

Labor Markets in Low Income Countries

An Agenda for Future Research and Policy Analysis¹

1. Introduction

In this paper we review labor market trends in low income countries, identifying the main challenges and implications for research and policy analysis. The focus is on basic indicators of participation, employment, the quality of jobs, and access to risk management systems. The paper is based on recent empirical work looking at the development paths over the last two decades of 133 middle and low income countries,² covering all geographic regions, as well as a review of the relevant economic literature. The main finding is that employment levels and the quantity of jobs has not been the problem in most low income countries. Employment has been growing at the same pace as the labor force over the last two decades, and contrary to middle income countries, female labor force participation rates are close to those of men. The problem instead is with the quality of the jobs created, as a large share of the labor force remains employed in low productivity activities in the urban informal sector or in agriculture. Many are self-employed, work in a household enterprise without outside workers, or in family businesses without pay. Earnings are often too low to pull households out of poverty and workers lack access to risk management systems.

Increasing the wellbeing of workers and their families involves improving labor market opportunities so people can be more successful at using or selling their labor. An important part of the jobs agenda should therefore focus on helping workers increase the returns from their current activities. At the same time, because there are risks associated with any job – the risk of being dismissed, the risk of exploitation or abuse, the risk of work injury or disability, or the risk of a drop in the price of the goods or services sold by a self-employed or a small family business – the jobs agenda also needs to consider policies to either reduce these risks or mitigate their impact.

Our analysis suggests two areas where future research and policy work could concentrate: (1) how to support the self-employed and micro-entrepreneurs to either increase the productivity of their current activities when there is potential, or transit into economically viable and more productive activities when necessary; and (2) how to expand access to basic insurance programs, including pensions, health, and unemployment benefits. Other interventions to stimulate the creation of formal wage employment – ranging from policies to improve education and training systems to those that aim to promote

¹ By David A. Robalino (World Bank and IZA) and David Margolis (World Bank and IZA) based on the paper by Cho Yoonyoung, David Newhouse, David Margolis, and David Robalino “*Labor Markets in Middle and Low Income Countries Trends and Implications for Social Protection and Labor Policies.*” Social Protection Discussion Papers. The World Bank. Washington DC.

² See Cho et. al. (forthcoming).

investments in specific sectors – remain relevant, but will have limited impact on total employment over the short and probably medium term.

The paper is organized in 4 sections. The next section describes some of the main challenges facing low income countries in terms of labor market outcomes. The section that follows analyzes some of the main factors that explain current outcomes, focusing on macro-economic policies, the investment climate, labor policies, skills, and social insurance programs. The final section discusses the implications for research and policy analysis.

2. Trends in main labor market outcomes in low income countries

A recent study³ classifies countries by how similar they are according to broad demographic, macroeconomic and labor market indicators. The indicators upon which the grouping was based were chosen so as to give a reasonably accurate picture of labor market activity while maximizing the number of countries for which analysis could be undertaken, given that missing data is a serious issue for many developing countries.⁴ Each group contained countries whose observed changes were as similar as possible to each other (on the same development path) yet as different as possible from the other groups (to distinguish between different development paths). Factors that are expected to explain the indicators themselves, such as the existence of infrastructure or labor regulations, were excluded (see **Error! Reference source not found.**).

Four groups of countries can be identified, bringing together countries from different regions and, in some cases, different levels of income:⁵

- **Cluster 1: Middle Income, Rapid Growth and Structural Change.** This cluster brings together countries where both income per capita and labor productivity have been growing rapidly, moving most to the middle income category. There have also been significant structural changes, with a reallocation of labor away from agriculture and into the industrial sector. Furthermore, employment growth is in line with labor force growth. Examples of this cluster include rapidly growing countries like China, India, Armenia, and Kazakhstan, as well as many

³ See Cho et. al. (forthcoming).

⁴ The indicators used are the following: log GNI per capita, percentage change in average years of schooling, percentage population growth, percentage working age population growth, percentage adult population growth, percentage youth population growth, percentage change in total employment, percentage change in adult working population, percentage change in youth working population, percentage change in male working population, percentage change in female working population, percentage change in agricultural employment, percentage change in industrial employment, and percentage change in service sector employment. The baseline period for the analysis was 1995-1999, and the comparison period was 2005-2008. The analysis was based on a statistical procedure known as cluster analysis and covered 78 of the 133 countries in the sample (the remaining 55 countries lacked sufficient data).

⁵ The analysis compares average values of available data for the 1995-1999 period with average values over the 2005-2008 period. Income levels are based on WDI definitions for 2009: GNI per capita less than \$995=low income, GNI per capital between \$996 and \$3945=lower middle income and GNI per capita between \$3945 and \$12195=upper middle income. Detailed statistics for each cluster are provided in **Error! Reference source not found.**

countries from the Middle East and North Africa (MENA), and the Latin America and Caribbean (LAC) region.

- **Cluster 2: Upper Middle Income, Aging, and Declining Informality.** The second cluster includes higher income countries that, while not matching cluster 1, have also displayed high growth rates in income per capita and labor productivity. Structural changes from agriculture to industry or services have been less important, but there has been a small shift away from informal employment. Employment growth is also in line with labor force growth, but share of youth has been shrinking. These countries include Argentina, Brazil, South Africa and Russia.
- **Cluster 3: Very Low Income, Young, Balanced Employment Growth.** Countries in the third cluster are the poorest in the sample. Growth in income per capita and labor productivity was solid, in line with a shift of employment out of agriculture into the service sector. There are no major imbalances between labor force and employment growth despite a rapid increase in the number of youth in the labor market. At the same time, there has been a large increase in the share of self, unpaid family and household employment, suggesting insufficient quality jobs. The cluster includes many African countries such as Burundi, Ghana and Malawi, with some poorer countries from other regions such as Bangladesh, Cambodia or Tajikistan.
- **Cluster 4: Low Income, Slow Productivity Growth, Structural Change.** The main characteristic of countries in this group is the slow growth in output and productivity, despite high employment growth and a rapid structural transformation out of agriculture into industry – suggesting that there is no automatic link between employment shifts from agriculture to industry and improvements in labor productivity. The majority of these countries are located in Sub-Saharan Africa, but there are others such as Nicaragua, Pakistan, and Mongolia.

Table 1: Main Macroeconomic and Labor Market Indicators across Groups

	Type 1: Middle Income, Rapid Growth, Structural Change	Type 2: Upper Middle Income, Aging, Declining Informality	Type 3: Very Low Income, Young, Balanced Employment Growth	Type 4: Low Income, Young, Slow Productivity Growth
<u>Initial level (1995-1999)</u>				
GDP per capita	1,224	3,406	209	464
\$2/day poverty rate	30%	15%	85%	56%
<u>Percentage growth</u>				
GDP per capita	33%	26%	23%	18%
Labor productivity	24%	19%	18%	8%
Total labor force	25%	20%	32%	50%
Youth labor force	11%	-3%	32%	35%
Total employment	21%	16%	30%	31%
Youth employment	13%	-2%	32%	24%
<u>Changes</u>				
\$2/day poverty rate	-8.58	-4.23	-6.63	-11.60
self, unpaid family and household employment share	0.37	-1.33	15.56	-2.48
Agriculture share	-5.51	-2.20	-4.08	-7.36
Industry Share	3.68	0.77	0.96	5.43
Public employment share	-0.46	-0.51	.	0.95
Female labor force participation	2.32	2.40	1.23	2.74
Adult employment to working age population ratio	1.38	1.98	0.83	2.75
Youth unemployment rate	-1.13	-1.46	-0.36	-1.40
<u>Levels</u>				
Agricultural employment share	12.77	7.15	37.53	22.20
Self, unpaid family and household employment share	46.28	32.45	85.25	56.15
Female labor force participation	44.96	49.39	67.01	53.51
Employment to population ratio	54.72	55.95	69.45	59.21
Adult unemployment rate	15.82	18.56	8.15	12.90
Youth unemployment rate	20.55	20.94	9.98	18.24
Worker remittances (% of GDP)	6.6	3.7	6.4	7.6
Size of diaspora (% of native-born population)	3.9	8.7	16.4	6.7
Net migration (Avg Absolute Value, % of total population)	1.4	1.2	1.2	0.9
<u>Number of countries available</u>				
Total	25	23	17	13

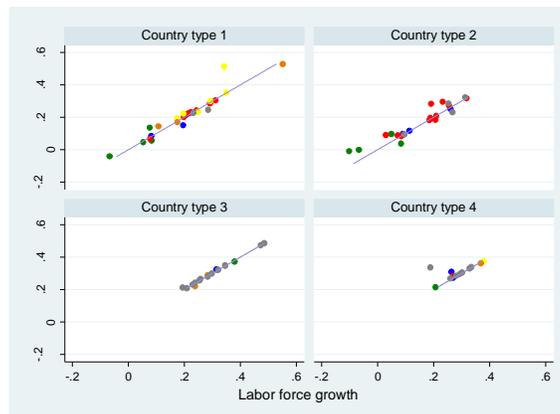
Source: Cho et. al. (forthcoming).

A first observation is that, across clusters, employment has been growing in line with the labor force. This can be seen in Figure 1 which plots growth rates for all countries where data are available between the baseline period (1990-1995) and the comparison period (2005-2008). Although there are exceptions across clusters, particularly in the case of middle income countries, in the majority of cases employment (as per the ILO definition) expanded to absorb new entrants to the labor market. This is remarkable in the case of low income countries, where the labor force has been expanding more rapidly than in middle income countries due to youth bulges in the demographic structure. Indeed, while the labor force grew, on average, by 15 percent (cluster 2) and 20 percent (cluster 2) between the baseline and comparison

period in middle income countries, the growth rate was around 30 percent in low income countries. This was also the case for the youth labor force, which grew by 32 percent in cluster 3 countries and 23 percent in cluster 4 countries.

The expansion of employment, however, hides several issues of concern. The first is the high share of the labor force that is self-employed or working in household enterprises, often without pay. These activities absorb over 55 percent of labor force in cluster 4 countries, and close to 85 percent in cluster 3 countries. As a majority of these jobs are low productivity and generate low earnings, to the point that many of workers and their families remain poor (poverty rates in cluster 3 and cluster 4 countries are 85 and 56 percent), this is a cause for concern. Moreover, workers in these activities/jobs are typically not protected by labor regulations and social insurance systems, and therefore remain vulnerable to abuse and exploitation, or fluctuations in incomes.

Figure 1: Labor Force and Employment Growth (1990-1995 to 2005-2008)



Source: Cho et al., (2011)

Note: blue=East Asia and Pacific, green=Europe and Central Asia, red=Latin America and Caribbean, yellow=Middle East and North Africa, orange=South Asia, and gray=Sub-Saharan Africa.

These numbers are explained in part by the important role that agriculture still plays as a source of jobs, employing 22 percent (cluster 4) and 38 percent (cluster 3) of the labor force. The share of agricultural employment has been declining in both clusters of countries over the last two decades, but only slowly. In the very low income countries (cluster 3), the movement out of agriculture has been compensated by an expansion of the service sector and this has led to an increase in labor productivity of 1 percent per year on average, which is low given the starting levels of income per capita (less than USD 500). In cluster 4 countries, the reduction in the share of agricultural employment has been faster (7 percentage points, on average, during the period of analysis vs. 4 percentage points) and the share of employment in the industrial sector increased (by 5 percentage points), but this did not result in a faster labor productivity growth. This is an important observation that calls into question the assumption that the movement of jobs from agriculture to industry is systematically associated with an increase in labor productivity.

A second issue that needs to receive attention relates to high unemployment rates among youth. The shares of unemployed youth in low income countries have been steady, but remain high (even if they are lower than those observed in middle income countries). In very low income countries, where the youth labor force has been growing at the fastest rates (32 percent on average), the average youth unemployment rate is the lowest (10 percent). This can be explained, in part, by lower reservation earnings, as not working is less of an option when living in a poor household. Youth, and often children, are more likely to engage in work activities even if not remunerated, which also explains the rapid increase in employment. In cluster 4 countries, the youth unemployment rate is considerably higher (18 percent), close to the level observed in middle income countries. As the share of youth in the labor force continues to increase in both sets of low income countries, the problem of youth unemployment may intensify. The fact that youth are less experienced than adults and have more limited social networks means that finding jobs can be more challenging for them. More importantly, long unemployment periods for youth might have long lasting consequences.⁶

The third issue of note for low income countries is the importance of migration flows and remittances. In both low and very low income countries, remittances from migration constitute an important share of GDP – 7.6 and 6.4 percent respectively. More importantly, these countries have large diasporas, particularly the very low income countries where over 16 percent of the native born population leaves overseas. Moreover, a growing share of current migration flows is taking place between developing countries. Hence, countries like Bangladesh or Pakistan have become an important source of cheap labor for higher income countries in Asia (e.g., Malaysia), the Middle East (e.g., Jordan and Lebanon), and the Gulf (e.g., Saudi Arabia and the Emirates). The issue here is not that migration is a negative phenomena – migration is a choice that workers and their families make, presumably to increase standards of living. The problem is that migration can have unintended consequences. First, migration divides families, with potential repercussions on children’s education and the resilience of informal safety nets.⁷ Second, migrants can be exposed to abuse and exploitation in receiving countries.⁸ Migration management that benefits both sending and receiving countries is a policy problem that is only now starting to receive attention.

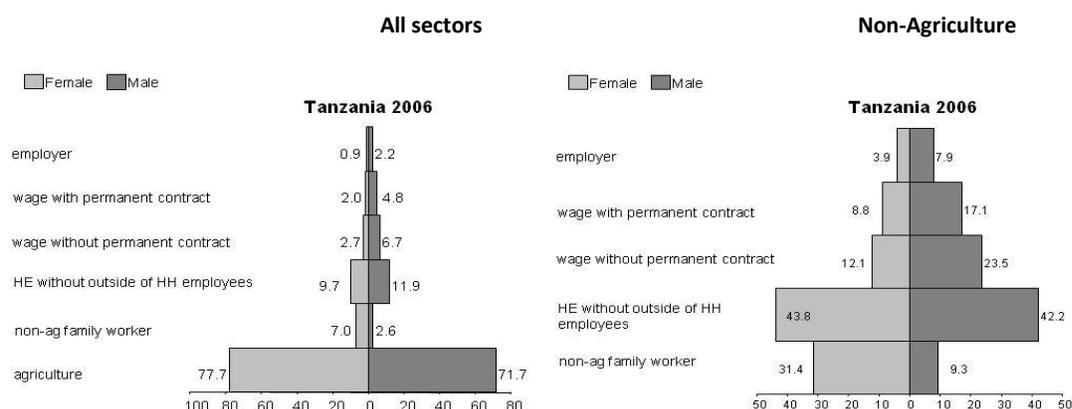
Other issues related to low female participation rates and adult unemployment rates are less severe in the case of low income countries. In general, adult unemployment rates are low, in part because individuals are less able to afford to be unemployed. Female participate rates tend to be higher than in middle income countries. In fact, close to 70 percent of women are active in very low income countries, even though they often work in household enterprises without pay. In Tanzania, for instance, 70 percent of women work in agriculture, and among those in non-agricultural activities 43 percent work in household enterprises without outside workers and 30 percent as unpaid family workers (see Figure 2). Again, the problem is not participation in the labor force, but the types of jobs women are involved in.

⁶ See Margolis et al. (2001), World Bank (2006).

⁷ See Holzmann and Jorgenson (2002).

⁸ See Holzmann et al., (2011)

Figure 2: Distribution of Employment in Tanzania



Source: Louise Fox, “Why is the Informal Normal in Low Income Sub-Saharan Africa”, presentation in World Bank BBL series “Beyond Informality,” March 17 2011.

3. Why do we observe current trends?

Ultimately the labor market outcomes discussed in the previous section depend on decisions by entrepreneurs to create, expand, downsize, or close business or establishments; occupational choices made by workers; and the efficiency of the job-matching process. Several formal and informal institutions affect these decisions and labor market dynamics. Much attention, for instance, has been given to the role of macroeconomic stability, the rule of law, infrastructure, and business regulations in influencing investment and hiring decisions. Decisions about the creation and expansion of businesses also depend on the cost of recruiting and paying workers with given skills. Regions with few skilled workers, where workers do not hold trusted diplomas certifying their skills, or where labor regulations increase the cost of hiring and dismissing workers will be less likely to attract investors, particularly those involved in high value added activities. Occupational choices also play a role at different levels, including the types of skills in which individuals invest and decisions about accepting formal or informal job offers or moving into self-employment.⁹ These decisions can be affected by both labor regulations and the design of mandatory insurance programs.

In this section we discuss some of the main factors that could explain current labor market outcomes in low income countries. We focus on five sets of indicators: (i) macroeconomic; (ii) the investment climate; (iii) labor market regulations; (iv) skills; and (v) social insurance.¹⁰

⁹ These decisions reflect individual preferences and the constraints they face. Many individuals, for instance, might choose to become self-employed not because it is their vocation but because the number salaried jobs is small relative to the number of job-seekers. Expectations about the types of jobs and earnings that are available can also affect decisions to invest in education and training. Individuals are less likely to invest in high-end skills if they know that the number of jobs available is rationed and the probability of getting one is low – in this case, the expected return to investment in education can be low even if the wage premium itself is very high.

¹⁰ The World Bank refers to these five dimensions as the MILES framework (see Banerji et al., 2008).

When looking at core macro-economic indicators in low income countries, the main problems that surface include high inflation rates, very low levels of foreign direct investment, and significant trade imbalances. Although not very different from middle income countries, inflation rates approaching 10 percent can reflect a weak monetary policy – either because central banks do not have a clear mandate to control inflation or because they do not have the necessary independence to do so. Relatively high inflation can then be associated with higher levels of uncertainty about the future, reducing incentives to invest. The fiscal situation of low income countries, on the other hand, seems to be better than that of middle income countries, with several running budget surpluses. The main gaps are in the low levels of Foreign Direct Investment that low income countries receive and that tend to be correlated with weak governance and a poor business environment (see below). Low income countries are also characterized but poorly diversified exports sectors mainly based on primary commodities. In the absence of flexible exchange rates inflows from these exports have contributed to appreciate the real exchange rate and affect the production and exports of other tradable goods. On average, the economies are running larger trade deficits than middle income countries.

Table 2: Challenges - Basic Macroeconomic Indicators

	Country type 1	Country type 2	Country type 3	Country type 4
Inflation	7.2	7.3	9.4	8.9
Deficit Spending (% of GDP)	-0.9	-0.3	0.4	0.3
Public Debt (% of GDP)	50	48	46	51
FDI (% of GDP)	1.84	1.93	0.07	0.19
Gross Capital Formation (% of GDP)	26.4	23.3	20.0	25.5
Current Account Balance (% of GDP)	-3.1	-2.5	-8.0	-4.2

Source: WDI.

In terms of indicators of the business environment the main gaps relate to access to credit and infrastructure. Although high by the standards of high income countries, there are no major differences between low and middle income countries regarding indicators such as the length of time necessary to create or close businesses, or the number of taxes that businesses have to pay. Access to credit in low income countries, however, seems to be an important issue, particularly for countries in cluster 3 where less than one percent of adults are covered by public or private registries. There are also important gaps regarding infrastructure as indicated by electricity consumption and the share of roads paved. In countries in cluster 3, for instance, electricity consumption is less than one third that observed in middle income countries and less than 20 percent of roads are paved. The lack of infrastructure increases the cost of doing business and can reduce investments.

Table 3: Challenges - Business environment

	Country type 1	Country type 2	Country type 3	Country type 4
Days to start a business	39	39	39	43
Getting credit: share covered by public registry	8.60	9.49	0.56	3.33
Getting credit: share covered by private bureau	15.68	38.71	0.01	8.04
Number of tax payments per year	37	34	37	47
Years to close business	3.54	2.82	3.36	3.69

Source: Doing Business.

Notes: Figures refer to most recent year data. Data available for all countries in groups 1-4 and all variables except getting credit: public registry (missing for type 2 country Malaysia), getting credit: private bureau (missing for type 1 country Egypt and type 2 country Mauritius) and years to close business (missing for type 1 country Albania and type 3 countries Burundi, Cambodia and Rwanda).

Table 4: Challenges – Infrastructure

	Country type 1	Country type 2	Country type 3	Country type 4
Electricity consumption (kWh per capita)	1255	2532	507	496
Share of roads paved	63	62	18	34

Source: WDI.

Notes: Figures refer to the 4-year average of available data from the period 2005-2008. Data availability by variable and country type for countries in groups 1-4 are as follows (Electricity consumption – Paved roads/total countries in group): 22-9/25 type 1 countries, 21-9/23 type 2 countries, 8-2/17 type 3 countries and 10-3/13 type 4 countries.

With the exception of minimum wage policy, labor regulations in low income countries do not appear to be more costly than in middle income countries and, given their low coverage, it is unclear how much they affect labor market outcomes. Minimum wages represent more than 50 percent of value added per worker, which is quite high and, where enforced, can reduce employment levels – at least formal wage employment.¹¹ Restrictions on dismissal procedures, on the other hand, seem less binding. While in specific cases like India and Pakistan these regulations can be quite restrictive, on average they seem less so. For instance, in less than 20 percent of cases does a third party have to approve dismissals and the cost of advance notice and severance pay are, on average, not particularly high. Although the empirical literature usually shows that laws aimed at providing job security reduce turnover, lead to the creation of fewer jobs, and may slow productivity growth,¹² it is unlikely that they constitute the main factor behind the low share of formal wage employment in low income countries. A recent study for South Asian countries suggests that while high minimum wages and rigid regulations can constrain the expansion of the formal sector at the margin, eliminating them would not have a significant effect on formal wage employment.

¹¹ See Del Carpio et al., (2011).

¹² See Robalino et al., (2011) for a review of the literature.

Table 5: Challenges - Labor market regulations

	Country type 1	Country type 2	Country type 3	Country type 4
Ratio of minimum wage to value added per worker	37%	27%	57%	52%
Severance pay for redundancy dismissal (in salary weeks)	13.1	14.8	18.9	12.6
Notice period for redundancy dismissal (in salary weeks)	5.1	4.1	5.5	4.0
Paid annual leave (in working days)	17	17	20	21
Notification of a third party required if 9 workers are dismissed	83%	43%	88%	54%
Approval of a third party required if 9 workers are dismissed	48%	13%	18%	15%

Source: Doing Business (Employing workers indicators).

Notes: Figures refer to most recent year data. Severance pay, notice period and paid annual leave figures represent averages for workers with 1, 5 and 10 years of job seniority. Data available for all countries and all variables except the notification and approval variables, for which one country in group 1 (Bolivia) is missing data.

A critical factor affecting labor market outcomes in low income countries is the very low level of education of the labor force. The average number of years of schooling remains low in middle income countries relative to OECD countries (8.5 vs. 11.9 years), yet it is twice that observed in low income countries. In high income countries, 56 percent of the labor force has a high school diploma and 14 percent have a university diploma. In cluster 3 countries less than 10 percent of the labor force has completed secondary school and less than 2 percent has university diplomas. Middle income countries already have literacy rates over 90 percent. For these countries, the issue of access to primary education is more or less resolved, and the challenge is to further lift the skill level of the population into the secondary and tertiary levels. In low income countries illiteracy can touch up to 73 percent of the population (Niger), and average years of education can be as low as 1.2 (Mozambique). In some countries like Kenya, Mongolia, Tajikistan or the Kyrgyz Republic, literacy rates and average education have reached levels comparable to middle income countries. But in general, a priority for low income countries continues to be expanding educational opportunities and ensuring the presence of teachers and the availability of textbooks.¹³

¹³ See the World Development Report (2007); World Bank (2007, 2008).

Table 6: Challenges – Skills

	Country type 1	Country type 2	Country type 3	Country type 4
Average years of schooling	7.53	8.47	4.34	5.26
Literacy rate	95.76	93.87	56.18	65.68
Share of working age population having completed secondary school	27.79	30.92	9.93	14.69
Share of working age population having completed tertiary education	6.44	7.45	1.35	3.09

Source: WDI, Barro and Lee (2010).

Notes: Figures refer to the 4-year average of available data from the period 2005-2008. Data available for all countries in groups 1-4 for average years of schooling but data on the literacy rate are limited (countries available/total countries in group): 24/25 type 1 countries, 20/23 type 2 countries, 15/17 type 3 countries and 12/13 type 4 countries.

Beyond these overall trends, the basic indicators of educational achievement hide fundamental issues regarding the relevance of skills acquired in education and training systems for labor markets. Indeed, ensuring that children enroll in schools and ultimately graduate from college does not guarantee that, while in the system, they are acquiring skills that will improve their labor market opportunities.¹⁴ For many developing countries, particularly in low income settings, assessments of education quality are disappointing.^{15,16} Furthermore, as the level of education increases, skills mismatch becomes an increasingly important issue and a major cause of high unemployment, especially among youth with higher education. In India, for instance, 50 percent of university graduates obtain a diploma in arts, far exceeding employer demands.¹⁷

The challenge of providing labor market relevant skills is complicated by a variety of factors that compromise early childhood development and the normal development of non-cognitive and, eventually, cognitive skills. Indeed, recent empirical analyses show that success in the labor market does not only depend on the acquisition of technical skills. Cognitive and non-cognitive skills, in part acquired in early childhood and during primary and secondary schooling, are also important determinants of employment dynamics and earnings later in life,¹⁸ and they also facilitate the acquisition of technical

¹⁴ See the *Skills toward Employability and Productivity* (StEP) framework publication “Stepping Up Skills for More Jobs and Higher Productivity” (World Bank, 2010).

¹⁵ See Glewwe and Kremer (2006); World Bank (2008); Robalino et al. (2011); Boissiere (2004).

¹⁶ Internationally comparable data measuring the quality of education such as TIMSS (Third International Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study), and PISA (Programme for International Student Assessment), collect information primarily from developed countries and a few middle income developing countries. Internationally comparable data are not available for very low-income countries. The performance of students on achievement tests administered within many of the low income countries, however, suggests that academic achievement is often very low. See Glewwe and Kremer (2006) and Boissiere, 2004 for more information on the quality of education in developing countries, World Bank (2008), for country specific assessment of academic achievement in LAC, and Robalino et. al. (2011) for South Asia.

¹⁷ See Robalino et. al. (2011).

¹⁸ Heckman et al. (2006) show that cognitive skills and non-cognitive skills are important in explaining a diverse array of labor market outcomes. Although there are important gender differences in the effects of these skills, for most behaviors, both factors play an important role for both men and women. Carneiro and Heckman (2003),

skills and education more generally.¹⁹ Because the demand for higher-level cognitive skills, relative to demands for manual job-specific skills, tends to increase with technological progress, provision of these skills becomes increasingly important in low income countries as they head toward economic diversification and productivity growth.²⁰

When it comes to social insurance programs, there is considerable variation regarding the types of risk covered. Among the countries for which data exists, old age, disability and survivor benefits are the most common - only Malawi does not offer them. Unemployment benefits, however, are not part of the social insurance system in the majority of cases. Only 35 percent of countries in the sample have them (mostly in Cluster 2), while the others rely on severance pay regulated through the labor code (see above). Outside of clusters 1 and 2, only a minority of countries offer contributory health insurance. In the others, all workers (and their families) are supposedly covered through national health services, but these systems can suffer from issues with access and quality.²¹

Table 7: Challenges - Social protection

	Country type 1	Country type 2	Country type 3	Country type 4
Availability of social protection (Number of different risks covered)	4.6	5.1	3.3	4.1
Share of working age population contributing to pensions	20%	30%	4%	8%

Sources: <http://www.ssa.gov/policy/docs/progdesc/ssptw/> and International Patterns of Pension Provision II database.

Notes: Figures refer to most recent year data. Types of risks potentially covered by the social protection indicator include old age, disability and survivor, sickness and maternity (cash benefits, medical care or both), workplace injury, unemployment and family allowances. Data availability by variable and country type are as follows (SP countries available – Pensions countries available/total countries in group): 23-22/25 type 1 countries, 23-19/23 type 2 countries, 14-12/17 type 3 countries and 11-11/13 type 4.

The main problem in the developing world, however, is that public social insurance systems cover only a minority of the labor force, often only workers engaged in formal employment. Less than 30 percent of the world's labor force has access to social security. The situation is even more dramatic in low income countries where less than 10 percent of the labor force is covered – mainly civil servants and a small contingent of formal workers in the private sector. In fact, coverage rates across countries are strongly correlated with income and region. Low income workers and the poor, especially those living in rural areas, are much less likely to be covered.²²

There are many reasons for the observed low levels of coverage, two of the most important being low productivity and earnings, and a weak capacity to enforce regulations. Low productivity firms, usually small or micro-firms, typically self-select into the informal sector; they cannot afford the minimum costs

Heckman and Masterov (2007), and Cunha, et. al. (2006), and numerous other papers establish that parents play an important role in producing both the cognitive and non-cognitive skills of their children.

¹⁹ See Bowles and Gintis (1976); Heckman et. al. (2006).

²⁰ See Autor, Levy and Murnane (2003); Goldin and Katz (2007).

²¹ See Wagstaff (2007) for general discussion on social health insurance; Thornton et al. (2010) for Nicaragua's randomized experiment on the design of social insurance program; World Bank (2007) for implementation of social health insurance program for various countries including Kenya, Ghana, Philippines, and Thailand; and Wagstaff et al. (2009) for integration of segmented programs in China.

²² See Ribe et. al. (2010); Holzmann et al. (2009).

of labor imposed by social security, which can be high.²³ Moreover, they are in many cases excluded from social security laws, which apply primarily to medium and large firms and organizations in the public sector in many countries. In theory, workers who are not in formal wage employment could be allowed to enroll voluntarily, but “myopia”, lack of trust in the public systems, and short-term liquidity constraints can keep uncovered individuals, particularly the unskilled and those with low income, from enrolling. Beyond these incentive and non compliance issues, coverage can be further reduced by low enforcement capacity. When comparing the benefits and the expected costs of non-compliance, poor enforcement can reduce the expected costs and some employers can choose to evade – studies have found underreporting to the pension system can be as high as 30% of the covered wage bill in formal firms.²⁴

4. Implications for Research and Policy Analysis

The previous two sections have discussed the main challenges facing low income countries in terms of labor market outcomes and some of the issues that will need to be addressed to improve them. We have argued that the problem at hand is not the lack of jobs, but the low productivity and earnings of the jobs people have and their vulnerability to shocks that comes as a result of limited access to risk management systems. Changing the status quo will involve providing better incentives and conditions for entrepreneurs, including foreign entrepreneurs, to create new businesses and expand existing ones. But even the most aggressive and successful industrial policy is unlikely to affect the situation of the majority of workers, who are often self-employed or employees in household enterprises and are lacking basic skills. Additional interventions are needed to support these workers either by increasing the productivity of their activities or by helping them move to more productive ones. Regardless of the intervention, governments will also need to improve the skills of the labor force and expand the coverage of social insurance programs. With this in mind, this final section outlines an agenda for research and policy analysis.

A first part of the agenda in low income countries would focus on ensuring that the process of business and job creation (and destruction) can take place efficiently. Policies to promote macroeconomic stability and a business environment that encourages investment and innovation remain relevant to this part of the agenda, which would essentially focus on high end jobs. Research here should continue to improve our understanding of how different parts of the regulatory framework affect the creation of firms and jobs in different sectors, regions, and at various levels of productivity. To date, there is evidence highlighting the importance of competition in facilitating firm entry, innovation and productivity growth.²⁵ Research also shows that significant reductions in regulations can increase the number of businesses and wage employment.²⁶ But important questions remain in terms of how different regulations and policy interventions affect competition (e.g., competition councils, anti-trust

²³ See World Bank (2005).

²⁴ See World Bank (2005).

²⁵ See, for example Aghion et al, (2005) and Hallward-Driemeier and Thompson (2009).

²⁶ See Bruhn (2011) and Klapper and Love (2010).

law) and ultimately jobs. How to enforce these regulations in developing countries also remains an open policy question.²⁷

This first part of the agenda could also involve more direct policy interventions to stimulate investments in particular sectors. Even in a perfect business environment with low macroeconomic and microeconomic risks, investments and new business will not simply follow due to other market features such as coordination failures and information spillovers.²⁸ In the case of coordination failures, the return to one investment depends on whether another investment is also made, such as when the profitability of export activities depends on port investments. Information spillovers can occur when first movers in new activities pay the cost of experimenting, allowing new entrants to learn from these first movers. In these cases, governments may be called upon to temporarily subsidize investments, guarantee loans to firms, facilitate the creation of necessary infrastructure, and mobilize skilled workers. But there remain questions about how these policies should be implemented – starting with how to “target activities” – that will need to be addressed in the future.²⁹

The second part of the agenda would focus on policies that are more relevant for supporting self-employment and entrepreneurship, which have received less attention and for which relatively little is known about their effectiveness. These policies would attempt to influence motivation and risk tolerance (via cultural and social norms); technical and non-cognitive skills; information about production technologies, best management practices, and prices; access to value chains and markets; and liquidity constraints. Some of the interventions that can be considered include business and life skills training, advisory services, networking, access to finance and micro-franchising.

At this stage, it is difficult to extract reproducible lessons from the evidence given the large heterogeneity of programs and the fact that they are typically comprised of a package of interventions. Randomized control trials carried out on a sample of microfinance clients in Peru,³⁰ Tanzania,³¹ Bosnia-Herzegovina,³² Dominican Republic,³³ and Pakistan³⁴ found that **business training** improved business knowledge and business practices, but there is little evidence of an impact on sales, profits or survival rates. Moreover, introducing **microfinance** in new areas affects the creation and ownership of new business but not employment among current businesses.³⁵ Evaluations of youth programs that provide **entrepreneurial skills** show that much depends on curriculum, pedagogical approach, and whether

²⁷ See Hallward-Driemeier and Pritchett (2010).

²⁸ See Hausmann (2008).

²⁹ Lin and Monga (2010) present evidence that governments implementing successful industrial policies targeted industries that (a) were consistent with the country’s latest comparative advantage determined by endowment structure and, (b) were mature in countries whose per capita income was, on average, around double their own.

³⁰ See Karlan and Valdivia (2011).

³¹ See Bjorvatn and Tungodden (2010).

³² See Bruhn and Zia (2011).

³³ See Drexler, Fisher and Schoar (2011).

³⁴ See Mansuri and Gine (2011).

³⁵ See Banerjee, Duflo, Glennerster and Kinnan, 2009.

participants have to actually start a business or not.³⁶ For example, an evaluation of Argentina's *Microemprendimientos Productivos*, which targeted welfare beneficiaries from a large safety nets intervention, reports that the intervention failed to increase income for the average participant during the short-run.³⁷ Some evaluations of **matching grants** for SMEs in Argentina³⁸ and Tunisia show positive results on employment creation but the results are less straightforward in Mauritius.³⁹ **Mentoring** for SMEs in Mexico led to large, but imprecisely measured, increases in profits and sales, but no increases in employment over one year.⁴⁰ Consultants to **improve management practices** in India increased productivity by 11 percent and annual profits by over USD 200,000 per firm, but were costly and induced no significant change in employment in the first year.⁴¹ In general, most results measure impacts over the short run; little is known about the medium term impact of these programs.

Nevertheless, there are some newer, innovating approaches that seem promising. For example, **microfranchising** programs remove the difficult step of designing a potentially successful business model by replication of an existing successful business. This approach has been applied in sectors from pharmaceutical drugs, to ice cream, to solid waste collection, to domestic or phone services, to the provision of water. The risk of failure for these businesses is lower than that of a standard firm start-up, which increases the attractiveness of this type of program in places where the stigma associated with failure is high. Other sorts of interventions that focus on increasing the productivity, integration, resistance to shocks and competitiveness the **agricultural sector** also merit more attention, particularly in low income countries. Examples of interventions targeting this sector include policies that promote access to finance, facilitate the adoption of new technologies, help upward movements in the value chain, improve the use of fertilizers and seeds, provide information about prices and quality standards, ease access to insurance to manage risk, provide assistance for the formation of producer networks and promote skill development.⁴²

Looking forward, the agenda to support self-employment and entrepreneurship could focus on the following questions:

- **Designing instruments and targeting methods to identify different groups of potential beneficiaries and assess the constraints they face.** Examples of targeted groups include subsistence farmers, women, youth, low productivity firms, etc., and interventions can take place at the level of the individual, firm, or community.
- **Better understanding what types of entrepreneurship programs are effective for specific groups.** Many more evaluations of targeted programs are required, ideally also providing information about how alternative design features affect their performance.

³⁶ For the case of the Netherlands see Oosterbeek, Van Praag and Ijsselstein (2010). For Botswana, Ethiopia, Kenya, South Africa and Tunisia see Africa Competitiveness Report (2011).

³⁷ See Almeida and Galasso (2009).

³⁸ See Castillo et al, (2010).

³⁹ See Biggs (1999)

⁴⁰ See Bruhn, Karlan and Schoar, (2011).

⁴¹ See Bloom, Eifert, Mahajan, McKenzie, and Roberts, (2011).

⁴² See World Bank (2007c).

- **Identifying the types of interventions that can be considered to extend insurance to the self-employed and small entrepreneurs.** This is an area where very little work has been conducted. Yet, the presence of uninsured risks – such as fluctuations in commodity prices, disability, or disease – may deter potentially successful entrepreneurs either from establishing businesses or from engaging in high-risk/high-reward activities.
- **Identifying what skills are related to successful entrepreneurship and learning about their malleability over the life cycle.** This can help understand whether interventions need to be introduced early in an individual’s education or if they can be taught after the individual enters the labor market.

The third part of the agenda would be about skills development and would have two components: improving the skills in the large stock of unskilled workers and, over the medium term, improving the skills of new labor market entrants. In the short term, the focus would need to be on three types of training programs for individuals who are leaving the formal general schooling system or are already in the labor market: pre-employment technical and vocational education and training (TVET); on-the-job training (OJT); and training-related active labor market programs (ALMP) targeted to individuals without access to the first two.⁴³

The challenge is to improve the design of existing programs based on a better understanding of the impact of different skills on labor market outcomes, problems of mismatch between the supply and demand of skills, and market failures that affect decisions to invest in training.⁴⁴ The later include poaching and matching externalities in labor markets; limited information in capital markets that precludes access to credit to finance investments in training; coordination failures that lead workers to underinvest in training (because there are no jobs for high-skilled workers) while limiting the incentives for employers to create these jobs (because of a lack of skilled workers on the market); limited information; and individual “myopia” that leads to insufficient investment or inappropriate career choices. The following areas for further research and policy analysis can be considered:

- **Measuring skills.** One of the main avenues for further research is the development of sound country-level, regularly-administered surveys of workers and firms that measure the supply and demand of technical, cognitive and non-cognitive skills and are relevant for the developing world.⁴⁵ How to define and measure the skills that determine labor market outcomes in developing countries remains an open question as well.
- **Assessing failures in the market for skills.** There is an urgent need for a much better assessment of the main market and governmental failures affecting the provision of training. A first step is to define a more systematic approach to identifying the constraints that individuals looking to acquire skills or firms seeking to provide them might face. An extension of this work would involve evaluating how different types of incentives, or more information, can affect skill acquisition.

⁴³ For a recent report taking stock of skills development strategies see Almeida et al. (forthcoming).

⁴⁴ See Almeida et al. (forthcoming).

⁴⁵ The Bank has already pioneered this type of survey in Lebanon and Peru, and is exploring the possibilities for expanding to more countries.

- **Improving knowledge about program design and implementation.** Some of the most important decisions when designing a new program relate to governance, management structures, public vs. private provision, financing mechanisms, payment systems to providers, decentralization and autonomy, regulations to control quality, and how to target and deliver transfers (to individuals or firms). Efforts should be undertaken to establish best practices with respect to these design features.

The fourth part of the agenda would relate to worker protection systems, social insurance and labor regulations. Expanding access to social insurance would require opening systems to all workers regardless of occupation and most likely on a voluntary basis, since enforcing compliance is often infeasible. This raises several technical challenges: (i) defining the set and level of benefits that are provided to attract workers – and their employers (when available) – from outside the formal sector; (ii) structuring incentives to encourage enrollment and take up; (iii) mobilizing subsidies for individuals with low or limited savings capacity; (iv) financing the system in a manner that minimizes incentives to evade while allowing workers to enroll (regardless of income and their contribution capacity) and avoiding the creation of unfunded liabilities; (v) collecting contributions from workers without stable and measurable earnings who often lack access to the financial sector; and (v) paying benefits.

Some of the themes for research and policy analysis include:

- **Identifying more efficient and equitable redistributive arrangements.** To guarantee financial sustainability and improve incentives social insurance programs need to rely on *actuarially fair risk pooling* and/or *savings*. Explicit redistributive arrangements can then be added as complements to these basic arrangements to cover individuals with limited savings capacity. Questions to address include: (i) whether to use ex-ante or ex-post transfers; (ii) how to design a targeted mechanism that goes beyond the poor; and (iii) how to finance the programs.
- **Supporting the development of voluntary savings schemes for informal sector workers.** Low income countries will most likely need to rely on voluntary schemes. To inform the design of these schemes field experiments should be launched to understand the constraints affecting individuals willingness to save and/or self-insure (e.g., information, skills, access, liquidity constraints, trust, social norms) and the impact of alternative interventions/incentives aiming at changing behaviors.

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