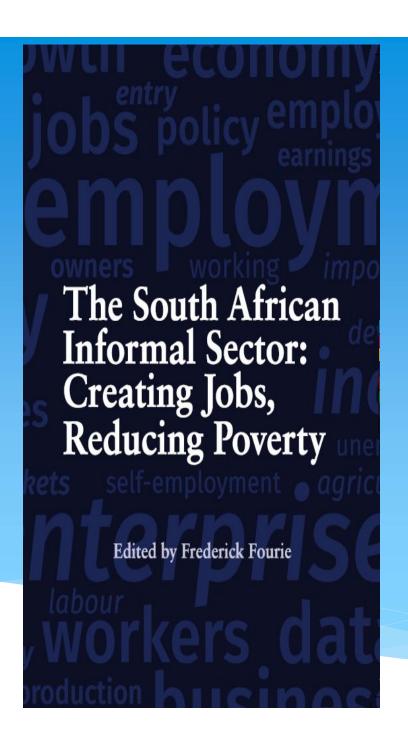
Informal sector employment and poverty in South Africa

Paul Cichello and Michael Rogan

The Economics of Informality Conference May 29, 2018



HILE the informal sector is the 'forgotten' sector in many ways, it provides livelihoods, employment and income for about 2.5 million workers and business owners. One in every six South Africans who work, work in the informal sector. Almost half of these work in firms with employees; these firms provide about 850 000 paid jobs—almost twice direct employment in the mining sector. The annual entry of new enterprises is quite high, as is the number of enterprises that grow their employment. There is no shortage of business initiative and desire to grow.

However, obstacles and constraints cause hardship and failure, pointing to the need for well-designed policies to enable and support the sector, rather than suppress it.

The same goes for formalisation. Recognising the informal sector as an integral part of the economy is a crucial first step towards instituting a 'smart' policy approach.

This volume is strongly evidence- and data-driven, with substantial quantitative contributions combined with qualitative findings – suitable for an era of evidence-based policy-making – and utilises several disciplinary perspectives.

'A prerequisite for good policy-making for this part of the economy is good analysis. ... This volume embodies analytical excellence.

I look forward to its impact on policy-making in South Africa and the world.'

-Ravi Kanbur (Cornell University)



Questions

- * How much poverty reduction is due to earnings from informal sector jobs?
 - * How does that compare to formal sector jobs?
- * How does poverty reduction from one informal sector job compare to poverty reduction from one formal sector job?

Primary Method

- * Decompose poverty reduction by income source
 - * Shapley values to decompose poverty
 - * Shorrocks (2013)
 - * Araar and Duclos (2007)
- * Decomposition so clearly not causal analysis

Main Results

- * Informal sector employment contributes relatively little to aggregate poverty reduction in South Africa, particularly compared to formal sector employment.
- * Informal employment has considerable power in reducing poverty for individuals, nearly as much as formal sector employment.

How it all fits together

- * The small impact on aggregate poverty is NOT driven by the fact that informal jobs produce too little money to reduce poverty.
- * The earnings are much less, but the targeting of earnings (i.e. flowing into poor households) is much better, offsetting the impact.
- * There are just many more jobs from formal sector employers than informal sector employers.

How it all fits together

- * Taking away two informal sector jobs reduces poverty as much as taking away one formal sector job. (conservative)
- * Taking away one informal sector job has nearly the same impact as taking away one formal sector job. (generous)

Main Take-aways

- * Informal sector employment cannot solve the poverty problem in South Africa.
- * But it can be **part** of the solution.
- * Informal sector wage employment appears to have considerable power in reducing poverty for individuals, nearly as much as formal sector employment.

Context: South Africa

- * High unemployment, really.
 - * 26.7 narrow, 31.9 broad, higher for sub-groups
- * Informal sector is relatively small share of economy
 - * 17% of employment, 18% of non-ag employment
 - * Domestic workers not incl., about 8%

Context: South Africa

- * National Development Plan- massive growth
 - * 1.2-2 million jobs (w/ domestics)
 - * No policy advice to create
- * Treasury
 - * Looking to grow- but how?
- * Resistance to informal sector employment
 - * Intermittent- Local officials

Data

- * Can't find the data we need in the same survey
 - Identification of earnings from informal sector jobs
 - Detail on non-labor income sources (and total household income)
- * National Income Dynamics Study (NIDS)
 - * Best available source
 - * Not perfect

Data: NIDS

- * Table 1 gives official definitions
- * Do best we can
 - * Relatively confident that:
 - * Informal sector self-employment is correctly defined
 - * Formal sector includes only those in formal sector employment (but not all)
 - * Use these as base
 - * Left with mixed groupings.

Methods

- * Contribution of income sources to poverty reduction
 - * Decompose by creating Shapley-Shorrocks values
 - * identify aggregate contributions (relative)
 - * Poverty effectiveness ratios
 - * Compare to contribution to income (share of income)
 - * Ratios relative to formal sector employment
 - * Present on a per job basis

Methods

- * Shapley-Shorrocks values (Shorrocks, 2013)
 - * Benefits:
 - * It all adds up- decomposable by income source
 - * Potential concerns:
 - * Average marginal effect is it relevant?
 - * Should we break earnings accumulation process into two stages?

Methods

- * Shapley-Shorrocks values- Changes over time
- * Simulation: (back of the envelope)
 - * Add 1,000,000 new informal sector jobs
 - Randomly distributed to current unemployed
 - * Random draws from the informal sector jobs earnings distribution

Results: Targeting

Source	Share of Income	Relative Share of Poverty Reduction	Poverty Effectiveness Ratio
Social grants	.066	207	3.21
Formal Sector Employment	.567	377	.66
Informal self- employment	.031	036	1.14

Year: 2008

Poverty line: R307 (2010 Rand) Food pov line

• Poverty measure: P-o (Headcount Ratio)

• Note: 1.14/.66 = 1.73

But which poverty measure?

- * Relative importance of informal self-employment compared to formal sector tends to:
 - * Decreases as you increase the poverty line
 - * 307 to 424 to 594
 - Increases as you move from P₀ to P₁ to P₂

Across poverty lines

Source	R307	R424	R594
Formal Sector Employment	0.66	0.77	0.88
Informal self- employment	1.14	1.13	1.16
Regular informal wage employment (mixed)	1.86	1.90	1.81

 The higher the poverty line, the lower the relative importance of informal sector income relative to formal sector income

Year: 2008

Poverty measure: P-o (Headcount Ratio)

Across poverty measures

Source	Ро	P1	P ₂
Formal Sector Employment	0.86	.61	. 53
Informal self- employment	1.40	1.39	1.36
Regular informal wage employment (mixed)	1.56	1.57	1.53

 The relative importance of informal sector income relative to formal sector income increases as we move from Po to P1 to P2 measures of poverty

Year: 2012

Poverty line: Z = 594

Methods: Per job ratios

Source	No. of jobs	Change in poverty per million jobs	Rel ratio compared to formal sector
Formal Sector Employment	10,400,000	.033	1.00
Informal self- employment	1,462,314	.021	.63
Regular informal wage employment (mixed)	1,185,124	.027	0.81

Year: 2012

Poverty line: R307 (2010 Rand) Food pov line

• Poverty measure: P-o (Headcount Ratio)

• Note: 1.14/.64 = 1.72

Methods: Per job ratios

Source	No. of jobs	Change in poverty per million jobs	Rel ratio compared to formal sector
Formal Sector Employment	10,400,000	.033	1.00
Informal self- employment	1,462,314	.021	.63
Regular informal wage employment (mixed)	1,185,124	.027	0.81

Year: 2012

Poverty line: R307 (2010 Rand) Food pov line

• Poverty measure: P-o (Headcount Ratio)

• Note: 1.14/.64 = 1.72

Change in earnings

- * Results a bit messy
- * Need to extend model to add number of jobs at a minimum
 - * Moving towards Azevedo (2013)

Simulation

- * Add 1 million informal self-employment jobs
- * Get reduction in poverty of roughly 10%, though it varies....
 - * Shorrocks said reduce by .021, .018, and .015 for P-0
 - * Sim said reduce by: .016, .025, .024
 - * 8.5%, 8.5%, and 6.0%
 - * For P-o,P-1,P-2 on food pov line
 - * sim said: 8.5%, 11.5%, 12.5% decline in national poverty

Main Take-aways

- * Informal sector employment cannot solve the poverty problem in South Africa.
- * But it can be **part** of the solution.
- * Informal sector wage employment appears to have considerable power in reducing poverty for individuals, nearly as much as formal sector employment.

Moving forward

- * Decompose inequality
- * Two-stage process of earnings accumulation
- * Other ways to convey simple idea

Inequality: Gini Coefficient

Source	Share of Income	Relative Share of Inequality	Inequality Effectiveness Ratio
Social grants	.066	.018	0.27
Formal Sector Employment	.567	.625	1.10
Informal self- employment	.031	.032	1.01
Regular informal wage employment	.024	.018	0.77

• Year: 2008

• Domestic: Inequality ratio 0.57

Pov. Eff. ratio 2.59