

Education & Employment in Zambia Evidence from a Scoping Exercise

25th July 2013

Southern Sun Ridgeway Hotel
Lusaka

Herryman Moono
(IGC)

Neil Rankin
(Stellenbosch University)

Outline

- Background
- Methodology
- The changing structure of the Zambian economy
- What has been happening at the school level?
- Education and labour market trends
- What does industry want/say?
- Conclusions

Background

- Born out of consultation with key stakeholders (GRZ, JICA, ZACCI, ZAM, AfDB, ZCSMBA, NCC, DFID, Norway, Fins, ZIPAR, etc)
- Aims to shed light on the relationship between education, training and employment in Zambia
- Add to existing Human Capital research
- Scoping exercise-More work required

Objectives

- Explore the relationship between education and its role in employment creation
- Look at the nature of the supply and demand for labour from the Zambian education system
- Identify needy research areas

Methodology

Adopt two approaches:

A. Quantitative: Analyse Micro-data from 2006/2010 Living Conditions Monitoring Survey(CSO)

B. Qualitative: Interviews with Human Resource Managers of firms in;

- a) Mining
- b) Construction
- c) Manufacturing

Interviewed industry representatives

GDP changes

Table 1. Sectoral Percentage Share of GDP (1994 Constant Prices), 2000-2012

% Share of GDP at Constant Prices	Year		
Sector	2000	2006	2012
Agriculture, Forestry and Fishing	17.2	13.7	12.6
Mining and Quarrying	6.4	8.7	7.1
Manufacturing	10.5	10.6	9.6
Electricity, Gas and Water	2.9	2.7	2.3
Construction	4.9	9.8	12.9
Wholesale and Retail trade	18.3	17.5	15.5
Restaurants, Bars and Hotels	1.9	2.8	2.3
Transport, Storage and Communications	6.3	7.4	10.9
Financial Institutions and Insurance	8.2	7.3	7.3
Real Estate and Business services	9.5	8.8	7.1
Community, Social and Personal Services	7.7	7.7	8.8
Public Administration & Defence	4.4	3.2	3.0
Education	2.0	3.1	4.3
Health	0.5	0.5	0.6
Recreation, Religious, Culture	0.3	0.5	0.6
Personal Services	0.5	0.5	0.4
Less: FISIM	-4.9	-4.2	-3.3
TOTAL GROSS VALUE ADDED	89.2	92.6	93.1
Taxes less subsidies on Products	10.8	7.4	6.9
TOTAL G.D.P. AT MARKET PRICES	100	100	100

Key points:

- Agriculture, forestry, fishing has a declining share of % GDP Contribution
- New emerging high growth sectors:
 1. Construction (More than doubled in 10 years)
 2. Transport, Storage & Communications
 3. Manufacturing has sustained a relatively high level

Overall point is that the structure of the economy is changing and with it the demand for labour

Employment changes

Table 2: Jobs by sector (000s)

Sector	2006	2010	Change
Agriculture, forestry and fisheries	3 006	3 029	23
Mining and quarrying	69	66	-3
Manufacturing	163	132	-31
Electricity, gas & water	15	17	2
Construction	53	80	27
Trade wholesale and retail distribution	389	468	79
Hotels and restaurants	35	44	9
Transport and communication	84	117	33
Finance, insurance and real estate	85	25	-60
Community, social and personal services	279	388	109
Private household services	54	80	26
International organisations	2	99	97
Total	4 235	4 544	309

Employment Changes: Key Points

- High growth sectors are not adding the most jobs.
- Broad change is towards higher capital intensity – which often requires higher skills.
- Many of the jobs are being added in services sector – these are likely to require at least basic numeracy and literacy (Require in-depth investigation?).

Trends in school enrolment^('000)

Table 3. Basic and secondary enrolment in Zambia by provider, 2000-2009

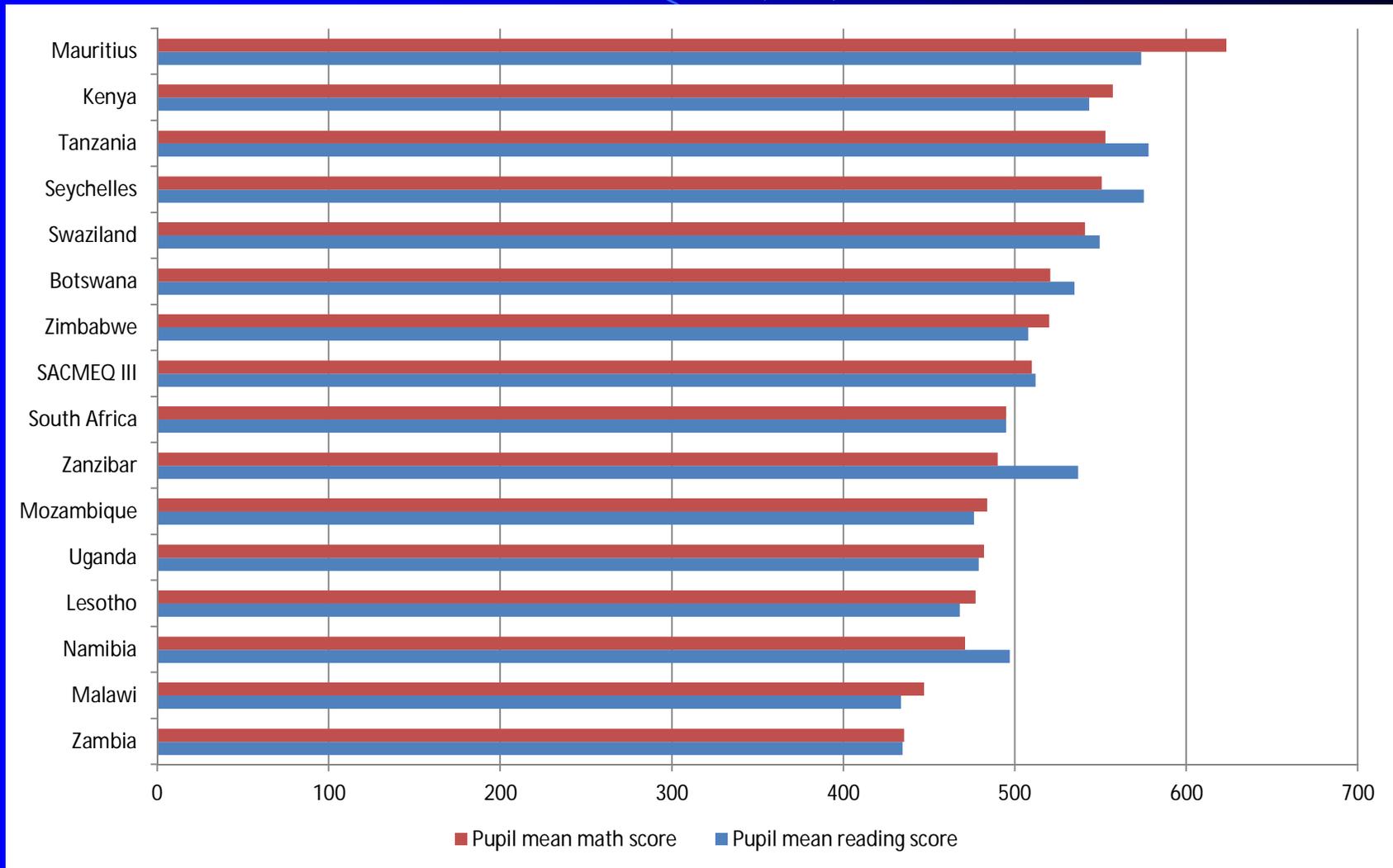
Year		2000	2005	2009	Annual Growth Rate
Secondary Total		271	396	672	9.5%
Basic Total		5324	8467	8111	4.3%
Year totals by provider					
Government/GA*	Secondary	244	310	531	8.1%
	Basic	4310	4927	4983	1.5%
Private/Church	Secondary	27	86	141	18%
	Basic	131	540	381	11.3%
Community	Basic	883	3000	2747	12%

Trends in school enrolment: Key Points

- High Growth in school enrolment, particularly at the secondary level.
- More basic schools than secondary schools
- Much higher growth in non-government school enrolment.
- Note the growing importance & contribution of community schools

Education quality

Figure 1. Average performance of grade 6 pupils in maths and reading in Southern and Eastern Africa (2007)



Education quality: Key points

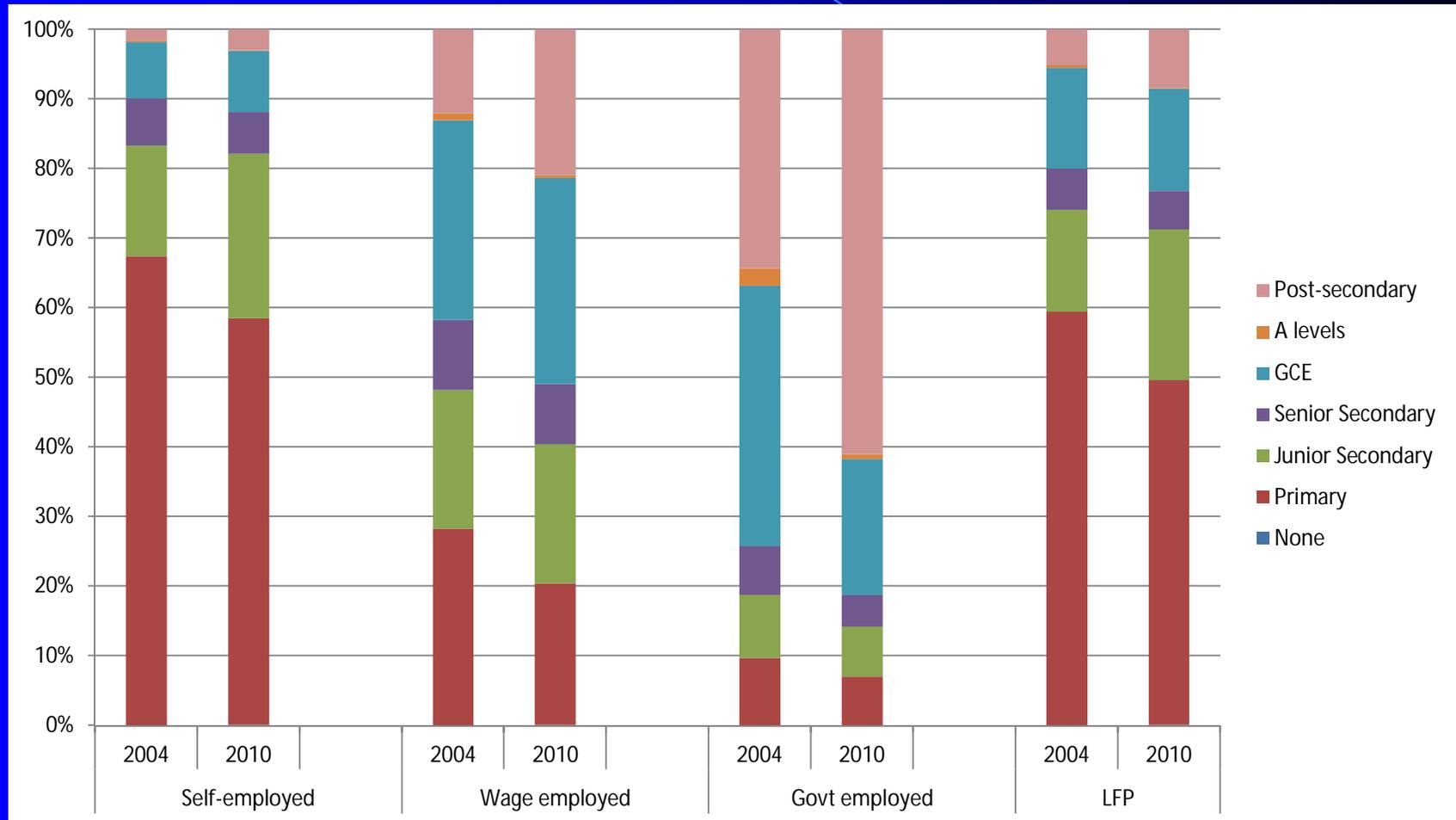
- Zambian pupils perform the worst in maths and reading within the region
- This seems to be getting worse - between 1995 and 2007 average reading scores in Zambian schools fell from 477.5 to 434.4.
- UNDP report ranks Zambia above 10 in adult literacy in SSA Africa (Zimbabwe ranked 1st)
- Any discussion on skills and education cannot ignore the poor performance of Zambian schools

Post-secondary education

- Growth in school enrolment has been accompanied by a growth in post-secondary enrolment
- Universities' share in post-secondary enrolment increased from 30 percent to 36 percent—correspondingly high rise of private universities—Humanities & Social Sciences
- High demand could be because these qualifications are now a prerequisite for certain jobs which are emerging in the jobs market

Education and labour market trends

Figure 2. Proportion of workers by education and sector including all labour force participants (LFP), 2004 and 2010

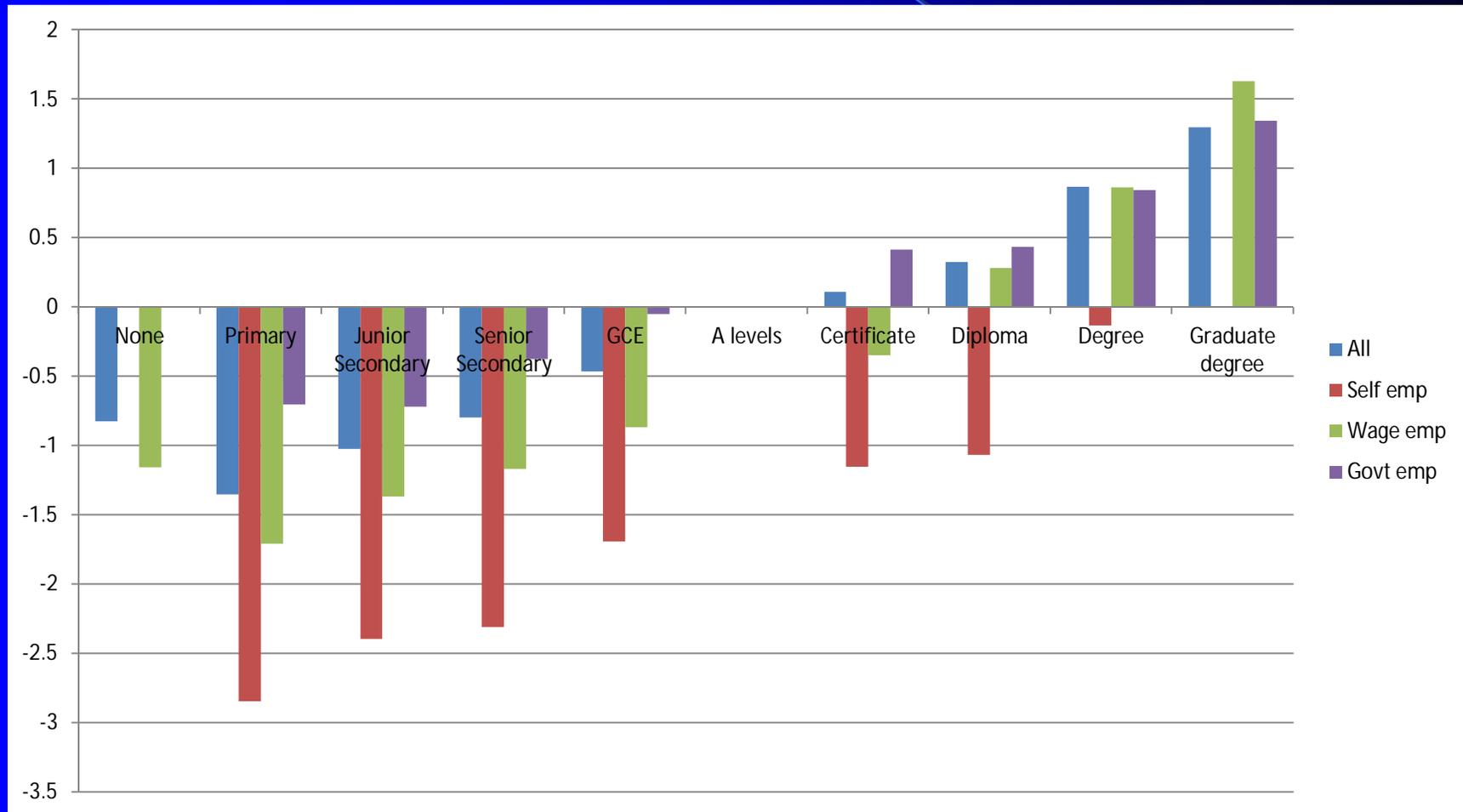


Key Points:

- Education levels of labour force participants are, on average, increasing
- Particular growth in post-secondary education has been within government jobs
- The bulk of the labour force are in self employment and has primary level education—
Informal sector employment(largest employer)
- Need further investigation into informal sector jobs

Education and wages

Figure 5. Education premiums (compared to A-levels) in monthly wages, self, wage and government employment, 2010



Key Points:

- The hierarchy in wages by education qualification is clearly evident
- On average, those with lower levels of education earn significantly less than those with higher education levels—As expected
- Certificates do not seem to elicit a wage premium for the wage employed
- Interestingly, although there is an increase in wages with education for those in self-employment this relationship levels out with the completion of secondary school

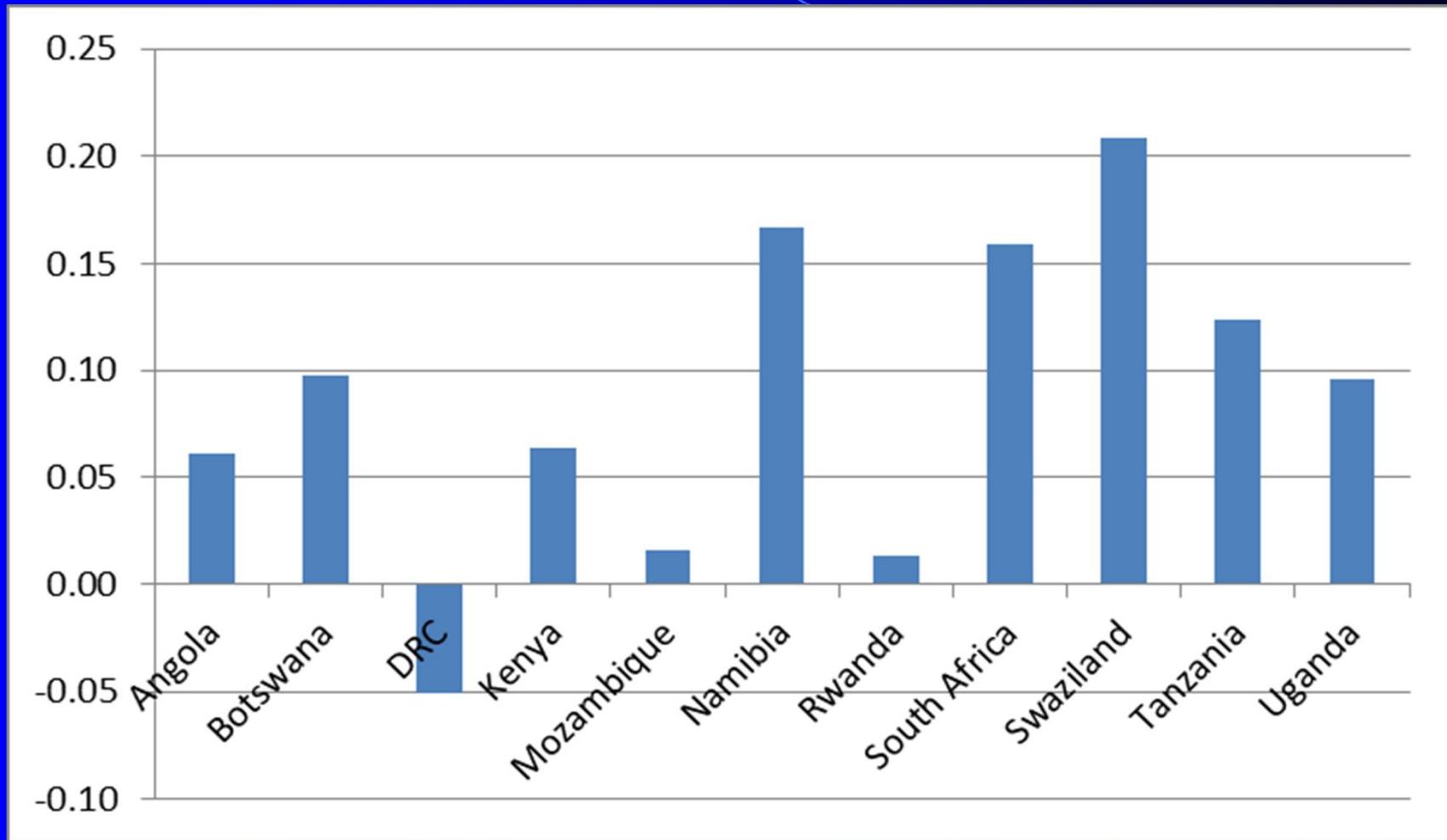
Key Points:

- There is also very little difference in the returns to a certificate compared to a diploma for the self-employed-motivation, dedication etc. may have a key role here
- In the wage and government sectors there are large returns to those with a university degree

Overall, there is a premium paid to those with post-secondary education, except in self-employment. This premium differs across sectors (see paper for details)

Firm Characteristics

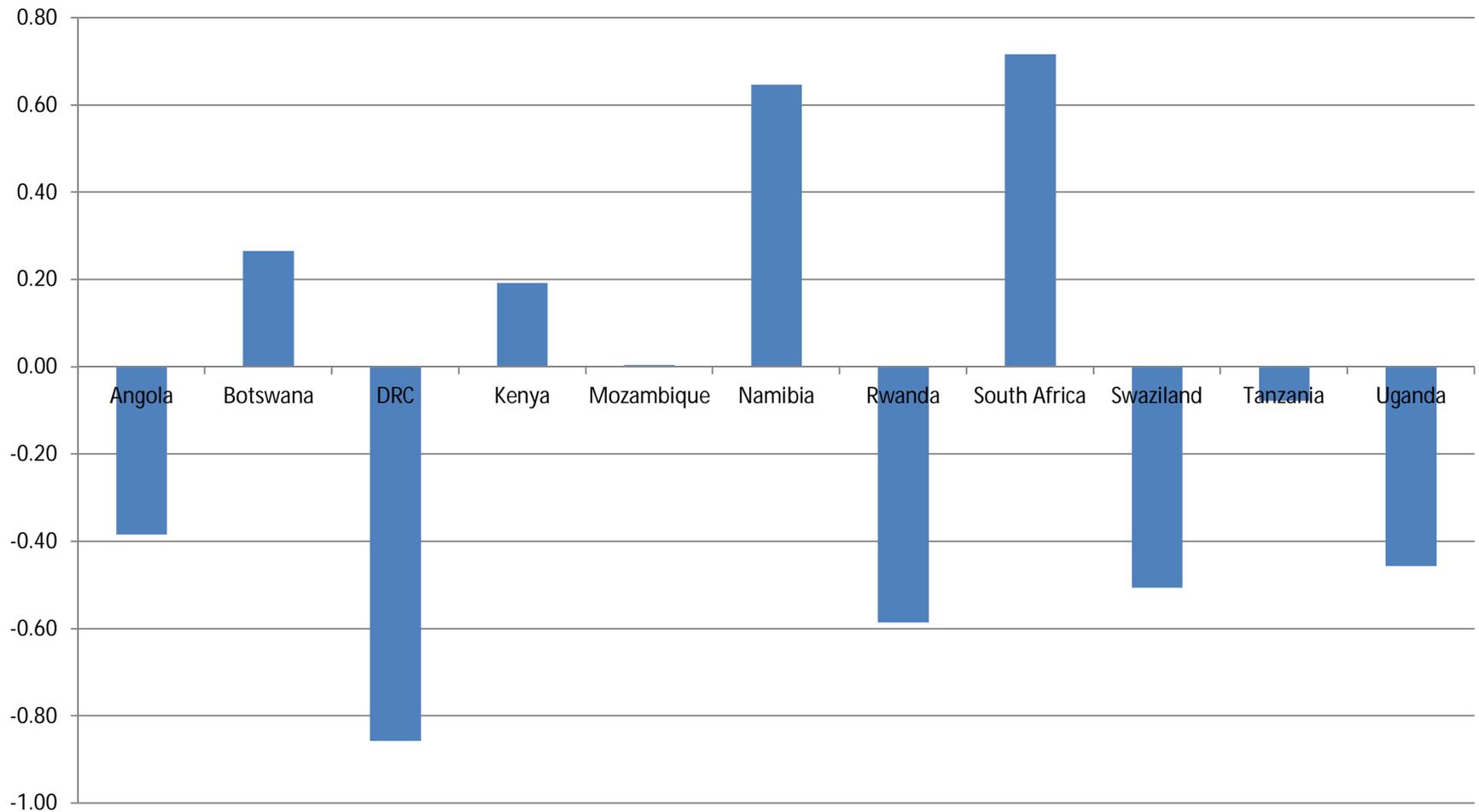
Figure 6. Probability of undertaking training, relative to Zambia and controlling for firm size(WB,2008)



Key Message:

- On average, across all countries considered except the DRC, Zambian firms are the least likely to run formal training programmes for its permanent employees.
- These results indicate that, in general, Zambian firms do not consider education as a constraint to production
- Are they content with the skills on the market? Is there some form of labour substitution that occurs easily in Zambia than in other countries?

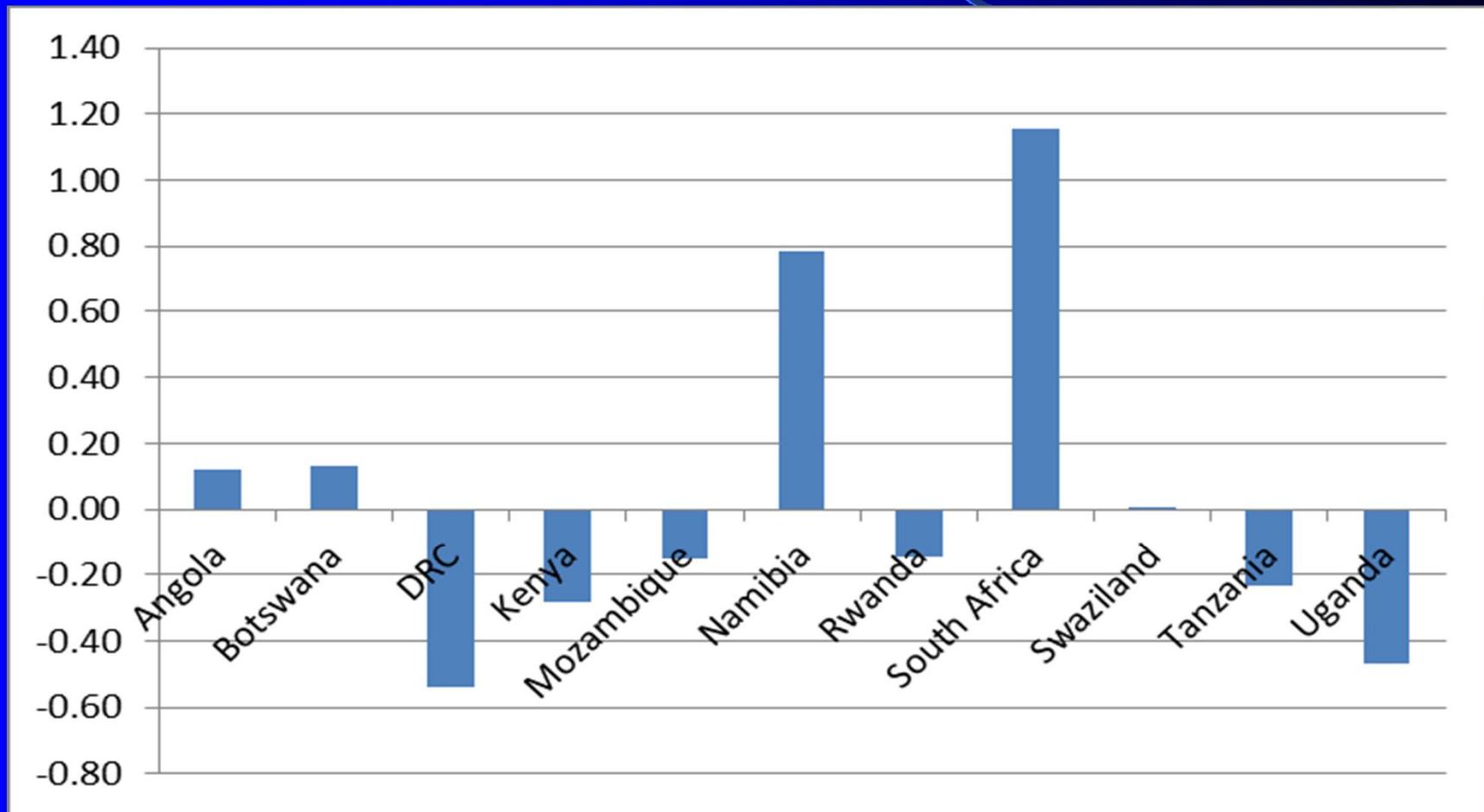
Figure 7. Relative capital-labour ratios, relative to Zambia and controlling for firm size(WB,2008)



Key Messages:

- Zambian firms are, on average, relatively capital intensive compared to other countries within the region.
- This confirms the changing structure of the Zambian economy
- How does this affect relative wages compared to other countries in the region?

Figure 8. Relative compensation levels for production workers, relative to Zambia and controlling for firm Size(WB, ICS,2008)



Key Message:

- Among production workers, Zambian workers earn, on average, higher wages than those in other countries in the region
- Coupled with high capital intensity in production, this structure of production may demand specialist skills attracting a high wage premium
- Zambian wages would easily attract foreign nationals at no additional cost
- Could this explain the outcry of the Zambian labour force on the perceived employment of foreigners by multinationals?

What does industry say about the education system?

Mismatch between skills required and those which graduates have-
education institutions are out of sync with employer needs

They want "Ready Made Employees": Employers are willing to pay
more and higher salaries to new workers with required skills

Lack of communication between themselves and education providers

Other perceptions:

- Sourcing and retaining skilled and experienced labour is difficult-firm trained labour difficult to bond
- Foreign labour is often perceived as more productive than local labour(e.g, in Construction)
- The overall costs of skilled permanent labour in Zambia is high relative to foreign options and semi-skilled part-time labour

Conclusion

Labour Demand side

Changing industrial structure

Change in skills demand set

Supply side

- Skills mismatch
- Numeracy / literacy levels low
- Lack of meaningful work experience
- Unresponsive to industry needs

Summing Up

- Any solution on employability will need to target the low performance of the Zambian education system
- Need for collaboration between education providers and industry
- Better labour market information may help the labour market to function better(Feasible?)
- To effectively deliver required skills, education and training policy must be combined with labour market policies
 - Create incentives to hire low-skilled workers
 - Change the skills composition of labour force-respond to industry needs

Further Research:

- What about informal sector employment? How can this be increased?
- Role of privately provided education at higher levels
- What are the effective modes of industry-education sector collaboration?
- Apprenticeships: A lost opportunity?

Thank you.

Moono Herryman
Country Economist
International Growth Centre
herryman.moono@theigc.org

Prof. Neil Rankin
Stellenbosch University
neilrankin@sun.ac.za