

What Are The Most Important Research Questions On The Economics Of Growth And Labour Markets In Low-Income Countries?

Comments and Reflections

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I: Introduction

The note provided here concentrates on discrete aspects of the economic research challenges within the low income country (LIC) context². In addition, the focus is almost exclusively on microeconomic issues, and within that context, the microeconomic constraints on growth within the LIC sample. The one key caveat is that I concentrate almost without exception on the Sub-Saharan African region partly as a tool of convenience, but additionally because this is where the world's poor and working poor are concentrated.

This brief paper has three components. Section II outlines the concerns around survey data and the availability thereof in the SSA and LIC context. Section III suggests the need for a better and more nuanced modelling of LIC labour markets and the implication thereof for applied work. Finally there are a series of research questions around the microeconomic constraints on economic growth which are analysed and dealt with. Section V concludes.

II: Quantity, Quality and Type of Survey Data

The availability of regular and high quality data is endogenous to the quantum and nature of research gaps observed within the sample of LICs in SSA. Poor quality data is often significantly correlated with pervasive research gaps. The latter in turn, if persistent over time will often result in a poor investment in the production of micro-data. This critical mass of survey data is sorely lacking in most LICs, particularly in the SSA region. The data constraints relate to the frequency of such micro-data, the heterogeneity in type of datasets which may be required for specific analyses and finally the quality and veracity of such data.

In terms of the frequency and heterogeneity of survey data - in many cases, a combination of household surveys, labour force surveys and income & expenditure surveys are all required for at least two years. This requirement would already narrow down the list of countries wherein such analysis is possible. We provide in the appendix below (Table A1), a very brief and in all probability incomplete, guide to the datasets available for economies within Africa for the 2000-2008 period³. As should be clear, whilst there is a fair spread of datasets across at least 36 countries in Africa, the data is either seldom available in multiple years or the country under consideration is highly unlikely to collect data across all relevant micro-datasets such as income & expenditure surveys, labour force surveys and general household surveys. Low Income Countries where more than one type of micro-dataset is present include for example Benin, Ethiopia, Madagascar, Mali, Mozambique, Rwanda, Tanzania and Zambia. In order to understand growth-labour market dynamics however, as will hopefully be evident from the discussion below, more often than not, data frequency greater than 1 year of data is required. For the period 2000 to the present, LIC African economies fulfilling this criterion include Benin, Ethiopia, Tanzania and Zambia. It is possible

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² The categorisation of Low Income Countries, that of economies with GNI per capita of \$1005 or less, I derive from the World Bank at http://data.worldbank.org/about/country-classifications/country-and-lending-groups#Low_income

³ Indeed, in some cases the data is wrong (for example showing no LFSs for Namibia) or outdated (not reflecting on the 2006 Zambian Living Conditions Survey).

however, that with a wider range in years, and possibly locating unofficial datasets, more countries would enter this sample⁴.

Ultimately though, the infrequency of data in SSA and within the LIC sample in particular, together with the lack of heterogeneity in such micro-data is a significant constraint in terms of answering the numerous research questions for LICs at both the in-country and cross-country level.

A final problem with survey data is that where such data are available, the quality is often questionable. For example, there have been serious concerns in the last few years around the quality of survey data in Zambia, Uganda and more recently (although not strictly a LIC), Namibia. Quality issues range from serious sampling and non-sampling errors to comparability problems across the years, given the construction of weights and random changes to the design of questionnaires.

The above concerns, within the context of a research agenda, lead to at least three possible avenues for further consideration:

1. That if possible, independent surveys or surveys with significant independent oversight, be commissioned in a carefully selected cohort of LICs. Indeed, one-off restricted sample firm or household surveys (such as the recent panel surveys for firms and households undertaken in Ghana and South Africa by the CSAE, and the household panel for Ethiopia) could be considered. Concerns around the expense of such surveys, public availability of such data and finally the extent to which they may not build institutional statistical capacity in-country remain important constraints on pursuing this option.
2. The second alternative would be to provide a digital, web-based platform for improving the quality of existing survey data within economies where such data exists, but is known to be of poor quality. Currently, this process is haphazard, uneven and almost always engenders data which is not made publically accessible. Custodianship of the data also, is often privately held by individuals or institutions. The result is that cleaned, verified data is rarely a public resource. A systematic, digitised, web-based interface which ensures that all past and future releases of such micro-data is cleaned and quality assured by a research institution (or even one of the multi-lateral institutions) would represent a significant positive development. In doing so, it could potentially be a fairly low cost route to increasing research interest in LICs⁵. The World Bank's International Household Survey Network is a good place to start, although it requires updating, as well as being in need of including data mining and basic cross-tabulation functions. The raw data also, is currently not available on the site.
3. Finally, it would be very useful to use the opportunity in this funding window to work with LIC governments, with a focus on building capacity in their respective national statistical offices. Often there are poor systems, poorly trained managers and field-workers and poor knowledge infrastructure in many of the Statistical Offices in LICs. A capacity building component with the aim of delivering regular,

⁴ Namibia for example, has household surveys which are 10 years apart (1994 and 2004).

⁵ A very good example of this route, was the Living Standards Measurement Survey for South Africa undertaken in 1993, under the auspices of the World Bank and a local university-based research institution. The data was made publically available and was freely available for downloading. An innovative strategy at the time, the survey spawned thousands of articles on South African socio-economic issues – and remains in use today.

high quality nationally representative micro-data is an essential component to pursuing a research agenda on labour markets and growth in LICs.

III: Multi-Sector Labour Market Models in Low Income Countries

Whilst the Harris-Todaro and Lewis models are rightfully entrenched in our thinking of developing country labour markets, it is evident that they do not go far enough in replicating the typical labour market of a low income country. Indeed, the work of Gary Fields in particular, currently represents the intellectual frontier of such thinking (Fields, 2005; Fields, 2007). Low income economies would appear to manifest a segmentation of the labour market along the following states of employment:

- Formal sector (to encompass public and private sector employment)
- Urban Informal Sector
- Rural Agriculture
- Rural Non-Farm Enterprises
- Unpaid Family Work
- Unemployed

Indeed, this formulation may not be complete, or it may almost certainly be inexact. For example, an alternative multi-sector segmentation of a LIC labour market could be represented by the urban formal; easy-entry urban informal; upper-tier urban informal; rural agriculture and the unemployed⁶. Beyond the stipulation of a close approximation to labour market segmentation of labour markets in LICs, we also need to understand three additional issues: Firstly, what the rationing model is, which defines these segments. Secondly, how wages and employment are set in each of the segments and finally how the different segments interact with each other. The notion that we have for example the six segments identified above all interacting with each other, and with their internal price and non-price dynamics - and changing over time - is a huge challenge to incorporate elegantly into a stylised model of a low income country labour market. This then remains a key research gap in our understanding of how low income country labour markets function.

From Multi-Sector Modelling to Survey Data

In many instances though, the modelling of the low income country labour market is in need of an applicative value or reinforcement. Again, as with our modelling of labour market segmentation, there remains a dearth of information, knowledge and understanding of how labour markets function in the low income country setting. In particular, I would argue that there are two key lacunae in the literature on low income country labour markets. *Firstly* we do not have a clear appreciation very simply of what the different labour market segments are, across and within low income country labour markets. *Secondly*, we do not fully understand how these different segments interact with each other.

Turning to the *first* of these, put simply, we do not have sufficient knowledge of all the possible alternative segmentations of the labour market, which are present in a LIC environment. An example of such a possible segmentation of the labour market, can be found by examining data from Zambia's 2010 Living Conditions Monitoring Survey. The segmentation provided below is only one possible approach to understanding the Zambian

⁶ This is the Fields (2007) formulation.

labour market. It is of course entirely possible to conceive of a different, equally valid segmentation, both within Zambia and for other LICs. This is a research question which will be informed variously by the answers provided in the theoretical modelling of multi-sector labour markets, the specific country conditions prevalent (a point noted repeatedly by Gary Fields) and finally the idiosyncrasies of the survey data available to the researcher.

The data below for example suggests that apart from the standard segments we are used to seeing in middle income country economies, low income economies yield multiple sectors which include for example unpaid family work and rural non-farm employment. The prevalence of certain segments will differ no doubt across other LICs. Whilst in some for example, unpaid family work will dominate, in other LICs, it is possible that this form of work is non-existent.

Table 1: Segmentation of the Zambian Labour Market

| Segment | Number | % Share |
|---|------------------|---------------|
| Labour Force | 4 939 081 | 100.00 |
| Expanded Employment (including unpaid family workers) | 4 272 304 | |
| Formal Sector ¹ | 870 101 | 20.37 |
| Urban Informal ² | 652 005 | 15.26 |
| Rural Informal (Non-Agric) ³ | 981 823 | 22.98 |
| Agriculture ⁴ | 1 697 514 | 39.73 |
| Unpaid Family Work | 70 861 | 1.66 |
| Piece Work ⁵ | 0 | 0.00 |
| Unemployed | 666 777 | |

Source: *Living Conditions Monitoring Survey, 2010 and own calculations*

Notes: 1: Formal employment includes all individuals reported as employed, working in a company/business with 5 or more employees, who are entitled to pension, gratuity or social security as well as paid leave.

2. Urban informal are all those reported as employed, residing in an urban area, working in a business with less than 5 employees, are not entitled to pension, gratuity or social security and paid leave as well as those reporting that their employment status is as an 'unpaid family worker'.

3. Rural informal (non-agricultural) refers to all employed, living in an rural area, working in a business with less than 5 employees, are not entitled to pension, gratuity or social security and paid leave as well as those reporting that their employment status is as an 'unpaid family worker'. All those who reported that their main economic activity was 'farming, fishing or forestry' were excluded.

4. All employed whose main economic activity is farming, fishing or forestry are included in this segment, irrespective of formal or informal sector.

5. Piece work refers to piecework other than that which has anything to do with Agriculture (i.e. gardening, digging a hole and so forth).

Rural household enterprises for example may be a much stronger feature in some LICs relative to others, possibly depending on the spatial structure of the economy's growth trajectory. The fact that this segmentation is dependent on the structure and decisions made in the questionnaire are also important. Hence, urban informal workers are categorised as such given a size classification criterion and an access to non-wage benefits criterion. This categorisation (and hence the size and shape of the segment) will differ across countries - and often within a country should the survey questionnaire change.

The *second* research gap in our understanding of low income country labour markets, is an extension to the above. Hence, not only do we have a poor appreciation of the alternative modalities of multiple segments in LICs, we arguably understand even less about how these segments (according to the data) interact with each other. Put differently, we do not have a good appreciation of the rules of engagement between these different segments, and how to treat these interactions given our standard tools of analysis. An example from Zambia once again may be instructive: The data from the LCMS of 2010 has a question on household sales of crops or livestock - for example maize, cassava, cattle, sheep. It is evident that for a

sample of the households (46%) positive sales and therefore additional household income is recorded. However, it is not clear from the survey who in the household, across the value chain, is involved in this economic activity. The question which arises then is how to allocate household income from a labour market activity across individuals (including the unemployed) within the household. None of the individuals, in terms of the survey attribute these sales to their personal income, yet it is clear that it is a vital component of household, individual (and rural firm) economic activity in Zambia.

Table 2: Individuals Working in Households: Zambia, 2010

| Segment | No Sales of Crops or Livestock | Positive Sales of Crops or Livestock |
|--|--------------------------------|--------------------------------------|
| Total Share of Households | 0.54 | 0.46 |
| Mean Share of Segment in Household Type: | | |
| Unemployed | 0.18 | 0.05 |
| Unpaid Family Workers | 0.03 | 0.20 |
| Employed | 0.79 | 0.75 |
| Wage Employed | 0.38 | 0.08 |
| Self Employed | 0.22 | 0.08 |
| Farming Employed | 0.12 | 0.57 |
| Fishing Employed | 0.01 | 0.01 |
| Forestry Employed | 0.00 | 0.00 |
| Piecework | 0.05 | 0.01 |

Source: Living Conditions Monitoring Survey 2010 and own calculations.

In our multi-sector modelling approach, we would argue that the different segments of the labour market (including the unemployed) are all involved to a varying degree in some common form of household-based income-earning activity. In an earnings function sense, this would mean re-segmenting the unemployed *ex post*, as employed if they participated in a positive sales household. For the employed this means additional income-earning activities. Whilst not shown here, there is also strong empirical evidence indicating that many of the formally employed are involved in multiple activities such as being informally employed or undertaken rural farming activities. The Ugandan work on rural household enterprises, for example, confirms this. How one deals with concentric and overlapping segments of labour market activity - particularly when it is the norm rather than the exception - is thus a key research area in the LIC setting.

Ultimately then, the above suggests that we currently do not have the basic structure or typology of the different segments or sectors of a typical low income country labour market. Better data will certainly aid this understanding as the former will yield repetitive patterns of segmentation across countries and over time. In addition to our ignorance of this typology is the fact that we understand possibly even less about how these segments interact with each other. Multiple income-earning activities amongst individuals and their changing across segments within households, is but one example of these connections across segments about which we know so little.

Based on the above then, the following would seem to be the most pertinent research questions:

1. Can we develop stylized theoretical multi-sector models of LICs incorporating both the identification of the segments and the mechanisms which connect them?
2. What do the data say are the profiles of segmented and multi-sector LIC labour markets and how do they differ across countries and across regions in the LIC sample?
3. What do the data say about how these segments connect to each other across countries and regions in the LIC sample?
4. How can we econometrically estimate both the determinants and participation, employment and earnings carefully and systematically across these multiple segments?
5. How do we deal with the overlap and congruence between firms, individuals and households which is unique (and dominant) in the LIC setting?
6. Finally, what is the relationship between three key exogenous elements of income flows within LIC economies and the labour market as modelled above, namely in the form of:
 - a. Remittances (both in-country and cross-border)
 - b. State Transfers in particular and social protection in general
 - c. Inter-household financial transactions

IV: Economic Growth and the Labour Market in LICs

Factors linking the labour market to economic growth are many and varied. In the LIC setting, these are understandably under-explored. I apportion my reflections of the research gaps into two broad areas: Firstly a suggestion that standard growth-poverty analytical tools need to be applied to the LIC sample. Secondly, I consider a restrictive set of micro-economic constraints which need to be better understood in the LIC setting within the context of growth and employment generation.

In the first instance then, a key area for research in the LIC sample, would be simply to profile the extent and nature of pro-poor growth in these individuals countries and across the sample. Methodologically, this could involve the use of the Growth Incidence Curve (GIC), which is by now a standard tool in the growth-poverty literature.

It is also entirely possible to utilise the architecture of the GIC curve approach to glean a more accurate representation of how the labour market, through employment creation, may (or may not) have generated pro-poor growth within an economy. If one utilises the functional form of the GIC curve, which is represented as (Ravallion,2004):

$$g_t(p) \equiv \frac{d \log y_t(p)}{dt} \text{ for } 0 \leq p \leq 1 \quad (1)$$

Where the growth rate g of each percentile p in the distribution is traced out across the variable under consideration, y . It is very easy to see then from the above, how distinct and relevant labour market categories can be supplanted onto the GIC approach. In effect then, we would treat the distribution y as being represented by our labour market category of interest. In so doing, we are immediately able to interrogate and understand the role of the labour market, and labour market returns in particular, in the growth process. The extent to which wage income as opposed to total household expenditure, was able to rise across all percentiles, or indeed, increase at a faster rate for those at the bottom of the distribution (who may be unskilled or in informal employment) – would be just one example of a vital

labour market lens to understanding pro-poor growth and poverty reduction in a LIC environment.

Based on the above, it is possible to conceive of representing GICs and their reflection of pro-poor growth estimates using labour market segments noted above such as formally employed, urban informal employed and so on, in the construction of how different labour market segments have contributed (or not contributed) to pro-poor growth outcomes in the country under review. More broadly, GICs by the main sectors within an economy could also be very useful. In so doing, this analysis would provide an understanding of whether, through say employment creation within a sector, the relevant sector has also provided returns which have resulted in benefits to the unskilled and hence contributed to poverty reduction.

Conditional on data availability then, the combination of multi-sector labour market models and the growth incidence curve methodology – could be an ideal platform around which to improve our understanding of pro-poor growth-labour market interactions in the sample of low-income countries. This is currently an under-explored terrain of research.

Consistent with our poor understanding of LIC labour market segments, there is a dearth of research on the barriers to growing the informal sector, microenterprise sector and household enterprises within these economies. In many senses, the reference here is to a need to improve our research and thus understanding of the constraints on the growth of the individual-owned firms in their various guises within low income economies. These types of economic activity are, as noted above, common in the LIC setting, but more importantly remain at the core of growth generation and poverty reduction in these economies. Given this, I focus on three areas of microeconomic constraints necessary to explore further, as they impact on the growth and development of the microenterprise sector in LICs. Hence, whilst these constraints no doubt also operate differentially for large firms, there is a strong argument that our understanding of their effect on small firms, non-farm enterprises, the urban informal sector and so on, is limited, relative to the cohort of large domestic or foreign-owned firms. The microeconomic constraints isolated as worthy of further research include regulatory constraints; labour supply challenges and finally market failures for credit and insurance access.

Product and Factor Market Regulations

Evidence indicates that whilst the impact of labour regulations are ambiguous in SSA, other forms of regulation are a constraint on growth (Fox & Sekkel,2006). This leads to two avenues for further research: Firstly it is important to assess the extent to which the labour regulatory argument holds for the sample of LICs only. For example, there is partial evidence to suggest that the laws on the statutes of LICs (certainly for many SSA economies) are particularly rigid – and more so than those for middle-income countries (Fox & Sekkel,2006). Yet, given poor enforcement of the laws, the impact on growth of the labour regulatory environment appears to be benign. However this reasoning is based on an unrepresentative sample of LICs and requires further detailed investigation both within-country and cross-country. Of course the Doing Business Survey is ideal for exactly this type of analysis. The research gap identified here though is to understand and estimate the impact of labour regulations (inclusive of the statute and it's enforcement) in hindering the growth of microenterprises - as opposed to large firms - in LICs. A comparison of this cohort with the impact of the regulatory regime on a sample of middle-income countries, would also be useful.

In terms of non-labour market regulations, the Investment Climate Assessment surveys (ICAs) and DBS results suggest that business registration costs, legal and judicial inefficiencies, poor contract enforcement, poor quality infrastructure, political risk and so on all remain hindrances to investment in SSA (Fox & Sekkel,2006). It is not clear however, to what extent these constraints are more severe in some LICs (say in Africa) relative to others (for example in Asia) and the reasons for this. In addition, it remains an area for further research to understand which of these investment climate factors are more important, relative to others in constraining the growth of domestic micro-enterprises. In the language of this paper, it would be useful to estimate the impact of the individual investment climate factors on the growth and performance of the different segments of the labour market in LICs (noted above).

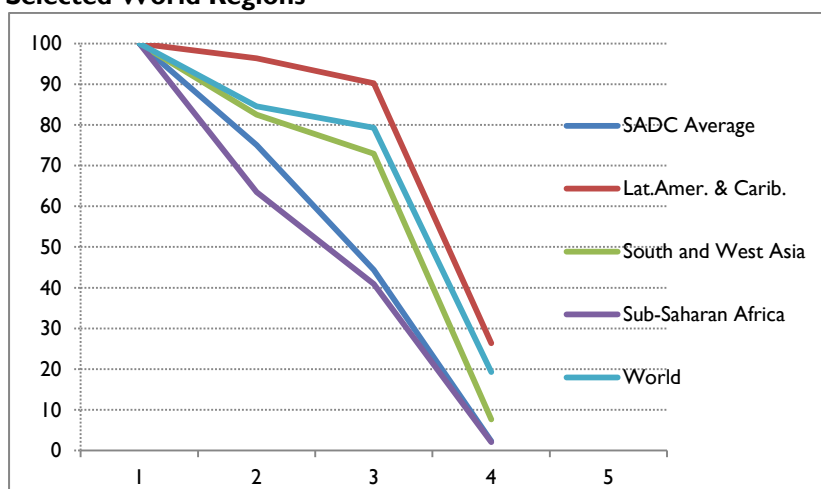
Human Capital Constraints on Growth

Low quality and quantity of schooling remains a common problem of course in the LIC sample. However, a research area worthy of focus would be to assess the extent to which this shortage of human capital acts as a constraint on microenterprise growth. For example, evidence from formal sector firms indicates that a premium is paid to highly educated workers given their severe shortage in SSA. This in part explains the convexity in returns to schooling seen in many SSA labour markets. One of the results of the latter is that the small firm segment of the labour market faces a significant skills constraint. Whilst there are clearly a multitude of research avenues to pursue here, I concentrate only on two areas of investigation, in that they may be pertinent to understanding the human capital constraint faced by small firms in LICs. Firstly, detailed analysis is required in order to understand what the determinants of the low throughput rates are, in the LIC settings. Secondly, there is a need to identify the reasons for the poor quality TVET system in LICs. This segment of the higher education system is often instrumental in providing the base of semi-skilled workers to an economy - and often also the seedbed for small enterprises.

In terms of the first of these, low conversion rates within the educational system may be key in understanding the pervasive human capital and skills constraint faced by the small firm segments in LICs. The data represented in the figure below is a measure of this challenge with the Southern African Development Corporation (SADC) region as well as SSA - representative of a significant number of low income countries. The figure calculates the shares of individuals within a cohort who would have enrolled at primary school and then progressed through the schooling and higher education system⁷. The data here compares SSA, and the SADC region to the world, the LAC and the South & West Asia region.

⁷ The Technical Vocational, Education & Training (TVET) data was not sufficiently reliable to allow for inclusion into this series. We doubt however, if this would change the substance of the results obtained.

Figure 8: Conversion Rates from Primary to Tertiary Education: : SADC Economies and Selected World Regions



Source: OECD (2006) and author's own calculations

Notes:

1. Complete data does not exist for the DRC, Lesotho and Zambia.
2. Estimates based on 2002 and 2003 enrollment cohort.

Visually, the data suggests a collapse in conversion rates from primary to secondary schooling, with this almost equally matched by the decline from secondary to tertiary enrolment. In contrast, the retention rates in all other regions of the world presented here, suggest a far better performance than that of SSA and the SADC region economies. Hence, for Africa, the data shows that for every 100 children of primary school age, we can expect, 2 of these individuals to enter the tertiary educational environment. This is an exit rate of 98 percentage points. In the LAC region, 26 of every 100 within the cohort should make it to a higher education, while for South & West Asia the figure is 8 individuals. The global average is 19. This huge and rapid attrition rate out of the schooling system, at both the primary and secondary school level, within the Africa – must stand as probably the most powerful indictment of the ineffectiveness of the continent's educational institutions.

A key research gap then is attempting a more nuanced understanding of these poor conversion rates within the LIC context and how this may compare with middle-income countries. This descriptive overview should be coupled with an assessment of what factors may be instrumental in improving throughput rates into the secondary schooling system and beyond. As a contribution to the origin of the skills constraint faced by microenterprises in LICs, this analysis would be invaluable.

The second element of the education challenge within the continent also lies with the Technical Vocational, Education & Training (TVET) system – that part of the education system which can and does absorb many early school leavers. It is also, in an efficiently run system, the key provider of the semi-skilled workforce to the labour market and arguably the skills bedrock of a dynamic microenterprise sector. Economies with a thriving small-firm manufacturing base for example, rely on in-country TVET institutions to supply suitably qualified semi-skilled workers. In Africa, this part of the system has suffered from severe under-funding and as a consequence, there is no steady supply of semi-skilled individuals to the labour market. The lack of a deep small (and large) firm manufacturing base in Africa arguably is, at least in labour supply terms, due to this wholly non-existent base of semi-skilled, TVET-trained workers. The lack of appreciation of this TVET system is tied in part

to the historical preference and tendency to view the higher education sector as defined solely by the university system. There is consequently, a long-held view within most economies in Africa that a university qualification is preferable to a TVET certification. This reputation of the TVET system is in stark contrast to numerous developed economies where a technical or artisanal training is in held in high regard both culturally, and by employers. As manifest of this relative preference for universities over the VET system, the table below presents estimates of enrolment across a sample of African economies for which we have data. The data makes it plain that with the exception of Mauritius, every other economy in the estimates below, has at least twice the number of university enrolments relative to VET enrolments.

Table 3: Comparative Enrolments in the Tertiary Sector, Select African Economies

| Country | TVET | University | Ratio of Univ to TVET |
|--------------|--------|------------|-----------------------|
| Swaziland | 994 | 2954 | 2.97 |
| Lesotho | 973 | 4582 | 4.71 |
| Mauritius | 8612 | 6239 | 0.72 |
| Mozambique | 3017 | 8537 | 2.83 |
| Namibia | 1648 | 12000 | 7.28 |
| South Africa | 350465 | 696657 | 1.99 |
| Sample Mean | 365709 | 730969 | 2.00 |

Source: Based on HSRC (2005) and authors' own calculations

Notes:

1. SADC average only based on countries listed
2. Namibia university enrolment based in UNESCO (2005) data
3. South Africa's VET figures refer only to full-time equivalents. Part-time equivalents sum to 706 000 individuals, many of whom however may be employed as well.

For example then, Swaziland has approximately three university enrollees for every one attendee at a TVET institution. Lesotho in turn, has close to five times the number of university relative to TVET students. Ultimately though, a more focused and detailed analysis of the TVET system within the LIC setting would be important. An understanding of the matching process between this institutional supply of semi-skilled labour and the needs of the microenterprise sector within LICs should be a key element of this research.

Credit and Financial Market Failures

Under-developed financial markets for credit and risk-mitigation instruments are common in SSA and developing countries in general. However, we arguably know even less about these market imperfections in the case of LICs. In the case of credit markets, developing country evidence suggests that the lack of access to credit acts a constraint on small business growth. Microenterprises are viewed as a high-risk group by lending institutions, often lack the collateral to meet loan conditions and obligations and for most formal financial institutions are a market where information asymmetries are pervasive. The upshot is the development of informal markets for credit, offered at significantly above-equilibrium interest rates. These markets are often unregulated and are fertile ground for unscrupulous practices which are inimical to small firm growth. Clearly though the growth of micro-firms, requires an availability of affordable credit for medium-term capital and investment decisions, stockpile inventory, increase the marginal productivity of factor inputs and so on.

In the case of risk-mitigation instruments short-term insurance products are rarely available to the micro-enterprise sector. Neoclassical theory predicts that in the case of risk-averse

or risk-neutral firms, uncertainty is associated with lower investment (Pattillo and Soderbom, 2000). Lack of risk-mitigation opportunities in an environment of uncertainty can impose serious barriers to investing in equipment or upgrades, negatively impacting enterprise growth and performance. Risk-mitigation is potentially more relevant for micro-entrepreneurs in LICs, countries struggling with a high incidence of daily economic and non-economic uncertainty. One can think of weather, the regulatory environment, political economy conditions, corruption and crime as only some of nodes of uncertainty faced by informal sector enterprises in a LICs. Unfortunately though, access to risk-mitigation instruments remains elusive for informal entrepreneurs. This is an under-appreciated policy and research area, but remains crucial to the growth of the informal sector in developing countries.

Loan subsidies through government-linked financial institutions, innovative risk-pooling approaches such as joint liability, community banking and public-private partnerships are just some of the mechanisms which have been used to improve access to credit (and less so, insurance) amongst small firms (and households). These interventions differ across countries in both a preferred approach (PPPs as opposed to community banking with or without government support) as well as the incidence of different interventions. However, it is evident that very little research or policy work exists within these areas (apart obviously from a few exceptional countries, such as Bangladesh) for the sample of Low Income economies.

There would appear then to be several research opportunities arising from the above observed credit and short-term insurance market failures. Firstly, a simple audit of the alternative forms of credit and insurance instruments available to microenterprises (or the alternative sectors within the labour market) within the LIC sample would be very useful. Apart from the Grameen Bank and BRAC credit and development programmes of Bangladesh, it would be very useful to assess the interventions currently in place amongst low income countries. Secondly, based on this audit, the extension of credit and insurance services could be tested in specific LICs based on best practice from elsewhere. Randomised Control Trials (RCTs) would seem most apposite as a route to testing such interventions. Hence a series of pilots on possible alternative models of credit and insurance services and products to microenterprises in LICs would be a most fruitful avenue for this research programme.

V: Conclusion

The above has tried to craft a quick and dirty overview of some of the research gaps existent in our understanding of growth and labour market issues in the low income country context. The list above is by no means exclusive or exhaustive, but will hopefully leverage additional related ideas within the broad areas of modelling LIC labour markets, profiling the multi-sector labour markets in the data, linking pro-poor growth to labour market segments and finally delving much deeper into the various micro-economic constraints on the growth of the small firm or microenterprise sector in low income countries.

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Data Appendix

Table A1: Availability of Socio-Economic Micro Datasets in Africa, 2000-2008, by Type of Data.

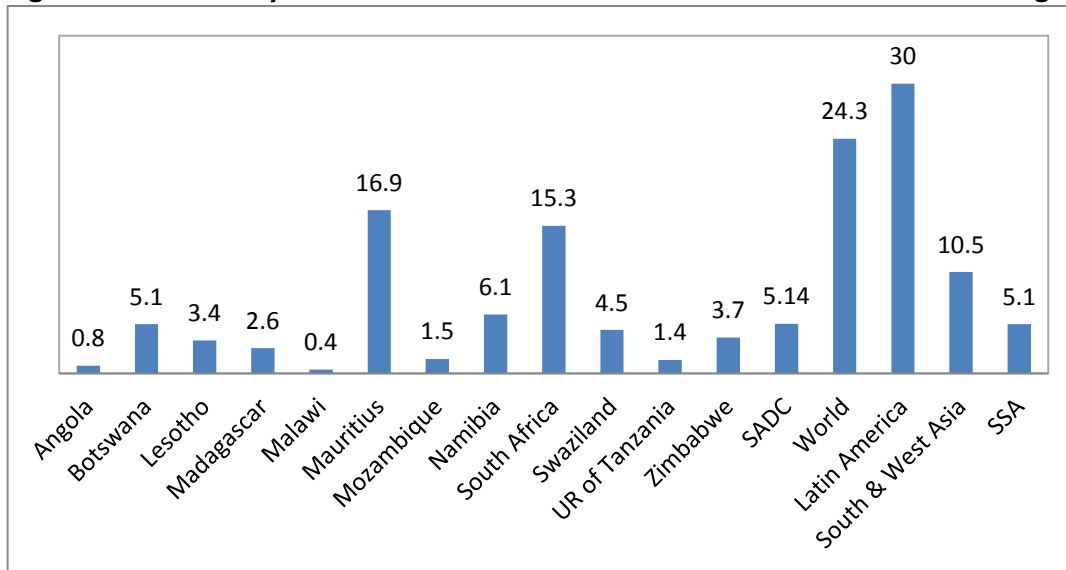
| Country | IES/HH survey | LSMS | LFS | Priority Survey (World Bank) |
|------------------|---------------|------|-----|------------------------------|
| Angola | √ | X | X | X |
| Benin | √ | X | √* | X |
| Botswana | √ | X | √ | X |
| Burkina Faso | X | | X | √ |
| Cameroon | √ | X | X | √ |
| CAR | X | | X | X |
| Cape Verde | √ | X | X | √ |
| Chad | X | X | X | √ |
| Congo, Rep of | X | X | X | √ |
| Djibouti | X | X | X | √ |
| Egypt, Arab Rep. | √ | X | X | X |
| Ethiopia | √* | X | √* | √ |
| Gabon | √* | X | X | X |
| Ghana | X | √ | X | X |
| Guinea | √ | X | X | X |
| Lesotho | √ | X | X | X |
| Liberia | √ | X | X | X |
| Madagascar | X | X | √ | √ |
| Malawi | X | √ | X | X |
| Mali | √ | X | X | √ |
| Mauritius | √ | X | √ | X |
| Morocco | √ | X | √* | X |
| Mozambique | √ | √ | X | X |
| Namibia | √ | X | X | X |
| Niger | X | X | X | √ |
| Nigeria | √ | X | X | X |
| Rwanda | √ | X | X | √ |
| Senegal | √ | X | X | X |
| Seychelles | √ | X | √ | X |
| South Africa | √* | X | √* | X |
| Swaziland | √ | X | X | X |
| Tanzania | X | √ | √* | √ |
| Tunisia | √ | X | √ | X |
| Uganda | √ | X | X | √ |
| Zambia | X | X | √* | X |
| Zimbabwe | X | X | √ | X |

Source: IHSN Survey catalogue

(<http://www.surveynetwork.org/home/?lvl=activities&lvl2=catalog&lvl3=surveys#>), accessed December 2008.

Note: * indicates that more than 1 year of data is available.

Figure XXX: Tertiary Enrolment Rates: SADC Economies and Selected World Regions, 2005



Source: OECD (2006) and author's own calculations

Notes:

1. No data exists for the DRC and Zambia.
2. Regional estimates are median values, while the SADC measure is a simple average.
3. Data are either for the school year ending 2003 or 2004.
4. The Tertiary Net Enrollment Rate (TNER) is calculated as: $\frac{n_i^T}{N_i^T}$, where n_i^T represents the number of individuals of tertiary education age, enrolled in a tertiary institution, while N_i^T is simply the population of individuals who are age-appropriate for tertiary education.