



The Landscape of Micro-Insurance in South Africa.

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Outline

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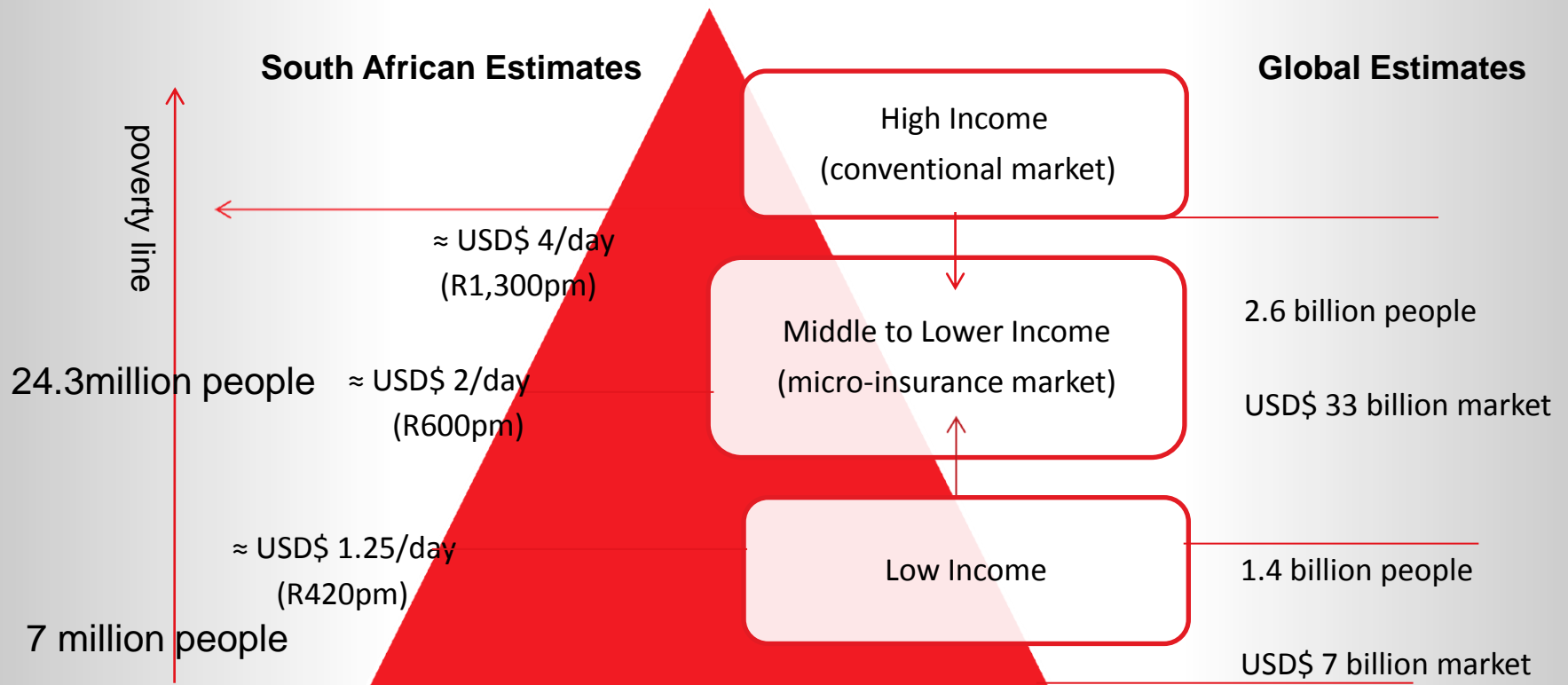
Background

Definition

- ... “ the protection of low-income people against specific perils in exchange for regular premiums proportionate to the likelihood and cost of the risk involved” – Churchill (2007)
- ... “insurance that is accessed by the low-income population (also known as the mass market), provided by a variety of different providers and managed in accordance with generally accepted insurance practice” - South African National treasury (2011)

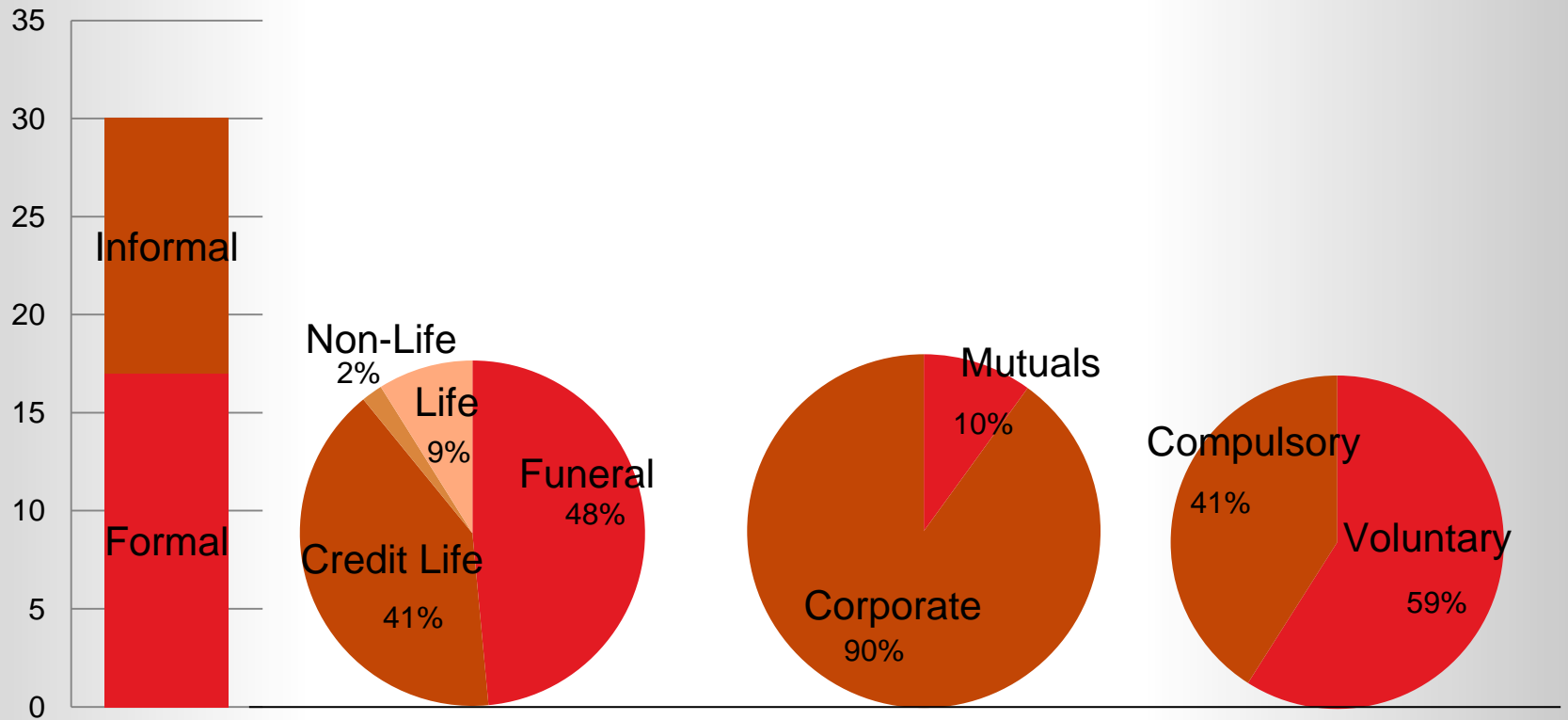
Background... cont.

- Estimated market potential of 4 billion policies (USD\$ 40 billion) globally, and annual growth rates of $\geq 10\%$ - Lloyd's of London (2009)



Composition of the South African micro-insurance market

Micro-insurance usage
% of Adults



Source: Bester et al. (2009), Finscope (2013)

	Colombia	India	Philippines	South Africa	Uganda
Micro-insurance Policyholders (% of Adults)	19%	2%	5.4%	30%	5%
Share of Formal providers in the Micro-insurance market	48%	80%	59%	54%	~ 100%
Share of Informal providers in the Micro-insurance market	52%	20%	41%	46%	Negligible
Compulsory credit-life share of the Formal market	27%	90%	49%	41%	100%

Source: Bester et al. (2009). Size and composition of the micro-insurance market across sample countries.

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Profitability





Overarching questions

- Can micro-insurance be profitable for commercial insurance providers?
- What are the factors that drive profitability/ business success of micro-insurance?

Research Methods

- Data Sample
 - life insurance firms in South Africa and Nigeria
 - product lines; credit-life, funeral, savings-linked.
 - firm-level financial data
 - 60 life insurers over the period of 2005-2010
 - unbalanced panel data of 303 firm-year observations.
- Definition of micro-insurance in South Africa vs. Nigeria.
- Assumptions and Limitations
 - Definition of Profitability, Data Constraints, Focus on financial (quantitative) factors.

Model Specification

$$\begin{aligned} \textit{Profit} = & \\ & \alpha + \beta_1 \textit{Cost Efficiency} + \beta_2 \textit{Ownership} + \\ & \beta_3 \textit{Leverage} + \beta_4 \textit{Reinsurance} + \\ & \beta_6 \{ \textit{Control variables} \} + u_{it} \end{aligned}$$

Feasible Generalised Least Squares (FGLS) is employed to estimate the model

Hypotheses

Cost Efficiency

- H1: A positive relation between cost efficiency and the profitability of micro-life insurers is likely to exist.

$$\ln Cost_i = \ln Cost^*(outputs_i, p(input\ prices)_i) + v_i + u_i$$

Frontier Efficiency Estimation

where;

- $\ln Cost_i$ - observed total costs
- $\ln Cost^*(outputs_i, p(input\ prices)_i)$ - cost function
- $outputs$ - gross premiums and investment income
- $input\ prices$ - cost of debt, equity and labour
- v_i - random error term; u_i - cost efficiency estimate

Hypotheses...cont.

Ownership Structure

- H2a: Public stock micro-life insurers are likely to be more profitable than public stock firms.

- H2b: Firms with stock privately owned by management are likely to be more profitable than firms with stock owned by large institutional investors such as banks, insurance firms etc.
 - D_p - public insurers;
 - D_{pm} - private firms with shareholdings mainly by management;
 - D_{pb} - private firms with shareholdings mainly by banks;
 - D_{po} - private firms with shareholdings mainly by other institutional investors.

Hypotheses....cont.

Leverage

- H3: A positive relation between leverage and the profitability of micro-life insurers is likely to exist.

Reinsurance

- H4: A negative relation between reinsurance and the profitability of micro-life insurers is likely to exist.

Control Variables

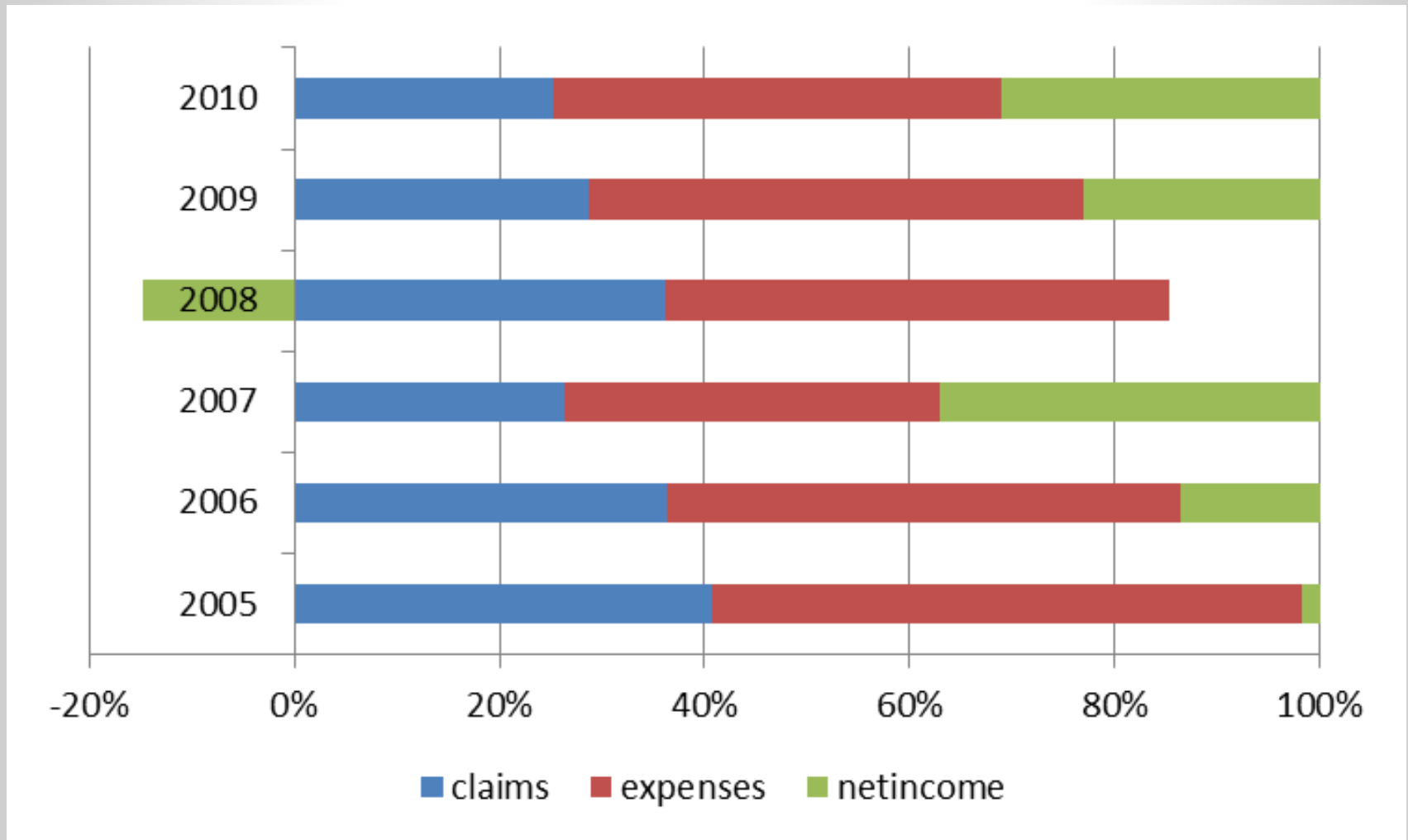
- Size = $\ln(\text{Total Assets})$
- Product Mix = Herfindahl concentration index
- Age = $\ln(\text{number of years since establishment})$
- Time Effects = dummy variables for each year to proxy for macroeconomic factors which are cross-sectionally constant.

Results - Descriptive Statistics

Variable	Mean	Median	Std. Dev	Min.	Max.
<i>Profit</i>	0.102	0.078	0.134	-0.076	0.330
<i>Cost Efficiency</i>	0.798	0.813	0.075	0.449	1.00
<i>Ownership: D_p</i>	0.161	1.000	0.368	0.000	1.000
<i>D_{pm}</i>	0.457	0.000	0.499	0.000	1.000
<i>D_{pb}</i>	0.148	0.000	0.356	0.000	1.000
<i>D_{po}</i>	0.228	0.000	0.421	0.000	1.000
<i>Leverage</i>	4.132	2.875	3.834	-5.424	18.152
<i>Reinsurance</i>	0.097	0.052	0.127	0.000	0.630
<i>Size</i>	11.040	11.148	3.085	5.102	17.505
<i>Product Mix</i>	0.725	0.703	0.225	0.287	1.000
<i>InAge</i>	2.789	2.770	0.974	0.693	4.585

Source: Research Data. This table presents the descriptive statistics of South African micro-life insurers, 2005-2010.

Results - Profitability



Source: Research Data. Snapshot of average claims, expenses and net income of South African micro-life insurers, 2005-2010.

Results - Multivariate Statistics

South Africa			Nigeria		
	Coefficient	Standard Error		Coefficient	Standard Error
Intercept	-0.137	0.113	Intercept	-0.515	0.096***
Cost Efficiency	0.580	0.102***	Cost Efficiency	0.749	0.084***
Ownership: Dp	-	-	Ownership: Dp	-	-
Dpm	0.045	0.023	Dpm	0.038	0.017**
Dpb	-0.008	0.018	Dpb	0.024	0.012
Dpo	0.104	0.034***	Dpo	-0.017	0.021
Leverage	0.013	0.002***	Leverage	0.051	0.009***
Reinsurance	0.281	0.067***	Reinsurance	0.303	0.252
Size	-0.012	0.004***	Size	0.003	0.004*
Product Mix	-0.103	0.038***	Product Mix	-0.023	0.026
InAge	-0.080	0.011	InAge	-0.039	0.010***
Reinsurance x Leverage	-0.026	0.010**	Reinsurance x Leverage	0.176	0.107
Time effects		Yes	Time effects		Yes
Wald test		192.39***	Wald test		291.35***

Source: Research Data. This table reports the results of the feasible generalised least squares (FGLS) estimation of the model. ***, **, and * indicate the significance of the test results at the 1%, 5% and 10 % levels respectively.

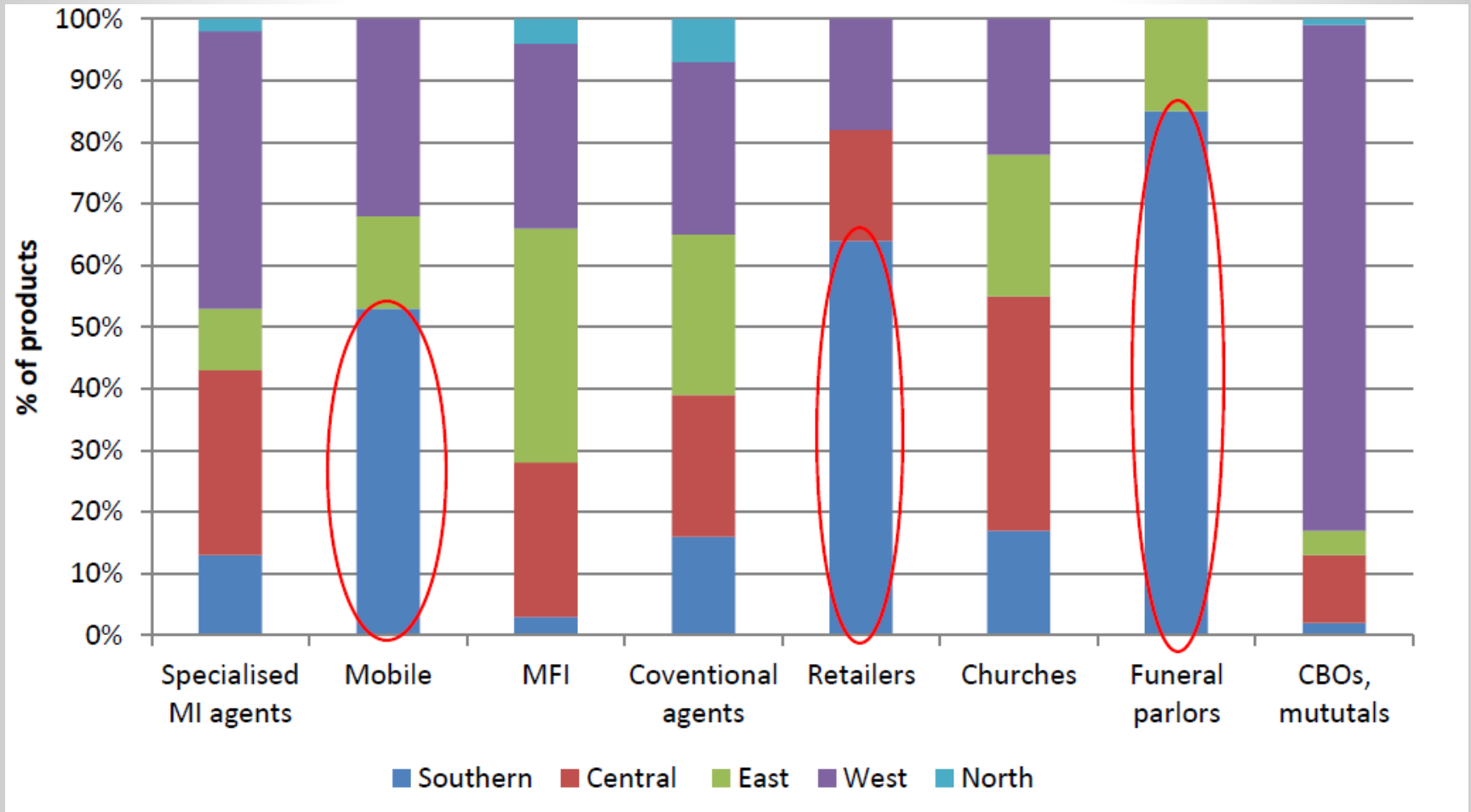
Key Findings and Recommendations

- Micro-insurance products can be profitable for commercial insurers - average profitability at 10 percent.
- Cost efficiency, reinsurance, ownership form and leverage are drivers of the profitability.
- The micro-life insurance industry in South Africa is on average 58 percent cost efficient.
- Reinsurance is beneficial in providing capacity, scale and technical expertise.

Key Findings and Recommendations...cont.

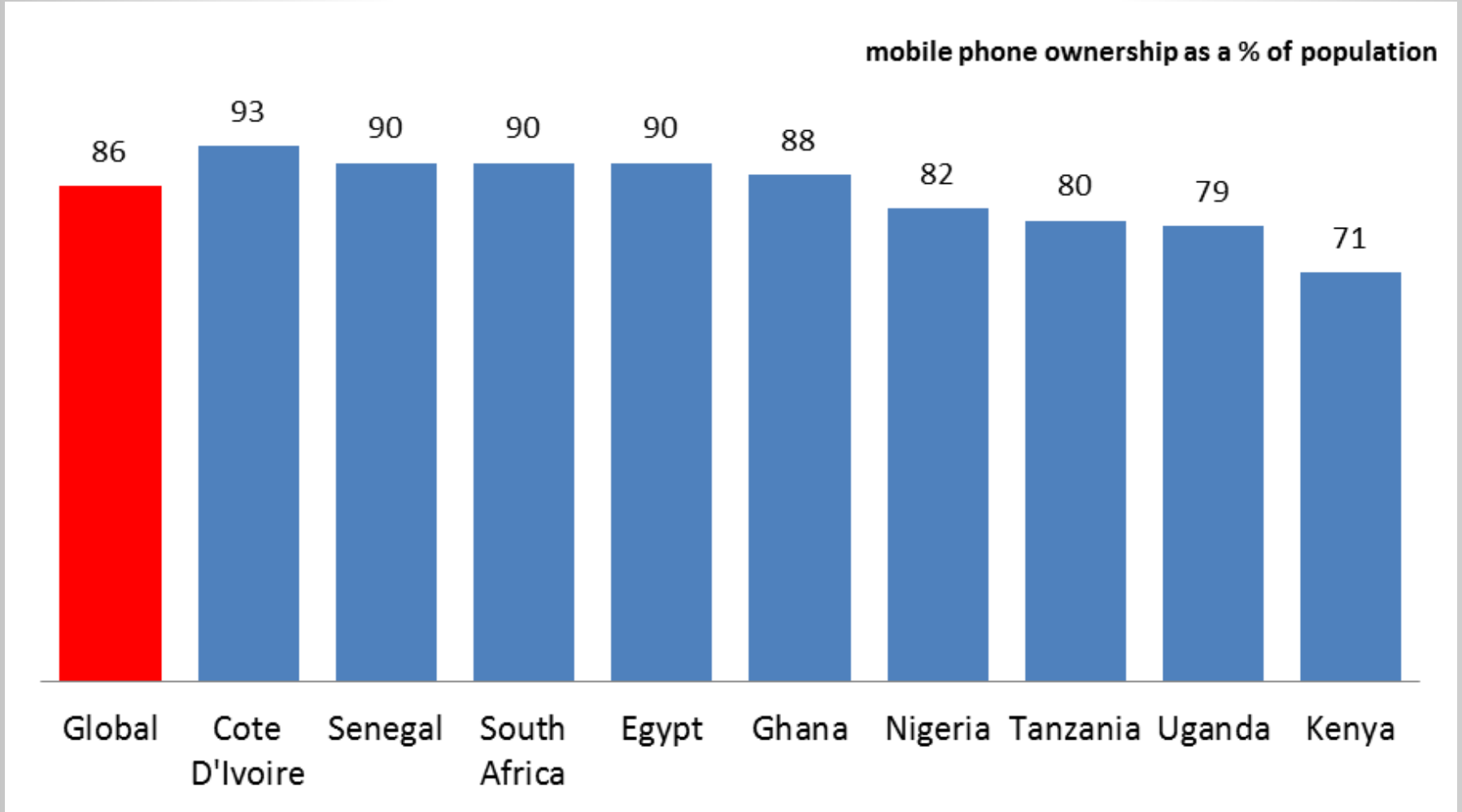
- Micro-life insurers which are owned by institutional investors are found to have higher profitability.
- Smaller micro-life insurers found to be more profitable than larger firms.
- Diversification is beneficial. That is, multi-line insurers are more profitable than concentrated/mono-line insurers.

Distribution Channels



Adapted from: McCord et. al (2012). Distribution channels for micro-insurance in Africa by region.

Distribution Channels...cont.



Adapted from: : TNS(2013). Mobile phone penetration in selected African countries

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Regulation



Micro-Insurance Regulation

- Countries with micro-insurance regulation/guidelines:
 - India – 2005,
 - Philippines- 2006, 2010
 - Mexico- 2008
 - Peru- 2007
 - Taiwan- 2009
 - Brazil - 2012
 - Nigeria – 2013
- Countries considering micro-insurance regulation
 - South Africa
 - Pakistan
 - CIMA countries – 14 Francophone countries

Current regulation

- Assistance policies
- Friendly Societies
- Financial Sector Charter (2012)- access targets for insurers in the low income market.
 - Zimele and Mzansi product standards (2007)
 - How successful were the Zimele standards?



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Proposed Regulation

- Micro-Insurance Regulatory framework: Draft legislation, 2012 → tabling to Parliament, 2013 → Implementation, 2013/2014.
- Product features and standards:
 - Risk Only
 - Benefits- sum assured basis capped for individuals at R50K(Life) ,R50K(Living benefits) and R100K(Non-life).
 - Contract term- 12 months max. (renewable)
 - Waiting periods- 6 months
 - No exclusions for pre-existing conditions
 - Right to monetary benefit
 - Grace period - 6 months max.
 - Target market → not limited to LSM 1-5
 - Simple and easy to understand TCs

Proposed Regulation....cont.

- Distribution
 - Streamlined FAIS requirements
 - Uncapped commission except for credit linked and embedded products
- Prudential requirements
 - R3 million upfront capital
 - Simpler capital, reserving and CG requirements
 - Exempted from SAM Pillar 1
 - Only one license required for both short and long term products.
 - Reinsurance not compulsory but may be enforced.
- Institutional forms
 - Public and private companies
 - Member-based organisations → must be registered under the Cooperative Act (Friendly Societies Act repealed)

Implications of MI Regulation for Existing Insurers

- Assistance business category removed.
- Must obtain a separate micro-insurance license or convert to a micro-insurer.
- May underwrite part of the risk of micro-insurers, but will be required to obtain a micro-insurance licence.
- Allowed to continue to underwrite groups or entities in the low income market.
- Reinsurers are allowed to reinsure micro-insurers with existing licence.

Opportunities for Existing Insurers

- Uncapped commissions
- Diversification across product lines
- Cross-selling opportunities
- Partnership with smaller informal providers.
- Lower capital and reporting requirements.



Conclusions

- Potential market for micro-insurance in the middle to low income segments of the population.
- South Africa has one of the highest penetration rates of micro-insurance which is mainly through funeral policies.
- Micro-insurance products can be profitable for commercial insurers.
- Cost efficiency is the main driver of profitability, hence insurers should search for ways to improve cost.
- The regulation of micro-insurance market offers opportunities for commercial insurers → competitive advantage.

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Thanks for your attention.