The Evolution and Future of Social Security in Africa: An Actuarial Perspective

Presented by Members of the Actuarial Society of South Africa Social Security Committee
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Outline

Introduction

African Highlights

General Framework of Discussion/Presentation
  - Benefits Covered
  - International and African Experience
  - Current African Challenges
  - Actuarial Involvement in Africa

Areas Covered
  - Retirement Benefits
  - Healthcare
  - Unemployment Benefits
  - Broader Social Security Nets
  - Survivor Benefits
  - Family Benefits
  - Education
  - Work Injury Benefits
  - Disability Benefits
  - Motor Vehicle Accident Benefits
  - Gender Inequality
  - Child/Orphan Grants

Actuarial Perspective and Contribution
Africa
Introduction

- **Aim:** Provide a high level summary of Social Security developments within the African context
- **Role of Social Security in correcting several historical social ills.**
- **Marked increase in empowerment programs and grants for women and the youth.**
- **Actuarial Involvement:** Assessing and ensuring sustainability of Social Security benefits

<table>
<thead>
<tr>
<th>old age</th>
<th>unemployment</th>
<th>sickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>invalidity</td>
<td>work injury</td>
<td>maternity</td>
</tr>
<tr>
<td>loss of main income earner</td>
<td>education</td>
<td>vulnerable children</td>
</tr>
<tr>
<td>healthcare</td>
<td>gender related benefits</td>
<td>motor vehicle accident benefits</td>
</tr>
</tbody>
</table>
Introduction

The main factors considered driving forces behind Social Security spending patterns are as follows:
Introduction

• Brief economic and demographic features of Africa as follows:
  – Expected growth in GDP in 2014 for Sub-Saharan African countries was 5.9% compared to 2.1% for developed countries;
  – 11 of the 20 fastest growing economies in the world are in Africa;
  – 13 African countries were expected to grow at a rate higher than 7% in 2013;
  – Average gross debt to GDP ratio for Sub-Saharan African countries of 36% as opposed to 109% for developed countries;
  – Countries with the 10 youngest populations are all in Africa;
  – 41% of the African population are under the age of 15;
  – Africa is expected to have the world’s largest working population in 30 years.

Bhawan, McKay, Patel
### World’s Ten fastest GDP growth rates - 2001 to 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola *</td>
<td>11.1%</td>
</tr>
<tr>
<td>China</td>
<td>10.5%</td>
</tr>
<tr>
<td>Myanmar</td>
<td>10.3%</td>
</tr>
<tr>
<td>Nigeria *</td>
<td>8.9%</td>
</tr>
<tr>
<td>Ethiopia *</td>
<td>8.4%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>8.2%</td>
</tr>
<tr>
<td>Chad *</td>
<td>7.9%</td>
</tr>
<tr>
<td>Mozambique *</td>
<td>7.9%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>7.7%</td>
</tr>
<tr>
<td>Rwanda *</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

* African country
Sources - The Economist

### World’s Ten fastest projected GDP growth rates - 2011 to 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>9.5%</td>
</tr>
<tr>
<td>India</td>
<td>8.2%</td>
</tr>
<tr>
<td>Ethiopia *</td>
<td>8.1%</td>
</tr>
<tr>
<td>Mozambique *</td>
<td>7.7%</td>
</tr>
<tr>
<td>Tanzania *</td>
<td>7.2%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>7.2%</td>
</tr>
<tr>
<td>Congo *</td>
<td>7.0%</td>
</tr>
<tr>
<td>Ghana *</td>
<td>7.0%</td>
</tr>
<tr>
<td>Zambia *</td>
<td>6.9%</td>
</tr>
<tr>
<td>Nigeria *</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

- 16% of the world’s population but 2.4% of the world’s GDP.
- Proportion of people living below poverty line in Sub-Saharan Africa reduced from 51% in 1981 to 47% in 2008.
- China reduced the proportion living below the poverty line from 84% in 1981 to 13% in 2008.

Social Security strategies need to factor in the economic and demographic developments.
Pensions
Retirement

Provision objectives

Smooth consumption from working life into retirement

Protect against poverty in old age
# International Experience

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of countries</th>
<th>Type (may be multiple)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mandatory DC, replacement target = % lifetime earnings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mandatory DC, independent investment management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Contributory, state financed</td>
</tr>
<tr>
<td>World</td>
<td>193</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>46</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>20</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10%</td>
</tr>
</tbody>
</table>
Major Challenges

- Equity and adequacy: coverage rates modest; self-employed, informal sector
- Affordable: promise generally large; already large % GDP
- Sustainability: many PAYG; scheme rules; demographic change
- Governance: generally weak
- Administrative concerns: costly, sometimes weak
# Potential Intervention Areas

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comments</th>
<th>Address</th>
</tr>
</thead>
</table>
| Create safety net | • Simple, small, universal  
• Fiscally viable and sustainable | Equity |
| Improve coverage rates | • Private and informal sectors  
• Self-employed | Adequacy |
| Rethink earning-related protection | • Realign benefits and contribution rates | Affordability |
| Recognise / fund a portion of liabilities explicitly | • Depends on financial viability | Sustainability |
| Protect benefits | • Improve governance and accountability  
• Diversify provision sources  
• Legally recognise benefits | Governance |
# Reform Types

<table>
<thead>
<tr>
<th>Type</th>
<th>African example</th>
<th>Potential issue(s) addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parametric</td>
<td>Kenya</td>
<td>Sustainability</td>
</tr>
<tr>
<td>• Retain existing structure</td>
<td></td>
<td>Affordability</td>
</tr>
<tr>
<td>• Change: Contribution parameters</td>
<td></td>
<td>Adequacy</td>
</tr>
<tr>
<td>Benefit parameters and / or</td>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td>Eligibility conditions</td>
<td></td>
<td>Predictability</td>
</tr>
<tr>
<td>Non-financial (unfunded) DC</td>
<td>Egypt (terminated)</td>
<td>Sustainability</td>
</tr>
<tr>
<td>• Link between benefits &amp; contributions</td>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td>Full/part prefunding</td>
<td>Nigeria</td>
<td>Sustainability</td>
</tr>
<tr>
<td>Incorporating behavioural economics</td>
<td>Rwanda</td>
<td>Adequacy</td>
</tr>
<tr>
<td>• Nudge into better decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Partial) individual contribution match by state</td>
<td></td>
<td>Adequacy</td>
</tr>
</tbody>
</table>

Other possibilities:
- Limit transaction costs
- Expand sources of provision
- Improve access
- Mandate participation
- Create a single UIF and retirement account
## Intervention Pre-requisites

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aligned to goals of retirement system</td>
</tr>
<tr>
<td>Conducive macro and fiscal environment</td>
</tr>
<tr>
<td>Credible government commitment</td>
</tr>
<tr>
<td>Local buy-in and leadership</td>
</tr>
<tr>
<td>Supporting structures in place</td>
</tr>
<tr>
<td>• Adequate regulation and supervision</td>
</tr>
<tr>
<td>• Effective Operating Systems</td>
</tr>
</tbody>
</table>
Unemployment

PLEASE, HELP
NO WORK
2 KIDS
God Bless
Introduction

Definition

African Demographic

State Benefits

Solution?

Consequences

MDG (Millennium Development Goal) 1 & 8

Unemployment
Benefits Covered

Limited Income Support

Unemployment Insurance (UI)

Eligibility Criteria

Unemployment Assistance (UA)

Contributory Schemes

Employment-related Social Assistance

Non-Contributory Schemes (tax-financed)
African & International Experience

AFRICA
- Limited Published Documents
- Challenges
- Demographic Differences

INTERNATIONAL
- Hidden Employment
- Reemployment Incentives
- Severance Payments
- Hiring Subsidies
- Compulsory Enrolment in formal employment
- Continuous Evaluation
Current African Challenges

- Administrative Burden
- Access To Payments
- Limited Coverage
- Availability Of Information
- Corruption, Fraud & Eligibility Enforcement
- Varying Financial Performance
- Lack Of Coordination
Health
Healthcare

“access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost”
Goal 4: Reduce child mortality rates

   Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Goal 5: Improve maternal health

   Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
   Target 5B: Achieve, by 2015, universal access to reproductive health

Goal 6: Combat HIV/AIDS, malaria, and other diseases

   Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS
   Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
   Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
Health Insurance Models and Funding Models

**Beveridge Model:**
- Great Britain
- Spain
- Scandinavia
- New Zealand
- Hong Kong
- Cuba

**NHI Model:**
- Canada
- Taiwan
- South Korea

**Bismarck Model:**
- Germany
- Switzerland
- France
- Belgium
- Netherlands
- Japan
- Latin America

**Out-of-Pocket Model:**
- Rural regions of:
  - Africa
  - India
  - China
  - South America
African Challenges in Healthcare

- Healthcare is inequitable and inaccessible to a large proportion of the population
  - Quadruple burden of disease
  - Shortage of healthcare professionals
  - Lack of adequate infrastructure
- Poor technology – both medical technology and IT
- High unemployment rates – low level of funding
  - Poor education
  - Poor living conditions
  - Cultural diversity
  - Political/Civil unrest
  - Geographical density
  - Crime and corruption
Broader Social Security
Broader Social Security Nets

- Survivor Benefits
- Family Benefits
- Work Injury Benefits
- Disability Benefits
- Motor Vehicle Accident Benefits
- Gender Inequality
- Child/Orphan Grants
- Education
Social Security in Africa

- Pensions
- OVC Grants
- Unemployment Benefits
- Healthcare
- Gender Equality Initiatives
- Survivor Benefits
- Family Benefits
- Work Injury Benefits
- Disability Benefits
- Motor Vehicle Accident Benefits
- Education
- Others

Actuaries

MDGs
- high economic growth rates
- substantial Social Security challenges

Planning
- credible data
dynamic considerations

Affordability and sound and efficient management of existing resources
General Actuarial Contribution

- Ensure adequacy and appropriateness of benefit packages
- Maximise population coverage
- Actuarial costing exercises

- Monitor sustainability and mitigate against unexpected losses
- Financial management
- Resource and utilisation management

- Longitudinal cohort studies
- Contributing to the development of databases
- Assist in setting policy
- Consideration to the effects of national economic growth, demographic changes and global technological improvements

- Asset-liability modelling
- Investment strategies
- Accountability and independent review
- Reporting and communication management
- Performance measurement

Design

Implementation

Internal and external environment

Monitoring and review
Questions

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