Exploring options for comprehensive social security in SADC: recent developments in tax-benefit microsimulation modelling in South Africa, Namibia, Mozambique, Tanzania and Zambia using EUROMOD
What is microsimulation?

“Microsimulation models use micro-data on persons (or households, or firms or other micro-units) and simulate the effect of changes in policy (or other changes) on each of these units. Differences before and after the change can be analysed at the micro-level to show the overall effect of the change.” (Mitton et al., 2000)
Purposes of Microsimulation

- How does the *current* tax and benefit system impact upon individuals in different groups (e.g. income groups, family types)?
- To what extent does the *current* tax and benefit system reduce poverty and inequality?
- What would be the *cost* of implementing social security *policy reforms*, for example:
  - universalising an existing benefit by removing the means-test,
  - introducing a new benefit,
  - increasing the monetary value of a benefit
- ...and what would be the *impact on poverty and inequality* of these reforms?
EUROMOD, SAMOD, NAMOD and other ‘MOD’s

**SASPRI** researchers have developed a number of static tax-benefit microsimulation models for SADC countries, based on an existing model ‘EUROMOD’.

**EUROMOD** has been developed over a 20 year period by Professor Holly Sutherland and colleagues at the University of Essex and is currently used in over 25 countries in Europe.

**SAMOD** is ten years old this year. It was the first application of the EUROMOD platform in a developing country context.

**NAMOD** was developed in 2012.

**SOUTHMOD** collaboration...
A major research program in which tax-benefit microsimulation models for selected developing countries in Africa and elsewhere are in the process of being built.

The outcome of the work will be a set of models for individual countries and research papers that contain simulation analysis of tax and benefit reforms.

SASPRI is, in the first round, working with local partners to develop models for Mozambique, Tanzania and Zambia.

Updating SAMOD and NAMOD is also part of SASPRI’s SOUTHMOD activity.
South Africa: SAMOD

- Initially developed in 2006 for South Africa’s national Department for Social Development (as part of the UK DfID-funded Strengthening Analytical Capacity for Evidence-based Decision-making (SACED) programme). Policies recently updated as part of the SOUTHMOD programme.


- New 2014/15 LCS dataset imminent.
### South Africa: SAMOD

#### Social grants
- Child Support Grant
- Foster Child Grant
- Care Dependency Grant
- Disability Grant
- Old Age Grant
- Grant-in-aid

#### Direct and indirect taxes
- Personal Income tax
- Value-added Tax

#### Social insurance contributions
- Unemployment Insurance Fund
Initially developed in 2012 for the Namibian government, funded by UNICEF Namibia. Policies recently updated as part of the SOUTHMOD programme.


<table>
<thead>
<tr>
<th>Social grants</th>
<th>Direct and indirect taxes</th>
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</table>
| • Child Maintenance Grant
• Foster Care Grant
• Old Age Grant
• Disability Grant      | • Income tax
• VAT                   |
Mozambique: MOZMOD

Currently being developed collaboratively by SASPRI and the Mozambique Ministry of Economy and Finance as part of SOUTHMOD.

Based on Mozambique Household Budget Survey (HBS) 2008/09.

<table>
<thead>
<tr>
<th>Social grants</th>
<th>Direct and indirect taxes</th>
<th>Social insurance contributions</th>
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<tbody>
<tr>
<td>• Basic Social Subsidy Programme</td>
<td>• Personal income tax (employment)</td>
<td>• Social insurance contribution</td>
</tr>
<tr>
<td>• Direct Social Subsidy Programme</td>
<td>• Simplified tax (self-employment)</td>
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<td>• Other personal income tax (e.g. interest etc)</td>
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<td>• VAT</td>
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• Social insurance contribution
Currently being developed collaboratively by SASPRI and academics from the University of Dar es Salaam as part of SOUTHMOD.

Based on Tanzanian National Household Budget Survey (HBS) for 2011/12.

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<tr>
<th>Social grants</th>
<th>Direct and indirect taxes</th>
<th>Social insurance contributions</th>
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<tbody>
<tr>
<td>PSSN Basic Cash Transfer</td>
<td>Presumptive income tax</td>
<td>Health insurance contributory scheme (NHIF)</td>
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<tr>
<td>PSSN Variable Conditional Cash Transfer</td>
<td>Personal Income Tax</td>
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<tr>
<td>PSSN Public Works</td>
<td>VAT</td>
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Currently being developed collaboratively by SASPRI and the Zambia Institute for Policy Analysis and Research (ZIPAR) as part of SOUTHMOD.


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<thead>
<tr>
<th>Social grants</th>
<th>Direct and indirect taxes</th>
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<tbody>
<tr>
<td>• Social Cash Transfer (SCT), separately for rural and urban residents</td>
<td>• Income tax</td>
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<td>• Farmer Input Support Programme</td>
<td>• Turnover tax</td>
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<td>• Home-grown school feeding programme</td>
<td>• VAT</td>
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<td></td>
<td>Social insurance contributions</td>
</tr>
<tr>
<td></td>
<td>• Employee pension contribution</td>
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</tbody>
</table>
Zambian Social Cash Transfer eligibility assessment:

1. Residency criteria
2. Incapacity criteria
3. Welfare criteria (poverty ‘scorecard’ approach)
4. Community validation
Illustrative findings: SAMOD

Distributional impact of two components of South Africa’s tax and benefit system in 2015: benefits and personal income tax

Notes and source: Benefits (or ‘Social Grants’) include CDG, FCG, CSG, OAG and DG. Results show benefits or personal income tax as a percentage of disposable income by income decile group. SAMOD Version 5.2 using NIDS Wave 4 Version 1.0.
Next steps

- Complete Phase 1 of the SOUTHMOD programme.

- Continue to collaborate with country partners to update existing models (new policy years, new underpinning datasets).

- Explore opportunities to develop further models with country partners across the SADC region.

- The user-flexibility of the EUROMOD software means that the options that can be explored for comprehensive social security are limitless!
International Conference
Comprehensive Social Protection in the SADC

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