implemented when the budget will be approved in 2006. Even though, in consolidated terms, there is a gain in moving civil servants to the INPS system, as it provides fewer benefits, the integration worsens the unsustainability of the INPS. Preliminary estimates indicate that the INPS system will be in deficit around 2040, as the system matures and the demographic situation improves. Now is the time to proceed with further reforms in order to avoid a deficit in 2040. Reforms must consider either a raise in the contribution rates or a substantial cut in benefits. Regarding the AP (Public Administration) there is a possibility of making

⁸ <http://allafrica.com/stories/200711081005.html>

the transition less costly by a combination of a lower accrual rate, later retirement, and price indexation of benefits. Regarding the INPS, one possibility would be increasing the contribution rates at an earlier point than when reserves are exhausted.

Together, both the AP (for civil servants) and the INPS (for private sector workers) cover one quarter of Cape Verde's labor force and pay pensions to about 7,300 people. There are also three non-contributory pension schemes. The "Pensão Social Mínima" (PSM) is a social assistance scheme that pays benefits to approximately 5,000 elderly individuals that meet income and age criteria established under a 1995 law, the "Pensão de Solidaridade" is paid to more than 9,000 former FAIMO workers over age 60 subject to a (vague) income test and an eligibility condition of having worked for, at least, ten years under the program. The "Pensão de Estado" is paid to individuals with relevant contributions to the arts, culture, and independence movement of Cape Verde and covers the residual population.

The AP is a more generous pension scheme than the INPS. The AP pension plan has a retirement age for teachers and police of 55 for both male and female and 60 for other members while the retirement age is 65 for the INPS for men and 60 for women. This is particularly important as about half of the civil servants in Cape Verde are teachers, which, along with the police, are covered by the AP pension scheme. As for the basic and accrual replacement rates⁹ there are no major differences between the two pension schemes, but the maximum replacement rate is 20 percentage points higher in the AP than in the INPS. Moreover, while for the AP the number of years considered for the wage base calculations is only one year for both old-age and invalidity retirement, for the INPS system it is 5 years for invalidity and 10 years for old-age. Finally, total contribution rates, as a percentage of wage bill, are 15 percentage points higher in the INPS than in the AP. These differences make the AP system a more paternalistic one, which provides enrolled individuals more benefits than those granted by the INPS.

Gambia

Current pension schemes in The Gambia are: (i) the Public Service Pension Scheme (PSPS) which covers government employees (civil servants and uniformed services); (ii) special provisions for National Assembly members, Local Government Authority employees and District Chiefs; (iii) the Federated Pension Fund (FPF) which covers non-government public sector employees; (iv) the National Provident Fund (NPF) which covers private sector employees; and (v) a number of registered Occupational Schemes. The Social Security and Housing Finance Corporation (SSHFC) manages the FPF, the NPF and other housing finance schemes.

An estimated 135,000 workers – a majority of the estimated size of the formal sector labor force – participate in mandatory pension schemes and of these about 18,700 are members of the PSPS and the remainder are in private sector schemes. However, given the importance of agriculture and the informal sector in the Gambian economy, the coverage rate in terms of the estimated total labor force is only about 20 percent. Active members of the PSPS represent about 14 percent of workers covered by all mandatory pension schemes, about 2.8 percent of the estimated size of the labor force and 1.2 percent of the Gambian population. The benefit structure and qualifying conditions are similar for the PSPS and the FPS. Yet while these schemes share such similarities, there is no mechanism that we are aware of to facilitate mobility of workers and portability of accrued rights between the public sector schemes.

Pension benefits are a key part of the remuneration package for civil servants, the military and police in The Gambia. Such deferred compensation is an essential part of the incentives to recruit,

retain, motivate and reward public servants. In this way, an assessment of the PSPS cannot be isolated from a broader assessment of overall public servant compensation and other incentives for public officials. This is of particular importance in The Gambia given the anticipated Civil Service Reform Program.

Ghana

There are currently two mandatory pension schemes in Ghana: the Social Security and National Insurance Trust (SSNIT), which is the main system and covers employees in the private sector, civil and public servants, professionals, traders, artisans, farmers and self-employed; and a small scheme, which is currently phasing-out, and only covers military, police, and a few civil servants, but used to cover all civil servants in the past. This last system is called originally CAP 30 program. In the aggregate both systems cover less than 10 percent of the labor force in Ghana, and cost already around 1.5 percent of GDP.

SSNIT was established by PNDC law 247 (Social Security Law, 1991), which converted a Provident Fund dating from 1972 into a pension scheme (partially-funded PAYG). The institution provides old-age pensions, invalidity, and death benefits. The current pension program has elements of defined benefit, and defined contribution. Pensioners have the right to obtain 25 percent of their pensions as lump-sum payments at the moment of retirement, and almost 30 percent of members that reach retirement age and are 'covered' by the system, do not qualify for the defined benefit component of the pension program (they receive instead lump-sum payments, as refunds of their past contributions with a determined interest).

The system's revenues largely consists of contributions from workers (5 percent of earnings), and employers on behalf of workers (12.5 percent of their payroll), however a fund for short-term benefits (health fund) takes 2.5 percent of the salary (out of this 17.5 percent, leaving only 15 percent for the pension fund).

According to early work in Ghana and the White paper on pension, the formal sector is still low. The main weaknesses of the current system can be summarized as follows:

- Inadequate investment returns
- Very low coverage
- High administrative costs and low efficiency
- Substantial slippage in real value of the pensions

In response to workers' protests, a Presidential Commission on Pension was established in August 2004. The Commission was in charge to examining the pension arrangements and to make appropriate recommendations for a sustainable pension scheme (s) that would ensure retirement income security for Ghanaian workers, with special reference to the public sector. The Commission consists on a Chairman and eight members, from various sectors. The Commission presented a progress report in November 2004, an Interim report in June, 2005 and the final report in March, 2006 to the President. The Government shares the view of the Commission that to ensure retirement income security for all Ghanaian workers, the ultimate goal is the creation of a unified pension structure.

Given the inadequate current pension schemes, the Government accepted the Commission's recommendation for a contributory three-pillar pension structures, comprising two mandatory schemes and a voluntary one, as follows:

- First pillar. A mandatory basic state social security scheme to be administered by a restructured SSNIT, which will pay only periodic monthly and other pension benefits (such as survivors and invalidity benefits). It will be a defined benefit scheme, benefiting from a portion of contributions paid to SSNIT by both the employee (5 percent), and the employer (12.5 percent). Under this new scheme, SSNIT will no longer pay the earlier mentioned 25 percent gratuity lump-sum.
- Second pillar. A mandatory, privately-managed occupational pension scheme. It will be a defined contribution pension scheme, paying mainly lump-sum benefits with a flexibility that allows the contributor to purchase additional annuities to enhance monthly pension benefits. The contribution rate will be 5 percent, out of this, 4 percent will be hived off SSNIT, while the remaining 1 percent will be contributed by the employer and the employee in equal proportions.
- Third pillar. A voluntary private pension scheme, offering attractive tax incentives. This would be operated in line with the provisions of the Long—Term Savings Act (LTSA), 2004.

A proposed Pension Regulatory Authority should, within five years after coming into effect of the new pension structure, achieve unification of all pension schemes in the country. With the coming into effect of the new pension scheme (estimated for the end of 2008), all workers currently on the SSNIT scheme and below 55 years, should automatically join the new scheme.

In short, the current pension system in Ghana is about to start a transition towards the new three pillar pension structure. Some of the proposals for such structure are still under revision. The new system should also ensure that it minimizes labour market distortions, and that the system is adequate, affordable, sustainable, robust, and equitable.

Kenya

The retirement benefits sector in Kenya is composed of the civil service scheme, the National Social Security Fund (NSSF), occupational schemes and individual pension schemes, with a coverage rate of around 15% of the workforce (10% or 800,000 members of the NSSF, 3% in the civil service scheme in 1.5% occupational schemes and 0.5% covered by individual retirement benefit schemes).

The NSSF is a public provident fund established under an Act of Parliament. It covers employed persons, traders, the self-employed and, since 2004, some workers in the informal sector. It is mandatory for all employers with at least 5 employees to enroll their members, but open to all other individuals mentioned above. Members of the scheme contribute 5% of monthly earnings up to a maximum of 200 shillings a month, which is the contribution rate for those earning more than KShs. 4,000. Employers pay 5% of payroll, with subject to a maximum of KShs. 400. Self-employed persons contribute 5% of their monthly earnings, with no minimum or maximum earning limits for contribution purposes. With effect from June 2007, members of NSSF can top up their savings at any point in time with any amount that is less than or equal to KShs. 1,000. Old-age pension benefits are available to those aged 55 who have retired from insured employment. They are available at age 50 if the person is not in insured employment. New and existing retirees can receive their benefits as a lump sum.

The Civil Service Pension Scheme covers all members of the Civil Service, and is established under an Act of Parliament as a PAYG system. It is currently non-contributory, although plans are underway to make it a contributory system.

Voluntary, occupational pension plans can be administered through pension funds or provident funds, and through DB or DC arrangements. An employer or a group of employers may, on a voluntary basis, establish a complementary occupational pension plan for their employees. Most plans are established by one single employer. Membership to an occupational pension or provident plan is often compulsory for covered employees. Once an employee decides to become a member, however, withdrawal from membership while being employed by the same employer is not allowed. Employees who are within five years of the plan retirement age when they commence work with the employer or when a new plan is established are not eligible for membership in the case of DB plans.

There are no legal rules for employee or employer contribution levels. A typical plan requires employees to contribute at a rate of 5% of salary and employers to contribute 10%. Employees must be allowed to pay additional voluntary contributions to the plan without any limit (although contributions are only tax-deductible up to a limit). The total of employee and employer contributions is tax-deductible up to the limit of the lower of KShs20,000 shillings or 30% of salary. All investment income earned by tax-registered retirement benefits schemes is tax-free.

Plans can be Defined Benefit or Defined Contribution in nature (around 80% are DC). The age at which benefits become available is not regulated and must be laid down in plan rules. Upon attainment of the retirement age, provident plans pay out a lump sum. Pension plans pay out benefits out as a monthly pension for the rest of the insured person's life. Up to one-third of total benefits can be commuted into a lump-sum payment if the plan is contributory (25% if non-contributory). The Board of Trustees is required to give the scheme member the opportunity to choose their annuity provider and preferred annuity. Plan rules may provide for different benefit formulas for different categories of workers under certain circumstances. Both lump sum payments and annuities enjoy more generous tax treatment, as long as the member retires on disability or age grounds, or has been a member of a retirement benefits scheme for at least 10 years. Pensions are tax-free for pensioners receiving up to KShs26,000 and have no other sources of income, or KShs15,000 if they have other sources of income. With effect from June 2007, pensions for individuals above the age of 65 are not taxable. For non-tax-registered retirement benefits schemes, contributions and investment income are taxable at normal tax rates. However, no further tax is exercised on the savings after the member retires.

Retirement benefits schemes are run by trustees. Half of the trustees are nominated by the members, and half are nominated by the employer. All trustees are required to engage the services of an assets manager for the management of their assets. A reform in 2005 abolished the possibility for workers to withdraw all their assets before reaching the normal retirement age. Since then, workers can only withdraw their employer's portion of contributions if they have been members of the scheme for less than one year, and if the vesting rules allow them to make such a withdrawal. They can withdraw their own contributions before reaching the age of 55 if they are withdrawing from a retirement benefits scheme. With effect from January 2008, they will also be allowed to assign their savings as mortgage security.

In 2007, there were around 1357 active occupational pension schemes, of which approximately 10% were DB schemes. The majority of schemes are pension schemes as opposed to provident funds. As of 2006, pension fund assets amounted to around 250bn KES (c\$3.5bn). Investment restrictions include up to 70% in domestic and regional shares, 15% offshore and 30% in real estate.

In terms of personal pension arrangements, 14 individual, DC-type pension schemes exist, which cover less than 1% of the population. They are mostly offered by insurance companies and are available to anyone. They are attractive to those workers whose employers do not offer a pension plan and to the self-employed. In May 2007, the Zimele Personal Pension Plan, a voluntary retirement savings arrangement for all public- and private-sector workers, was introduced. It will be managed by the private firm Zimele Asset Management Company. The plan operates on the basis of pooled funds. Contributions and investment income are exempt from tax. Amana Personal Pension Plan is the only other individual retirement benefits scheme that is similarly structured to the Zimele Personal Pension Plan.

The pension system in Kenya has been supervised by the independent Retirement Benefits Authority (RBA) since 2000, which oversees the 1997 Retirement Benefits Act, which brought regulation, protection and structure to the pension industry. The RBA continues work to develop the industry and train trustees.

However, challenges still remain for the RBA, including bringing some funds in line with the law and to a fully funded level. Post-retirement poverty, low coverage, low contributions rates and the HIV/AIDS epidemic (which had reduced the life expectancy of Kenyans to below the normal retirement age) present challenges for the Kenyan pension system. The introduction of a “zero” pillar has been proposed, providing universal minimum pension to the population over 65. The Civil Servants Pension Scheme, non-contributory, may be reformed to introduce employee contributions and a revision of the retirement age from 55 to 60. There have also been proposals to introduce a mandatory element into the voluntary occupational and individual schemes and to create a “fourth” pillar in the form of tax incentives for family support and the purchase of a home.

Lesotho

The social pension in Lesotho was introduced in 2004. Everyone over the age of 70, except those people already receiving a government pension, receives M150 (US\$22) each month. Photo identification is needed to register for the pension, which is paid at post offices throughout the country, with around 3.6% of the population eligible (in 2006 about 72,000 people, 96% of those eligible, were receiving the pension, and more than half of these were women). The scheme is administered by the Ministry of Finance and Development Planning and financed out of the state budget (amounting to 2.4% of the national budget, or 1.43% of GDP).

Malawi

In the absence of national policy, pension coverage in Malawi is currently low. With no formal social security scheme, there is little security for retirees. Currently there are around 600 private pension funds in the country, offering DB and DC pensions, and an Umbrella fund. Three Administrators operate, but there is no active supervision or regulation of the market.

In 2005 the Government and the Reserve Bank of Malawi (RBM) started an initiative - within the context of broader financial sector reforms - to develop a regulatory framework for the supervision of pension funds. The reforms will include provisions for the registration of all funds and licensing of other market players (trustees, administrators, fund managers, custodians) based on fit and proper criteria. Funds should be structured as trusts, with assets held by a custodian. Controls for contributions will be put in place, and fund rules and benefit protection methods checked. Investments in high risk areas will be restricted and the information provided to members controlled. Tax treatment will be handled a later stage of reform.

Mauritius

The pension system in Mauritius consists of a universal, non-contributory Basic Retirement Pension, two mandatory, income-related pension schemes for the private sector (National Pension Fund and National Savings Fund) – which are administered by the public sector – and a number of voluntary schemes providing supplementary pension income.

The Basic Retirement Income is a universal, non-contributory pension funded by government taxation. It provides a minimum income guarantee for the elderly, covering all persons over 60 resident in Mauritius. The monthly retirement income provided is Rs1500 (1999/2000). Benefits are index linked, with a 5-year adjustment to prices. Payments increase for the very old (85s, 90s, 100s). Around 150,000 beneficiaries are covered (around $\frac{3}{4}$ receiving old age benefits, the remainder widows, invalids and orphan benefits). Public sector employees (civil servants and parastatal employees) are covered by a separate scheme, which has been criticized as being overly generous vs. the private sector schemes, providing 66.7% of final salary for 33.3 years of employment

In terms of occupational pensions, membership of the National Pension Fund Scheme (NPF) and National Savings Fund (NSF) is mandatory for all private sector employees with one month lifetime employment.

The NPF is a partially funded scheme requiring 9% contribution (13.5% for the sugar sector), whilst the NSF is a fully funded scheme requiring 2.5% contributions.

Benefits are paid from age 60 and are points based. The government also guarantees a minimum pension obligation (Rs 218 2000) to those who have made a one-time/ one month contribution to the fund.

NPF – aims at 33.3% replacement rate of average lifetime earnings for 40 years of employment – but is said to not be meeting these expectations and is likely to deliver only a 15% replacement rate. The average payout from the fund in 2000 was Rs 522 per month (218 minimum pension + 423 NPF average). The NSF is a DC scheme paying lump sum benefits only. The NPF and NSF are administered by the public sector, with assets amounting to around 19% of GDP, 17% in the NPF and 2% in the NSF (World Bank 2004). Around 220,000 employees are covered by the schemes (c15,000 employers) with around 36,000 beneficiaries receiving payments.

Around 1000 voluntary, occupational pension schemes are also in operation. Most of the estimated 25,000 members are highly paid workers (coverage estimated at around 10%), either in schemes insured and/ or administered by insurance companies or self-administered superannuation funds. Contributions to the schemes are made by employers only – usually at a rate between 12-19% of earnings. The schemes are predominantly DB based, with benefits paid out as pensions or lump sum (insured funds only). Of the 25,000 members 13,500 are in insured funds and 11,500 in registered superannuation funds. Funds are said to be low cost (possibly as sponsoring companies absorb some of the costs of larger funds).

Mauritius is facing a demographic transition much sooner in its development cycle than other upper income and high income countries have experienced. The share of its over-60 population is expected to more than triple in the next 50 years. The unfunded universal scheme and the civil service scheme are therefore becoming an unsustainable financial burden on the government. Declining benefits from the contributory scheme and a lack of a regulatory environment for private savings (discouraging private savings through the formal financial system) are jeopardizing living standards in retirement. In addition public sector management of the private contributory schemes does not deliver

maximum returns, whilst private sector savings are unlikely to grow given the lack of regulation and development of domestic financial markets.

The government therefore recognizes the need for reform of the pension system, and has held a widespread debate on the topic in recent years, including a comprehensive World Bank (2004) review of the system issued in 2004 which recommended the follow:

- reduce fiscal risk by modernizing the Basic Retirement Pension;
- render the system more equitable (through continued, and possibly higher transfers to the poor, maximize returns for contributors);
- render the system more efficient (by diversifying risk and enabling resource allocation);
- improve transparency in management through introduction of regulation and a supervisory agency for pensions;
- introduce flexibility in the system, especially regarding the retirement age.

Namibia

The Namibian pension system consists of a universal pension scheme the (National Pension Scheme), and voluntary contributory private pensions.

The National Pension Scheme (NPS), known as the Universal Pension Scheme, is a social pension, which provides a flat-rate benefit, is non-contributory and non-taxable and payable regardless of other income. As of 2005, N\$300 in monthly benefits were provided to around 100,000 pensioners. The pension is payable to all resident Namibian citizens (who are not outside the country for more than 6 months) above the age of 60. The pension is funded from government taxation. Most pensioners (85%) receive their money at a designated cash pay point, with the rest via a post office or bank. The overhead costs of the NPS are said to be relatively high.

The government also launched the Namibia Agricultural Retirement fund to cover agriculture related workers. This DC scheme is funded with 10% contributions, evenly split between employees and employers (who also pay an additional 1% for administrative fees).

The Government Institutions Pension Fund (GPIF) covers civil servants. This is a fully funded, DB scheme and is the largest pension fund in the country with assets of N\$15.1bn (2004) – or 73% of total pension assets in the country.

Around 15,000 workers are covered by taxable, contributory schemes (frequently on generous terms). Around 500 private pension funds currently operate in the country, with total pension assets in 2004 amounting to N\$25bn, or 68% of GDP. Most funds are small and are administered by external fund administrators that provide basic recordkeeping as well as more specialized legal and actuarial services (the largest pension fund administrator has a 60 percent market share). There are also a small number of pension funds that are administered and insured by life insurance companies. These funds have total assets of N\$2.4 billion that are included with insurance company assets in published statistics. The remaining N\$5.6 billion was held by various smaller funds, the bulk of which are based on defined contribution plans. The average size of private pension funds is less than N\$12 million, implying that pension fund operations may be suffering from small scale diseconomies. However,

several plans belong to umbrella funds in an attempt to lower operating costs and enhance investment performance.

Pension funds invest heavily abroad give a lack of domestic investment opportunities and due to strong links with South African financial institutions. While equity allocation appears high in comparison to other emerging market countries, it is similar to allocations in developed countries. Several factors have contributed to this outcome¹⁰:

- data shows that about 60-70 percent of assets are invested in equities and unit trusts, and these have so far performed well. Holdings of government bills and bonds have fluctuated between 10-20 percent;
- under Regulation 28, pension funds are required to invest a minimum of 35 percent in local assets but its flexible implementation to include the dual listed equities on the Namibia Stock Exchange (NSX) as local assets has allowed continued diversification and good performance.

Currently only around 6% of Namibia's population is over 60. This is expected to rise to 21% in the coming decades (with the old age dependency ratio likewise rising from 11% to 36% on World Bank estimates). The government recognises that existing pension arrangements are not well suited to an ageing population. Reforms to make the system more redistributive are therefore being considered.

A National Pensions scheme has been proposed. This is a contributory, PAYG scheme, under which the contributor could retire with 15 years of contributions after the age of 60. The plan would be redistributive by replacing a larger % of lower income workers' wages. The government is in the process of designing a simple means test (income and asset based).

Niger

Niger has two mandatory pension systems that provide income protection to a very small group of the population (only 3 percent of the labor force), however pension spending has been increasing exponentially during the last few years. The two different pension schemes provide pensions to workers of the public and private sector. "Caisse Nationale de Securite Sociale" (CNSS) manages pensions for the private sector, and "Fonds Nationale de Retraite" (FNR) those of the public sector. CNSS was created in 1965, but some rules have been modified since then. On the other hand, FNR was created earlier, in 1961, and since then there have not been any significant changes of its rules and regulations.

The institution of CNSS manages three social security branches: family allowances, work injuries, and pensions (old-age, invalidity, and survivors). It also manages a "social and health fund". On the other hand, FNR pays only old-age pensions, invalidity, survivorship, plus family allowances. FNR is not an autonomous body, but completely linked to Treasury.

The contribution rate in CNSS is 17 percent (15.4 from employer, and 1.6 from employee) of individual's covered earnings, however only 4 percent is for the pension branch. The contribution rate for family allowances is 11 percent and 2 percent is for work injury. FNR is also supposed to collect contributions from both employees (6 percent of payroll), and the government-employer (14 percent), however it does not receive the mandatory employer's contribution on a regular basis.

¹⁰ IMF Namibia Financial Stability Report <http://www.imf.org/external/pubs/ft/scr/2007/cr0783.pdf>

Despite low coverage, as earlier mentioned, pension expenditures have been growing and the overall deficit of the pension system in Niger (CNSS and FNR) is already around 0.3 percent of GDP, or 37 percent of the government primary deficit. In the CNSS expenditures have been growing by around 10 percent per year and are now at FCFA 4.7 billion (almost 0.3 percent of GDP). With revenues of only FCFA 2 billion, the CNSS is displaying a deficit of around 0.15 percent of GDP. This deficit of the pension branch is currently financed by the surplus of the family allowance one. In the FNR, the expenditures have increased at a faster pace (around 14 percent per year) and in 2006 these reached FCFA 9.8 billion (0.5 percent of GDP). The deficit of the system is estimated at 0.19 of GDP. So the overall deficit of the mandatory pension system is close to 0.3 percent of GDP or almost 40 percent of the aggregated primary deficit of the government which accounts for almost 1 percent of GDP.

Benefits are quite modest in the case of private sector workers and call for a review of the mandate of the social security system as a whole and a reallocation of payroll taxes. The replacement rates for a full career worker (40 years of contribution) retiring at age 60 are about 55 percent for the CNSS. Although this replacement rate can be considered appropriate, the reality, however, is that few workers in the private sector are full-career. Many contribute to the pension system for only half of their active life. The effective replacement rates can therefore be below 40 percent and this raises concerns about the adequacy of the current system to prevent poverty during old-age. Like in the case of wages, higher real pensions can only come from higher labor productivity. Nonetheless, the value of pensions relative to wages could increase by allocating a larger portion of the total social security pay-roll tax to finance pensions. This would require reviewing the level of other benefits within the CNSS – particularly family allowances which arguably should not be part of a social risk management system.

On the contrary, the pension plan for civil servants is quite generous and could contribute to a regressive distribution of public expenditures. The replacement rate for a full-career civil servant retiring at age 60 is 80 percent. Because civil servants also have longer careers replacement rates are also high. These pensions today are financed essentially out of the general budget. Thus, other things being equal, higher pension for civil servants imply a lower budget to allocate to finance the production of public goods, social investment in education, health and infrastructure, as well as transfers to the poor. Thus, in a country like Niger the opportunity costs of higher pensions for civil servants is likely to be much higher than in middle and high income countries.

Nigeria

The Contributory Pension Scheme (CPS), which was established by the Pension Reform Act 2004, is contributory, fully funded, DC, privately managed and based on individual accounts. Existing private sector pension schemes are allowed to continue provided there is evidence to show that the pension scheme is fully funded at all times, any shortfall will be made up within 90 days, pension funds assets are segregated from the assets of the employer/company, the pension funds assets are held by a licensed Custodian and the scheme is specifically approved by the National Pension Commission.

Membership in the CPS is compulsory for all public sector employers (except diplomats) and for those private sector employers with 5 or more employees. Retirement Saving Accounts are set up for all covered employees under the CPS. Some groups of employees are exempted from the contributory pension scheme, for example those who, at the coming into force of the Pension Reform Act 2004 are covered by a different pension scheme, which existed before the commencement of the Pension Reform Act 2004 and who have 3 years or less to retire. Public services employees and private sector employees pay a minimum of 7.5% of their gross monthly earnings. Employers also pay a minimum contribution of 7.5% and may pay the full 15% themselves. Military personnel pay a minimum of

2.5% of their gross monthly earnings and their employers pay 12.5%. The gross monthly earnings comprise basic salary, housing allowances and transportation allowances. Voluntary contributions are allowed. Contributions may be revised upwards by agreement between the employer and the employee. The National Pension Commission must be notified of this revision.

Upon retirement the member has a choice as to how to receive his retirement benefits:

- programmed monthly or quarterly withdrawals, based on life expectancy;
- annuity for life purchased from a life insurance company (with monthly or quarterly payments);
- a lump sum, provided that the amount left after that lump sum withdrawal is sufficient to permit an annuity or programmed withdrawals of at least 50 per cent of the employee's annual pre-retirement salary.

If the employee retires before the age of 50, a maximum of 25% of retirement savings can be withdrawn as a lump sum (six months after retirement and the individual cannot re-enter the workforce). All retirement savings account holders who have contributed for 20 years are guaranteed a minimum pension as specified by the Government on the recommendation from the Pension Commission. Additional or voluntary lump sum contributions into the RSA can be withdrawn before retirement or attainment of the age of 50 years.

Contributions to the new pension scheme are tax free. Investment income is taxed. Benefits are exempted from tax. Early withdrawals (withdrawn from voluntary additional contributions) are taxed.

Pension funds can only be managed by pension fund administrators who have obtained a licence from the National Pension Commission. The employee is free to choose an administrator. Custodians hold the employees assets and execute transactions for the employee. The Pension Reform Act provides that administrators may only charge clearly defined and reasonable fees. Pension funds and assets can be invested in:

- bonds, bills and other securities issued or guaranteed by the Federal Government and the Central Bank of Nigeria;
- bonds, debentures, redeemable preference shares and other debt instruments issued by stock-listed corporations;
- ordinary shares of public limited companies listed on the stock exchanges with good track records having declared and paid dividends in the preceding five years;
- bank deposits and bank securities;
- investment certificates of closed-end investment fund or hybrid investment funds listed on a Stock exchange with a good track record of earning;
- units sold by open-end investment funds or specialist open-end investment funds listed on the stock exchange recognised by the Pension Commission;
- bonds and other debt securities issued by listed companies;

- real estate;
- such other instruments as the Commission may prescribe.

Nigeria was the first country in sub-Saharan Africa to introduce a pension system based on ‘Chilean style’, individual, funded accounts. The questions which arise from this experiment are whether the infrastructure was and is in place to support the operation of such a system and – even if so – whether it is appropriate for a country such as Nigeria. There has been some criticism that the country was a different level of development to Chile when the reforms were introduced (in terms of economic, social and pension system development) and that there was a lack of governance, records, financial institutional capacity and market development. Moreover, as 90% individuals work in the informal sector, the new system is unable to meet the fundamental goal of providing most Nigerians with access to formal social security programmes. Some have therefore argued that Nigeria still needs a basic social pension - which the Chileans are introducing through reforms to their own system.

Senegal

Two pension schemes currently operate in Senegal – the Fonds national de Retraite (FNR) for private sector workers and the Institutoin de Prévoyance Retraite du Sénégal (IPRES) for civil servants. These are partially funded systems (most of the reserves are for the IPRES scheme).

Senegal is adopting a gradual approach towards building a sustainable retirement system. A extensive consultation process and debate on pension reform is underway in the country, with the Ministries of Finance and Labour consulting with social security institutions, unions and other stakeholders. Reforms to reign in the cost of the FNR scheme were initiated in 2002 (including change of the benefit formula, rise of the retirement age, and indexation of benefits). Further steps could include integrating the two existing systems, and the introduce a fully funded, mandatory DC based pension system is also under consideration.

South Africa

Although the main source of income for over 75% of individuals over the retirement age in South Africa is a means tested, social grant (the SOAG), the country does also have a well developed occupational pension and private retirement savings system, albeit with a limited coverage of the working population. The South African government is currently undertaking extensive reforms of the system to improve both the depth and coverage of pension benefits.

The public pension provides a non-contributory, means- tested old age pension. The system is financed by general revenues. The pension is payable to women at 60 and men at 65 who are resident citizens of South Africa. Benefits amount to up to 940 rand a month for a single pensioner. Married couples may receive double the amount. The pension is reduced to 25% of the full amount for pensioners who are resident for more than 3 months in a private care institution. A means test is currently applied, which lowers the benefit by 50 cents for every R1 of other income, to a level of zero when other income exceeds R1,880 per month. This is the main source of income for 75% of retirees, most of whom receive the full amount. Special grants are paid to war veterans (up to R838) and pensioners who need full-time attendance of another person as the result of a mental or physical condition (R180). The benefit level is informally linked to wages (following inflation erosion in the 1990s), and relative to average formal sector wages, provides a reasonable replacement rate to lower income workers who reach retirement age as well as acting an important source of poverty relief for those who are unemployed through most of their working lives. Originally, in the Apartheid era it was

introduced to cover small numbers of low-income, white workers, but was gradually extended to all South Africans, with parity payments for all ethnic groups achieved in the 1990s.

The private and funded pension system consists of an occupational and personal tier. There are also occupational pension funds for civil servants, as well as for workers of state companies. Many middle to upper income workers belong to an occupational fund as well as make supplementary retirement provision through the use of individual retirement funds (called “retirement annuities”) which are similar in character to 401(k) plans in the United States. Occupational pension provision is provided through pension funds (which must pay out a least 2/3 in annuities with employee contributions tax exempt), or provident funds (which are permitted to pay 100% of the member’s benefit in the form of a lump-sum).

In terms of voluntary, occupational pensions, employers decide whether to set up a fund, what type and categories of employees eligible, after which all workers in a category must join. For this reason, the system though legally voluntary can be thought of as quasi-mandatory. In some instances, employers are free to decide contribution levels and there are no minimum or maximum contribution limits, unless so provided for in the rules of the fund. In other cases, the rates of contribution are an outcome of negotiation between labour representatives and employers (this is the case in many so called “bargaining council” and industry funds which effectively act as multi-employer funds). Additional voluntary contributions are allowed, if the rules of the fund concerned permit. The tax deductible contribution for employees is equal to the greater of 7,5% of remuneration or R1,7501. The tax deductible contribution for employers is a minimum of 10% of approved remuneration. In practice, the South African Revenue Services (SARS) allows up to 20% tax deductible contributions towards pension and provident funds. Investment returns are not taxed and benefits are taxed as earned income, with a certain tax-free lump sum permitted.

Pension schemes can be pure defined benefit (DB) or defined contribution (DC), or some hybrid of the two. Pension funds must pay out a least 2/3 in annuities (maximum 1/3 as a lump sum); provident funds may pay out 100% lump sums. Generally the employer is free to decide the benefit structure and the age at which they become available when setting up an occupational scheme. Market The majority of employees in the formally employed private sector in South Africa belong to defined contribution (DC) schemes, while public sector funds are still largely defined benefit (DB) arrangements. The South African environment has also seen considerable growth of multi-employer or “umbrella” funds, which are DC in nature. Most of the large trade unions have established national defined contribution funds and have negotiated an option for their members to belong to such funds, as opposed to membership of an employer-sponsored fund. In effect therefore, such funds are multi-employer funds, but along industry lines. Umbrella funds, covering multiple employers, are also allowed and have increased in number over time.

Viewing the pensions market as a whole, in 2004 there were around 13,700 funds, - over 10,000 a underwritten by insurance companies - with almost 9m members and R1,1 trillion assets. Some double counting exists in terms of the number of members, as some individuals are members of more than one fund (for example, may belong to a retirement annuity fund as well as an occupational fund established by their employer). Many funds also offer death and disability benefits.

Additional tax-incentivised saving for retirement occurs through voluntary savings vehicles, mainly in the form of Retirement Annuity (“RA”) fund policies, primarily offered by the insurance sector. There are some 2,5 million members of RA funds, across a wide range of income levels, making substantial contributions to supplement those made to occupational pension funds. These are implemented through retirement annuity funds. Estimates by the National Treasury places coverage at

approximately 60% of workers in the formal sector. However, no statistics exist for pension provisioning in the informal sector.

In the case of retirement annuities, benefits become available from age 55 onwards. They can be paid out as annuity or as a combination of a lump sum (1/3 of assets) and annuity. Contributions are tax-deductible up to 15% of taxable income. Investment yields are subject to beneficial tax rules, for example exempt from capital gains tax. A lump sum payment is tax free up to R300,000. Beyond this point, larger lump-sums are taxed up to 36%. Market In 2005, R23 billion contributions were made to underwritten funds. This consists of retirement annuities and insurance policies which are purchased by an employer on behalf of their employee.

Reform proposals include the introduction of a contributory social security pillar as well as (where applicable to persons) supplementary mandatory contributions to the private retirement funding arrangements in order to improve the coverage rate and tackle 'leakage' problems (early withdrawals leading to substantial sums of money being taken out of the funded pension system). The primary objective of this reform is to ensure a basic level of income during retirement for all South Africans. Currently, almost 80% of funds have less than 100 members, which has tended to raise concerns about the availability of sufficiently trained trustees to govern these funds and the cost-efficiency of such arrangements for the members within these funds. The tax treatment of occupational pension fund and retirement annuity fund contributions will be aligned, so as to remove any potential discrimination against the self-employed, as well as aid portability of pension entitlements across the various pillars of provision.

Uganda

Uganda operates a provident fund system, covering permanent employees aged 16-54 in firms with more than 5 workers. Voluntary participation is also possible, with a separately run (generous) scheme for government employees (the Public Sector Pension Fund – PSPF). The scheme is funded with 5% contributions from employees and 10% from employers (no maximum or minimum earning levels apply for contribution purposes). Benefits are paid from age 55 in the form of a lump sum equal to total contributions plus accrued interest (which is determined based on the rate of return of the National Social Security Fund investments). In recent years the government of Uganda has expressed strong interest in reforming the provident and public sector pension funds.

Zambia

Reforms since the 1990s have transformed Zambia's provident fund system into a pension system consisting of a mandatory, privately managed, partially funded, defined benefit schemes. Voluntary occupational pension's schemes also exist. A pension regulator, the Pensions and Insurance Authority, was established in 2000.

Zambia's National Provident Fund (ZMPF) was restructured in the 1990s and converted to a basic, compulsory, social insurance scheme, administered by the National Pension Scheme Authority (NAPSA).

Members of the NAPSA are old members of the ZMPF and new employees, including central and local government civil servants who started work from 2000. All employed persons (including agricultural workers, domestic servants in urban areas etc.) are covered. Voluntary coverage is for the self-employed and some categories of informal-sector workers who were previously covered for at least 60 months (NB 88% of workers in Zambia are part of the informal sector and only 3% are fully part of the formal sector).

Workers younger than 16 or over 55, or earning less than K15,000 a month, and armed forces personnel are excluded.

The scheme is funded by 5% of covered earnings (10% for voluntary contributions) contributed by the employee and 5% from the employer. The maximum monthly earnings for contribution purposes are equal to 4x national average monthly earnings.

Pensions are paid to those over 55 with at least 180 contributions who have retired from regular employment. A reduced early pension is paid from age 50 with at least 180 contributions is the resulting reduced pension is at least equal to the minimum pension. Pension payments are adjusted annually in line with national average earnings. The monthly pension is equal to the insured's average adjusted monthly earnings x no. of months of contribution. The minimum monthly pension is equal to 20% of national earnings and the maximum 40% of the insured's average adjusted monthly earnings. Benefits are portable across employment opportunities. An old-age settlement is paid if the insured does not qualify for the old-age pension, which is a lump sum equal to the total adjusted contributions from the insured person and the employer + accrued interest. The NAPSA is not as yet fully funded as the government has been defaulting on its mandatory contributions.

The pension scheme for teachers and armed forces was merged with the Civil Service Pension Fund in 1996 (Public Service Pension Fund – PSPF). A Local Authorities Superannuation Fund (LASF) also still operates. Monthly pensions are low for those in the PSPF and LASF due to the size of the lump sum which can be taken upon retirement. Parametric reforms for these schemes have been planned but as yet not implemented (due to Constitutional protection for some civil servant benefits), and the schemes remain in deficit.

The scope of coverage of the social security schemes is limited, given that (according to ILO estimates¹¹) 88% of all employed workers are in the informal economy and only 3% in a fully formal environment.

Voluntary, occupational pension schemes may be set up by employers singly or as a group (collective bargaining is usually part of establishing a plan). Plans must be authorized by the Registrar or Pensions and Insurance (RPI) and are organised on a trust basis (with a board made up of equal numbers of employer and employee representatives). Employers are required to contribute, usually at double the rate of employee contributions (between 10-20% of salary). Employers sponsoring a DB plan sometimes do not contribute a fixed rate but pay what is necessary, in addition to employee contributions, to ensure that liabilities are properly funded. Plans may be contributory or non-contributory for employees, as specified in the plan rules. Employees usually pay one-third of the total contributions. In practice most plans are contributory at a rate of 5 (most usual)-10%. Tax rules require a minimum retirement age of 55 (45 for some types of work if approved by the relevant authorities). Plans may be DB or DC (most large plans being the former, smaller plans the latter). Many plans are shifting from DB to DC arrangements. Benefits are usually paid as pension, with the greater of ZMK 5million or 50% of the cash value of the pension rights payable as a lump sum. Employee contributions are tax deductible up to ZMK 60,000 month, with employer contributions deductible up to 20% of payroll. Investment income is taxed at the withholding tax rate on all government securities of 15% (dividend income tax exempt) and benefits are tax exempt.

Trustees must contract out asset management to an asset manager (i.e. an administration company, bank, insurance company or registered financial services company). Plan assets may be

¹¹ Zambia Social Protection Expenditure and Performance Review and Social Budget Social Security Department ILO June 2008 ILO/DFID/Zambia/R.22bis

invested in bonds, treasury bills, equity or cash. Up to 30% of assets may be invested abroad. Fees are not regulated but determined by the market.

Alternative pillars to provide greater diversity in pension saving options has been proposed, but have not been able to proceed without further reform of the NAPSA system. The main problems identified in the area of private pension funds are a lack of legislation, regulation and supervision of occupational pension plans, a lack of secure and profitable investment opportunities which explains why the portfolios of all private pension funds consist only of Treasury Bills and real estate, and a lack of qualified management personnel.

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APPENDIX 1

ILO definitions of types of mandatory systems for retirement income categorized in Table 1:

Flat-rate pension: A pension of uniform amount or one based on years of service or residence but independent of earnings. It is financed by payroll tax contributions from employees, employers, or both.

Earnings-related pension: A pension based on earnings. It is financed by payroll tax contributions from employees, employers or both.

Means-tested pension: A pension paid to eligible persons whose own or family income, assets, or both fall below designated levels. It is generally financed through government contributions, with no contributions from employers or employees.

Flat-rate universal pension: A pension of uniform amount normally based on residence but independent of earnings. It is generally financed through government contributions, with no contributions from employers or employees.

Provident funds: Employees and employer contributions are set aside for each employee in publicly managed special funds. Benefits are generally paid as a lump sum with accrued interest.

Occupational retirement schemes: Employees and, in some cases, employers must contribute a certain percentage of earnings to an individual account managed by a public or private fund manager chosen by the employee. The accumulated capital in the individual account is used to purchase an annuity, make programmed withdrawals, or a combination of the two and may be paid as a lump sum.

**PRIVATE PENSIONS AND GOVERNMENT INFORMATION CAMPAIGNS: LESSONS
FROM OECD COUNTRIES**

Introduction

Most of the OECD countries are facing the challenge of how to maintain sustainable pension systems in the face of aging populations. Many have undertaken pension reforms – which frequently involve the introduction of policies which may be seen as unpalatable to parts of the population. These reforms also often involve individuals having to take more responsibility for funding their retirement income.

Several OECD governments have therefore launched public awareness campaigns to help explain to their populations the need for reform, the policy undertaken and the increased responsibilities which individuals have for funding their own retirement (and how to manage the choices subsequently involved). Such campaigns have been shown to have success in raising awareness amongst the population of these issues - though translating such action into a change in behaviour does seem to have been more challenging.

This report reviews the main campaigns that have been launched in OECD and selected non-OECD countries and provide a preliminary assessment of their effectiveness in terms of extent to which original goals were achieved. The starting point for this assessment is the OECD *Recommendation on Principles and Good Practices for Financial Education and Awareness*, approved in 2005 and the OECD *Recommendation on Good Practices for Financial Education relating to Private Pensions*, approved in 2008.

Overview of campaigns

Public awareness campaigns can be divided into two main groups. There are those whose main objective is to explain to the public the need for a particular reform and help build a political and social consensus in order to pass the reform. Such campaigns have usually accompanied the major, systemic pension reforms that have taken place in Latin American and Central and Eastern European countries, where part of the social security system has been substituted by mandatory, privately managed pension funds.

The second type of public awareness campaigns have as their main objective the prompting of consumers into a particular course of action. In the countries mentioned above, the new reformed system is usually optional for workers above a certain age, who may choose instead to stay in the old system. The government may therefore wish to engage in a public information campaigns to explain the virtues of the new system relative to the old one. Similarly, in voluntary pension systems, the government may engage in public information campaigns to encourage individuals to save and inform them about the long-term benefits of maintaining a schedule of regular contributions.

Public information campaigns of this second type may also try to inform workers about other choices they face and about the importance of making a choice. For example, the mandatory private pension systems introduced in recent years are all of the defined contribution type, offering workers choice of fund manager, annuity provider, and increasingly also a choice of investment portfolio during the accumulation stage.

Public awareness campaigns are distinct from financial literacy programmes in the private pensions area whose main objective is to raise the target population's knowledge of financial and related matters as regards their private pension arrangements. Sometimes, public awareness campaigns are combined with targeted financial literacy programmes (e.g. adult seminars, school curricula, etc) or

may involve the use of mass media to transmit financial knowledge to the general population, via, for example, the internet, television or brochures. When judging the impact of public awareness campaigns, it may be difficult to disentangle their effect from that of these additional programmes.

OECD Guidelines

Through its broad Financial Education project, the OECD has surveyed a number of these national pension awareness campaigns. General recommendations on such programmes have been included in the OECD *'Recommendations on Principles and Good Practices for Financial Education and Awareness'*¹ which were approved by the OECD Council in 2005. For example:

- Financial education should be provided in a fair and unbiased manner. Programmes should be co-ordinated and developed with efficiency.
- Financial education programmes should focus on high priority issues, which depending on national circumstances, may include important aspects of financial life planning such as basic savings, private debt management or insurance as well as pre-requisites for financial awareness such as elementary financial mathematics and economics. The awareness of future retirees about the need to assess the financial adequacy of their current public or private pensions schemes and to take appropriate action when needed should be encouraged.
- National campaigns should be encouraged to raise awareness of the population about the need to improve their understanding of financial risks and ways to protect against financial risks through adequate savings, insurance and financial education
- Financial education should start at school. People should be educated about financial matters as early as possible in their lives.

Given the particular need for financial education in relation to pensions (due to the complex, long term, nature of pension contracts and their role in providing often vital subsistence income), the OECD Council requested specific guidelines for pension related campaigns to be drawn up. The *'Recommendations on Good Practices for Financial Education Relating to Private Pensions'*,² launched in 2008, also make specific recommendations on the role of governments:

Governments and other Public Authorities:

- Have a significant role to play in financial education programmes on pensions via public awareness campaigns and should provide a strong lead, coordinating projects with a range of other partners. Specific websites or a specialized structure or agency should be considered.
- Should promote awareness and education of financial and regulatory issues that bear on pension financial education such as information disclosure guidelines and corporate and financial governance guidelines.
- Should explain public policy clearly (particularly where mandatory savings are involved) – including any pension reforms taking place, the pension environment, increased individual responsibility and demographic and changes requiring individuals to save more – in order to

¹ <http://www.oecd.org/dataoecd/7/17/35108560.pdf>

² <http://www.oecd.org/dataoecd/4/21/40537843.pdf>

maintain transparency and confidence in the pension system and thereby encourage individual saving for retirement. Care should, however, be taken with public campaigns to distinguish between financial education and political advocacy for a particular form of pension or retirement income system.

- Should direct public awareness campaigns as broadly as possible, due to a widespread lack of understanding of pension issues. In addition specific programmes targeted at the most vulnerable groups (migrants or those with the lowest income and savings levels) can also have a significant impact.
- Should work towards making individuals aware of their limited knowledge on financial matters, and pension products in particular, stressing the risks of not having an adequate income in retirement, and should provide information for where to seek further information and advice on how to mitigate this risk.
- Should strive to ensure that reliable information of projected public pension income is delivered on a regular basis by public pension providers - giving individuals a clear, prudent projection of potential retirement income.
- Should work to ensure that training in financial education relating to pensions is started as early as possible – potentially as part of school curricula - in order to encourage individuals to start savings from as young an age as possible, which is particularly important in relation to DC type pension plans. They should also ensure that financial education on pensions is available on an on-going basis, at key points through an individual's life (starting work, marriage, birth of child etc.).

General Lessons on what makes campaigns successful

Echoing the OECD guidelines, and looking at international campaigns, it is possible to start to draw out some lessons for why certain campaigns have been successful.³

- Governments first need to define their role in the campaign (which should focus on explaining systematic change and building confidence).
- When explaining reforms of a pension system objective information is essential (are governments the best placed to provide this given they were also responsible for the previous system?)/ care should be taken not to be entirely negative about the previous systems, otherwise, people may opt to go into the new mixed schemes even when that is not in their own best interests.
- Government campaigns work when they clearly distinguish between information and advice - otherwise the public sector sources (often the preferred information source of individuals) can lose credibility.
- To be successful governments need work with a wide set of partners and to use varied (often not obvious) channels.

³ These suggestions, and the following case studies on Poland, Estonia and Germany, are drawn from a recent European Union peer review, looking at public information on pension systems and pension system changes by examining campaigns in a range of EU countries.

- Building on existing financial education work and campaigns can boost effectiveness and efficiency.
- However, governments need to coordinate their campaigns carefully with these other stakeholders – particularly private sector advertising (e.g. which may be delayed until government campaigns are over/ or government advice on how to interpret advertising may be needed).
- Governments may need to regulate private sector information – e.g. via compatibility requirements.
- Campaigns may be divided into different stages – for example an initial stage may choose to focus on opinion leaders, who can subsequently provide independent information and advice to others.
- Governments may include an element of targeting journalists in the media in their campaigns – with these groups then able to explain reforms to the broader population.
- For campaigns to work they should not only target older people (despite most media coverage of pensions featuring pictures of old people!) – information needs to be delivered to those still working and the young.
- People need a unified picture of their pension options – hence projections of pension payouts are an important information item (though how to present them in an accurate / understandable / not misleading way needs further work).
- Governments should not shy away from linking pension reform to other topics – such as labour market issues (i.e. need to work longer).
- To have the long lasting impact aimed at, campaigns need to be on-going and have some follow up to initial activity around the time of reforms otherwise the initial benefits will fade (i.e. the government needs to keep returning to the topic and let people know what has happened in the meantime).
- The impact of campaigns needs to be regularly evaluated (does it lead people to making the choices they need?).
- Governments should not overestimate the amount of time people are willing to devote to learning about pensions.
- Behavioural economics shows that some groups will not or cannot save and governments should therefore consider linking their campaigns with other mechanisms (e.g. automatic enrolment and well designed default options).

Case Studies

Examples of some campaigns run by governments and pension regulatory / supervisory authorities follow. They are divided into two main groups. The first contains countries that have reformed their pension system systemically, and who used a public awareness campaign for the purposes of building a consensus about the need to reform. Some of these countries have also used

public awareness campaigns to explain how the pension system has been reformed and to help them make certain choices over their mandatory private pension arrangements.

The second group contains examples of countries which have used public awareness campaigns only to inform the public about a particular reform or option they face in the private pension system and to prompt them to take action. They may be general campaigns seeking to encourage individuals to save through voluntary pension arrangements or more specific campaigns explaining in detail a new private pension system or specific changes to the pension system – such as the introduction of individual choice over providers and investments.

Some of these reforms may have also involved the use of specific instruments to assist individuals in making their choices (such as on-line calculators that give them a projection of future pension income) and may have been accompanied by financial literacy programmes. Such instruments and programmes are mentioned but not discussed in detail as they are subject of a separate OECD research project.

Systemic pension reforms and public awareness campaigns

Poland

When the new individual account based pension system was introduced in the 1990s, the government (Office of the Government's Plenipotentiary for Social Security Reform) commissioned an information campaign. This lasted from March 1997 to December 1999, and had a budget of US\$6m (financed by USAID and the Polish State budget).

The campaign was in two stages. The first stage, launched in 1997 when the new pension legislation was passing through parliament, introduced the idea of reform and targeted 'opinion leaders (trade union leaders, employers groups, members of parliament etc.) to help build consensus about the reform. The campaign dealt with general themes, using opinion polls to show that the old system was viewed critically by the majority of the population, and aiming to build a positive image of the reforms, to explain them and thereby reduce fears (particularly of older people). Educating journalists, so that they could provide independent information, was also an important part of the campaign (given they, as well as the population at large, lacked financial knowledge, following only 10 years of market experience in the country at the time). This effort bore fruit in the appearance of weekly sections in newspapers, explaining pensions issues and answering people's questions. A logo and slogan were used to give the campaign identity (*Security through Diversity* (Bezpieczeństwo dzięki różnorodności)), and information brochures for employees, sent to companies and trade unions, also played a critical role. Brochures in newspapers, a road show touring workplaces (aimed at unions), and information packages for MPs, political parties and NGOs were also used.

The second stage, launched in 1999, then targeted individuals affected by the new system, presenting the reforms and providing the information they needed to make necessary decisions. The main challenge of the campaign was communicating different messages to different groups (the new system being compulsory for those under 30, with those between 30-50 being able to choose whether to join– and if so what fund to opt for - and those over 50 requiring reassurance that the changes would not hurt them). 5 million brochures were distributed during the campaign, via pension reform leaflets inserted into daily newspapers, including the most popular 'tabloid' in the country, and call centres were set up (which responded to over 200,000 enquires). In addition, a media advertising campaign was launched. The government also had to help people make rational decisions and how to interpret the heavy advertising which was run by pension funds attempting to get the business of these new subscribers. Surveys at the start of 1999 showed less than 40% of the respondents felt they were well

informed about the pension reform, with the number rising to about 60% 10 months later, in the aftermath of the campaign. Polls also showed that 63% felt information about the reform was easily accessible. Coverage levels achieved for the new system were certainly ahead of expectations. For example 60% of the 31-35 age group joined on a voluntary basis vs. original estimates of 25-45%. However, one side effect of the otherwise efficient Polish public awareness campaign was that some of those joining on a voluntary basis were from an age group where the decision may have been detrimental (i.e. employees entitled to early retirement under the previous system who lost this right when transferring to the new arrangements). It could also be argued that the awareness campaign, and accompanying marketing by private operators, painted too rosy a picture of the new pension system, which may have raised expectations beyond what can be delivered as the payout phase of the reform gets underway in the coming years.

After the Office of the Government's Plenipotentiary for Social Security Reform was dissolved at the end of 1999, the task of continuous provision of information on new the pension system was taken over by the newly established Pension Supervision Office. The pension supervisor is obliged by law⁴ to "further public awareness of the funds' objectives and terms of operation, in particular of the right appertaining to the fund members." Since 2001 (when the pension supervisor was established as a separate government body) the public information activities have focused on two issues; making the public aware of investment results achieved and charges levied under second pillar pensions and promoting voluntary savings in the third pillar.

Estonia

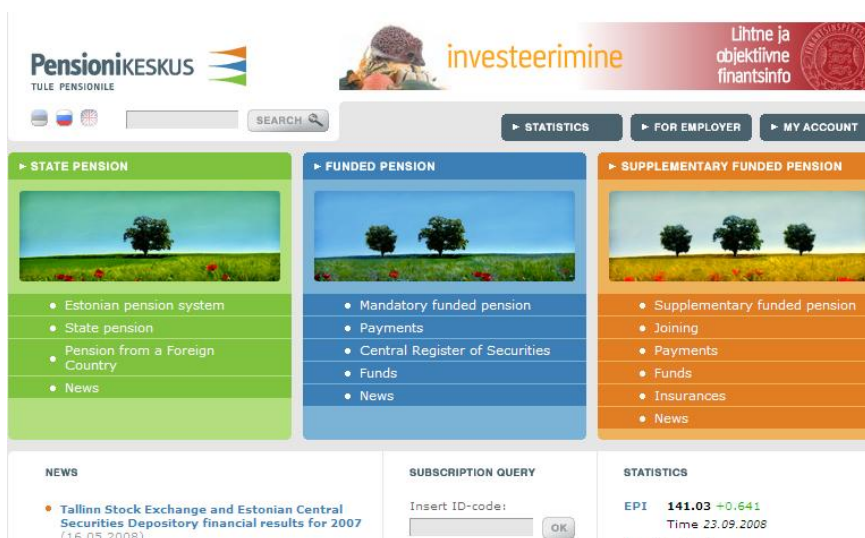
As with many other Central and Eastern European countries, Estonia moved from a PAYG to a fully funded, individual account system in the 1990s. The government targeted information about their reforms to a wide audience – though a different message was required for different groups. The first step in the campaign was to define the role of the government, and it was decided that the government should explain why the system needed to be changed (e.g. highlighting demographic impacts on the national budget), and why the particular reform was chosen. Details of the different options for various demographic groups were filled in later, after this 'scene setting' exercise. Practical information on how to join the schemes was also provided. Information on pension funds and advice on investment strategies was studiously avoided.

A PR campaign was conducted (by professional consultants) in 2001-2002, lasting for about 6 months and using all kinds of communication channels (including its own TV show featuring interviews with experts, radio and print media, posters, a call centre, a pensions website - www.pensionikeskus.ee - participation in investment fairs and roadshows held in cooperation with the central depository agency – which proved popular). The slogan used was *What are you thinking about? About my pension*, and the symbol an oak tree (the crown of which was in the shape of Estonia, with the word *kogumispension*- "funded pension"- at its base, and three branches representing a three-pillar pension system). The campaign benefitted from close cooperation with pension funds (at the start the pension funds used the oak tree logo) – with the private sector agreeing not to launch their own advertising until the campaign was over to avoid confusion. The campaign, though extensive, was not expensive (around €150,000). The initial aim of building trust in the new system is felt to have worked well (for example in first 6 months more than 200 000 people joined the system and in next year another 150 000 joined – this is ca 45% of total potential people who could join according to their age. Today there are 575 000 people in mandatory funded pension scheme).

⁴ Article 200.1 of Polish Pension Funds Law.

A new campaigns will begin in 2009 when the new pension system will start to make its first pension payments.

In terms of what was learnt from the campaign, the Estonian authorities found that there could not be too much information coming from a neutral source such as the State, but that ensuring the target audience receives the necessary information from a convenient and appealing channel is key (as they unlikely to make the extra effort to inform themselves on a topic which is seen as 'boring and related to the distant future'). Cooperation with other authorities (e.g. the tax office, FSA, other Ministries) and the private sector was also important for securing the best results for the campaign. What should be avoided is over estimating people's ability to understand complex financial issues, the time they are willing to dedicate to learn more or read brochures, and overestimating the abilities of the government to 'go it alone'.




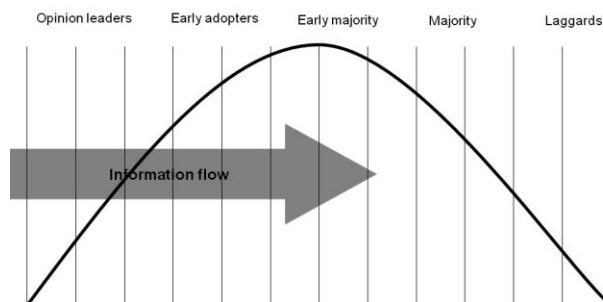
Hungary


Communication regarding pension reform in Hungary is said to not always have been so successful. Unlike its CEE counterparts discussed above, the government's information campaign during the 1990s reform period, was not effective enough, though heavy advertising was undertaken by pension agents. This is said to have led to complaints that the new system is expensive (due to marketing costs) and many Hungarians slightly underestimated the necessity to introduce the private pension pillar. Switching into the new mixed system, transfers risks more to the individuals, who were not properly explained. There is still no independent rating of pension funds 10 years after the reforms (though these are soon to be introduced by the pension supervisory authority), with a lack of comparative data suppressing switching between funds despite big differences in performance. The media coverage of pensions has been rather highlighting problems than putting forward solutions. Such consequences show why information campaigns are so important.

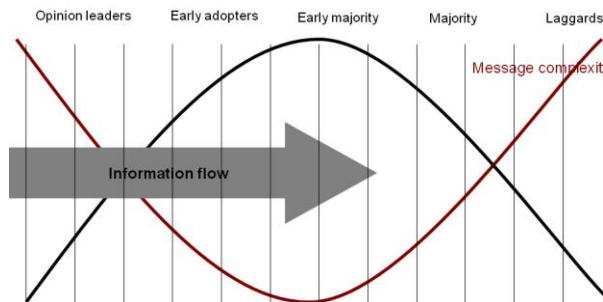
The Hungarian government has now been building communication regarding the continued need for pension reform in the country and the further need to strengthen pension consciousness. The current campaign has been build using standard communication tools adopted from other sectors targeting consumers. For example, the population has been broken down into groups of 'opinion leders', 'early adopters' 'laggards' etc. – with the complexity of the message adjusted for each groups' ability. A new a campaign was launched in June 2008, introducing steps taken over the previous 2 years to secure current and future pensions and to increase awareness on pension issues. Almost 800,000 copies of a brochure covering the topic were produce and enclosed in daily newspapers for a

week. The cost of the communication campaign was 28.5 million Hungarian Forint. A periodic, free brochure is also produced - “Új Magyarország Kiadvány” - which reaches most households and informs people about current government decisions and changes. The brochure has been published three times since November 2007, with around 3million copies produced each time. The efficiency of the brochures was measured with a survey, which showed that of those who received the brochures 71% remembered the articles about the pension reform in the first and third brochure.

How we build our message? 



How we build our message? 



In recent years the government has set up a Pension and Old Age Roundtable – consisting of a group of professional, pension experts who are developing a national plan based on maximum consensus. In addition an internet based, deliberative discussions around the initiative have been launched, involving civic platforms and creating communications elements to avoid misunderstandings. The government website - www.tegyunkerte.hu - provides information on pension reform and was received more than 1 million visitors in the first half of 2008.



Australia

After the superannuation choice of fund legislation went into effect on 1 July 2005, the government allocated almost \$20 million over two years to fund education initiatives, directed by the Financial Literacy Foundation (a division in the Department of the Treasury⁶). This education campaign includes four main activities which aim to raise awareness: a call centre to reply to questions regarding fund choice; the Super Choice Internet site;⁷ written publications and an advertising initiative targeted to employees and employers informing them of their obligations and rights.

An evaluation of the campaign's first phase concluded that consumers and employers rated the initiative highly.



⁶ <http://www.understandingmoney.gov.au/Content/Consumer/AboutUs.aspx>

⁷ www.superchoice.gov.au

Sweden

The Swedish public pension system was completely reformed in 1999. The main public pension was changed into a cash-balance type scheme, and a small personal defined contribution pension component called PPM was added. The first set of pension statements for the new system was sent out to 5.3 million individuals in 1999. The send-out of the pension statements was accompanied by an information campaign targeted at the age group 18 through 61. The information campaign consisted of newspaper advertisements, television and radio commercials and public relations events such as conferences. The main goals of the information campaign were to:

- Build knowledge of the new pension system.
- Encourage individuals to read and to understand their pension statements.
- Build trust in the new pension system.

The cost of producing and sending out the first set of pension statements was approximately 45 MSEK. The cost of the information campaign was approximately 55 MSEK.

The information campaign was shown to be initially successful. However, after a while, surveys indicate that knowledge about the public pension system has reverted back to original levels. Around 2/3 of people initially made an active choice regarding which fund they wished their individual defined contribution accounts to be invested – but now only around 2% of new members of the system do so (not helped by the numbers of fund choices rising from 500 to 800). The decline in the number of people making an active choice of fund appears to be related to the discontinuation of the public information campaign after the introduction of the new system.

Currently, the government relies mainly on the annual pension statement, the so-called ‘Orange Envelope’, in order to explain to individuals the way the system operates, the choices they face and what benefits they may expect. The Orange Envelope is sent annually to everyone covered by the country’s national pension system, which contains information on how their defined contribution account has changed over the year and also projections for their future pension income. In addition, there is a summary of how the new pension system works (highlighting to participants that benefits are determined by lifetime earnings).⁸ The government agency that administers the individual defined contribution accounts – the Premium Pension Authority - provides information on fund choices, investment risk, and fees and has its own website where participants can review and manage their accounts.

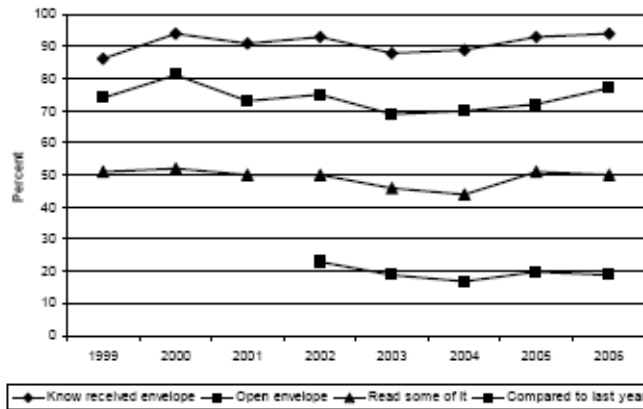
⁸ In order to project potential *total* pension income – as around 15% of retirement income in Sweden comes from occupational pensions - the Swedish Social Insurance Agency and the Premium Pension Authority together with the insurance companies for the occupation plans launched the website www.minpension.se in 2004, which presents individual projections of both the public pension and occupational pension benefits and presents the total projected pension as well its components.



The Swedish Social Insurance Agency conducts an annual survey (since 1999) about the Orange Envelope to examine how participants use it and how well it communicates information about the pension system. The results show that knowledge of the envelope is high (and has held up) but usage is much lower. Though confidence in the pension system does appear to have improved following the introduction of the new communication methods (the share of participants that has no confidence in the system has decreased from 20 percent at the time the new system was introduced to about 13 percent in 2006), knowledge of the pension system as a whole still remains patchy.

In 2008, the Swedish National Audit Office evaluated the information in the Orange Envelope and the efforts by the Swedish Social Insurance Agency and Premium Pension Agency. They concluded that the Orange Envelope contained too much information and recommended the government review its contents. In particular, the Audit Office thought too much information was provided on details that are not directly associated with decisions on work and savings, such as administrative costs.

Figure 1. Share of participants that know about the Orange Envelope



Source: Survey of the Orange Envelope.

Sweden is currently going through another pension reform, although this time it is of the occupational pension system for white-collar employees. The occupational pension system was transformed in 2007 from defined benefit to defined contribution for all members born in 1979 or after. The collective agreement which drives the occupational pension system calls for a budget of approximately 50 MSEK to the employees' confederation for purposes of financial education and approximately half that budget to the employers' confederation. No particular information campaign, however, has been launched to educate members on the transformation of the occupational pension system.

National awareness and information campaigns

Ireland



The National Pension Policy Initiative (NPPI) was launched in 1996 to facilitate debate on how to achieve a fully developed national pension system and to formulate a strategy and made recommendations for actions needed to achieve this system. The initiative culminated in the publication of a report in 1998 (implemented via legislation in 2002), which included the recognition that the NPPI recommendations would have to be supported by an effective education and awareness programme if they were to have the maximum desired effect as understanding and awareness of pensions amongst the general public in Ireland in the mid 1990s was low.

The National Pension Awareness Campaign⁹ was launched in 2003 to coincide with the launch of Pension Retirement Savings Accounts (PRSAs). It was run by the Pension Board on behalf of the government annually from 2003 through 2007. Funds of €500,000 annually were allocated to the programme from 2003-2005, rising to €1million for 2006, 2007 and 2008. The main goal of the campaign was to raise the adult population's awareness about pension issues, which, according to the government, has been raised from 60% to over 85%. On the other hand, there is less evidence of increased savings as a result of the campaign (the focus was shifted to this goal in 2006/2007).

The success of the campaign has been attributed to its broad nature, with the Pensions Board coordinating many partner organisations (from trade union and employers groups to the National Library Network, to women's groups and industry associations such as those covering hotels). The campaign also involved a range of media and PR tools, using television, radio and cinema advertising, press coverage and posters – often with a specific target on younger consumers, women or certain types of workers (international migrant workers, rural workers etc.). Further details of the campaign can be found in Annex 1 of this paper.

⁹ <http://www.pensionsboard.ie/index.asp?locID=134&docID=-1>

**Focus on Young People
“Popcorn and Pensions”**


Minister Brennan launches Cinema advertising and poster campaign



www.pensionsboard.ie

An Bord Pánscaí -
The Pensions Board
Authority for Pensions

**NPAC Advertising 2006 – 2008
Focus on “Taking Action”**



www.pensionsboard.ie

An Bord Pánscaí -
The Pensions Board
Authority for Pensions

Germany

Given well known demographic pressures, the German government is in the process of reforming the pension system by way of raising the retirement age and increasing the role of occupational and private pensions (via the 2001 ‘Riester’ supplementary pension). The government felt the need to communicate these major shifts in the philosophy of old age pension provisioning (i.e. the move from state to self reliance), and it’s related information campaign has been viewed as a success as there has been a notable change in attitudes in the country.

The reforms have been accompanied by strong information drives, with the Riester reform heavily advertised in all media. For example, the statutory pension insurance institution, the Deutsche Rentenversicherung, sends a Pension Information Letter to everyone with an insurance record of at least five years – about 27 million people in 2007 – informing them (in simple language) of their current and potential future entitlements (based on a simple projection and an estimation of the potential impact of inflation). Such information has been shown to successfully highlight potential gaps in individuals’ pension provisioning. In addition to such specific information, general campaigns have also been used – such as pension specialists attending adult education classes (which are popular in Germany). One of these campaigns, the campaign "Altersvorsorge macht Schule / Old-age provision goes to school" started in 2007. The training course is independent and is provided through about 500 adult education centres in Germany. Over 500 courses with several thousands participants took place in 2007.

As with all Germany government projects, these campaigns are reviewed regularly (with positive responses). The proportion of the population who have begun to reassess their pension provisioning (and to realise that it is insufficient) has risen. Confidence in the new products has also grown. In addition to Riester contracts (which increased to 11m by the end of 2007), coverage of occupational pension schemes - which was stagnant - has also increased since 2001 (which increased 17m by the end of 2007). Furthermore, statistics show the average retirement age rising.

On-going Financial Education

USA.¹⁰

Developed by the Employee Benefit Research Institute (EBRI) and its American Savings Education Council (ASEC) program, the award-winning Choose to Save[®] national public education and outreach program is dedicated to raising awareness about the need to plan and save for long-term personal financial security. As part of its mission, Choose to Save[®] develops user-friendly, multimedia materials to help individuals plan and save for their financial future.

Public service announcements (PSAs) are a key tool used to encourage individuals to take charge of their financial future. Programmes on targeted networks as well as national channels are used as well as radio outlets (including armed services radio channels), Internet programmes are also central to the programme, again utilizing PSAs and a dedicated financial education website www.ChoosetoSave.org. This includes free savings tools such as:

- The Ballpark E\$timate[®] retirement planning worksheet
- Many online calculators provided by ASEC partner organizations
- 14 brochures giving readers valuable information on savings issues
- Savings tips on a wide range of savings topics arranged by subject category and alphabetically

All of the information available through the Choose to Save[®] Program is free to the general public. All information contained on the Choose to Save[®] Web site is solely educational and there is never any solicitation of products. Choose to Save[®] PSAs, Web site, and materials development receive the financial support of EBRI members and ASEC partner institutions.

The Choose to Save[®] website is currently receiving over 29,000 hits and 16,000 visits a month with the calculator being viewed by up to 300,000 people annually. The savings tips and ballpark estimates have proven particularly popular.

¹⁰ Taken from OECD publication *'Improving Financial Education and Awareness on Insurance and Private Pensions'*.

Mexico

The 1997 reform replaced the country's pay as you go (PAYG) system with a defined contribution one, based on individual accounts managed by specialized financial institutions called "Afores"¹¹. Contributions to the individual account are made by the employee, the employer and the government. The regulator of Mexico's pension system, Consar, among many others, has the responsibility for: a) creating the regulations under which Afores report information to their clients and, b) promoting financial education related to the pension system.

Consar's permanent information campaign is aimed at generating consciousness by employees of their ownership of their respective individual account; involving them in the selection of their Afore based on the concept of net returns (return minus commissions) and the acknowledgement of the importance of preparing effectively for retirement.

The campaign implemented by Consar makes use of Internet and all media channels (TV, radio, newspapers, magazines, billboards) for its principal delivery methods. More specifically, it publishes printed material such as wall posters and advertisements in newspapers and magazines, and online materials, such as banners on principal Internet sites.¹² It also diffuses radio and television advertisements, and places posters on information stands nationwide.¹³ All of them include advertisements such as: "get involved today and not tomorrow when it's too late", and "depending on the choice you make today will be the size of your pension tomorrow".

Moreover, Consar agents make personal visits to companies, universities, trade unions, and associations to make presentations to employees and students on the pension system. An innovative scheme has been the organization of "Afores' fairs" in which the authorities, Afores and other pension-related institutions give individual attention to employees on the pension system. In these fairs Consar has assisted over 5,000 people on a daily basis. Through these and other means, Consar gave direct attention to 5.4 million people during 2007 and as of September 2008 has already assisted over 6 million.

All these actions have been positively regarded by employees. The closer and simpler the information is, the higher the demand for it.

¹¹ Specialized financial entities managing and promoting the individual accounts part of Mexico's system and responsible for the investment of resources through the Sociedades de Inversión Especializadas en Fondos para el Retiro (Siefores) (Investment Funds Specialised in Funds for Retirement).

¹² Besides straight forward advertisements, Consar promotes its Internet page where a vast variety of information can be found (i.e. Afores charts based on net returns, basic illustrated documents on the main concepts of the pension system, financial data, press information, presentations, etc).

¹³ The information stands are located at commercial centers, subway stations and strategic points in main streets. These booths are easily recognizable and one or more specialists are there to give away information materials and solve questions.



COMISIÓN NACIONAL DEL SISTEMA DE AHORRO PARA EL RETIRO

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- Panorama General del SAR
- Servicios que prestan las Afores
- Contacta a tu Afore en tu localidad
- Datos de las Afores

SERVICIOS CONSAR

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- ¿En qué Afore estoy? / Necesito mi Estado de Cuenta
- Traspaso
- Retiros totales
- Retiros parciales
- Tabla de trámites
- SAR 92 IMSS
- Modificaciones a la Ley del SAR
- Nuevas SIEFORES
- Aportaciones voluntarias
- Compra, fusión y liquidación de AFORES
- Unificación de cuentas SAR- ISSSTE- AFORES
- Subcuentas y aportaciones
- Asignación
- Beneficiarios IMSS

INFORMACIÓN PARA AFORES

- Documento de rendimiento neto para traspasos
- Estadísticas para publicidad y promociones
- Precios de las SIEFORES básicas

ENLACES

- IFAI
- Simuladores CONDUSEF
- Normateca
- www.gob.mx
- Portal Ciudadano

DATOS FINANCIEROS

- Diversificación de inversiones de SIEFORES
- Canasta de referencia de SIEFORES
- Límites del régimen de inversión
- Servicios de innovación financiera

OTRA INFORMACIÓN

- Registro Electrónico de planes de pensiones
- Estadísticas del SAR
- Otros Temas
- Convocatoria ciudadana para identificar el trámite más inútil

ANNEX 1



An Bord Pinsean -
The Pensions Board
Authority for Pensions

National Pensions Awareness Campaign 2003 – 2007

National Pensions Awareness Campaign (NPAC)

1. Introduction

“For some countries it is governments and regulators that provide information and education on general issues, while financial institutions provide more specific product information, whilst in others regulations exist on the types of information employers can provide. It is important to have some coordination on the provision of information because although information about pensions is widely available, people do not know which sources to trust, how to access it, or how the information relates to their circumstances. Successful programmes have shown to be ones with a strong leader, but involving many different parties e.g. the “Pensions Awareness Campaign in Ireland”

(Source: OECD Working Party on Private Pensions)

In 1995 the Pensions Board and the Department of Social Welfare (now the Department of Social & Family Affairs (DSFA)), commissioned the Economic Social and Research Institute (ESRI) to undertake a survey of occupational and personal pensions. This survey showed that approximately 50% of the workforce in Ireland had supplementary pension cover in addition to social welfare pension cover.

The National Pensions Policy Initiative (NPPI) was launched in October 1996 to facilitate debate on how to achieve a fully developed national pensions system and to formulate a strategy and make recommendations for actions needed to achieve this system. There was a very wide response to the Initiative from many different sources, showing recognition of the importance of pensions and making use of the opportunity to influence future national pensions’ policy. The Initiative culminated in the publication of the Board’s report, entitled “Securing Retirement Income” in 1998. The report set out the proposed plan for future pensions’ policy. It detailed the need for a fully developed national pension system which enables all residents in the State to acquire an income that allows them to maintain their established standard of living on reaching retirement age, in long-term incapacity and, in the case of dependants, on the death of the income provider. Its recommendations set out how those aims can be achieved. The report and most of its recommendations were implemented via legislation i.e. the Pensions (Amendment) Act, 2002.

It was recognised that the recommendations contained in NPPI would need to be supported by an effective education and awareness programme if they were to have the maximum desired effect. The level of understanding and awareness of pensions among the general public in Ireland in the mid 1990s was low. Market research included in submissions to the Board as part of NPPI showed an important reason for non-participation in pension arrangements as “never thought about it” and a lack of appreciation of the importance of retirement planning. Many people had little comprehension of the impact that retirement would have on personal standards of living and gave little thought to how they would compensate for an absence of employment earning. There was a tendency to believe that the State alone would look after them when they retired. Research at that time provided clear evidence that the extension of pension coverage required more education on the importance of saving for retirement. Consequently the Board recognised that widespread awareness of the need for pension provision was an essential and basic requirement to the success of the NPPI. The Board therefore recommended a Government driven Pension Awareness Campaign to be conducted in conjunction with the relevant public and private sector bodies.

In the Pension Board’s, National Pensions Review 2005 it is stated that *“The Board is of the view that further awareness campaigns should form an important part of any voluntary pension system, with continued emphasis on the Board’s priority groups of women and the lower paid.”*

Following the completion of the National Pensions Review 2005 and the Special Savings for Retirement Report in 2006, the Board is now participating in the process of working with all the pension stakeholders in completing the Green Paper on Pensions which is expected to be published shortly.

The outputs from the Green Paper, the results of the subsequent consultation process and the framework for long-term pension policy decided upon by Government will influence the nature of the communication and awareness campaigns that will be required for the future. There is a well structured NPAC platform now in place from which any future communications initiatives can be launched.

1.1 Implementation of NPAC

The Pensions Board adopts a multi-stakeholder approach in its implementation of the NPAC project. Through NPAC and the day to day workings of the Pensions Board, contact has been made with a wide range of support agencies that assist in delivering the pensions message to their constituent clients and members. NPAC works closely with a very wide range of employer groups and organisations in educating and providing information support for them in relation to pensions.

A sample of these include;

- State Agencies/Government Departments/ Political Parties
- Pensions Industry
- Irish Congress of Trade Unions (ICTU)
- Irish Business and Employers Confederation (IBEC)
- Small Firms Association (SFA)/Chambers of Commerce in Ireland (CCI)/Irish Small and Medium Enterprises (ISME)

- Universities/Colleges/Schools/Union of Students in Ireland/Career Guidance Counsellors
- FAS/Failte Ireland/National Recruitment Federation
- Comhairle/Citizen Information Centres
- Irish Farmers Association (IFA)/Irish Countrywomen's Association (ICA)
- National Library Network
- Rural Leader Groups/Area Partnership Companies
- Irish Hotels Federation/Licensed Vintners Association (LVA) /Vintners Federation of Ireland (VFI)/Restaurants Association of Ireland

2. Campaign Background

The National Pensions Awareness Campaign arose from a NPPI (National Pensions Policy Initiative 1998) recommendation which was accepted by Government. The campaign commenced in 2003 to coincide with the launch of Personal Retirement Savings Accounts (PRSAs) and has been continued up to and including 2007, conducted by the Board on an Exchequer-financed basis.

€500,000 p.a. was made available annually to carry out a National Pensions Awareness

Campaign, on behalf of Government in 2003, 2004, 2005. This allocation was increased to €1,000,000 p.a. for 2006, 2007 and 2008.

The Board established an NPAC Project Team in 2003 to devise an awareness strategy and implementation plan for this important project. This group oversees the conduct of the National Pensions Awareness Campaign.

Independent annual consumer audits were undertaken on behalf of Board to measure the success of campaign activity.

3. Campaign Objectives

The primary objective of the campaigns 2003 – 2007 was to heighten pension awareness with the view to increasing pension coverage in Ireland.

The secondary objective of the campaigns was to ensure those with pension provision address the adequacy of that provision.

An associated objective is the building of an educational foundation for retirement planning for the future.

4. Key Target Sectors

Pension Awareness and increasing Pension Coverage

An integrated advertising and public relations programme is utilised to talk to the identified target audiences using TV, radio, newspapers, online, posters and direct mail. In order to make such a

complex message as pensions more consumer friendly the campaign uses every available means of trying to drive action.

A primary focus for NPAC is on young people in the age bracket 25 – 39. Within this group NPAC also focuses on the sectors with low pension coverage.

- **Population aged 25 – 39 years old** – this is the core identified NPAC audience group where it is important that workers start their pension early in their working life in order to ensure they have adequate provision for their retirement.
- **Women** – the female population has traditionally lower pension coverage than the male population.
- **Young People / Graduates** – it is important that the pension message reaches people before they start their first job.
- **Hospitality, Farming and the Rural Community** – the lowest levels of pensions coverage are in the hospitality and agri-sectors.
- **International Workers** – as more and more inward migration takes place into Ireland it is important to communicate the pension message to this audience.

On an ongoing basis throughout the year NPAC continues to promulgate the pension message through a wide and diverse range of communication channels targeting all age groups. It makes extensive use of editorial coverage in local and national media to expand on the seriousness and importance of the need for pension planning particularly emphasising the importance of adequacy. NPAC endeavours to make the subject matter interesting and as consumer friendly as possible.

Adequacy of pension provision

Many people have unrealistic expectations as to the level of income they will receive in retirement. Surveys have shown that a high proportion of existing pension holders have inadequate levels of cover.

NPAC delivers its general awareness building activities and promotes the need for adequacy in existing pensions through promotions, dissemination of information, attending at conferences, seminars, workshops etc and operating the information Lo-call helpline and website.

Additional activities include:

- partnering with pension providers and their intermediaries to promote the importance of adequate pension provision among existing pension contributors
- focusing on the responsibility of employers to address the pensions issue with their employees
- continuing to work with employer and trade union groups to encourage their members to address the pensions issue
- continuing to work with various representative organisations in bringing the pensions message to their membership e.g. Accountants, Solicitors and HR Managers.

Education Initiatives - National Steering Group for Financial Education

In line with the OECD's recommendations on principles and good practices for financial education the Financial Regulator has established a National Steering Group to act as an over-arching Government body to promote and coordinate financial education via the formal education sector and through adult and community education groups. The Pensions Board, as a key stakeholder in terms of financial education on pensions, is a member of the steering group.

The steering group will be proposing policy in the area of financial education, including financial literacy education policy, and through the operation of working groups, effecting the implementation of priorities set by the group.

Educating the public about pensions

From an education perspective as stated earlier, pensions and long term financial planning is not on the educational curriculum at any level.

An International Adult Literacy Survey (OECD 1997), highlighted that for up to 500,000 Irish adults low literacy levels can be a barrier to understanding and accessing financial services. In response to these findings the National Adult Literacy Agency (NALA) started a financial literacy campaign focused on alerting management and staff in the financial services sectors to the issues of low literacy capacity among their customers.

Other important characteristics affecting individuals include:

- historical tradition – civil and public servants and employees in big unionised private firms get pensions automatically
- professionals and the well educated and self employed, through tax and accounting advice also take out pensions
- there is a historic and deep rooted land and property ownership passion in Ireland. There needs to be a clearer understanding of the property market and how Irish people see it, as their pension and the effects of when people sell on these properties to realise their pension
- as has been clearly shown by recent Revenue Audits there was a very negative tax and savings attitude during the 70s, 80s and early 90s in Ireland
- in the context of the 70's right through to the early 90's with the exclusion of those people in bullet points 1 and 2 above - obtaining a job was the number one challenge. The economics of the country during those times allowed for these people to be cared for by the state systems, family and friends in their retirement years.

5. NPAC Action and Awareness Strategy

The approach adopted was:

- intense advertising and promotion focus on the key targets (25 – 39 year olds)
- encouraging people to be aware and informed about their existing pension situation and particularly to examine the adequacy of same

- directing consumers to be personally responsible and take action for their future retirement planning as well as promoting employers responsibility
- driving consumers to the Pensions Board website and particularly the pensions calculators
- engaging consumers with focused awareness building activities through promotions, dissemination of information, attending at conferences, seminars, workshops etc and operating the information Lo-call helpline and website.

6. NPAC PR and Advertising Strategy

NPAC engages in an intensive multi-tiered messaging and media approach designed to drive awareness and action amongst the general public and the hard to reach subgroups.

- **Television** is the strongest medium to communicate the message as it delivers high levels of coverage and ensures all age groups and social demographics are reached. TV ads are aired at critical times of the campaign e.g. National Pensions Action Week (NPAW), annual tax filing deadline periods, etc.
- **Radio** is used as a cost effective way of increasing the frequency of message and ensuring increased coverage of light television viewers. Ireland has the highest level of radio listenership in Europe.
- **Cinema** is used to ensure increased coverage of younger adults who tend to be “light” TV viewers.
- **Press** is used as an informational medium through the supply of articles in increasing the awareness of the importance for starting a pension.
- **Ambient** including posters on buses and in washrooms are used in tandem with Internet banner advertising to target young consumers in the course of their daily routines.

7. NPAC Review

In February 2007 the Department of Social and Family Affairs (DSFA) and The Pensions Board agreed to carry out a review of the National Pensions Awareness Campaign 2003 – 2007. Terms of Reference for the conduct of the Review were agreed between the Board and DSFA and approved by the NPAC Project Group.

These were as follows;

1. Review to what extent the campaign has met the objectives of raising pensions and pension adequacy awareness levels and encouraging pension take-up.
2. Review how the resources made available for NPAC have been used and if their use represents value for money.
3. If it were decided to cease NPAC assess the implications this would have on awareness levels in the short/medium and long-term.

4. If it were decided to maintain NPAC should the existing communications and activity strategy be continued and/ or what other approaches should be considered.
5. Outline any other issues or actions which may have an impact on NPAC going forward e.g. Green Paper.
6. If it were decided to maintain NPAC, should the awareness campaign be embedded in the ongoing work of the Pensions Board or is the existing ad-hoc arrangement, with the future being decided on an annual basis, the correct approach.

7.1 Review to what extent the campaign has met the objectives of raising pensions and pensions adequacy awareness levels and encouraging pension take up.

It very difficult to systematically assess the effectiveness of NPAC as isolating its impact is challenging when there are so many other extraneous influences. It is also inherently difficult to draw definitive conclusions regarding impact because the 'cause and effect' relationships are difficult to establish.

Pension coverage and uptake rates do not reflect the heightened levels of awareness that have been achieved however pension take-up is improving.

Key points:

- public awareness levels of pensions and pension adequacy issues have risen from circa 60% in 2003 to 87% in 2007
- the pension coverage rate for those in employment aged 30 to 65 increased from 57.8% in 2002 to 61.8% in 2005
- over the NPAC term 2003 to 2006 the number of participants in Occupational Pension Schemes has increased by 73,037 people
- over 100,000 PRSAs with asset value in excess of €1billion have been taken out by the end of the second quarter 2007
- the coverage rate of 55% of Irish workforce of circa 2,000,000 (CSO 2006) means that approximately 900,000 people do not have private pension provision.

7.2 Review how the resources made available for NPAC have been used and if their use represents value for money.

€500,000 p.a. was made available annually to carry out NPAC on behalf of Government in 2003, 2004, 2005. This allocation was increased to €1,000,000 p.a. for 2006, 2007 and 2008.

It is very difficult to cover the value for money element of the NPAC campaign in a forensic way as the diversity of activity carried out by the Board and all the other stakeholders in promulgating the pensions awareness message is what creates the total value.

Effectiveness and efficiency is achieved when and where all elements of the campaign support each other and create a knock on effect where each action and activity generates more interest, discussion, promotion, media coverage, etc of pensions issues.

Sample Media Analysis

For the purpose of this review an evaluation was undertaken by Media Market of the print media coverage for the month of March 2007 which incorporated National Pensions Action Week. Over the month there was a total of 1,180 press articles covering all the print media in Ireland. This equates to a total of 414,787 sq.cm of print media space. To purchase the equivalent volume of advertising space would cost in the region of €3.4 million.

Budget Controls

The NPAC Project Team and the Board of the Pensions Board approved the campaign activity and budget for each year. NPAC budget activity is administered by the Board on behalf of DSFA. Twice a year the Board produces an interim activity and budget report and an invoice for expenditure incurred which is reimbursed by DSFA. All NPAC budget activity is audited by the Comptroller and Auditor General each year.

The open competitive tender process was used by NPAC to ensure that value for money in the Advertising and Public Relations support service contracts was achieved. Through the tendering process NPAC was able to benchmark industry prices for these services.

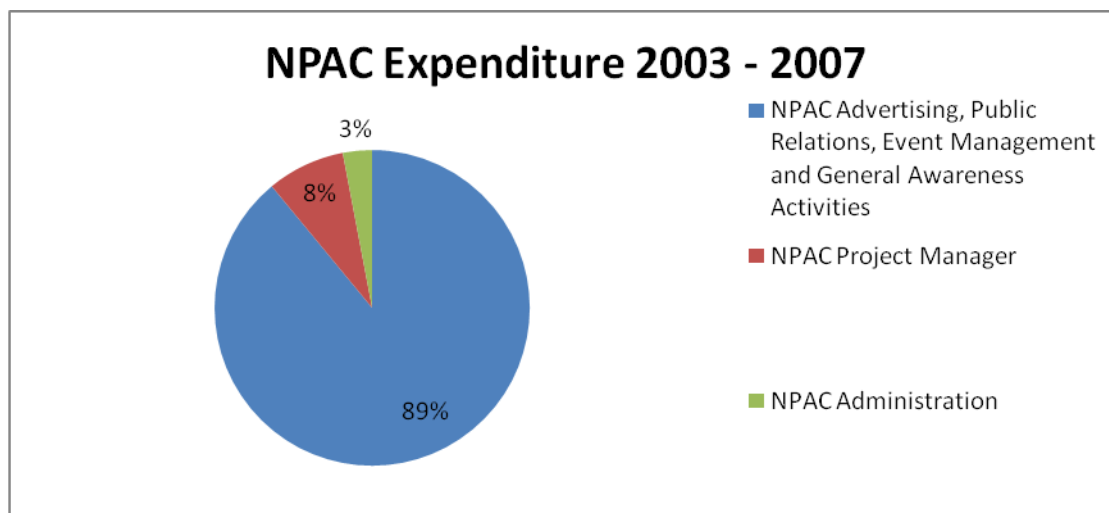
NPAC Project Manager

Having a dedicated NPAC Project Manager with direct experience in marketing, PR and event management ensured that all activities undertaken during the campaign delivered value for money through maximising media coverage and the engagement and participation of external stakeholders.

NPAC Expenditure

The breakdown of expenditure clearly demonstrates that the maximum expenditure available was allocated to advertising and awareness building activities.

NPAC Expenditure 2003 – 2007



Source: Pensions Board

NPAC operates an integrated communications strategy throughout the year thus maximising the opportunities to promote the pensions message through, public relations, advertising, marketing and event management.

7.3 If it were decided to cease NPAC assess the implications this would have on awareness levels in the short/medium and long-term.

The public relations, marketing and advertising industry would argue that the high levels of awareness generated by public awareness campaigns such as NPAC would drop off quite quickly should such a campaign cease and nothing be put in its place.

There are no set rules about how long consumers remember a campaign as it is dependent on a wide variety of influences such as;

- level of spend
- availability of the product or service
- consumer interest in the category
- previous awareness
- creative cut through (impact of advertising and PR)

Where an organisation such as the Pensions Board is not communicating its message in the media market place then public awareness of the Board and pensions in general would be very low. Furthermore if the Board were not so engaged, it is more likely that external interests would be setting the media and communications agenda in relation to pension issues.

The ongoing public relations of the Board have been considerably increased by the NPAC activity and have led to increased and sustained media exposure for pension issues.

On a broader level, prior to the commencement of NPAC in 2003, the main media outlets for pensions related editorial was the financial columns of the national broadsheets. Through NPAC activity, pensions are now covered by a broad diversity of media including the tabloids, regional press, consumer and trade magazines, information websites, organisational newsletters and e-zines.

Pensions coverage on radio has been a very positive development and particularly coverage on local radio stations throughout the country which facilitates longer and more consumer focused interviews and discussion of pension issues. A positive example of this was during National Pensions Action Week 2007 where Board personnel gave over 40 radio interviews nationwide.

7.4 If it were decided to maintain NPAC should the existing communications and activity strategy be continued and or what other approaches should be considered.

In 2006 and 2007 the focus of NPAC shifted to reflect a change of emphasis from awareness building to action on pension take-up.

To reflect that focus the following options should be considered in the context of the continuation of NPAC:

- continue with a high profile and sustained advertising and promotional campaign to drive pension take-up
- increasing the advertising and media activity to focus in on the key time zones of a “National Pensions Action Week” and on the self-employed tax deadlines in October
- a more focused targeting of activity on the key sectors where coverage remains low such as the hospitality sector, farming and rural communities would be initiated. In adopting this approach care would be needed to ensure that overall awareness levels did not suffer
- expand, develop and evolve longer-term “Partnership Relationships” with external stakeholders such as FAS, Failte Ireland, Careers Guidance Institute, Union of Students in Ireland and the National Recruitment Federation. Educational and promotional “Partnership Relationships” will help to create more buy-in and ownership of the importance of pension coverage and the responsibility for participation in the promotion process on an ongoing basis
- ring-fence some funding for committed financial planning and education initiatives such as the adaptation of the UK – “Learn about Money” project.

7.5 *Outline any other issues or actions which may have an impact on NPAC going forward e.g. Green Paper.*

In the Pension Board’s, *National Pensions Review 2005* it is stated that “The Board is of the view that further awareness campaigns should form an important part of any voluntary pension system, with continued emphasis on the Board’s priority groups of women and the lower paid.”

Following the completion of the National Pensions Review 2005 and the Special Savings for Retirement Report in 2006 the Board is now in the process of working with all the pension stakeholders in completing the Green Paper on Pensions which is expected to be published shortly.

The outputs from the Green Paper, the results of the subsequent consultation process and the framework for long-term pensions policy decided upon by Government will influence the nature of the communication and awareness campaigns that will be required for the future. At this point in time there is a well structured NPAC campaign platform in place from which any future communications initiatives can be launched.

The OECD report *Good Practices on Financial Education Relating to Private Pensions* makes the following recommendations;

- Governments should play a significant role in financial education programmes on pensions via public awareness campaigns and can provide a strong lead, coordinating projects with a range of other partners.
- Governments should direct public pensions awareness campaigns as broadly as possible due to a widespread lack of understanding of pensions issues. In addition specific programmes targeted at the most vulnerable groups (migrants or those with the lowest income and savings levels) can also have a significant impact.

At this point in time there is a well structured NPAC campaign platform in place from which any future communications initiatives can be launched.

7.6 *If it were decided to maintain NPAC should the awareness campaign be embedded in the ongoing work of the Pensions Board or is the existing ad-hoc arrangement, with the future being decided on an annual basis, the correct approach.*

Currently the NPAC campaign is funded on a year by year basis. The recommendation from the NPAC Project Team is to embed the awareness campaign in the ongoing work of the Pensions Board for the following reasons:

- capacity to forward plan for a three to five year integrated and intensified campaign
- the timeframe to build, develop and evolve longer-term Partnership Relationships with external stakeholders
- streamlined tendering, procurement and administration.

8. Summary and Recommendations

Over its short life the NPAC initiative has been very successful in meeting its primary objective of substantially increasing pensions awareness in Ireland. Pensions take-up has also increased over the same period but not to the target levels set in the National Pensions Policy Initiative (NPPI 1998). These target levels have been reconfirmed in the National Pensions Review (2006). Accordingly in order to further increase pensions take-up an intensified and sustained public awareness, promotion and education campaign highlighting the necessity of pension provision is essential.

Recommendations

The following are the recommendations for the future direction of NPAC:

- Government needs to continue to play a significant role in financial education programmes on pensions via public awareness campaigns and provide a strong lead, coordinating projects with a range of other partners.
- public awareness campaigns such as NPAC need to be run on a continual basis, spanning different generations, and not just organised as one-off initiatives in order to have sustained and positive impact.
- NPAC should be embedded in the ongoing work of the Pensions Board.
- focus the targeting of activity solely on the key sectors where coverage remains continually low such as the hospitality sector, farming and rural communities.
- ring-fence some funding for committed financial planning and education initiatives.
- NPAC should be reviewed again in 2010.

**PENSION COVERAGE AND INFORMAL SECTOR WORKERS:
INTERNATIONAL EXPERIENCES**

Abstract

Pension reform around the world in recent decades has focused mainly on the formal sector. Consequently, many of those working in the informal sector have been left out of structured pension arrangements, particularly in developing countries – a serious problem given this group are often low income earners, vulnerable to economic volatility and change. However, since the turn of the millennium, efforts in a range of countries have increasingly highlighted improving pension coverage for informal sector workers. This paper provides an overview of selected country experience in this regard, and provides some suggestions for governments in developing countries considering implementing their own pension reform to ensure that informal sector workers receive the retirement income they need.

1. Introduction

Modern pension system can trace their roots back at least to late 19th century in Germany, when the Bismarckian social welfare system was introduced. Nowadays, pensions have spread and established around the globe, including in both developed and developing countries. Though the type of pension system varies, all play an important role in providing necessary income to elderly populations and in alleviating post-retirement poverty among the poorest sectors of society. However, despite the continued evolution and development of modern pension system over the past century, one issue which is yet to be resolved is how to extend such structured pensions arrangement to informal sector workers.

Though the definition of this sector varies by country, informal sector workers are generally those with low incomes or self-employed, working in very small (unregistered) companies or the household sector, often on a part-time basis (and migrant workers) in industries such as agriculture, construction and services¹. Compared to workers in the formal sector - who normally join either mandatory or voluntary pension systems, or both - those in the informal sector are typically not covered well (in many cases not at all) by modern, structured pension systems. They do not have access to pension plans organised or run by employers, may lack official registration papers or other documents which could help the relevant authorities target them for other schemes, may change job frequently and often live and work in rural areas which financial infrastructure is poor or non-existent. These workers may also come from lower income and educated groups, meaning their knowledge and understanding of pension and saving products is limited and their resources for long-term savings scarce. Hence gaining access to a structured pension system is a challenge for these workers. This issue is even more severe in developing countries, and indeed a rise in the informal sector has been correlated with economic growth in several regions². The challenge is greater in these countries partly due to logistical difficulties in getting informal sector workers to participate in pension schemes, and partly due to the traditional role of family support in pension provisioning.

Recently both the international community and national governments have realised the increasing importance and urgency of extending the pension system to the informal sector. Indeed, a range of different policy initiatives have been undertaken, aiming to tackle this problem given the country-specific conditions and environments. This paper provides a comparative overview of these policies, and aims to provide practical international experiences to other governments considering such pension

¹ See ILO definition <http://www.gdrc.org/informal/huss0772.pdf>

² See ILO discussions – e.g. <http://www.ilo.org/public/english/employment/gems/eoo/download/kilm07.pdf>

reform initiatives. The remaining part of the paper is arranged as follows. Section 2 will give an overview of international experiences, organised by type of policy response, and focusing on Bangladesh, Chile, China, India, Kenya, South Africa and the United Kingdom (though other countries are referred to and cited), with further details of pension arrangements and informal sector policies in these countries provided in the Appendix. Section 3 provides some suggestions for governments – particularly in developing economies - which are looking to promote pension coverage for their informal sector workers. The last section concludes while summarising the main findings.

It should be noted that this is intended as an overview paper and is by no means an exhaustive investigation of this challenging topic. The OECD acknowledges the leadership of other international organisations in this area (notably the ILO, and World Bank) and encourages interested readers to follow up with the reports referenced in the bibliography.

2. Overview of international experiences

This section provides comparative information on how countries have been working to extend pension coverage to the informal sector. The discussion will be presented by type of policy initiatives which have been undertaken or are being considered by governments. It should be noted at the outset that it is possible that a government has adopted, or considered adopting, a combination of the following initiatives rather than a single policy.

1. Broadening access to social assistance programmes (non-contributory pensions)

Before discussing ways to bring informal sector workers into structured pension systems (either mandatory or voluntary), it needs to be acknowledged that in reality in developing countries - particularly those with the lowest income levels - there is always a group of population whose main challenge is to meet basic needs, e.g. food, clothing and housing. Informal sector workers (including agricultural workers) in developing countries are an important component of such population groups. In this context, it could be very difficult (if not impossible) for governments to undertake any meaningful actions to bring these individuals into formal pension systems. Therefore, an important policy tool is to provide social assistance to all of the poorest elderly, on a non contributory basis. In general there are two approaches - means-tested and universal. Under the means-tested approach, only those who are too poor to support themselves are eligible for benefits, whilst under the universal approach all older people (subject to certain criteria but not levels of income and wealth) are entitled to receive such benefits. There has been much debate concerning the advantages and disadvantages on these two approaches, (for example the former may discourage people from working, while the latter distribute funds to not only those most in need but also relatively wealthier groups and can therefore be more costly and arguably less progressive and equitable), which is beyond the scope of this paper, but is discussed in some of the references in the bibliography at the end of the report.



Old-age social assistance programmes have already existed in many countries for a long time. For example, workers in the informal sector in South Africa are covered by a public pension financed from general government revenues, which provides a non-contributory, means-tested old age pensions. Benefits amount to up to Rand 940 a month for a single pensioner, and a means test is currently applied, which lowers the benefit by 50 cents for every Rand 1 of other income, to a level of zero when other income exceeds R1880 per month. This is the main source of income for 75% of retirees, most of whom receive the full amount of Rand 940 a month. The benefit has been considered to be relatively generous for South Africans. To some extent it can be contrasted with the minimum pension benefit provided by the Bangladesh government. The means-tested arrangement in Bangladesh covers low income citizens aged 62 and above, but only one member from each family is entitled to the benefit (currently 180 Taka per month). However, this amount is not felt sufficient to meet the all

basic needs of such a population and only the poorest people are covered, with the majority of the poor consequently still relying on family support. In view of the benefits of providing an appropriate old-age social assistance, Kenya is one country considering establishing a ‘zero pillar’ pension, which aims to basic a retirement income to all of the older population (i.e. over 65).

It has been argued that introducing such a basic social pension need not be prohibitively expensive for developing countries – with ILO estimating the cost at a few percent of GDP³.

Examples of universal and means tested schemes

	Age limit	US\$	% of GDP	
Bangladesh	57	2	0.03	means tested
Bolivia	65	18	1.3	universal
Botswana	65	27	0.4	universal
Brazil (Rural)	60 (M) 55 (W)	140	0.7	means tested
Chile	65	75	0.38	means tested
Costa Rica	65	26	0.18	means tested
India	65	4	0.01	means tested
Mauritius	60	60	2	universal
Moldova	62 (M) 57 (W)	5	0.08	means tested
Namibia	60	28	0.8	universal
Nepal	75	2		universal
South Africa	65 (M) 60 (W)	109	1.4	means tested
Thailand	60	8	0.005	means tested
Vietnam	60	6	0.5	means tested

 Source: Willmore (2006). Universal pensions for low income countries 

³ Charts presented by Vinícius Carvalho Pinheiro, ITC - ILO at the OECD/IOPS Global Forum on Private Pensions, Istanbul, Turkey, November 2006 <http://www.oecd.org/dataoecd/62/23/37696140.pdf>

II. Adapting contributory pensions to the informal sector

A. Encouraging voluntary participation by the informal sector

i. Flexible terms for informal sector workers

One of the main reasons why informal sector workers do not want to participate in voluntary pension systems (and in some cases even comply with mandatory schemes) is that they find the strict criteria involved too onerous, e.g. in terms of contribution requirements, vesting policies and requirements on governance structure of pension fund itself etc.. In order to encourage participation of this particular group of population, it may therefore be necessary to relax some requirements to a level which is consistent with the situation relating to informal sector workers.

Indeed when governments start to address informal sector coverage, many of their reforms feature such increased flexibility. For example, in China informal sector employees are required to join the mandatory public pension scheme. However, due to lack of incentives and relatively high contribution rates, as well as lax enforcement powers of the labour ministry, very few comply with this requirement. In view of this problem, in many local regions across the country, restrictions have been modified to encourage participation. Specifically, the contribution rates for the system have been reduced from the standard 28% of earnings (20% from employer and 8% from employee) to 20% (of which 8% will be directed to an individual account). Meanwhile, in terms of voluntary private pensions in China, the central government has also been working to encourage the set-up of additional pension schemes among small and medium sized enterprises (SMEs). In this context, compared to the standard pension arrangements which normally apply to the large state-owned enterprises in China, simplification and flexibility will be the main features of the new pension products (e.g. easier application procedures and faster assessment processes).

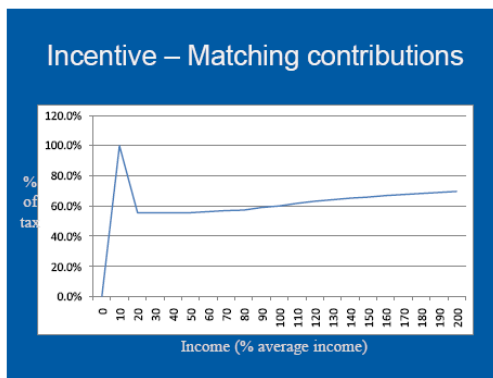
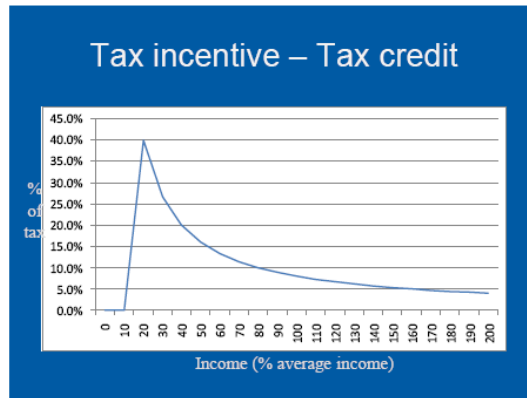
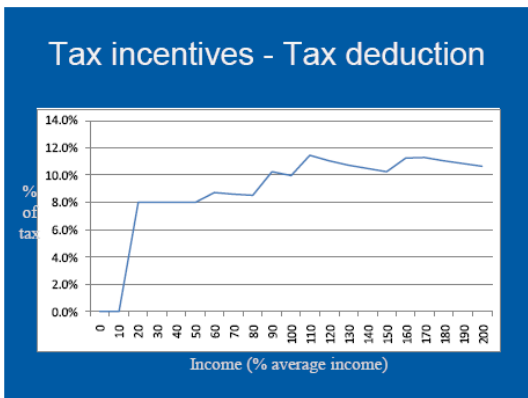
In Chile and in other developing countries where there is a large agricultural sector, in order to encourage participation of the temporary and/or seasonal workers (most from the agricultural sector), flexible contributions are allowed. In other words, when there is a good harvest, due to good weather conditions and/or advances in fertilization technology, farmers can make larger pension contributions than normal. However, if bad weather conditions prevail (e.g. flooding or pest problems) farmers may not have sufficient funds to meet their basic needs, let alone to put aside extra money for pension contributions. Even during a period when weather conditions are relatively stable, it is still common in the agricultural sector for farmers to receive income from goods/crops during a specific period of the year (or for agricultural workers to only be employed for a specific season), making their earnings during the year highly volatile. Hence it can make sense to allow for irregular contributions which correspond to the income pattern of such seasonal industries and workers.

In addition to flexibility in terms of contributions, flexibility in terms of withdrawals may be necessary to encourage informal sector workers to participate in pension arrangements. Given in many countries these workers are from vulnerable groups of society, having access to long-term pension savings may be required to cover periods of unemployment, for emergency spending (such as on health care) or for other life essentials, such as housing. Some pension systems do therefore allow for withdrawals in specific circumstances. For example in Australia early withdrawals from superannuation funds are permitted in limited exceptional circumstances on compassionate grounds or in cases of severe financial hardship. However, this flexibility needs to be balanced with the risk of 'leakage' from the system, with large withdrawals leading to insufficient balances upon retirement (as has been a problem with the provident fund in Singapore and pension funds in South Africa, for example).

ii. Providing monetary incentives to participate

Tax relief on pension contributions may be one way to encourage pension participation, particularly for the voluntary schemes. It has been argued that one of the reasons why 401(k) plans in the US are so popular largely arises from government tax rebates and matching contributions. Consequently, when introducing new pension arrangements to increase (voluntary) contributions, tax policy has been frequently used as a tool in many countries – particularly an ‘EET’ policy (where by pension contributions and investment income are tax exempt whilst pension benefits are taxed as ordinary income). Such a ‘deferred’ tax policy is designed to encourage pension contributions, given that even a small deduction from accumulated pension assets (e.g. via tax charges) at the early accumulation stage can make a big difference to eventual pension wealth when compounded over 40 years. When Chile, for example, introduced its pension reform in the early 1980s, it was specified that employees contribute 10% of salary to their individual account, with all contributions and investment income treated as tax free, while benefits were considered as income. For the new NPSS in the UK, the government will contribute to the new system via a 1% tax rebate (which comprises a part of the 4% employer contribution).

Yet it has been debated as to whether tax incentives really provoke new savings rather than shifting existing savings to more efficient arrangements (Antolin and Ponton 2007). Moreover, tax benefits are not always a powerful tool, particularly for those in the informal sector who do not pay tax or are too poor to put aside extra money for long-term savings. Other mechanisms, such as tax credits or matching contributions, may be more appropriate mechanisms for assisting these groups (see charts below from referenced report in OECD/IOPS 2007).



iii. Financial education

One reason why people may not join a pension scheme (even where available and advantageous for them to do so) is because of a lack of knowledge on pensions in general and the scheme in particular. For example, around 80% the informal sector employees in India surveyed by the Asian Development Bank (ADB 2006) did not know what a pension was. Likewise, even though they meet the criteria, very few informal sector workers join the Public Provident Fund in India. In developed countries, this same problem also exists. For example, in the United Kingdom up to over GBP 6 billion pension credit benefits are not claimed, largely due to lack of knowledge among this group of people (Stewart 2006).

Given such challenges, financial education may be able to play a role in raising public knowledge and awareness, and therefore potentially leading to increased pension coverage – including for the informal sector (Stewart 2006). For example the ADB (2006) have estimated that 20 million of 360 million workers in the Indian informal sector are financially able and willing to join the New Pension System (involving individual DC accounts, currently eligible to civil servants but to be made available to the entire population). One of their proposals for successfully bringing these workers into the system is through financial education –i.e. via public awareness campaigns. Similarly in China, projects have been undertaken to provide training for local social security bureau officials to ensure that they know how to effectively explain benefits available to eligible people (such as rural workers, only 11% of whom claim available pension insurance benefits). Financial education projects have also been conducted in the pension context in several OECD countries with some success. In the UK, a specific campaign was launched in 2006 to help self-employees understand current pension system and arrangements available to them, with the aim of including them into the formal private pension system.

B. Compulsory participation for the informal sector

i. Semi-compulsion of pension participation

Recently governments in a number of OECD countries have been considering introducing so called ‘auto enrolment’ mechanisms into pension systems for employees, including informal sector workers. Notable examples are the recent reforms in Italy, the United Kingdom and New Zealand. The reasoning behind these initiatives is the same as for compulsory participation - i.e. when faced with difficult choices (such as those around pension provisioning) people tend to make no decision. Semi-compulsion or soft-compulsion plays on this behavior by, rather than making individuals actively choose to join a pension scheme, automatically enrolling them and giving them the option to opt out – thereby using people’s natural inactivity to deliver higher membership levels. The main reason why semi-compulsion is preferred to a pure mandatory approach is that individuals are offered more free choice (as there will always be a group of the population – whether in the formal or the informal sector - who would prefer to plan their own retirement, rather than being forced to join a scheme which might not be best choice for them).

Although the UK has a relatively mature pension system and developed pension market, employees in the informal sector are not well covered by private pension arrangements, which provide significant supplementary pensions on top of the relatively limited public pension provisions provided by the state. It is estimated that a population of around 7 million people are under saving in the UK, most being low income earners and those in the informal sector (DWP 2006). In addition, roughly 2 million of around 3 million self employees are not saving via private pension arrangements. Hence the UK government recently decided to introduce a personal saving plan, to be known as the National Pension Saving Scheme (NPSS), from 2012. According to Department of Work and Pensions (2006),

all employees in the UK who earn more than GBP 5,000 annually will be required to automatically enroll into the NPSS (with employees allowed to opt out if they participate in other qualified pension schemes, e.g. stakeholder schemes). The minimum contribution for employees is 4% of earnings up to a maximum contribution of GBP 5,000. The employee contribution will be matched by a minimum 3% employer contribution of which 1% is in the form of tax rebate from the government.

A key component of the NPSS will be the establishment of a central clearing house, for collection, reconciliation and administration functions, which is designed to be similar to the Swedish PPM model⁴. The investment function is expected to be outsourced to external professional asset managers. The main advantage of having a centralized agency is cost efficiency (with evidence from various countries showing that competition of such functions does not always successfully reduce prices)⁵. It is expected that up to 10 million new contributors will join the NPSS and the annual new contributions to pensions will be around GBP 4 or 5 billion. Over the long term, it is estimated that the NPSS could accumulate up to GBP 150 billion (DWP 2006). Three reasons could explain why employees in the informal sector may be interested in this initiative. First, it is automatic enrolment, therefore mitigating some reluctance to participate. Second, the matching contributions from the employer and government should be attractive to informal sector workers, therefore encouraging them to stay within the scheme rather than opting out. Third, given that a central and single clearing house will be established, the cost should be lower than otherwise, which should encourage participation amongst lower income workers.

In Italy following approval of the new pensions law by the Parliament in 2004, since July 2007 employee contributions to the severance pay (i.e. “trattamento di fine rapporto” or TFR) are automatically transferred to a public pension fund run by the INPS (i.e. the National Social Security Institute), unless they choose to stay with the old TFR or divert their funds to a pension fund. New employees are given six months to make their decision. Once decision is made, those who decide to go with pension funds cannot return back to the old TFR, although those who decide to stay with TFR can still join a pension fund at any time.

In Italy domestic employees are covered by the public pension system under administration of INPS. Participation in the system is voluntary for contract workers while self-employed persons in Italy are covered by special systems.

The government of New Zealand introduced a voluntary, long-term savings initiative in 2007 known as KiwiSaver⁶. Those in formal employment are automatically enrolled into an eligible saving scheme on starting work, with employees and employers both contributing, but can opt out within a certain period. Membership is not restricted to formal employment as all New Zealand citizens under the age of 65 and resident in the country can join the scheme, whether self-employed or not working. Incentives, for formal sector workers and other participants include a NZD 1000 contribution from the government on setting up the scheme, a NZD 40 payment from the government each year to cover scheme costs, tax incentives and the possibility of linking KiwiSaver savings to mortgage payments. As of May 2008, take-up of the scheme was estimated to have reached 673,000 (40% of the working population).

ii. Compulsion of pension participation

⁴ See <http://www.regeringen.se/content/1/c6/05/19/48/72712aef.pdf>

⁵ In the UK, for example, the decline in fees and charges for personal pensions since the mid-1990s has been attributed more to regulation rather than competition (DWP 2006).

⁶ <http://www.kiwisaver.govt.nz/>

In addition to the above argument relating to the semi-compulsion, another policy initiative governments may consider is to make participation of private pension systems mandatory if workers in the informal sector are not properly covered by other forms of voluntary pension arrangement. However, before going into details it is worth noting that international experiences presented in this section should be more relevant to those African countries where households in the informal sector are capable of putting aside extra monies into a funded account. If such forced savings - which normally are unavailable for use until (or close to) the retirement age - would crowd out the present basic needs of the group of population, (e.g. foods, housing and education), this would not be an optimal policy choice (Martin and Whitehouse 2008). This is particularly the case when retirement is often not the (main) driver of savings amongst poorer households. One survey study shows that for poorer households with savings in South Africa, emergency needs, food, and funeral costs are the three most important reasons for saving, while retirement is only considered the eighth most importance (Masilena 2005).

The argument for manditization comes from behavioral economics, with individuals tending towards inertia when facing difficult financial situations (partly due to the difficulty in making a right decision and the level of negative consequence of making a wrong decision and because many people - especially younger generations - live for today and are reluctant to think about their retirement several decades away and to save for the future). These arguments are particularly relevant for pension issues given that surveys consistently show that most people find joining an appropriate pension scheme a rather complicated task and difficult decision⁷. In this context, many people chose to make no decision - especially if there is no proper and effective incentive, as is often the case with the informal sector, which effectively leads to undersaving.

It is worth noting that although manditization increases participation in general, it may be particularly effective and necessary for the informal sector workers given that, in general, they may be less informed and more short-term in their financial planning than those working in the formal sector. Therefore, if arrangements are voluntary it is likely that they will not participate or simply do not know what pensions are and/or how to participate.

Around the globe, many countries have reformed their pension system by legalizing mandatory participation of private pensions, which in some cases apply to the formal sector only, e.g. in Chile, and in other cases which apply to both formal and informal sectors, e.g. in Australia (except the self-employed) and Hong Kong China.

Chile in 1981 introduced the well known privatisation of its pension system, under which employees in the formal sector were required to join the new mandatory pension system, with each employee allocated a personal pension account (fully funded and defined contribution based). Following its pension reform, pension coverage in Chile increased significantly from 48% in 1980 to 58% in 2000 (de Mesa et al 2006), and private pension assets increased from virtually zero to USD 111 billion in 2007, accounting for 61% of GDP. Yet the current system is only mandatory for those working in the formal sector (and voluntary for the self-employed), which means that many people are left out, and therefore face the risk of not having sufficient pensions when they retire. Current estimates are that around one third of workforce in Chile - including most of 1.2 million people working in the informal sector - are not covered by the mandatory system (Herald Tribune 2008). In view of this problem, a recent reform to the system has been to require the self-employed (who form a large part of the informal sector) to join the system on a mandatory basis.

⁷ See the OECD's work on financial education and pensions
http://www.oecd.org/document/37/0,3343,en_2649_15251491_25698341_1_1_1_1,00.html

Mandatory participation applies to both formal and informal sector employees in some economies, e.g. Australia and Hong Kong China. In Australia, the current superannuation pension system requires that all employees in the public and private sectors (including those in the informal sector with some exceptions⁸) participate in the system. The contribution rate for employers is 9% of payroll, while employee contributions are allowable and voluntary up to certain limits. Though participation may not be particularly popular or information sector workers and their employers (given tax incentives have limited impact for low income workers or for companies making a loss), compliance is strictly enforced (via severe penalties) by the Australia Taxation Office.

Self-employees in Australia are not required to contribute on their own behalf under the Superannuation system, regardless of income thresholds. However there are tax incentives - provided an individual earns less than 10% of their income as an employee, an individual can (from 1 July 2007) claim a tax deduction for personal contributions to a complying fund. There is no limit to the amount of the deduction, however the 2007 reforms also introduced caps on the amount of concessional tax contributions that can be made in a year to a fund.⁹

In Hong Kong China public and private-sector employees and self-employed persons aged between 18 and 65 must become members of a provident fund scheme. This obligation applies to both full-time and part-time workers holding a contract of 60 days or more. Employees in the catering or construction industry who are employed for less than 60 days or on a daily basis (casual employees) must also be covered. Self-employees must also enrol themselves in a scheme within 60 days of becoming self-employed. In order to encourage compliance by informal sector workers, more flexible arrangements have been introduced. For those employed in the informal sector, the contribution rate is 5% of earnings from both employers and employees, while for those self employees the contribution is 5% of their earnings. For casual workers paid daily, the contribution rules are adjusted to be flexible in order to encourage participation. Meanwhile, two industry schemes exist for the catering and construction industries in Hong Kong China, which help workers in these sectors to maintain their pension contributions even if they change job regularly.

In addition, some other countries have also considered making pension participation mandatory. For example, the Kenyan government has proposed a mandatory element into the current voluntary occupational and individual schemes, along with proposals intended to increase the coverage rate, particularly among informal sector workers. The current provident fund scheme would be converted into a national social insurance pension scheme, with membership of formal and informal sector workers and encouragement for the self-employed and seasonal workers to make voluntary contributions¹⁰.

⁸ In terms of participation there are limited exceptions, e.g. employee aged 70 and over, employee receiving salary or wages less than AUD\$450/month, part-time employees under age 18.

⁹ Contributions for which a tax deduction had been claimed and which exceed the cap are taxed in the fund at the top marginal rate instead of at 15%.

¹⁰ See ILO report:
http://ilo.law.cornell.edu/public/english/protection/socsec/pol/campagne/files/kenya/2page_info_health_pensions.pdf

III. Alternative routes to informal sector coverage

A. Utilization of existing (non-pension) infrastructure

Though it may be necessary to establish institutions and infrastructure when setting up a new pension system, it can be more efficiently if existing infrastructure is utilized where possible. This can be particularly useful when attempting to reach informal sector workers who cannot join a pension scheme via existing employment related mechanisms. For example, when the Indian government was considering introducing the new National Pension Scheme (NPS) (which is mandatory for government officials, but voluntary for informal sector workers), much debate focused on the structure of points of presence (PoP) – i.e. the first point of contact between members (or potential members) and the NPS system. Making such contacts and facilities as convenient as possible is considered of great importance to ensuring the success of the new system. In India, the financial sector infrastructure related to the NPS (including arrangements not previously related to pensions) has been made as wide ranging as possible, and utilizes existing institutions. For example, banks, post offices, depository agencies, and pay and accounts offices are all permitted to conduct the NPS related business. This should greatly assist individuals' participation, particularly those living in remote rural area where many financial institutions are absent and the establishment of new branches is not financially practical.

B. Utilizing existing (non-pension) financial sector institutions - Micro-finance

In addition to utilizing a wide range of financial sector infrastructure to access the informal sector, drawing upon financial sector players and institutions which already have a relationship with such groups outside the pensions realm may also be useful – for example, microfinance companies.

Microfinance is a generic term which refers to the mechanism by which financial services are provided to poor and low income earners. The first microfinance project was initiated by Prof. Muhammad Yunus in 1976 in a small Bangladeshi village, and later extended to over 73,000 villages across the country. His Grameen Bank provides microcredit services to poor people who otherwise cannot receive standard loans from commercial banks. One condition of granting loans from the Grameen Bank is trust or reputation between the Bank and its borrowers rather than collateral or credit history. In this context, an individual must join a group of borrowers in order to apply for a loan, with a small amount of money initially being lent. Depending on the punctuality of repayments, the amount of subsequent loans may be increased.

In 2000, the Grameen Bank started to offer a product specifically designed for the purposes of old-age protection. Under this scheme, all borrowers in the Grameen Bank are required to deposit a minimum of 50 taka each month in a personal pension savings account (Barua 2006). The guaranteed interest rate is 8% if the deposit period is one to three year, 10% if three to five years, and 12% if longer than five years.

Since the introduction of microfinance in Bangladesh, such programmes have been adopted in many other countries, particularly developing economies (Hu 2008). For example, in the Philippines a variant of such 'micropension' schemes operates, i.e. the retirement saving fund, which features greater flexibility in terms of contributions and vesting rights. For example, members are allowed to make contributions at a level as low as USD 0.12 per week, which is intended to make the programme as low burden as possible.

In addition, regarding the Indian pension reform a single administration agency has been selected to serve as the centralised clearing house for the new system for a period of 10 years. The main

purpose of having a single agency is to achieve economies of scale and reduce costs, in line with the UK's NPSS and the Swedish PPM as discussed earlier. This institution (often referred to as CR in India) is responsible for the collection and transfer of member contributions via various points of presence (POPs), the allocation of the funds by pension fund managers, and crediting and reporting the allocation of units into each individual personal account.

3. Some policy recommendations for countries with developing pension systems

The section above provides a review of international practices relating to how to extend formal pension coverage to informal sector workers, drawing on experiences from both developed and particularly developing countries. Based on the above analysis, some suggestions are now made for other governments to consider when reforming their pension systems and working to increase informal sector coverage.

Old-age pension guarantee

Given that many of those working in the informal sector in developing countries are amongst the poorest of workers, fully funded pension arrangement – such as those in more developed economies – may not be the best solution, given the more immediate demands on this group is for food, clothing, housing, education and health etc. Asking such individuals to save extra money for the distant future, either via a mandatory regime or through various means of incentives, may not be practically feasible. This issue becomes more compounded once the fact that life expectancy in many of these countries is lower than other regions is taken into account. Similarly, the former World Bank pensions expert, Estelle James (1999) argued that “extending coverage by requiring low income informal sector workers to contribute to social security would not be in the best interests of these workers...” . Therefore, in order to prevent poverty among the poorest, including informal sector workers, governments should consider at least providing a basic old-age safety net which can be fully financed by the general budget – such as the proposals currently being considered by the Kenya government.

Benefits need to be pitched at a level so as not to disincentivise people's own efforts to alleviate poverty. However, benefits should also be sufficient to meet basic needs, such as food and clothing. For example, Michael Cullen - Finance Minister of New Zealand put forward (2003) that citizens should retire in a degree of personal comfort, without worry and with dignity; however, they should not expect that the state would provide incomes to a level as they were used to during their working lives. In addition, the question of which approach should be used when distributing the benefit largely depends on the country-specific situation, although the means-tested model may be the more appropriate in many cases, as this allows for the targeted allocation of scarce fiscal sources.

Flexible terms

Allowing more flexible contribution and withdrawal terms for informal sector workers can be important for encouraging their participation in mandatory or voluntary pension systems. Contribution schedules should be able to reflect part time or seasonal work (with larger contributions allowed at certain times of the year and contribution holidays during other periods), with access to benefits allowed (though strictly controlled) for emergency and essential purposes. Setting up industry based schemes for workers on short contracts who move jobs frequently (such as those in Hong Kong China for workers in the catering and construction industries) also allows flexibility and should therefore help to raise participation rates.

Target and incentivise those who are capable of extra saving

In order to encourage more people in the informal sector to join the structured pension system, it may be useful to target those who are capable of extra saving. Therefore, before launching a new pension system, those who are able to put aside additional money and are therefore most likely to be the new entrants to the system should be investigated and considered (see ADB 2006). Research studies could be conducted to identify and analyse the main concerns of this identified group, their income profile, social characters, etc.. With this information, it should be possible to design new policies to be as attractive and flexible as possible, and adapted to the specific needs of the targeted group. Financial education campaigns may also be used to promote participation in the new system. The benefits of introducing a new system are consequently more likely to be maximized. An example of such research has been undertaken by the Indian government, which has sought measures to encourage private sector employees to join the new National Pension System (NPS).

Tax incentives should also be carefully designed, with mechanisms such as tax credits and matching contributions considered to ensure that incentives successfully reach the informal sector.

Utilize existing infrastructure from a broad range of sectors and broad financial sector players

Targeting the informal sector is no easy task. Such workers are a disparate group, often from rural areas, with unstructured working arrangement – precisely the reasons for formal pension provisioning not reaching them. Consequently governments may need to think broadly and to use different routes to reach this group and provide them with coverage for their retirement. Using everyday contact points, such as post offices, credit unions, money transfer agents or rural banks as partners may be one option (as is being explored in India) or alternative finance providers, such as the retirement related microfinance programmes which are being developed in countries such as Bangladesh and the Philippines.

Centralised administration agency

Costs are an important aspect of any pension system, with even small fees and charges able to erode accumulated pension assets considerably over the long-term. Designing low cost systems is particularly important for informal sector workers who are likely to have smaller pension balances due to lower incomes (and therefore contributions) and often interrupted and uncertain working patterns. When designing a new pension system governments may therefore wish to consider establishing a centralised administration agency, which serves as a national clearing house and can provide several functions – such as transaction settlement, account administration and record keeping etc., as one way of reducing costs. This agency could be established in the form of semi-governmental agency, or at least at arm's length from the government, in order to avoid conflict of interests. As reviewed earlier, the Indian and UK governments have considered setting up a central clearinghouse as a key integrated part of their new pension reforms.

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ANNEX 1: CASE STUDIES

Bangladesh

Bangladesh is one of the poorest countries in the world, with poverty among the elderly one of the major challenges facing the government. Though Bangladesh is still a young country, the population is aging, if more slowly than in other countries. Government employees in Bangladesh have been covered by generous pension arrangements for several decades. However, employees in the private sector - particularly those in informal sector work - were not covered by any formal pension system until 1998 when a means-tested system was introduced.

Pension arrangements related to the informal sector

As mentioned, employees in the informal sector (such as agricultural workers) were not covered by any formal pension arrangements until the Bangladeshi government introduced a social assistance system with the aim of alleviating old-age poverty in 1998. This system features a means-tested arrangement and is totally government financed. The system covers low income citizens aged 62 and above, but only one member from each family is entitled to benefits which currently consist of 180 Taka per month. Though the social assistance system is moving in the right direction in terms of helping the poorer, elder sections of the population, it is not deemed to be sufficient to meet all the basic needs of such a population and only the poorest people are covered. Therefore, most of old-aged population in Bangladesh, particularly those in rural areas, continue to rely heavily on traditionally family support.

Recent reforms and proposals

In 2000, the Grameen Bank in Bangladesh (the microfinance institution founded by Prof. Muhammad Yunus in 1983) introduced a Grameen Pension Scheme for the poor people. The Grameen Bank now provides microcredit services to individuals who otherwise cannot receive standard loans from commercial banks. One condition of granting loans for Grameen Bank is trust or reputation between the Bank and its borrowers rather than collateral or credit history. In this context, an individual must join a group of borrowers in order to apply for loans. The loan normally is for a small amount of money and can be renewable after repayment of previous loans has been received from any members belonging to the same borrowing group, including the individual himself or - far more usually - herself.

The Grameen Pension Scheme (GPS) is one of the products offered by the bank and is specifically designed for the purposes of old-age pensions. All borrowers of Grameen Bank are required to deposit a minimum of 50 taka each month in a personal pension savings account (Barua 2006). The guaranteed interest rate is 8% if the deposit period is one to three year, 10% if three to five years, and 12% if longer than five years. It is estimated that for a regular deposit of 50 taka per month, in 10 years time, the borrower will be able to receive 11,214 taka, almost double the amount he/she deposited with the GPS.

The GPS has proven popular in Bangladesh in recent years. For example, the total amount of assets has increased from USD 4.8 million in 2000 to USD 163.5 million in 2006. The number of membership has also increased from around 0.5 million in 2000 to more than 6 million in 2006.

Chile

The Chilean pension system started its most significant reform in 1980s with the introduction of a mandatory individual account, defined contribution pension system. Public pensions also exist in Chile, which aim to ensure a minimum pensions for older people. In addition, personal pensions and life insurance are available for individuals on a voluntary basis. The existing pension system was reformed in 2008 to expand access to the minimum pensions for the “left out” population, many of whom are self employees and/or working in the informal sector.

Pension arrangements related to the informal sector

Though members in the individual account system is mandatory for those in the formal sector, participation by self-employees (most of whom are in the informal sector) is voluntary. The contribution rate is 10% of earnings for all participants. The system is DC in nature, and therefore the benefit depends on the level of assets accumulated and investment returns. However, if for whatever the reason, the fund is not sufficient to finance the minimum pension pre-specified by the authorities, the Chilean government will make up the deficit. The funds accumulated are managed by six professional pension managers (i.e. AFPs). Each AFP offers four types of different investment vehicle in order to accommodate needs of members with different risk-return preferences.

Employees in the informal sector can also join the voluntary personal schemes offered by financial institutions, including AFPs, mutual funds and banks, etc. The amount and periodicity of contribution is flexible in order to meet needs of this specific group.

Recent reforms and proposals

On December 19, 2006, the Chilean President sent Congress a pension reform bill in order to introduce changes into the pension system created in 1980. This Bill has been recently passed. Some components of the reforms are related to improving the current low coverage among informal sector workers.

First, a Solidarity Pension System (SPS) will be created for members unable to save towards their retirement. The SPS will replace the current means-tested pensions and the guaranteed minimum pension with two types of pension benefits for the country's low-income population aged 65 or older who have lived in Chile for at least 20 years.

Second, the proposed pension reform mandates that the self-employed, who currently are not obligated to contribute to the pension system, join the individual retirement account system within 7 years after the reform has been implemented.

Third, in order to promote participation of younger workers, the reform proposes a monthly subsidy to low-income workers (those who earn less than 1.5 times the minimum wage) between ages 18 and 35 for the first 24 months of employment after they are formally employed.

China

The pension system in China is segregated between urban and rural populations in China. The pension system in urban areas (modified in 1997) features multiple tiers, consisting of both public and private pension components. In rural areas (60% of the total population), the formal pension system is effectively absent, despite pilot schemes run locally by some (wealthier) provinces, and many still rely heavily on informal family support. Public sector employees are covered by separate, generous pension arrangements.

Pension arrangements related to the informal sector

Several options are available for providing pension coverage to informal sector employees in China. First, they can join the pension system which is designed to be compulsory for both formal and informal sectors. However, due to lax regulation and low compliance rate, very few employees in the informal sector join these schemes. In order to encourage participation, more flexible terms are applied in some provinces (it should be noted that local governments have the authority to revise the rules related to pension contribution rates according to local, specific situations and conditions). For example, in many cases the contribution rate for self employees is reduced from 28% (of which 20% by employer and 8% by employee) to 20% of which 8% is credited to individual accounts. The government in 1999 introduced a minimum income guarantee scheme which aims to provide an amount equivalent to around 20% of the local average salary to those in urban areas who cannot provide sufficiently for themselves. Second, in addition to the the public pension, workers in the private sector in principle can also join voluntary, occupational pension arrangements, known in China as enterprise annuities. However, given the nature of voluntary participation and that the majority of employers in China have not participated in the mandatory public pension (a precondition for setting up supplementary pension arrangements), in practice very few employees in the informal sector are covered by such schemes (which tend to be concentrated at large, former State Owned Enterprises).

Third, for self employees in China, another form of participating in the pension system is to buy life insurance, which is indeed increasingly common. Given marketing efforts from insurance companies and generous terms offered, many individuals in the informal sector have started to purchasing such insurance policies.

The above options are mainly open to employees working in urban areas. Those working in rural areas, e.g. farmers, are effectively not covered by any pension system at all. The only exception is the social assistance scheme which provides a minimum income for those who cannot support themselves. Hence older people in rural areas largely rely on their own savings and particularly their family members. Although some pilot schemes have been launched in wealthier regions, the success of such schemes remains to be seen.

Recent reforms and proposals

Chinese government is concerned about the low coverage of pension system in the informal sector, particularly those in rural areas. Therefore, in order to encourage voluntary participation in the occupational (enterprise annuity) pensions, the central government has been considering the establishment of collective pension funds (CPF) which directly target small and medium sized enterprises in China. CPF are designed to be more flexible than traditional EA arrangements which require stricter participation criteria. Meanwhile, for the large rural population China's insurance regulator has been encouraging insurance companies to offer appropriate products. For example, some products similar as micro credit programmes in other countries are now available in the market, featuring increased flexibility and convenience of participation. Furthermore, given that many farmers

lost their lands due to rapid industrialization in China, some insurance companies offer products which are linked to financial compensation they receive. In other words, such financial compensation is used to buy certain types of insurance products for their retirement and/or other purposes, rather than being given to farmers directly.

India

In India, there are many different schemes in operation, which could be grouped roughly into 3 parts – the social safety program, (mandatory and voluntary) occupation related schemes, and individual voluntary arrangements. Note only around 12% of population in India is covered by the formal pension system, while the remainder are supported either by community, charity or family.

Pension arrangements related to the informal sector

Employees in the Indian formal sector are covered by occupation-based defined contribution (DC) or defined benefit (DB) pension plans on both a mandatory and voluntary basis. In comparison, those in the informal sector can participate in voluntary pension arrangements while very few are covered by mandatory pension system (ADB 2006). The only exceptions are seamen and coal miners which have their own industry funds¹¹.

In addition to the above-mentioned mandatory plans, individuals (including those working in the informal sector) can join a range of voluntary plans which are typically offered by insurance companies. The plans include the public provident fund which is partially funded, DC, unit linked pension plan, offered by life insurance companies, and mutual fund pension plans.

30% of the poorest elderly, regardless of whether they have contributed over their career life, are covered by the National Old Age Pension System (NOAPS), which pays a monthly pension of Rs 75. Currently there are around 7.3 million people covered. Meanwhile, at the state government level, additional pensions may be available for the elderly with marginal contributions from employees and employers. The benefit ranges from USD 2.2 to USD 4.4 per month.

Recent reforms and proposals

The Indian pension system has been declared sustainable in the long run, largely due to the fragmentation of the system, low coverage and the generousness of benefits. In order to tackle the issues (particularly to encourage participation of the informal sector workers, despite the availability of certain products in the market), in 2004 the Indian government introduced a new system, called the National Pension Scheme (NPS). NPS is mandatory for those employees in the central government who start their employment after 1 January 2004, while it is voluntary for state employees and all the other Indian citizens. One of the main features of the new system is its low cost, which consequently intends to encourage voluntary participation of those people who do not have any form of private pension.

¹¹ The Seamen's Provident Fund was established for Indian Merchant Navy Seamen. It is a DC plan with matching contribution of 12% of basic salary from employees and employers. The return is specified or administered by the state. Two types of plans exist for coal miners, i.e. Coal Miners Provident Fund and Coal Miners Pension Fund, the former being a DC plan, while the latter is a DB arrangement. Concerning contributions, the provident fund receives 10% from employees and 10.84% from employers, while the pension fund receives 2.16% from employees, 1.16% from employers and 1.6% from government.

The new system is fully funded and has two accounts, i.e. Tier-I and Tier-II. Tier-I does not allow premature withdrawals before retirement, while Tier-II is withdrawable and does not have tax incentives. Members are entitled to receive pension benefits at age 60. Upon retirement, members are mandated to invest 40% of the accumulated assets to buy annuities. The remaining assets can be withdrawn in the form of lump sum. The amount and periodicity of contributions are subject to the discretion of employees and employers, with no mandatory requirements. Several institutions play a major role in the new system, including the following:

Pension Fund Regulatory and Development Authority (PFRDA): the PFRDA was established in 2003 as an essential component of the reform of the pension system. The PFRDA is a specialized agency responsible for the regulation and supervision of Indian pension funds. For example, any financial institutions intending to conduct pension related business needs to have approval from the PFRDA.

Central reporting agency (CRA): a single institution was selected by PFRDA to serve as the centralized clearing house for the new system for a period of 10 years. This institution (often referred to as CR) is responsible for the collection and transfer of member contributions via various points of presence (POPs), the allocation of the funds by pension fund managers, and crediting and reporting the allocation of units into each individual personal account. The CRA is interlinked with the other major players (including individual members) electronically and shares information with the PFRDA.

Point of presence (POP): as the first point of contact with individuals, the POP is of crucial importance in the new pension system. Existing infrastructure has been utilized to facilitate the establishment of the new system, largely with the aim of reducing costs. Currently POPs include banks, post offices, depository participants, pay and accounts offices and all the other entities which can serve as service providers.

Pension fund manager (PFM): under the new system, employees are offered the opportunity to select from professional Pension Fund Manager (PFM), which are licensed by the PFRDA. Each PFM provides three types of funds to be selected by members, and the funds feature different combination of risk and return in order to take into account the risk preferences of individual investors.

In addition, in 2006 Asian Development Bank (ADB 2006) produced a report with a focus on how to encourage people in unorganized sector to join the NPS. The recommendation was that the system should be designed to target those who are capable of saving (given that there will always be a certain proportion of population in the informal sector who are too poor to save, or to put aside extra money for the distant future, so that tax incentive, low entry cost, etc might not be sufficient to encourage their voluntary participation). For those who are capable for saving for their retirement, the ADB recommended actions be taken to facilitate their participation, e.g. innovative marketing strategies, public awareness campaigns for private pensions etc.. Specifically, the ADB (2006) recommended that such public education focus on a range of themes, e.g. the message that people are not saving enough to support themselves in retirement and may consequently fall into poverty in later life; or the message that informal family support in retirement that has been important in the past is likely to reduce in the future (due to social changes).

Kenya

The Kenyan pension system has three main components: the public PAYG system administered by the National Social Security Fund (NSSF), privately managed voluntary occupational schemes (DB or DC plans) and individual retirement schemes (all are DC plans). Employees in the government are covered by a separate civil service scheme.

Pension arrangements related to the informal sector

For informal sector workers, two opportunities are available to provide pension coverage. The first is the public provident fund, i.e. National Social Security Fund (NSSF). This covers employed persons, traders, the self-employed and, since 2004, some workers in the informal sector. It is mandatory for all employers with at least 5 employees to enrol their members, but open to all other individuals mentioned above. Members of the scheme contribute 5% of monthly earnings up to a maximum of 200 shillings a month, which is the contribution rate for those earning more than KShs. 4,000. Employers pay 5% of payroll, with subject to a maximum of KShs. 400. Self-employed persons contribute 5% of their monthly earnings, with no minimum or maximum earning limits for contribution purposes. With effect from June 2007, members of the NSSF can top up their savings at any point in time with any amount that is less than or equal to KShs. 1,000.

Meanwhile, the private sector provides certain products which allows for individual participation. Currently in Kenya there are 14 individual personal pension schemes which have registered with the Retirement Benefits Authority (RBA). The schemes are all defined contribution and mostly offered by insurance companies. Example include the Zimele Personal Pension Plan established in May 2007 and the Amana Personal Pension Plan. However, according to latest statistics (Odundo 2008), only 1% of the total USD 4 billion pension assets in Kenya belonged to such individual schemes.

Recent reforms and proposals

Low pension coverage is a big challenge facing the Kenyan government. In order to increase coverage and encourage more of the old-age population to join the formal pension system, the authorities are considering several options. Firstly, the introduction of a “zero” pillar has been proposed, which will provide a universal minimum pension to the population over 65. Secondly, there have also been proposals to introduce a mandatory element into the voluntary occupational and individual schemes and to create a “fourth” pillar in the form of tax incentives for family support and the purchase of a home.

South Africa

The South African pension system consists of a public PAYG tier, a voluntary occupational pension system and voluntary personal saving arrangements. The occupational system can be thought of as quasi-mandatory for employees in the formal sector as many employers require a new employee to join the occupational fund offered by the employer as a condition of service. Employees in the public sector are covered by separate pension schemes.

Pension arrangements related to the informal sector

Workers in the informal sector in South Africa are covered by the public pension system, which serves as the main financial resource for this group. The public pension provides a non-contributory, means- tested old age pension, financed by general revenues. The pension is payable to women at 60 and men at 65 who are resident citizens of South Africa. Benefits amount up to Rand 870 a month for a single pensioner, with married couples receiving double this amount. The pension is reduced to 25% of the full amount for pensioners who are resident for more than 3 months in a private care institution. A means test is currently applied, which lowers the benefit by 50 cents for every Rand 1 of other income, to a level of zero when other income exceeds R1,740 per month. This is the main source of income for 75% of retirees, most of whom receive the full amount of Rand 870 month. The benefit level is informally linked to wages (following inflation erosion in the 1990s), and - relative to average formal sector wages - provides a reasonable replacement rate to lower income workers, as well as

acting as an important source of poverty relief for those who are unemployed through most of their working lives.

In addition, additional tax-incentivised saving for retirement is available for employees in the informal sector through voluntary savings vehicles. They are mainly in the form of Retirement Annuity (“RA”) fund policies, primarily offered by insurance companies. Estimates by the National Treasury place coverage of occupational and personal pensions at approximately 60% of workers in the formal sector. No statistics are available for pension provisioning in the informal sector, although unofficial estimates are around a mere 1%.

Recent reforms and proposals

In order to increase pension coverage, the South Africa government is considering the introduction of a mandatory pension system for all formally employed workers. The main objective of this proposal is to ensure a basic level of retirement income for all South Africans. Meanwhile, specifically for employees in the informal sector, the government is currently thinking of establishing a national savings fund. This fund will be designed in a way to accommodate needs of the informal sector workers, e.g. flexible contributions and less strict terms for withdrawal.

United Kingdom

The UK public pension provides a relatively modest retirement income for workers, based on a contribution-based basic pension, supplemented by means-tested social security benefits, and an additional, earning-related top-up - the Second State Pension – provided either by the State or the occupational pension scheme sector. These are supplemented by a large voluntary private pensions sector, comprising DB or DC occupational schemes (run on a trust basis) and personal pension arrangements.

Pension arrangements related to the informal sector

Under the current UK pension system, informal sector employees are mainly covered by the Basic State Pension and/or personal pension arrangements.

Self-employees are entitled to the Basic State Pension as long as they contribute to the system for a certain amount of years (i.e. 30 years) and reach the state pensionable age which is currently 65 for men and 60 for women. In 2006 the basic state pension was GBP 84.25 per week, which is adjusted at least in line with inflation. In order to help low-income pensioners, the UK government offers Pensions Credit, consisting of a means-tested Guarantee Credit and a Savings Credit. The Pension Credit amounts to GBP 114.05 a week for a single person or GBP 174.05 for a couple. Self-employed persons pay a flat-rate GBP 2.75 a week if earnings are greater than GBP 4,465. In addition, self-employed persons with annual profits between GBP 5,035 and GBP 33,540 pay an earnings-related contribution of 8%, plus 1% of any profits above GBP 33,540. 15% of contributions (insured person, employer and self-employed) are allocated to the National Health Service, while the contributions also help finance sickness and maternity benefits, work injury benefits and unemployment benefits.

In addition to the above-mentioned public pensions, self-employees can also participate in stakeholder pensions. Stakeholder pensions are available to almost everybody, including people in employment, fixed contract workers, the self-employed and people who are not actually working but can afford to make contributions. There are no maximum contribution limits. Contributions can be paid on a weekly or monthly basis or can be made as a one-off payment. Schemes must offer a default investment option, which has to include a lifecycle investment pattern (requiring less risky investment

from 5 years before retirement). Schemes must have either trustees or stakeholder managers (insurance company, bank or building society). These stakeholder schemes are also decided to be low cost, with charges restrictive to 1% per annum.

Recent reforms and proposals

Despite the availability of pension arrangements in the market, stakeholders and other private insurance products have not proved popular amongst private sector workers.

In response to both the publication of the Pensions Commission Report and the subsequent national pension debate in 2005, the Department of Work and Pensions in 2006 made specific proposals regarding how to address challenges facing the UK pension system. One such proposal involved encouraging the establishment of pensions among self-employees and/or those who are under saving. Research has suggested that in the UK around 7 million people are not saving enough for their retirement, i.e. this group of population (mostly low income earners) are not saving at a level which will enable them to maintain their current life and consumption style after retirement. In other words, in addition to participation in the state pensions, they typically do not have in any other occupational or personal pension arrangements. In this context, it is estimated that 2 million of the around 3 million self-employees in the UK are not saving in via private pension arrangement.

Given this observation, the UK government proposed to introduce a personal-account-based, automatic enrolment scheme (DWP 2006). Under this scheme:

- individuals will be automatically enrolled if they earn above GBP 5,000 a year;
- employees will pay contributions of around 4 per cent on their earnings between approximately GBP 5,000 and GBP 33,500 a year;
- the employee contribution will be matched by 3 per cent from the employer together with around 1 per cent in the form of normal tax relief from the State;
- the band of earnings on which contributions will be paid will be uprated in line with earnings to ensure the scheme is sustainable;
- employees aged over 22 and below State Pension age will be eligible for automatic enrolment and;
- employees outside these age bands will be able to opt in to the scheme, with access to an employer contribution if they fall within the earnings bands.

Under this system, known as the National Pension Savings Scheme (NPSS), any employees will be automatically enrolled into the scheme, except they choose to opt out and participate in other qualified pension schemes, e.g. stakeholder schemes. The main thrust is to tackle the inertia of individuals towards pension decisions, given their complexity and concerns relating to the inefficiency of individual pension arrangements (which can be costly products).

One important component of the new system is the establishment of a single organisation to administer the funds at the national level. This institution – similar as the centralised pension agency in Sweden, the PPM - will be at arm's length from the government and consist of staff with relevant expertise. The advantages of such a delivery agency are lower costs and higher efficiency when compared to the existing market providers. As a central clearing house, this agency will be responsible

for collection, reconciliation, and administration functions. Investment functions, meanwhile, may be outsourced to professional financial institutions.

It is estimated that this new system will potentially cover new contributions from up to 10 million people and the increase private pension savings could be around GBP 8 billion a year, of which GBP 4 to 5 billion will be new saving. From the long term perspective, the pension market could witness an expansion of up to GBP 150 billion assets.

PENSION FUND INVESTMENT IN INFRASTRUCTURE¹

¹ This paper was prepared by Georg Inderst, an independent consultant acting on behalf of the OECD

Introduction

Pension funds are increasingly moving into new asset classes in a search for yield. Infrastructure is one type of investment being frequently discussed, given its potential to match long-term pension assets and provide diversification.

Previously pension fund exposure to infrastructure has been via listed companies (such as utilities), or via real estate portfolios. However, some larger funds globally are beginning to invest via private-equity funds, or, occasionally, even directly. Australian, Canadian and Dutch pension funds may be considered as leaders in this field.

However, barriers to such investment still exist – not least from the political risks involved with such long-term investments – and the experience of pension funds around the world with such assets has not always been positive. Such challenges only multiply if investment in projects in developing countries is considered.

OECD guidelines and experience in international investment and related sectors may provide assistance to regulators and other government authorities considering encouraging or assisting pension funds looking to invest in this new asset class.

This paper is designed as an overview piece, discussing if pension funds should invest in infrastructure on a theoretical basis, whether they do in practice, and, if not, how (and if) regulators can encourage and assist them to do so.

The asset allocation context

Investing in infrastructure has become a new topic for pension funds in recent years. Institutional investors are trying to spread their investments across a much wider spectrum of investments than in the past. They are looking for new sources of return and better diversification of investment risk. In this process, they are searching beyond the traditional asset classes of equities, bonds, cash and real estate.

In the 1990s, strong stock markets were supportive of the development of funded pensions, and the allocations to equities were increased by pension funds in many countries. However, the burst of the TMT- bubble in the early 2000s and the subsequent recession led to substantial funding and solvency problems for pension funds. Both sides of the balance sheet were affected. Not only did asset prices fall but also pension liabilities rose at the same time, because of lower interest rates, improving longevity, and other reasons.

This led to a major rethink of the asset allocation of pension funds. They realized that they were often not well protected against market volatility, inflation and interest rate risks. At the same time, investment experts reduced the long-term return forecasts for mainstream equities and government bonds. As a result, many pension funds started to look for new investment opportunities.

They enlarged their investment universe to include corporate and high yield bonds, and invested more money internationally, including in emerging markets. In addition, the investment industry started to offer new or “alternative” asset classes for pension funds. They include hedge funds, commodities, private equity, currency and tactical asset allocation overlays, commercial loans, infrastructure investments, forestry products, microfinance and other niche areas.

The idea of investing in infrastructure seems to strike a chord with many pension plan directors and members. Infrastructure feels more “tangible” and “real” than a lot of other complex products and derivative strategies presented to pension funds these days, where they find it difficult to detect the underlying value. In addition, infrastructure is made for the long term, and there seems to be a natural fit with the long-term liabilities of many pension plans. For some people there is also a connotation to sustainable or socially responsible investing, which is an increasingly popular route chosen in particular by public and industry-wide pension plans.

Dedicated infrastructure funds were first set up in the mid-1990s in Australia, and the local Superannuation plans in the USA were early investors in them. Some bigger Canadian plans also pioneered this field. Australian financial institutions started to promote such funds more widely to pension funds and other investors earlier this decade. Since 2005, several (mostly big) European and US pension plans have made their first concrete steps while many more seem to be contemplating them.

Over the last 2 - 3 years, not only have financial products for pension funds mushroomed but related marketing and research reports, and media interest in general has followed.² Unfortunately, there is considerable confusion in this area, in particular with regard to the definition of infrastructure assets, the investment options available, the actual investments of pension funds, the expected and realized returns, the diversification benefits and the specific risks.

It is symptomatic of the confusion that infrastructure investments of pension funds come under different labels, e.g., under private equity, listed equity, real estate, alternatives, real assets or just “other assets”.

Background: private finance of infrastructure

In a historic perspective, private financing of infrastructure is not new. In recent times, however, there have been significant new developments. In post-war Europe in particular, most of the infrastructure was owned and controlled by state institutions. Since the 1980s, the trend has reversed as many pieces of infrastructure have been (partly or fully) privatised in the face of stretched public finances. Estimates for privatized assets run over US\$ 1tr for the OECD countries.³ At the same time, several industries were (more or less) deregulated. In this first wave, many investors benefited from investing in shares and bonds of, e.g., privatized utility companies.

A key driver behind these trends is the need to improve the (often declining) public infrastructure or build new projects in the first place. Full privatisation is not always needed, or possible, or politically wanted. Therefore, governments increasingly propose new forms of “public private partnerships”, e.g. by subcontracting public services to private companies. The state changes its role from owner and provider of public services to purchaser and regulator of them. The private sector comes in as financier and manager of infrastructure, obviously expecting an attractive return.

Different countries have taken different routes at different speed. Australia has been gaining substantial experience in terms of private investing in infrastructure over more than 10 years. In Europe, the UK’s “Private Finance Initiative” (PFI) and Public Private Partnerships (PPP) shows a list of over 900 projects for £ 53bn signed from the mid-1990’s to the end of 2007, with a capital value of

² Even a new specialist Journal, “Institutional Investing in Infrastructure”, Institutional Real Estate Inc., was launched in Spring 2008.

³ OECD (2008a).

£ 60bn. “Overall, PFI/PPP has accounted for about 10-15% of public sector capital investment since 1996.”⁴

The PPP market in Europe outside UK has also been developing in the 2000s. The value of 193 signed projects totalled € 32bn from 2001 to 2007. The pipeline is still growing. A further € 68bn of projects is currently being procured, with Italy being the most active. Many in the infrastructure industry see the USA as “the next gold rush”. The involvement of private investors in infrastructure is rising fast in Asia and in many emerging markets.

What about the future? The requirement for better infrastructure seems obvious everywhere in the world. Infrastructure investment will need a huge amount of capital in the coming decades, whether public or private. Estimates made by supranational institutions for global infrastructure needs run into the dozens of trillions.

Through to 2030, according to the OECD, the annual infrastructure requirements for electricity transmission and distribution, road and rail transport, telecommunication and water is likely to average 3.5% of world GDP, i.e. about US\$ 2tr pa.⁵ This amounts to a sum of over US\$ 50tr until 2030. The figures get even higher if other infrastructure sectors are added.

The infrastructure needs are especially high in developing countries.⁶ The Economist magazine reports that “over half of the world’s infrastructure investment is now taking place in emerging economies.”⁷ The US\$ 1.2tr pa spent is equivalent of 6% of their combined GDPs.

Definition of infrastructure assets

The definition of infrastructure investment seems intuitive. The OECD uses a simple and general definition for infrastructure as the system of public works in a country, state or region, including roads, utility lines and public buildings. A standard dictionary’s definition is:

“The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions including schools, post offices, and prisons.” (American Heritage Dictionary).

Infrastructure assets are traditionally defined by their physical characteristics. One can split them into two main categories, and a range of sectors within those:

Economic infrastructure

- transport (e.g. toll roads, airports, seaport, tunnels, bridges, metro, rail systems)
- utilities (e.g. water supply, sewage system, energy distribution networks, power plants, pipelines, gas storage)

⁴ IFSL (2008).

⁵ OECD (2007a).

⁶ See, e.g., ADB (2006) for East Asia.

⁷ Economist (2008).

- communication (e.g. TV/ telephone transmitters, towers, satellites, cable networks)
- renewable energy

Social infrastructure

- education facilities
- health (hospitals and health care centres)
- security (e.g. prisons, police, military stations)
- others (e.g. parks).

There is a lot of variety within infrastructure if it is defined by its physical nature, and people disagree what exactly should or should not count as infrastructure asset. For example, do utility companies count as infrastructure? When their activities span production, distribution and networks, where is the dividing line? More generally, where does public infrastructure end and private infrastructure start?

Financial industry analysts therefore tend to take a different route. They see certain commonalities, or common economic and financial characteristics of infrastructure. In particular, they emphasize the existence of limited competition, resulting from different sources.

- Economic: natural monopolies (e.g. energy distribution networks), public goods (e.g. broadcasting)
- Regulation: controlled charges and fee increases (e.g. toll roads), regulated utilities
- Concessions from public authorities: long-dating contracts (e.g. hospitals).

Infrastructure assets typically show one or more of the following stylized economic characteristics, including

- high barriers to entry
- economies of scale (e.g. high fixed, low variable costs)
- inelastic demand for services (giving pricing power)
- low operating cost and high target operating margins
- long duration (e.g. concessions of 25 years, leases up to 99 years).

From this, the investment industry deduces a number of favourable investment characteristics of infrastructure assets:

- stable and predictable cash flows
- long term income streams

- often inflation-linked (helping with liability-matching)
- in some countries, tax-effective
- returns insensitive to the fluctuations in business, interest rates, stock markets
- relatively low default rates
- low correlations with other assets classes (offering diversification potential)
- socially responsible investing (SRI) (providing public goods essential to society)⁸.

A caveat is necessary at this stage. The definition of infrastructure investment by its financial rather than physical characteristics creates new controversies. For example, what does the cash flow from a toll bridge have in common with the one from a school building project? Is the risk of an airport comparable to the risk of a gas distribution network? It is therefore important to look deeper into the investment process and vehicles.

Ways of investing in infrastructure

How can pension plans invest in infrastructure? Traditionally, pension funds bought and sold shares or bonds of listed companies operating in the sector. They may also have owned property in the sector. These days, there are a number of different ways to get exposure to infrastructure, and it is important to stress some distinctions.

Primary vs. secondary market

Primary market refers to financing the start-up phase of an infrastructure project, e.g. building a school. It involves procuring, then building and delivering the asset. Secondary relates to the operational phase of an infrastructure asset, e.g. a toll bridge in operation. For example, a financial investor buys the shares of the project special purpose vehicle (SPV).

The primary market is typically higher risk and requires higher return expectations than the secondary. In the former, investors' main interest is in the growth potential of the project. However, a high initial capital investment is required and the cash flow in the first years is likely to be negative. This should be followed by high payouts in later years. This J-curve-like profile of cash flows is known from private equity investments. In the secondary market, investors' main interest is in high and stable dividends. This resembles the regular income streams from real estate or bonds. In the traditional investment style classifications, secondary market investments would suit income-style investors while primary would suit growth-style investors.

Equity vs. debt finance

Infrastructure projects are financed through a combination of debt and equity. Investors might seek some sort of equity participation or be interested in buying infrastructure bonds issued by infrastructure companies. On the debt side, bank loans tend to dominate but bigger companies often

⁸ See, e.g. Underhill (2007). Furthermore, he argues that “sustainable infrastructure investment programmes offer substantial, tangible benefits to the labour movement”. However, Torrance (2006) does not find SRI to be a major factor in pension funds' interest in infrastructure (yet?).

issue infrastructure bonds (e.g., PFI bonds in the UK). Infrastructure projects are often highly leveraged, i.e. the equity portion is small.

Listed vs. unlisted companies

Infrastructure companies can be listed on the stock exchange or unlisted. Investment in unlisted companies works like a private equity investment.

Direct vs. indirect investment

For listed infrastructure companies, equity can be bought easily and directly on the stock exchange. For unlisted companies, direct investment is more complicated. Some bigger pension plans have started to invest directly in unlisted infrastructure companies, normally in partnership with other investors, including specialist funds. The more common route for pension funds is to invest indirectly, e.g. through a specialist private-equity type of fund.

General partner vs. limited partners

Most private equity-type funds take the form of Limited Partnerships. They are managed by a General Partner (GP) that is often part of bigger financial groups. The investors in such funds are referred to as Limited Partners (LP). LPs take a more passive investor role in the fund. Pension funds typically participate as LPs.

Listed vs. unlisted infrastructure funds

Infrastructure funds may also be listed on the stock exchange (such as closed end funds or investment trusts) or unlisted. There are a number of implications, such as different regulation, governance, investment constraints, reporting requirements, access to the funds, etc.

Domestic vs. international

Some infrastructure funds are purely domestic for reasons of investor preferences or regulatory and tax constraints. Other funds have a global or regional focus (e.g. European, Asian). There are already examples of infrastructure funds for single developing countries (e.g. India), regions (e.g. Africa), or global emerging markets.

Single-sector vs. multi-sector

Infrastructure investment vehicles may be single-sector (e.g. airport, transport, utilities) or multi-sector, seeking broader diversification across sectors.

Not all investment options are always available to pension funds in all countries. Nor may they be necessarily suitable. The selection of the investment route and vehicle depend on a number of factors, including the liability profile, the overall investment strategy and asset allocation, regulatory constraints, specific risk budgets and preferences, governance and management resources, etc.

The main focus of this paper is on pension funds investments in private equity-style funds and on direct infrastructure investments. Nonetheless, it is important to keep a broader perspective, and make comparisons with the traditional investment route via listed securities of infrastructure companies.

Many pension plans are used only to traditional portfolios but there are crucial differences with private equity-type funds, most importantly:

- time horizon of private equity investments (e.g. 5 years)
- investment stages (capital allocated, committed, drawn-down, invested, distributed)
- different valuation methodologies (not market priced, less frequent)
- return measurement (internal rate of return, vintage year returns instead of time-weighted, annual returns)
- J-curve effect (negative cash flows in the early years)
- institutional set-up (GP and LPs) and compensation structure.

Is infrastructure a separate asset class?

The investment banks and managers involved in infrastructure almost *unisono* claim that infrastructure should be treated as a separate asset class. However, not everybody is convinced that infrastructure is necessarily an asset class fundamentally distinct from others.

The first argument in favour follows from the traditional “physical” definition of infrastructure. However, some observers feel that infrastructure is just a particular sector in the economy. Consequently, the traditional approach of subsuming infrastructure companies under the usual stock market sectors (e.g. utilities, transport, energy shares) would still be valid. Idem for infrastructure bonds within corporate bonds. As for the new-wave infrastructure funds, they are effectively buy-out or venture capital funds in the sector, and would fit into the private equity class.

The second argument in favour of infrastructure as a separate asset class is based on common economic and financial characteristics as presented above. One can stress the stylized differences to other asset classes, in particular to private equity (e.g. longer time horizon, higher and more stable yields) and real estate (investment in companies rather than physical property; limited competition; bigger minimum investment size of \$ 100m or so).

However, the supposed commonalties and differences may just be sheer idealizations of a very diverse reality. These claims are still awaiting thorough scientific scrutiny. Even if infrastructure is considered a separate asset class, it is certainly a very heterogeneous one. The differences within infrastructure (e.g. primary vs. secondary) often feel bigger than the differences with other asset classes.

A third line of argument separates infrastructure out by its quantitative risk-return characteristics. A line that could be taken would be to show that the correlations of asset returns of subsectors within infrastructure are higher than the correlations with other asset classes. Some correlation statistics have been produced in recent years but a comprehensive study is still lacking.

What do pension funds think? For many, the question has not yet arisen. Listed infrastructure is typically still subsumed in the traditional equity and bond categories. Similarly, infrastructure property would normally show up in the real estate category.

For the new dedicated, alternative infrastructure investments, different routes are being taken. According to one research institute, 47% of active investors now have a separate allocation specifically to infrastructure, while 43% include it in their private equity portfolio and 10% in their real assets allocation.⁹ The majority of the separate allocations go into unlisted funds rather than direct investments.

Size of infrastructure market

There are many estimates for the market potential of private infrastructure finance produced by the financial industry. Ernst & Young, a consultancy firm, estimate that global private investment in infrastructure could exceed 1 trillion dollars annually.¹⁰ This would be of comparable size to the global real estate investment.

What is the size of the infrastructure market? RREEF, an investment manager, estimates the current value of European economic infrastructure to be €4 - €5 trillion. This compares to European stocks of € 8tr, bonds € 11tr and commercial property € 5tr.¹¹ The European social infrastructure market is calculated to be € 420bn. There is substantial potential for private investments in Asia and emerging markets.¹² Estimates for the global market size span over \$ 10 – 20tr.¹³ Clearly, this is not all open to private capital, and not in the short term.

Another approach is to quantify the size of the listed infrastructure market. Listed infrastructure companies have been well known to analysts for many years and they are contained in well-established stock market indices. S&P, the index provider, estimates the market capitalization of global listed infrastructure companies at about US\$ 2.1tr in 2007.¹⁴ Based on their indices, this makes about 6% of the size of the global equity market of about US\$ 44tr. The total value of the global infrastructure asset market is estimated at US\$ 2.8tr.

Several index providers have linked up with the investment industry to provide specialist listed infrastructure indices in recent years. In 2005, Macquarie Bank and the index provider FTSE launched a new Global Infrastructure Index series, providing data back to the year 2000. It is based on 238 stocks in 48 markets with a market capitalization over US\$ 1.6tr.¹⁵ The volume had grown threefold since 2000, through both new issues and higher valuations. However, the index is heavily biased towards utilities (over 80%) (see figure 1).

In 2006, the index provider S&P launched the Global Infrastructure Index. At the end of 2007, it included 75 liquid and investable companies in 22 countries with a combined market capitalization of US\$ 1.2tr. The breakdown by sectors is 39% transportation, 40% utilities and 21% energy. In terms of countries, the USA has the biggest share of 24% (this compares to 40% in the FTSE index).

⁹ Preqin (2008).

¹⁰ Ernst & Young (2008). Their calculation assumes that 10%-15% of public infrastructure spending could come from private source.

¹¹ RREEF (2006b).

¹² For an investor perspective on Asia, India and China, see RREEF (2007b), (2007), (2008).

¹³ Quadrant (2008).

¹⁴ S&P (2007).

¹⁵ FTSE (2007).

UBS, the investment bank, started a Global Infrastructure and Utilities Index in 2006 (calculated by S&P), separating utilities and infrastructure (in a more narrow sense)¹⁶. Of the 273 companies, utilities dominate while infrastructure only account for about 8.5% of the total market capitalization of US\$1.7tr. Within infrastructure only (ex utilities), toll roads (46%), communications (37%) and airports (10%) are large. In terms of regions, Europe is ahead at 64%, followed by North America at 22% and Asia Pacific at 15% (August 2008 figures). To remove the skew towards utilities, UBS introduced a Global 50/50 Infrastructure & Utilities Series in 2008 that equally weights the two subsectors.

S&P also launched an Emerging Markets Infrastructure Index in 2007, made up of 30 large stocks in 20 countries (including South Africa and Egypt) with a market capitalization of US\$ 103bn. It is dominated by companies in China, Russia and Brazil. Macquarie started their own Emerging Markets Infrastructure and Development Index in 2008 that covers 50 stocks in 15 countries with a total value of US\$ 570bn.

More index providers have recently launched infrastructure indices.¹⁷ Typically, these services also provide sub-indices covering different regions, countries, sectors, company sizes etc. Further developments include the calculation of single country indices such as the FTSE IDFC India Infrastructure Index, a Global Infrastructure Shariah Index by S&P, and the launch of exchange-traded funds (ETF) based on infrastructure indices.

The growth of infrastructure funds

The size of the unlisted infrastructure market is more difficult to measure. In 2006, the credit rating agency S&P reported that “it is estimated that \$ 100-150bn of fund money has been raised globally and is waiting to be placed in suitable assets in the infrastructure sector”.¹⁸ S&P also saw a rise in infrastructure deals and a strong increase in private equity firms’ activity in the sector.

In a new Infrastructure Review, Prequin, a private equity research company, reports a massive increase in fund-raising for infrastructure funds in recent years. A total of US\$ 34.9bn was raised by 18 funds in 2007, up from \$6.6bn raised by 11 funds in 2005. Another \$13.2bn was added by 6 funds early in 2008. By mid-2008, the trend was still unbroken. “There are currently 71 funds on the road seeking an aggregate \$90.8 billion – a dramatic increase on 2005 when there were four funds seeking \$ 1.8 billion.”¹⁹ (see figure 2)

Infrastructure finance has also been driven by the mergers and acquisitions (M&A) boom of recent years. According to Thomson Financial, the value of infrastructure-related deals exceeded \$300bn globally both in 2006 and 2007. Infrastructure funds have also become bigger, as have private equity funds and M&A deals in general. According to Prequin, the average size of infrastructure funds has increased massively from US\$ 159m in 2003 to US\$3.3bn in 2008.

¹⁶ UBS (2006a), (2006b).

¹⁷ Dow Jones and Brookfield, e.g., started in 2008 with a global index comprising 94 stocks in 22 countries and a value of about US\$ 300bn.

¹⁸ S&P (2006).

¹⁹ Prequin (2008). The Chairman of the Global Infrastructure Council talks of a “tsunami of 77 new infrastructure funds launched in the past 18 months”, aiming to raise capital commitments over US\$ 126bn. (Underhill (2007)).

The investors surveyed by Preqin, are 48% based in Europe, 19% in Asia and 33% in North America (one third of them in Canada). The share of the USA appears small compared to private equity in general, were the USA is the dominant market. This is explained by the relative late entry of private finance in infrastructure there.

In terms of capital sought, Preqin find 15 North-American funds targeting aggregate commitments of \$ 34bn, equating to 37% over the overall target volume. 23 European funds are targeting \$ 33bn and 33 funds in Asia and the rest of the world target \$ 24bn (as of mid 2008). There are “numerous” emerging market-focused funds but their fund-raising targets are smaller than those focused on the more established markets.

The majority of investments in infrastructure funds to date seem to have gone into transport (airports, ports, toll roads) but investors are trying to diversify into other sectors, such as communication infrastructure, waste, renewable energy and social infrastructure.

Pension funds investments

According to the OECD calculations, the funded pensions market (both occupational and work-related) has a size of US\$ 24.6tr worldwide. Of this, US\$ 16.2tr is held by pension funds.²⁰ On a simple calculation, an allocation of 3% of pension fund assets would make roughly US\$ 500bn available for infrastructure investments.

How much money have pension funds invested in infrastructure? Again, one should distinguish investments in listed and unlisted infrastructure equity.

Listed infrastructure

There are no hard data available. However, one can make a simple approximation.

Following earlier calculations, infrastructure stocks (including utilities) account for around 5% of the stock market. Watson Wyatt estimates that 56.4% of global pension assets were invested in equity in 2007.²¹ This gives a total equity investment by pension funds of over US\$ 8tr.

Assuming that pension funds have, overall, no sector bias for or against infrastructure stocks, a proportion of 5% implies they are invested with US\$ 400bn in listed infrastructure stocks. However, if only 15% of those are infrastructure in a narrow sense (ex utilities), as indicated by the indices, then the approximation figure comes down to US\$ 60bn.

Unlisted infrastructure

It is becoming accepted practice to name infrastructure as an alternative asset classes. In the alternative space, this typically means investment in infrastructure funds and direct investments in (unlisted) infrastructure companies.

There is hardly any independent and reliable data available on the investment of pension funds in infrastructure as alternative asset class. Data providers normally still classify infrastructure under the

²⁰ OECD (2007c).

²¹ Watson Wyatt (2008b).

“other” or “alternative” asset classes, without breaking that up further. They may also fall into the private equity or real estate categories.

Watson Wyatt, a consultancy, undertakes an annual survey of managers of alternative asset classes, where infrastructure was included for the first time in 2008.²² 17 managers had US\$ 45.8bn pension fund assets under management. This is about 5% of alternative investments. 53% of that was invested in Europe, 21% in North America, 22% in Asia Pacific and 4% elsewhere. In comparison to other alternative asset classes, North America comes out much lower while Europe and Asia Pacific comes out much higher.

According to this survey, the Australian Macquarie Group is by far the biggest manager, managing assets of over US\$ 20bn for pension funds, and a market share of 44%.²³ Macquarie is a pioneer and leader in the “Australian finance model”.²⁴

“Organizing infrastructure acquisition, funding and management, the Macquarie Bank Group has grown to include 900 professionals working solely in the infrastructure sector, managing approximately US \$45 billion in infrastructure equity invested in more than 100 assets across 25 countries.”²⁵

What is the percentage of pension funds assets allocated to infrastructure? In Australia, the Superannuation funds have been a key driving force behind the private capital flow into infrastructure. An average of approximately 5% of their assets is invested there, with some funds being in the double digits.²⁶

Globally, following the Watson Wyatt survey, the figure of US\$ 45.8bn given by fund managers would make about 2.8% of the US\$ 16.2tr global pension funds assets. However, other surveys do not confirm an allocation of such size.²⁷

Outside Australia, the weightings of unlisted infrastructure appear much lower. In the client survey of the consultant firm Mercer, only 0.7% of UK pension plans are shown to invest in infrastructure. The average allocation to infrastructure by those plans is 2.3% on an unweighted basis and 0.8% on a weighted basis.²⁸ For Continental Europe, only 1.1% of pension plans are said to be invested in infrastructure, with an average allocation of 2.0% to the asset class by those funds invested.

²² Watson Wyatt (2008a).

²³ There are 2 more Australian managers in the top 10, Colonial First State and AMP Capital. The others are RREEF (Deutsche Bank), Goldman Sachs, Alinda Capital Partners and Morgan Stanley (main domicile USA), 3i Group and Henderson (UK), Fortis Investments (Belgium).

²⁴ “The pioneer of the specialist fund model was Macquarie Group, although several local rivals including Babcock & Brown and Allco Finance joined in with gusto. The model involved buying infrastructure assets ... and bundling them into listed satellites and taking fees.” (Article “Infrastructure funds lose out in a scramble to divest their assets”, Financial Times, 25.08.2008).

²⁵ Torrance (2008).

²⁶ Access Economics (2005).

²⁷ It is not untypical for surveys to overestimate pension fund investments in alternative assets. They often include other institutional investors and financial services companies, or use a generous definition of “pension fund investments”.

²⁸ Mercer (2008).

Overall, the allocation of pension funds to new-style infrastructure funds has been growing in the last 3 years although from an almost nil base (outside Australia). Asset allocation weightings are still low on average, but there are a number of prominent examples of single big pension funds that have made substantial allocations (but not necessarily yet commitments or investments!).

Examples of pension fund investments

In Canada, the Ontario Municipal Employees Retirement System (OMERS) has several billions Can\$ invested in infrastructure through its subsidiary Borealis Infrastructure, set up in 1998. The Ontario Teachers Pension Plan (OTPP) is another example.

The big US pension fund, CalPERS, adopted a new investment policy in 2008 with a target 3% allocation of assets, or US\$ 7.2bn in infrastructure. The target returns is a net 5% above inflation over 5 years. Other US pension funds with infrastructure allocations or intentions include CalSTERS, the Washington State Pension Plan, Alaska Permanent Fund Corporation, Oregon PERD, the World Bank.

The major Dutch pension fund APG has a target of 2% for infrastructure in its Strategic Investment Plan 2007-2009. Given the size of the fund of € 300bn, this amounts to a volume of about € 6bn. Currently, the actual investment level is still well below that target. Other big pension investors in Continental Europe include the Danish ATP and PKA, Dutch PGGM, Finnish VER. In the UK, a number of big pension funds have announced going into infrastructure in recent years: USS, BT, RailPen. In addition, several local authority schemes have already started the process, e.g. LPFA. A number of smaller and medium-sized pension funds, private and public, are currently joining in.

The majority of pension fund investments are through infrastructure funds. However, some bigger Canadian and Dutch pension plans have started to invest directly. They are often co-investors with specialist funds, and thereby hope to build up the internal expertise in-house over time.

Several countries have established public pension reserve plans to fund the state pension promises. Some reserve funds have made a start in the infrastructure space, e.g., the Swedish buffer fund AP3, the Canadian Pension Plan (CPP). In 2008, the Irish National Pension Reserve Fund (NPRF) announced the desire to invest Euro 200m, i.e. 1% of its assets, in domestic public sector infrastructure projects. The overall target allocation to infrastructure for 2009 is 2%. The French FFR has also added infrastructure to its strategic asset allocation.

There are particular governance and investment issues to consider for them.²⁹ There is potential pressure, or desire, to invest in domestic infrastructure in order to help the development of the national or regional infrastructure, the local capital markets and the economic development in general.

Sovereign wealth funds (SWF) offer another potential major source of infrastructure funding. There has been an increase in investments of private equity and hedge funds by SWRs in recent times. So far, however, direct involvement in global infrastructure seems to have been small.³⁰ Nonetheless, there has been controversy about the possibility of “political investing” in some places already.

²⁹ See Yermo (2008) for an overview.

³⁰ McKinsey (2008).

Risk-return profile and benchmarks

What returns can pension fund expect from infrastructure investments? There are many figures flowing around in the financial and pensions industry but it is less clear what their substance is. History can offer little guidance. Surprisingly, there is still hardly any academic research on the subject.

What is the theoretical risk-reward profile? Early marketing brochures used charts showing “equity-type returns with bond-type risk” to describe the profile of infrastructure investment. Even if such a combination existed on the market, it would be unlikely to persevere for a very long time.

Pension funds are presented all sorts of graphics with stylized risk-return profiles: sometimes showing infrastructure with risk and return both higher than equities, sometimes both lower, and sometimes at higher returns and lower risk. Other charts plot different dots on the chart for early-stage and mature assets, or many more dots for different sectors (see figure 3 for an example).

A theoretical analysis could start with the Capital-Asset-Pricing-Model and establish risk premia for infrastructure assets. For primary infrastructure investments, e.g. they could include a credit premium, an illiquidity premium, a small cap premium, and perhaps others. This would speak for a return and risk expectation somewhere between public and private equity. On the other side, mature infrastructure services with high and stable dividends may have a risk-return profile closer to utility stocks with a low stock market beta, or corporate bonds.

In a nutshell, more work will need to be done in this field. The definition and heterogeneity of infrastructure asset is a crucial element in the analysis, and the specific mix of risk premia varies a lot across infrastructure investment vehicles.

For pension funds, these questions are not academic. How should they benchmark infrastructure investments? What could be considered success or failure? How should infrastructure be modelled in asset-liability-studies? How should they integrate it in their strategic asset allocation and risk budgeting exercises?

When the global infrastructure boom started, return expectations were often given as 15% plus pa by some providers.³¹ In their 2005 analysis of the Australian market, Mercer say that “most managers’ products fall into the category of diversified infrastructure funds that have an objective to deliver returns of 9 – 12% net of fees”.³²

RREEF makes the distinction between the total return expectations of mature (10 % – 14% pa) and early-stage assets (18% plus).³³ It should be noted, however, that such expectations are fuelled by leveraging the returns of the underlying portfolio. RREEF put a typical leverage rate of 40–80% for mature and 30–75% for early-stage assets.

The analysts’ projections also vary across infrastructure sectors. JP Morgan Asset Management, e.g., expects the lowest expected internal rates of returns for toll roads (8-2%) and PFI/PPP (9–14%),

³¹ Another issue is the definition of “return”. Infrastructure fund providers normally think in terms of expected internal rate of returns over a given period, while pension funds are used to think in terms of annual total returns.

³² Mercer (2005).

³³ RREEF (2007a).

and the highest for airports (15-18%) and broadcast network (15-20%), this against an infrastructure average of 10-15%.³⁴

Return expectations have been reduced more recently (even before the credit crunch 2007) from double digits to single digits, as more players crowded into the market and pushed bidding prices up. The “first-mover-advantage”, typical for new asset classes, has run out:

“(…) assets have been mispriced in the past and, despite their low-risk characteristics which would normally mean low returns, infrastructure returns have historically ranged anywhere between 10% and 35%. With demand and knowledge rising however, returns are predicted to stabilise around 5-6% in the long term, and in equilibrium.”³⁵

How do these return expectations compare to other asset classes? According to a recent survey, return expectations for the asset class infrastructure over 10 years are an annualized 9.5%, putting it in second place behind private equity (11.3%). In comparison, stocks are expected to return 9.0%, bonds 5.1% and cash 3.7%.³⁶

What is the expected risk profile of infrastructure? Expectations for volatility are typically set somewhere between equities and bonds. The asset-liability model used by Morgan Stanley Investment Management, e.g., compares five main asset classes.³⁷ It puts infrastructure (volatility 7.9%, return 9.3%) second only to bonds (4.4%) in terms of expected volatility and second only to private equity (10.0%) in terms of expected return (see table 1).

As an example for pension funds, the Dutch APG, expects a 10% return from infrastructure with a 7% risk. In comparison, the corresponding figures are 6% / 9% for property and 15% / 25% for private equity. CalPERS are looking for an annual return of inflation (CPI) plus 5% - 7%.

There is currently no established benchmark for infrastructure investments. In theory, there are a number of possibilities, including

- Absolute return figure (e.g. 9%)
- Inflation plus margin (e.g. CPI + 4%)
- Bond yield plus margin
- (Inflation-linked) bond index return plus margin
- Blend of equity, real estate, bond and private equity benchmark
- Listed infrastructure index or global equity index or blend of the two
- Peer group of unlisted infrastructure funds.

³⁴ Quadrant (2008).

³⁵ Torrance (2007b).

³⁶ Survey of 100 European pension schemes undertaken by Richard Davies Investor Relations for Financial News, 10.12.2007.

³⁷ Morgan Stanley (2007).

In practice, there seems to be much variety in the benchmarks set by different pension funds, with the first two seemingly the most important. The choice of an appropriate benchmark depends on a number of factors, relating both to the liability profile of the pension fund and the type of infrastructure investment (e.g. mature, growth or diversified).³⁸

Performance: listed infrastructure

What do the actual performance figures tell? There was a strong revaluation of the utility and infrastructure sectors on the stock markets in the mid-2000s. Marketing material uses charts showing the outperformance of these sectors against the general stock market. Rather problematically, this is frequently interpreted as a proof of the virtues of infrastructure as an asset class in general.

Some asset managers and consultants make a case in favour of listed infrastructure against unlisted investments.³⁹ They mention the advantages of higher liquidity, lower transaction and fund management costs, less leverage, market pricing, market size, etc. However, listed infrastructure would be more volatile and more correlated with the stock market.

Newell and Peng have undertaken studies for Australia, the USA and Europe. The main body of their analysis is based on the performance of listed infrastructure companies and funds, using the UBS Global Infrastructure and Utilities Index.

According to their index calculation, global listed infrastructure returned an average annual return of 12.8% in the 10 years to end 2006.⁴⁰ This compares favourably with returns of 9.2% for global equities, and 5.2% for bonds. However, infrastructure lags the performance of property that is presented as 16.5% over the period.

Newell and Peng further analyze the risk-adjusted performance of listed infrastructure over the 7 years 2000-2006. Globally, the annualized return is 18.2% with a risk figure of 14.1%, resulting in a Sharpe ratio of 1.07. This compares favourably with stocks that have a 7-year return of 5.8%, volatility of 16.2% and a Sharpe ratio of 0.17. Property again looked good over the period with an annual return of 30.0%, risk of 18.1% and a Sharpe ratio of 1.32. In the same analysis, the European listed infrastructure produces an annualized return of 20.3% with a risk figure of 13.7%, resulting in a Sharpe ratio of 1.26.

Another study of Newell and Peng deals with the USA, where the results are less favourable. Over the seven years to the end of 2006, US infrastructure underperformed (on a risk-adjusted basis) other asset classes in the USA but also infrastructure in other regions. They conclude: “While Europe, Canada, and Australia have a long tradition of privatization of infrastructure assets, the U.S. has only recently become actively involved, particularly with toll road privatization.”⁴¹

³⁸ For a discussion of benchmarks, see, e.g., Colonial First State (2007), RREEF (2007a).

³⁹ See, e.g., Timotijevic (2007a). Lazard (2006), e.g., work with a list of 70 preferred listed stocks with a value of US\$ 350m that show the typical infrastructure investment characteristics.

⁴⁰ Newell/Peng (2008b).

⁴¹ Newell/Peng (2008a).

Performance: unlisted infrastructure

Unfortunately, performance data are much less available for unlisted infrastructure investments. There are a number of reasons for this:

- The history of most unlisted infrastructure vehicles is quite short.
- Data is often proprietary and not made public.
- The reliability of performance data used in marketing is unclear.
- There is much variety and diversity in unlisted infrastructure funds.
- Funds use different benchmarks.
- There are no agreed performance reporting standards.
- Independent performance measurement services still do not measure infrastructure investments separately, or do not provide data yet.

It appears that the data situation is best for Australia where the experience with unlisted infrastructure investments has been the longest. In one of their papers, Peng and Newell analyze both listed and unlisted infrastructure investments in Australia.⁴²

They compare the risk-adjusted performance of 16 listed infrastructure companies (with assets of A\$ 55bn), 16 listed infrastructure funds (with assets of A\$ 27bn) and 19 unlisted funds (with 144 infrastructure assets of A\$ 4.5bn). The average annual return over ten years to Q2 2006 is 22.4% for listed and 14.1% for unlisted infrastructure. Unlisted infrastructure beat bonds (return of 7.2%), stocks (12.9%) and direct property (10.9%) over the period.

Volatility of unlisted infrastructure is shown as 5.8% and thereby much lower than for listed infrastructure (16.0%) and stocks (11.0%). Bonds (4.3%) and direct property (1.5%) are less volatile. Putting risk and return figures together, they calculate a risk-adjusted performance figure for unlisted infrastructure, giving a Sharpe-ratio of 1.5. Only direct property comes out higher (primarily because of the extremely low volatility input).

Unfortunately, no such analysis is provided for data outside Australia. There are a number of caveats, some of them given also by the authors. They include the valuation basis, the definition of risk, the indices used, the period analyzed (here before the credit crunch 2007/2008). Volatility measures for unlisted vehicles are not really comparable to those of listed vehicles as different valuation standards are at work.

Figures from the industry

Macquarie Bank used show strong risk/return statistics where unlisted infrastructure in Australia stands out very favourably against other asset classes with a return of 19.2% and risk at 6.5% for the period 1995-2002.⁴³ Strong performance claims are also made on a global scale, e.g. in 2006:

⁴² Peng/Newell (2007).

⁴³ Rakowski (2004)

“Macquarie believes it has demonstrated its value by providing investors with an average annual compound return of 19.4% across its managed infrastructure funds over an 11 year period.”⁴⁴

This is compared to a return of global equities of 9.7% and Australian listed infrastructure of 25.7%.

In 2005, Mercer published figures for unlisted infrastructure in Australia. They use a simple unweighted average of gross monthly returns provided by a very small number (three) of providers with a longer history.⁴⁵ The average annual return of unlisted infrastructure is 13.3% and annualized volatility 9.1% over the 10-year period 1996-2005. This compares favourably with other asset classes. Australian equities, e.g., show returns of 11.6% and volatility of 11.3%. The authors add a health warning:

“We urge extreme caution in interpreting these figures because of the appraisal basis of valuations in infrastructure as referred above. Also, investors have increased their investments progressively over the period. As the returns presented above are time-weighted, they do not reflect the actual overall returns achieved by investors on their investments through the period.”

Colonial First State Global Asset Management uses a similar approach with data of five unlisted Australian diversified infrastructure funds. They produce average annual return figures for the 10 years to June 2006 of 13.5% at a volatility of about 6%.⁴⁶

Quadrant⁴⁷, an advisory firm, lists returns since inception of seven North American pension plans. They range from 5.8% (Canada Pension Fund) to 29.0% (Ontario Municipal Employees).

For most pension funds, it is too early to say. The first performance figures now start to appear in the annual reports of pension plans but they are naturally of limited value. APG, for example, reported infrastructure returns of 41.3% in 2006 and 21.0% in 2007.

How much diversification?

An important reason for investment in alternative asset classes is the benefit of diversification. In simple terms, diversification is achieved by having assets that do not go up and down all at the same time. A measure commonly used is the statistical covariance of returns, or its square, the correlation of returns.

Such correlation analysis is relatively easy for listed infrastructure since the launch of such sector indices in recent years. For example, RREEF show a correlation matrix of global returns over 10 years, where listed infrastructure correlates with equities with a value of 0.59, fixed income of 0.39,

⁴⁴ Macquarie article of 03.03.06, www.macquarie.com.

⁴⁵ Mercer (2005).

⁴⁶ Colonial First State (2006).

⁴⁷ Quadrant (2008).

public real estate of 0.62, hedge funds of 0.0 to 0.1 (depending on index used), private equity -0.1 to 0.3. This confirms that listed infrastructure is affected by the general stock market volatility.⁴⁸

Actual, longer-term correlations statistics for unlisted infrastructure are only available for Australia. Peng and Newell's analysis of data there seems to confirm the diversification opportunity.⁴⁹ Unlisted infrastructure shows low correlations with other asset classes using quarterly data): 0.06 with equities, 0.17 with bonds, and 0.26 with direct property. In comparison, listed infrastructure has somewhat higher values for the correlation with equities (0.21) and bonds (0.38) but only 0.03 with direct property. Interestingly, listed and unlisted infrastructure only correlate with a value of 0.36 (see Table 2).

Mercer's analysis shows similarly low correlations of < 0.20 of unlisted Australian infrastructure against other asset classes and a value of 0.30 against unlisted property.⁵⁰ Colonial First State monthly correlations statistics of unlisted infrastructure are a bit higher for equities (0.27) and bonds (0.33), but negative for direct property (-0.20).⁵¹

It is also interesting to see how correlations change over time. Peng and Newell undertake a dynamic analysis of 5-year rolling correlations. It shows movements of correlations, e.g. of unlisted infrastructure against equities, between 0.30 and -0.15. In a similar analysis, Colonial First State's range is between 0.4 and 0.

In terms of future expected correlations, Morgan Stanley use similar very low levels of correlation of infrastructure other asset classes, ranging between 0.12 against private equity and 0.20 against bonds (see table 1).

There are a number of important issues with using correlation as a measure of diversification, including the exact definition of return data used, the frequency, the stability of correlations over time, and others. For example, the investment industry often uses short-term frequency data (e.g. daily) while pension funds tend to favour longer-term frequency (e.g. quarterly, annual, or longer).

Yet again, statistical analysis involving unlisted assets needs to be read with caution. There is a tendency to underestimate volatility and covariances, and overestimate the diversification potential of direct property, private equity and unlisted infrastructure. In summary, more work needs to be done.

Risks

It is an essential part of the fiduciary duty of those involved in pension fund investing to understand the specific risks of infrastructure assets. Risks go much further than the usual volatility statistics, and certain factors are just genuinely uncertain⁵².

At the level of infrastructure projects and companies, key risks include:

- Construction risk (e.g. the project is not completed on time; costs are higher than budgeted)

⁴⁸ RREEF (2007a).

⁴⁹ Peng/Newell (2007).

⁵⁰ Mercer (2005).

⁵¹ Colonial First State (2006).

⁵² See Stewart (2007) for some similar issues with hedge fund investments by pension funds.

- Operational risk (e.g. poor management, systems)
- Business risk (e.g. more competitors entering; change in consumer preferences and demand; technological advances)
- Gearing risk (typical leverage of 30-90%, resulting in a high exposure to interest rate risk; refinancing risk with higher inflation and interest rates; downgrade risk)
- Legal and ownership risk (unknown future litigation, planning consents not granted; lease running out)
- Regulatory risk (e.g. fee rises fall behind schedule)
- Environmental risk (unforeseen environmental hazards; action groups)
- Political and social risk (opposition from pressure groups; politicians may change their mind; corruption).

There are additional issues at the level of infrastructure funds and vehicles:

Liquidity

Unlike listed investment instruments, it is normally not so easy to reduce or liquidate investments at short notice. The secondary market is still immature in most places. Although the majority of pension funds do not have a high need for immediate liquidity, for some others this may be a crucial consideration.

Pricing

Pension funds are used to daily market price valuations of traded assets but infrastructure is typically valued on an appraisal basis, the frequency being quarterly or longer periods. Some know this already from property investments.

Timing

It is crucial to know at what point of time the pension fund's money is actually being invested. It is often overlooked, that even when pension funds have allocated and committed money to infrastructure, it may not have been drawn down and invested in infrastructure projects.⁵³ In fact, it seems that much of the new money allocated by pension funds is still not invested and therefore unable to generate the expected value added.

Governance, management, operations

Investing in infrastructure constitutes a major management and governance challenge for pension fund. What type of projects should be considered? What investment approach? What should be outsourced? What specific advisers are needed? Is it understood what fund managers do and what they invest in? Infrastructure is also an operational challenge for pension funds, including accounting, IT, risk management. Who will deal with all the small print in the (voluminous) paperwork?

⁵³ See Fraser-Sampson (2007). It should also be noted that industry figures (volume, performance, etc.) are often not clear about what stage of the process they refer to.

Barriers

Some of the inherent risks and issues with infrastructure investment can put pension funds off making such investments. Other barriers may be imposed from outside, e.g. by regulators. Those in the pensions and investment world mention several key barriers for infrastructure investment:⁵⁴

Novelty

Infrastructure (in the form of unlisted funds and direct investments) is a relatively new asset class and still little known in the pensions world. Most trustees have not gained any experience with infrastructure investments yet, and even for those involved, the experience is mostly shorter than 2 - 3 years.⁵⁵ Investing in something new always constitutes an unknown fiduciary risk: If something goes wrong, pension fund boards are very exposed.

Lack of knowledge and experience

Many pension plan trustees feel a lack of knowledge not only on their own side but also on the side of managers and advisers (investment consultants, actuaries, lawyers, auditors etc). Most infrastructure funds have been created only since the mid-2000s. Investment consultants have established dedicated resources to infrastructure analysis only recently.

Shortage of data

Despite the flurry of research reports issued by fund managers recently, pension funds still perceive a shortage of objective information and quality data. Independent performance and risk management has not gone very far as yet in regards to the collection, analysis, and publication of data. Academic research is also in its infancy.

Little know investment vehicles

Many pension trustees have no experience with private-equity type of funds, or have reservations about them. Still only a minority of plans is invested in private equity in general and would thereby have learnt the differences to mainstream investments. With infrastructure, the disorientation is even bigger because of the changing mix of equity, private equity, real estate and bond elements involved.

Lack of transparency

Transaction-driven investment firms prefer to sit on their proprietary information while pension fund investors like transparency on investment process and assets. Such issues are already heavily debated in the world of private equity and hedge funds.

Direct investment

Direct investment is not unknown to many pension funds from their property portfolios. However, it works differently for infrastructure because investment is in a company rather than a real

⁵⁴ Torrance (2006) undertook 40 interviews with people involved in pension funds, consultants and infrastructure industry in 2005. See also Inderst (2007), Global Pensions (2008) for a recent discussion of industry experts on pension fund opportunities and barriers for pension funds.

⁵⁵ Still in 2005, Torrance (2007a) finds it difficult to find actual pension fund investors in the UK and USA.

estate asset. Also, some pension plans have disinvested from direct property in recent years, instead opting for indirect vehicles.

The pros and cons for direct investments by pension funds are easy to see. Direct investment gives direct ownership and control over the investments, but requires much stronger in-house resources in the process of building, acquiring, managing and disposing assets. Transaction costs and investment sizes are relatively high. Indirect investment allows investment in smaller sizes and a higher degree of diversification. However, there is little control over assets and substantial fees need to be paid to external specialist firms. Direct investing in infrastructure is not a realistic option for most smaller and medium-sized pension funds.

Short lifespan of investment funds

Paradoxically, pension funds often find the lifespan of the infrastructure vehicle offered too short for their needs. There is a maturity mismatch between the typical length of private equity-type of funds (typically 10 years) with the liabilities of pension plans (often much longer). Trustees do not like the idea of selling assets that they might have bought for a long-term, steady, inflation-linked income stream. Providers prefer to realize investments and set up successor funds.

Culture

Many stakeholders of pension funds generally do not feel comfortable with the transaction business, or “deal-making culture”, of investment banks and private equity funds. Most pension funds are traditionally used to the longer-term “asset management” relationship with performance benchmarks and ad-valorem fees.

Fees

How are fees and transaction costs structured? What is the total cost load to the ultimate investor?

One area of contention is the appropriate level of management fee and the structure of incentive fees. Typically, there is a basic management fee of 1% - 2% and a performance fee of 10% - 20%, usually with a hurdle rate of 8% -12%.⁵⁶ Some (potential) investors feel that they are charged “private equity-type fees for bond/utility stock-type returns”.

Another area of concern for pension funds is the range of fees and costs incurred in the course of transactions of infrastructure projects. This includes acquisition fees, financial adviser and other advisory fees, finance arranger fees, fees for provision of funding, project development fees etc. The complexity of infrastructure deals will be matched by the level of fees charged, and this can substantially affect the net returns to the investor.

In recent years, many pension funds have been asked to raise their attention on transaction fees paid.⁵⁷ However, that analysis is still mostly focusing on securities with comparatively low fees in relatively competitive markets, i.e. mainstream equities and bonds. However, trying to chase higher

⁵⁶ Welsh (2007) According to the press, some fee renegotiations are already underway.

⁵⁷ E.g. the Myners (2001) report in the UK.

returns, pension funds are, ironically, now paying 50% higher fees on their assets on average than 5 years ago.⁵⁸

Conflicts of interest and other governance issues

Pension fund trustees should be aware of potential or actual conflicts of interest. Investment groups are often involved in different roles (financing, transactions, management). Fees often flow from the infrastructure fund to companies related the manager, e.g. within an investment banking group. This raises the question of how potential conflicts of interests are handled by the infrastructure fund manager. The debate about how to achieve an effective alignment of interests is open.⁵⁹

The “Australian infrastructure model” has raised a number of other corporate governance concerns in relation to the control of the sponsoring group, disclosure, transactions, valuations and auditing.⁶⁰

Regulatory, political and social risks

Infrastructure is not a pure “private” investment. Pension funds are aware that there is a “public” side too it, it is inherently “political”.⁶¹ Government involvement can be in various directions. The revenues of infrastructure projects are often protected by government concessions of 25 years or more (e.g. schools and hospitals). Other projects may have charges and fee increases controlled by a public regulator (e.g. toll roads). The public authorities also tend to keep a strong interest in the regulation of formerly nationalized monopolies such as utility distribution networks.

Given the visibility of infrastructure, it is not difficult to see that any such licences and regulations will be more under the scrutiny of the public than, e.g., more privately owned real estate. Different stakeholders have different interests; pressure groups may become vocal; media find easy targets particularly when things are not going well; politicians may take a short-term view driven by election prospects and intervene.

Many in the pensions industry are concerned about negative press in relation to private involvement in infrastructure. There are well-know examples of infrastructure companies that fill the headlines: Eurotunnel, Cross-City-tunnel in Sidney, BAA, and others. There is vocal opposition against PPP/PFI in the UK, using a number of arguments: lack of transparency, increasing costs of PFI projects, a build-up of huge off-balance-sheet liabilities for future taxpayers, excessive returns for the financial industry, etc.⁶²

⁵⁸ Watson Wyatt (2008c).

⁵⁹ Torrance (2007a) discusses the problems in the private governance of the infrastructure investment process, in particular the tensions between providers and investors over different time horizons, transaction and management fees, transparency, manager independence, flexibility in contracting.

⁶⁰ For a critical account of Australian listed funds in particular, see RiskMetrics (2008). Torrance (2007a) discusses the problems in the private governance of the infrastructure investment process, in particular the tensions between providers and investors over different time horizons, transaction and management fees, transparency, manager independence, flexibility in contracting.

⁶¹ See Torrance (2006) and (2008) for a discussion of the “financialization of urban infrastructures” and the impact of international firms on the local governance of public infrastructure.

⁶² For example, see Halligan (2006), or the article “PFI deals ‘not doing a good job’, says watchdog” (Financial Times, 2.9.2008).

Another concern is corruption of people involved both inside and outside infrastructure companies: managers, regulators, legislators, judiciaries. Pension fund directors worry about the financial consequences in a narrow sense, but also about how to handle the reputational risk.

Emerging markets

Political and social risks are being perceived as being particularly virulent in many developing markets.⁶³ Business surveys frequently show that political stability is a *sine qua non* for foreign investors. Clarity and continuity in the regulatory and supervisory approach is essential to create comfort with conservative pension boards.⁶⁴

Pension funds have generally reduced their “home bias” in recent years, even in real estate. However, investing in alternative assets in lesser-known constituencies poses a considerable governance challenge on the shoulders of pension trustees. Investors frequently demand a geographic restriction of infrastructure fund investments, e.g., to OECD countries.

Market excesses

Many industry observers believe that infrastructure had been undervalued in the 1990s. However, prices rose strongly in the 2000s. Infrastructure markets appeared to overheat in 2006/2007, where investors often felt a shortage of suitable projects or the overvaluation of assets. In 2006, the rating agency S&P warned, “the infrastructure sector is in danger of suffering from the dual curse of overvaluation and excessive leverage -the classic symptoms of an asset bubble similar to the dotcom era of the last decade”.⁶⁵

All sorts of players had entered the competition for infrastructure assets and companies: (competing and non-competing) corporations, investment banks, private equity and real estate investors, specialist funds and boutiques, insurance companies, pension plans, etc. Interesting alliances are being formed: Banks team up with institutional investors in order to raise capital for the big deals. It remains often less clear to the public who is acting as principal and who as agent.

Credit crunch and financial crisis

The credit crisis starting in 2007 has changed the investment scenario. Because of tighter liquidity and lending conditions, and the global economic slowdown, asset prices adjust downward and this affects private equity, real estate and ultimately infrastructure funds, too. The effect varies across infrastructure sectors and investment vehicles, depending on the level of gearing, the debt profile, the exposure to business cycles and other factors.⁶⁶

In 2008, some big Australian infrastructure funds started to divest assets, in some cases in order to reduce debt levels when interest costs rise and asset prices fall.⁶⁷ Another effect of the credit crunch

⁶³ See, e.g., Dewey Ballantine (2006).

⁶⁴ See Eberhard (2007) for a discussion of infrastructure regulation in developing countries.

⁶⁵ S&P (2006).

⁶⁶ See, e.g., Timotijevic (2007b), Freshfields (2008), Leen (2008).

⁶⁷ Article “Infrastructure funds lose out in a scramble to divest their assets”, Financial Times, 25.08.2008. Question marks over the listed infrastructure models are also being raised, see the article “Australian infrastructure managers feel the heat”, Financial Times, 22.09.08.

is that the comparatively stable infrastructure sector attracts “the new power brokers” of private equity firms, hedge funds and sovereign funds.⁶⁸

Regulatory constraints

Investment regulation for pension funds can affect infrastructure investments of pension funds in various ways, directly or indirectly. In addition, funding and solvency regulations, risk management regulations and others may also have an effect. The regulatory framework for pension plans differs substantially across countries. Consequently, investment regulations need to be seen in the context of the overall legal and regulatory framework of each constituency.

Vives (1999) developed a classification of how investment regulations can affect infrastructure investments by pension funds.⁶⁹ He found considerable impact of local investment regulation in Latin America, although there are big differences across the region, and certain things have, of course, changed since. Generally speaking, “it is no wonder that there has been so little participation” of pension funds in infrastructure.

“Even though pension funds can afford to wait for returns because their liabilities are long term, current regulations lead them to prefer short-term, steady returns.”

Adjusting and extending Vives’ approach, investment regulations potentially affect infrastructure investment in a number of ways.

Constraints on asset classes

- Quantitative constraints on asset classes (maximum or minimum limits)
- Outright exclusion of asset classes, funds or types of securities (e.g., real estate or private equity)
- Constraints on foreign investment (or non-EU, non-OECD) or currency exposure may also come into play

Listing or liquidity

- Exclusion of assets that are not listed and traded on organized security exchanges
- Maximum limits for unlisted investments
- The use of (minimum) liquidity indices

Concentration and diversification

- Investment limits in any single issue or single issuer
- Maximum percentage of ownership, e.g. in shares of any company

⁶⁸ McKinsey (2007).

⁶⁹ Vives (1999).

Ratings

- A requirement that infrastructure securities are rated, or have minimum rating (e.g. investment grade), or are being issued by a company that is rated

Valuation rules

- Requirement of mark-to-market valuation, effectively excluding privately traded assets.

Switching

- Allowing or disallowing plan members to switch pension administrator or funds, and how

Performance regulation

- Minimum returns (nominal or real, absolute or relative to some benchmark, e.g. an industry peer group)
- Capital guarantees

DC investment options

- Number of investment options open to members of DC or cash-balance plans
- Type of options (e.g. different risk levels)

Competition in pensions industry

- Is there a monopoly of pensions asset management?
- Competition between pension funds, banks, funds managers, insurers?
- Separate regulators and supervisors?

Prudent person principles

- Suitability of investments
- Need of diversification
- Understanding and resources

Risk management regulation

- Mandatory use of particular risk management techniques (e.g. value-at-risk)
- How is riskiness of infrastructure investments prescribed or determined?

Solvency and funding rules

- Regulation of quantitative solvency and funding rules (e.g. “traffic-light”)

- Rules for infrastructure investments in scenario analysis and stress testing?

Investment limits

Investment regulations have been relaxed in many countries over the last 10 years or so. ⁷⁰Nonetheless, there are still quantitative constraints in place in many countries. The annual OECD Survey of Investment Regulations of Pension Funds gives an overview for OECD member states and selected non OECD countries.⁷¹

National regulations do normally not (yet?) specify separate rules for infrastructure investments but there are other quantitative investment constraints relevant for infrastructure. These can be general limits to listed equities or bonds, and, most significantly, constraints on private investments and real estate. Countries can be grouped in three categories.

No quantitative limits

There is a first group of countries that have no investment constraints on the allocation to particular asset classes. They include countries with a tradition of the ‘prudent person’ rule such as the USA, UK, the Netherlands, Ireland, New Zealand, as well as countries that have recently introduced new pension fund legislation, e.g. Germany (Pensionsfonds), Belgium (OFP), Luxembourg (ASSEP and SEPCAV).

Quantitative constraints

A second group has some sort of limit on private investment funds and/or real estate but do not exclude such investments completely. For example, there is a 10% limit for private equity in Denmark and 30% in Spain. This group still forms the majority of the countries listed by the OECD.

Exclusion of asset classes

In group three, there are the countries that fully exclude investments in private investment funds, including Slovakia, Poland, Russia, Korea (corporate pensions), Mexico, Chile, South Africa. Real estate investment faces similar exclusions in most of these countries, although there can be a distinction between listed and direct.

Other limitations potentially also affect infrastructure investments, in particular on foreign assets, ownership concentration limits and limits on single issue or issuer. The countries under the prudent person tend to set only a general diversification requirement, without any quantitative restrictions.⁷²

For the other countries, quantitative restrictions are typical. Ownership concentration limits can be particularly binding as investment in infrastructure fund investments often require relatively big capital commitments. This is even more obvious for direct investments. Similarly, for investment limits in a single issue or issuer. Overall limits on foreign investments are still quite common in the

⁷⁰ For example, the European Pensions Directive 2003 sets the ‘prudent person’ rule as the underlying principle for capital investment.

⁷¹ OECD (2008b).

⁷² The exception is limits on self-investment in companies somehow related to the pension fund, e.g. 5% - 10% in the Netherlands.

OECD and beyond. In addition, some countries specifically prohibit investment in foreign private investment funds, e.g. Brazil, Columbia and South Africa.

What can governments and regulators do?

There are economic characteristics connected with infrastructure that potentially justify public intervention: public goods, natural monopolies, externalities, and other “market failures”. Infrastructure is also important in terms of social and defence policy. Furthermore, there are architectural, artistic and cultural aspects to it. On the other hand, public provision of infrastructure has its own problems.⁷³

Should governments give incentives to institutional investors, and pension funds in particular, to invest in infrastructure? Typical arguments in favour include:

- High social returns on infrastructure investments
- Enhancement of the country’s international competitiveness
- Development of local capital markets
- Natural long term match of assets and pension liabilities
- Political considerations (e.g. control of big financial resources by political parties or social partners).

The arguments against run along the lines of

- Mis-allocation of resources
- Eventually lower (private and social) returns as a result of that
- Political interventionism
- Bureaucracy and agency problems
- Corruption risk.

Positive incentives to investors can be in the form of, e.g., tax advantages, special subsidies or guarantees.⁷⁴ In his analysis of Latin America, Vives (1999) demands a development of local capital markets and infrastructure securities that are more adequate to pension fund investing. He also favours a gradual move towards a “prudent person” regulatory framework. However, he does not propose special subsidies, guarantees or tax benefits for pension fund infrastructure investments.

⁷³ See, e.g., Foldary (2005).

⁷⁴ Ernst & Young (2008) mention that some developing countries, such as India, Brazil, and China, provide infrastructure specific incentives designed to encourage private investments. The US has traditionally encouraged infrastructure financing in the public sector via the favourable tax treatment of municipal bonds.

Another way is to set positive targets of pension funds investments that should go into national infrastructure. It is clear that there is potentially a higher pressure by politicians and the public on public, mandatory and regional pension funds, including funded national pensions reserve systems or other sovereign funds.⁷⁵

In practice, the bigger issue for pension fund investment in infrastructure is barriers, negative incentives and unmanageable risks. It would be useful to distinguish between those that are in the remit of governments and regulators (e.g. investment restrictions, funding regulation, supervisory approach, political interference) and those that are more in the nature of the asset class (e.g. liquidity, size, novelty) or market-driven (e.g. data, fees, market excesses). Clearly, the distinction is not always clear-cut. For example, the transparency issue as all three ingredients, and so has knowledge and understanding.

Under the prudent person rule, infrastructure is an integral element in the asset-liability and risk management of the pension funds, the same way as other asset classes are. The particular characteristics (e.g. liquidity, private equity-type vehicle) need to be integrated in such exercise. An additional advantage is that investment policy can be more scheme-specific than under broad-brushed restrictions. Over time, one can therefore, expect much variation across countries and plans in terms of the allocations made, the vehicles used, the risk-return contribution expected, and the geographical and sectoral exposure to infrastructure.

The prudent person rule is not easily transferable into different legal and pension cultures. It requires high standards in pensions governance, risk management and supervision. This may give a rationale for specific investment restrictions for infrastructure (and alternative investments in general) by the regulators in some places. However, they should be clearly justified and reviewed on a regular basis.

OECD advice

The OECD has undertaken a major study examining what governments can do to respond to the complex infrastructure challenge.⁷⁶ It finds an important role for private sector finance to satisfy the high needs of future infrastructure investment. This would include “mechanisms for securing long-term financing for infrastructure (e.g. long-term infrastructure funds)”. The OECD presents 17 principal policy recommendations, including:

“2. Encourage investment by pension funds and other large institutional investors.”

“6. Examine the legal and regulatory framework conditions with a view to encouraging the emergence of fresh sources of capital and new business models for infrastructure.”

Private sector participation in infrastructure

Recognising the critical importance of infrastructure sectors for growth and sustainable development, the OECD Council approved in March 2007 the OECD *Principles for Private Sector Participation in Infrastructure (OECD 2007b)*⁷⁷. The *Principles* offer a practical guidance to help

⁷⁵ As an example, in 2005 the Irish NPRF was warned by the IMF of potential conflicts of interest that could arise with investments in domestic private-public partnerships.

⁷⁶ See OECD (2007a) for a set of policy recommendations.

⁷⁷ For further background information relating to the Principles see www.oecd.org/daf/investment/ppp

governments and other stakeholders properly assess and manage the implications of involving private actors in the financing, development and management of infrastructure. They provide a coherent catalogue of policy directions for consideration by governments, including appropriate allocation of roles, risks and responsibilities and framework conditions necessary to attract and make the best of private sector participation, while emphasizing the need for adaptation to local circumstances and needs.

The framework covers five main sets of challenges:

1. Deciding on the utility and nature of potential private sector involvement;
2. Providing a sound institutional and regulatory environment for infrastructure investment, including facilitating access to capital markets through the phasing out of unnecessary obstacles to capital movements and restrictions on access to local markets;
3. Ensuring public and institutional support for the project and choice of financing;
4. Making the co-operation between the public and private sectors work by promoting transparency and appropriate contractual arrangements;
5. Promoting private partners' responsible business conduct'.

Some examples of practical suggestions for how to overcome such challenges are included in the table below:

OECD Principles Private Sector Participation in Infrastructure	Issues for Government
<p>Enhancing the enabling institutional environment</p> <p><i>Principle 6: infrastructure projects should be free from corruption at all levels and in all project phases. Public authorities should take effective measures to ensure public and private sector integrity and accountability and establish procedures to deter, detect and sanction corruption</i></p>	<ul style="list-style-type: none"> • Consider sending strong political signal: adhere to international anti-corruption conventions (OECD and UN Conventions), inducing institutional reforms (procurement, judiciary), set a structure of disincentives and strengthen monitoring and enforcement • Reduce incentives: address corruption explicitly in the PPP framework, disclose information, define performance targets and outputs, introduce opportunities for challenges and reviews, and allow for private sector to benefit from contract (rather than by preventing it). Reduce incidence of transaction, gain from each transaction and increase probability of detection and penalty • Be aware and mitigate potential negative impacts of the fight against corruption: the costs related to proliferation of controls and institutions and the impacts on the poorest. Tackle corruption in an open, inclusive and equitable manner by suggesting alternatives so as to avoid negative consequences of removing illegal connections and closing below standard facilities
<p>Making the public-private cooperation work</p> <p><i>Principle 14: there should be full disclosure of all project-relevant information between public authorities and their private partners, including the state of pre-existing infrastructure, performance standards and penalties in the case of non-compliance. The principle of due diligence must be upheld</i></p>	<ul style="list-style-type: none"> • Concentrate on improving data quality overtime. Involve all stakeholders in data improvement strategy • Develop monitoring mechanisms • Invest time and capacity in the due diligence process • Clarify expectations and constraints
<p><i>Principle 17: regulation of infrastructure services needs to be entrusted to specialised public authorities that are competent, well-resourced and shielded from undue influence by the parties to infrastructure contracts</i></p>	<ul style="list-style-type: none"> • There should be a clear separation between the commercial and the regulation functions of the State • The regulatory body needs to be set up prior to the reform, enjoy stability to build-up credibility. Some flexibility is needed to adapt roles and responsibilities to initial conditions while being able to evolve with country development • There is a trade-off between independence and accountability of regulatory bodies. Key elements are predictability, transparency, consistency, capacity. Disclose information on decisions and procedures, submit to judicial reviews, which also help to protect against excessive political influence • Efforts must be made to avoid conflicts between contractual obligations and regulatory requirements • Regulating small providers requires some form of official recognition of their activities (through licensing and sub-contracting

	<p>arrangements for instance). Simplify opaque layers of regulation, inform on regulatory principles and lines of responsibility. Develop better monitoring of sector.</p>
<p>Principle 18: <i>occasional renegotiations are inevitable in long-term partnerships, but they should be conducted in good faith, in a transparent and non-discriminatory manner</i></p>	<ul style="list-style-type: none"> • The constantly changing environment that developing and emerging countries face (due to external shocks but also to internal factors such as population growth, migration to urban areas, evolution of poverty) calls for flexibility to adapt to new conditions • Some basic principles can help avoid unnecessary renegotiations: <ul style="list-style-type: none"> - be aware of trade-off between the risk borne by investors and the probability of renegotiations: less renegotiation when award based on higher transfer fee vs. lowest tariff and rate of return vs. price cap; - less renegotiation when a credible regulatory framework is in place (prior to reforms): existence of regulatory body and regulatory framework embedded in law (rather than decree or contract); - less renegotiation when regulation by objectives (on performance indicators) vs. by means (investments) as give flexibility (notably in terms of technology and strategies) to reach the objectives. For similar reasons, avoid multiplicity of criteria (potentially contradictory and leverage for renegotiation) and using criteria likely to be modified soon (tariffs); - avoid making renegotiations too easy and allowing possibility to default cheaply. Use of performance bonds, step-in rights and renegotiation fees can reduce incentive to renegotiate. Include contractual stipulations specifying under what circumstances revisions shall be considered; -develop credible and realistic terms of reference and contract specifications and avoid changes in policy orientation (adding additional provisions- such as delivery to the poor – after award)

In response to the international community's call for strengthened efforts to ensure adequate provision of water and sanitation services, a specific application of the *Principles* to the water and sanitation sector was conducted in 2007 and 2008⁷⁸. Further sectoral applications of the *Principles* are underway on transport⁷⁹ and energy.”

Pension fund asset management

In terms of pension fund related recommendations, the *OECD Guidelines for Pension Fund Asset Management* (2006) can be read to be broadly supportive of pension fund investment in infrastructure. First these Guidelines support the prudent person standard as the basic principle for pension boards: “such that the investment of pension assets is undertaken with care, the skill of an expert, prudence and due diligence.”

Second, the Guidelines caution against the use of investment category limits. Though recognising that some limits may be required (e.g. on unquoted shares, illiquid assets, investments that lack sufficient transparency, or in relation to single issues and issuers), the Annotations to the Guidelines note that: “the general intent of such portfolio limits is to implement the prudent principles of security, profitability and liquidity at the regulatory level, rather than pension fund level, and to effect or make an initial strategic asset allocation decision applicable to all pension funds subject to the legal provision. Portfolio limits may be applied to ensure a minimum degree of diversification and asset-liability matching.”

However, the Guidelines do not support the use of minimum investment floors for asset categories, which would prevent the use of some positive incentive mechanisms for infrastructure investment.

In terms of the valuation of pension assets, the Guidelines recommend the use of current market value or fair market methodology. However, “special methods may be needed to value securities in less liquid markets and assets such as real estate.” The special methods would, of course, also apply to many infrastructure investments.

Other OECD guidance for pension funds, such as the *Guidelines for Pension Fund Governance* (2005) can also be applied to infrastructure investing – notably the requirement for the governing boards of pension funds to understand the investments they are making or to seek suitably expert advice.

Risk-management of alternative assets

In addition to OECD guidance, the International Organisation of Pension Supervisors (IOPS) has issued a set of *Good Practices in Risk Management of Alternative Investments by Pension Funds* (2008).

The introduction to the IOPS (2008) guideline recognizes some specific characteristics of alternative investments such as “the application of innovative financial products and derivatives, the use of extensive leverage, illiquidity of underlying investments, a greater reliance on the skill of the

⁷⁸ OECD (2008. Forthcoming). Optimising private sector participation in water infrastructure. A checklist for public action.

⁷⁹ Regional Background Paper for the 2008 Regional Roundtable of the NEPAD/OECD Africa Investment Initiative. How to increase sound private investment in Africa's road infrastructure: building on country successes and OECD policy tools.

manager and the absence of a meaningful benchmark”. Such investments may be complex, illiquid or opaque.

Pension funds need to address the specific risks, e.g. liquidity, operational, reputation, integrity, counter-party or outsourcing risk, as well as inherent issues such as limited transparency, valuation weaknesses, control issues and conflicts of interest.

As alternative investments often have divergent, asymmetric risk and return profiles, limited transparency and liquidity, IOPS Good Practice No. 1 requires pension funds to “take appropriate account of the specific risk and return characteristics of these investments”. Good Practice No. 2 demands adequate diversification and avoidance of undesirable concentrations of risks.

The commentary to Guideline 2 recommends the application of appropriate stress testing procedures, and adds: “Illiquid portfolios can often move in concert in certain stress events. Such common exposures might not be picked up in normal mean-variance analysis.” This is a useful recognition of the limitations of traditional quantitative risk management. In theory and practice, correlations of alternative asset classes with each other and with traditional asset classes are far from set and proven. Furthermore, in the new debate in risk management, it is questioned to what extent such correlations would ever be stable and consistent. There are question marks over stress testing procedures imposed on financial institutions, and this has become more widely recognised since the credit crisis 2007/8.

In practice, all this is difficult to achieve, for infrastructure in particular, where the risk-return profile is still controversial. Pension funds and supervisors do not have well-established standards available, and a lot of the risk is not easily quantifiable.

Other important rules and recommendations by international organizations include the European Pension Fund Directive (2003), the IOPS Principles on Pension Supervision (2006), the AIOS Principles of Pension Regulation and Supervision (2003).

Conclusion and Recommendations

As the need for investment in infrastructure continues to grow, private sector financing for infrastructure projects has developed around the world. Given the long-term growth and (potentially) low correlation aspects of infrastructure investments, pension funds have also shown interest in increasing their exposure to this area, along with their move into alternative assets.

Such investments cover a wide spectrum of projects – from economic infrastructure such as transport, to social projects such as hospitals – and involve different forms of financing (primary vs. secondary, debt vs. equity, private vs. listed, direct vs. indirect). Data explaining the size, risk, return and correlations of this diverse asset class is therefore limited, which may be making pension fund investors cautious. Given investing in such assets also involves new types of investment vehicles and risk for pension funds to manage – such as exposure to leverage, legal and ownership issues, environmental risks as well as regulatory and political challenges – such caution may well be justified.

However, if governments wish to help infrastructure developers tap into potentially important sources of financing such as pension funds, certain steps could be taken:

Enhance the investment environment

- Decide on the utility and nature of potential private sector involvement

- Provide a sound institutional and regulatory environment for infrastructure investment, including facilitating access to capital markets through the phasing out of unnecessary obstacles to capital movements and restrictions on access to local markets
- Ensure public and institutional support for the project and choice of financing
- Make the co-operation between the public and private sectors work by promoting transparency and appropriate contractual arrangements
- Promote private partners' responsible business conduct'

Remove regulatory barriers

- Promote the prudent person standard of investment
- Remove unnecessary or overly restrictive quantitative investment limits (asset category ceilings, prohibitions on investing in unlisted, overseas assets etc.)

Others

- Support stronger efforts in independent data collection and objective information provision in the field of infrastructure investment
- Recommend upgrade of national and supra-national statistical data collection with a view to better capture infrastructure (and other alternative asset classes)
- Promote higher transparency standards in private equity vehicles and direct investments
- Recommend the establishment of international guidelines for performance and risk measurement of infrastructure (and other alternative) investments
- Encourage the study of more advanced risk analysis beyond the traditional measures, including the specific risks of infrastructure. Advice against a supervisory approach that creates false certainties in risk management
- Encourage improvements in knowledge and understanding of pension fund stakeholders and supervisors on infrastructure assets.

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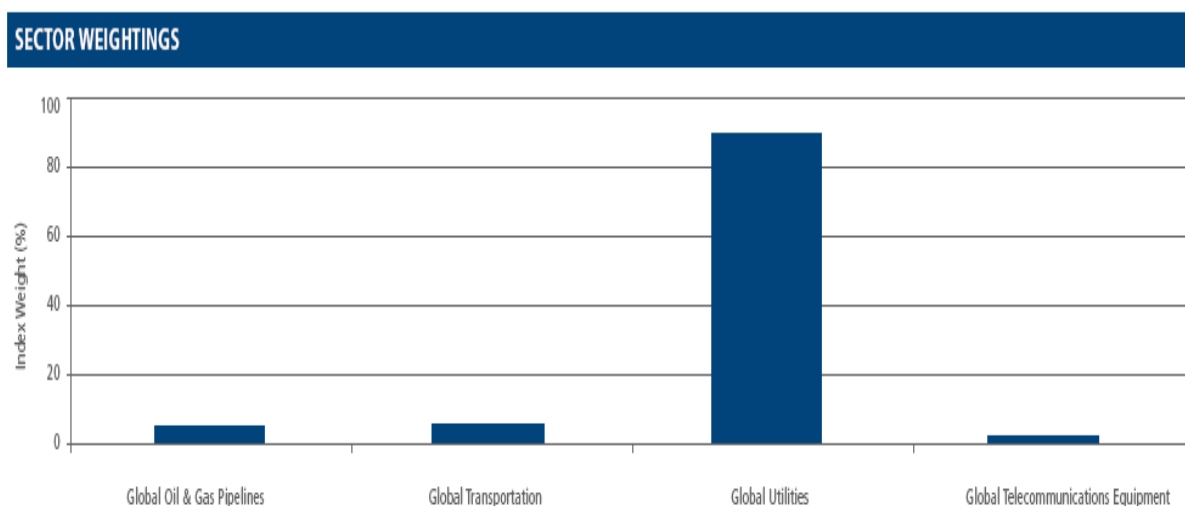
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APPENDIX:

Figure 1

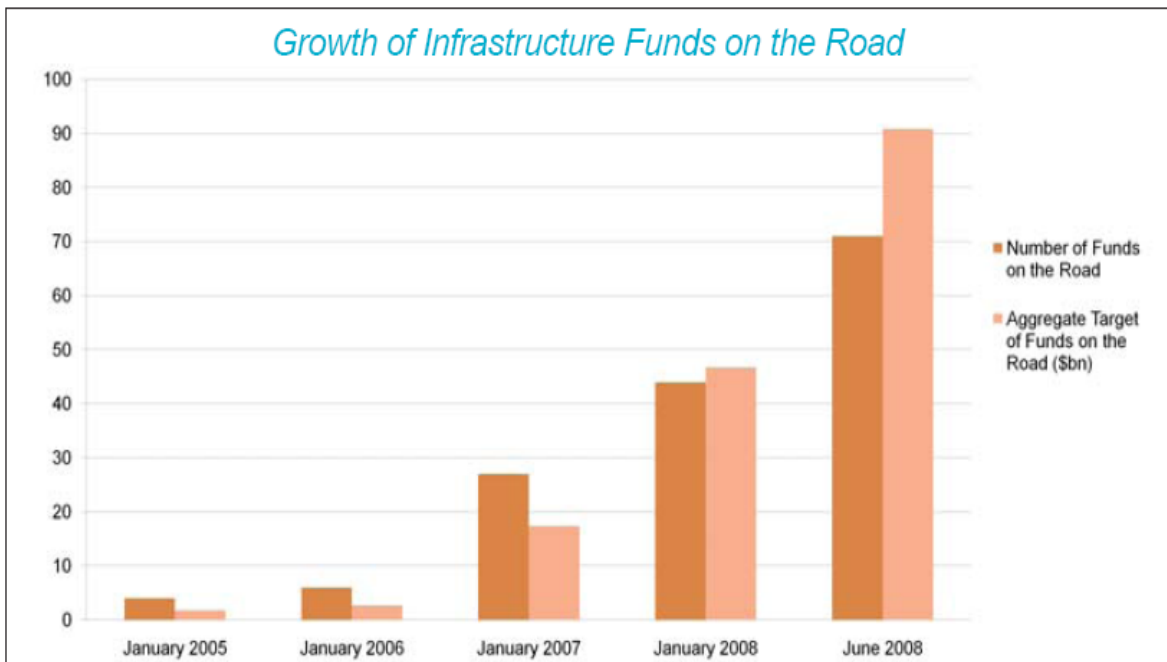
5.1.1 Macquarie Global Infrastructure Index Sector Breakdown



Source: FTSE Group, data as at 28 Feb, 2007

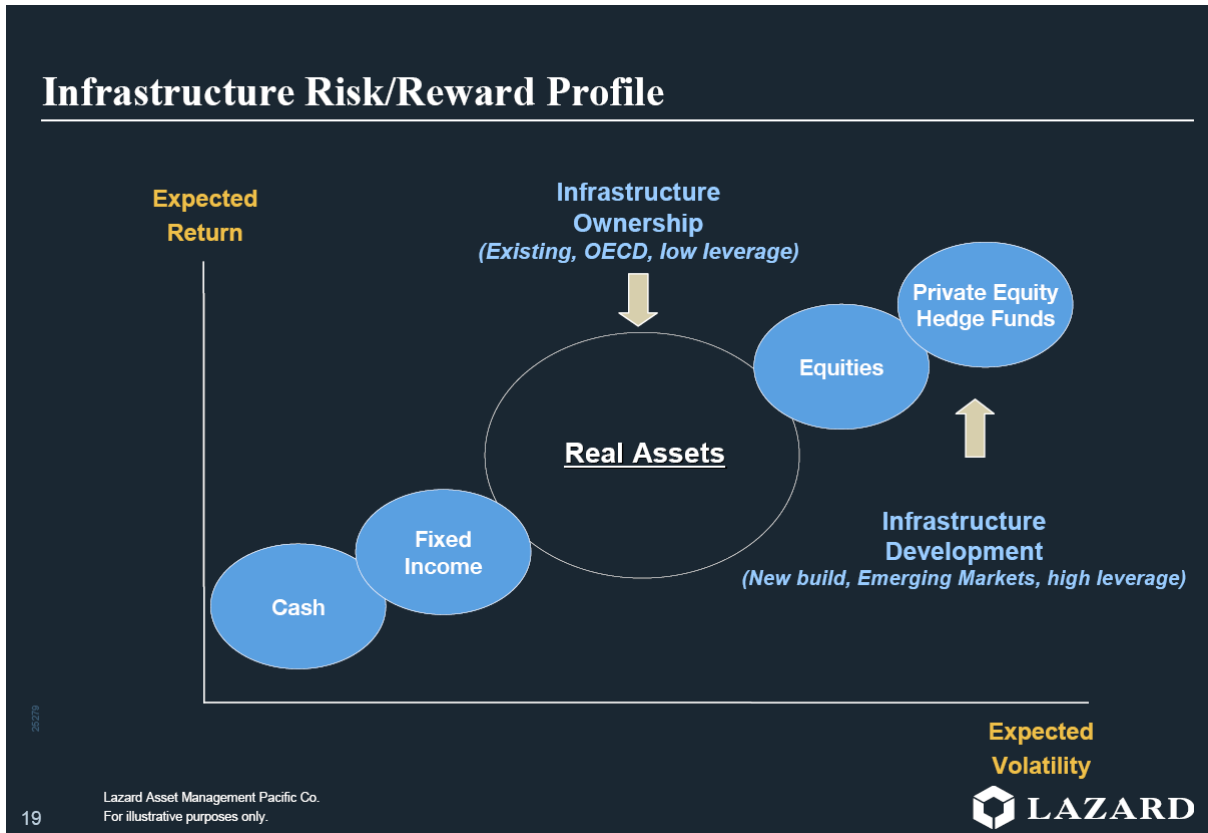
Source: FTSE (2007)

Figure 2



Source: Preqin (2008)

Figure 3



Source: Lazard

Table 1

Figure 2: Expected Returns and Correlations^{1,2}

ASSET RETURNS	EXPECTED RETURN ³	ANNUALIZED VOLATILITY ⁴	WORST 5% RETURNS ⁵		
Bonds (5-year duration)	5.2%	4.4%	3.1%		
Equities	8.1%	18.2%	1.1%		
Real estate	7.0%	9.5%	(1.3)%		
Infrastructure	9.3%	7.9%	(1.5)%		
Private equity	10.0%	30.2%	(7.3)%		
CORRELATIONS ⁶	BONDS	EQUITIES	REAL ESTATE	INFRASTRUCTURE	PRIVATE EQUITY
Bonds	100%	11%	40%	20%	6%
Equities		100%	8%	15%	34%
Real estate			100%	21%	5%
Infrastructure				100%	12%
Private equity					100%

Source: Morgan Stanley Asset-Liability model

Data as of May 2007

There can be no assurance that estimated returns or projections can be realized or that actual returns or performance results will not be materially lower than those estimated herein. The expected returns do not reflect the performance of any Morgan Stanley Investment Management investment.

Source: Morgan Stanley (2007)

Table 2**Table 5: Inter-asset Correlation Matrix: Q3:1995-Q2:2006**

	Composite Infrastructure	Infrastructure	Toll Roads	Airports	Utilities	Unlisted Infrastructure	Direct Property	LPTs	Stocks	Bonds
Composite Infrastructure	1.00									
Infrastructure	0.86*	1.00								
Toll Roads	0.85*	0.99*	1.00							
Airports	0.38*	0.40*	0.26	1.00						
Utilities	0.82*	0.42*	0.42*	0.14	1.00					
Unlisted Infrastructure	0.31*	0.36*	0.36*	0.26	0.16	1.00				
Direct Property	-0.08	0.03	-0.01	0.36*	-0.21	0.26	1.00			
LPTs	0.52*	0.40*	0.39*	0.06	0.47*	0.24	0.19	1.00		
Stocks	0.15	0.21	0.14	0.54*	0.01	0.06	0.14	0.17	1.00	
Bonds	0.57*	0.38*	0.38*	-0.03	0.57*	0.17	-0.12	0.49*	-0.21	1.00
Inflation	-0.20	-0.22	-0.21	-0.23	-0.12	-0.27	0.10	-0.13	-0.09	-0.25

*: significant correlation (P<5%)

Source: Peng/Newell (2007)