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Labor Markets in Low- and Middle-Income Countries

Trends and Implications for Social Protection and Labor Policies

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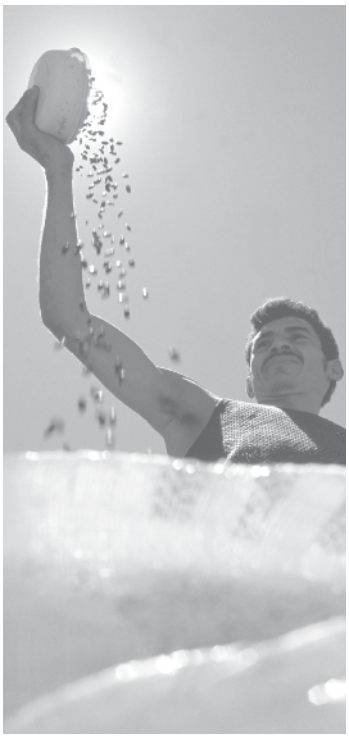
Background Paper for the World Bank 2012–2022 Social Protection and Labor Strategy





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Abstract

This paper reviews labor market trends throughout the developing world, identifies issues and policy priorities across groups of countries, and derives implications for the World Bank's new Social Protection and Labor Strategy. Five key issues are identified: a high and growing share of the labor force that is self-employed or working in household enterprises, exposure to income shocks with limited access to risk management systems, low female participation rates, high youth unemployment rates, and the need to manage migration flows and remittances. The paper then details a three-pronged agenda based on providing incentives and conditions for work, improving the efficiency of job creation, and managing risks / facilitating labor market transitions. This suggests that the Bank should emphasize self-employment and entrepreneurship promotion, provision of skills and development opportunities, and facilitation of labor market transitions into and between jobs, while protecting workers from shocks and paying particular attention to youth.

JEL Classification: O15, O19, J21

Key Words: labor markets, developing countries, cluster analysis, self-employment, entrepreneurship, skills, activation, labor market transitions, social protection, youth employment

Labor Markets in Low- and Middle-Income Countries:

Trends and Implications for Social Protection and Labor Policies[1]

I. Introduction

The wellbeing of the majority of the world's population depends critically on workers' ability to earn a decent and reliable stream of income. Improving individuals' livelihoods and earnings opportunities, to a large extent, is about improving their work opportunities – by helping them either to increase the returns from their current work or to move from inactivity or low return activities into more productive occupations. At the same time, jobs that provide an adequate standard of living during good times are not enough. Any job is associated with risks: 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 person or small family business. An agenda to promote good quality employment thus also needs to consider policies, such as implementing labor regulations or providing insurance, that reduce or mitigate these risks.

This paper reviews labor market trends throughout the developing world, identifies specific problems and policy priorities across groups of countries, and derives implications for the Bank's work on labor and the new Social Protection Strategy. The analysis is based on a sample of 133 middle- and low-income countries during the last two decades, complemented by desk reviews of relevant studies in labor economics, including economic sector work produced by the World Bank. It reviews the evolution of several standard labor market indicators such as participation, employment/unemployment, and labor productivity growth. For each country, we also track important determinants of these indicators, including the macroeconomic and business environment, the level of education of the labor force, and labor regulations and social insurance laws.

As countries recover from the financial crisis, it is increasingly important for policymakers to move beyond short-term mitigation measures and tackle structural problems that limit workers' access to productive jobs and formal risk management programs. The global challenge facing policymakers, particularly in low- and middle-income countries, is to create more high-quality jobs. 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

[1] This paper was prepared by a team comprising Yoonyoung Cho, David N. Margolis, David Newhouse, and David A. Robalino. Victor Eduardo Macias Essedin provided inputs to the sections on entrepreneurship and youth, and Alice Wuermli provided inputs to the section on youth.

enterprise without outside workers, or work in a family business without pay. Earnings are often insufficient to pull households out of poverty. Low labor participation rates and high unemployment are also issues of concern; women, in particular, are less likely to enter the labor force, while in many countries a growing number of youth are filling the ranks of the unemployed. In addition, with the exception of a minority of formal sector workers, most workers are vulnerable to abuse, poor working conditions, risk of exploitation, and lack of income protection.

The structural problems that hinder the creation of good jobs vary from country to country. Many countries are still affected by macroeconomic policies that create uncertainty and/or regulations that increase the costs of doing business, which in turn reduce incentives to start or expand businesses and create new jobs. The lack of skilled workers, and inappropriate labor regulations and social insurance policies, are also part of the problem. The importance of each of these factors varies by country and is not necessarily the same within regions. In low-income countries, for instance, imperfections in labor markets and inadequate labor regulations and social insurance laws tend to be less important because most workers are in the "unorganized" sector, and well-functioning labor markets often do not exist. In these settings, the lack of a skilled labor force and weak basic infrastructure, both of which inhibit innovation and economic diversification, are more pressing constraints. In middle-income countries, although macroeconomic stability and the skills of the workforce remain important, imperfections in the labor market and inappropriate regulations and social insurance systems are often more prominent obstacles to the creation of good jobs.

In the context of the new social protection strategy, the paper identifies three common objectives for labor policies in middle- and low-income countries. The first two, more directly related to the *promotion* function of the social protection system, focus on (i) ***ensuring that enough high-quality jobs, both salaried and non-salaried, are created,*** and (ii) ***building skills***. These objectives can be achieved through policies that promote sound macroeconomic and business environments (including labor regulations), programs that provide direct support to self-employed workers and small entrepreneurs, and education and training policies. The third objective, mainly related to the *prevention* function, concerns ***managing risks and facilitating labor market transitions.*** This entails ensuring that workers smooth consumption in the presence of income shocks through risk pooling or savings arrangements. There is also a key role for appropriate incentives and active labor market programs that facilitate youths' transition from school to work, and help workers move from a state of inactivity, disability, or unemployment into productive jobs or from low to high productivity activities.

The paper is organized in four parts. The first describes the analysis of labor market trends across different types of countries. In the second, we analyze secondary data as well as country and regional studies to identify constraints that prevent entrepreneurs from starting or

expanding businesses to create jobs, as well as those facing workers to obtain jobs. Third, we provide a discussion of the three areas where future research and policy analysis should focus to address major knowledge gaps. The fourth and final section concludes and discusses the operational implications for the Bank's work on labor.

II. Development Patterns and Labor Market Outcomes

Traditionally, cross-country analyses of labor market trends have grouped together countries by region or income level. This is a natural classification of countries and is appealing in part because it matches the way operations are organized within the Bank. These classifications can combine countries that, although geographically close or similar in terms of standards of living, have important structural differences. When countries' macroeconomic and labor market dynamics are different, so too will be their key constraints and policy priorities.[2] As a result, it can become difficult to diagnose and develop policy priorities that apply to all countries within a region or income group.

The analysis in this section takes a different approach, classifying countries by how similar they are according to broad demographic, macro, and labor market indicators. The indicators that determine the groupings were chosen 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.[3] Each group contains countries whose observed labor market changes indicate that they are on a similar development path, as distinct as possible from the development path of other groups. In this part of the analysis, we exclude factors that determine labor market outcomes such as the existence of infrastructure or labor regulations, which are discussed in Section III.

[2] Examples of neighboring countries with vastly different labor markets include India and Pakistan, Brazil and Bolivia, Russia and Tajikistan, Saudi Arabia and Yemen, South Africa and Mozambique, and China and Mongolia.

[3] 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 (see Annex 1 for details).

Four groups of countries can be identified, bringing together countries from different regions and, in some cases, different levels of income.[4] The clusters are represented by different columns in Table 2.1 and different colors in Figure 2.1. In addition, a fifth cluster has been identified but, due to lack of information, cannot be included in the analysis. The main characteristics of the countries in each cluster can be summarized as follows: [5]

- **Type 1: Middle Income, Rapid Growth, and Structural Change**. This cluster consists of countries where both income per capita and labor productivity have grown rapidly, moving most into 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, many countries from the Middle East and North Africa, and several countries from Latin America and the Caribbean.

- **Type 2: Upper Middle Income, Aging, and Declining Informality**. The second cluster includes higher income countries that, while not matching the level of the first cluster, 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 in this cluster, but there has been a small shift away from informal employment. Employment growth is also in line with labor force growth, but the share of youth employed has been shrinking. These countries include Argentina, Brazil, South Africa, and Russia.

- **Type 3: Very Low Income, Young, Slow Structural Change**. 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-employment, unpaid family employment, and household employment, suggesting insufficient numbers of good jobs. This cluster includes many African countries such as Burundi, Ghana, and Malawi, with some poorer countries from other regions such as Bangladesh, Cambodia, or Tajikistan.

[4] The data used for the cluster analysis are drawn from the ILO-KILM and WDI databases.

[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 Annex 2.

- **Type 4: Low Income and Slow Productivity Growth despite Structural Change.** This group of countries is characterized by slow growth in output and productivity, despite substantial employment growth and a rapid structural transformation out of agriculture into industry. These countries demonstrate that substantial employment shifts from agriculture to industry do not always translate into improved labor productivity. While the majority of these countries are located in Sub-Saharan Africa, the cluster also includes non-African countries like Nicaragua, Pakistan, and Mongolia.

- **Type 5: Insufficient Data Countries**. The final group of countries is heterogeneous and has only one common feature: a lack of available data on which to classify them.[6] As a result of these data limitations, we cannot draw conclusions about any particular development path for these countries.

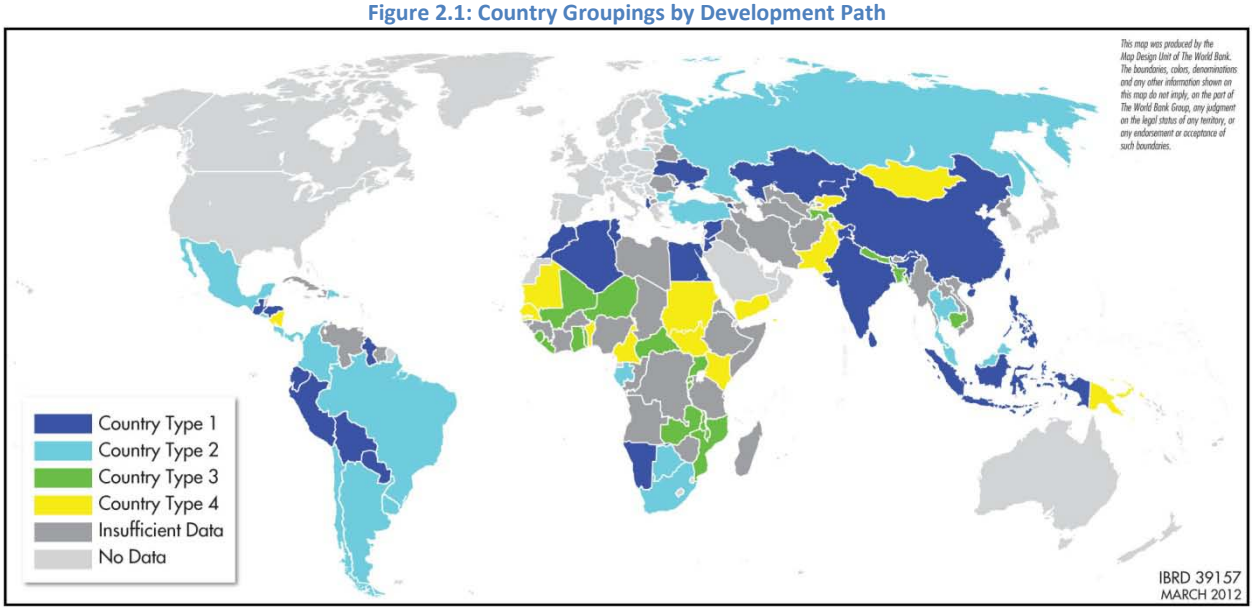
[6] Of the 55 countries in this group, no single indicator was available for all of them: the country with the most available data in the group was Georgia, with 19 of the 20 variables used for the analysis (missing only the change in the average years of schooling). At the other extreme, Kosovo only had data for the change in the agricultural and industrial shares of employment, while only demographic information (percentage change in the total and youth population, and percentage change in the working age population) was obtainable for North Korea. In fact, much of the data that is available for these countries is drawn from sources in which imputed data is common. The variables that are the most highly represented in group 5 are those related to demographics (typically projections between censuses) and the share of employment in agriculture or industry (drawn from the ILO's KILM database, which relies on well-documented imputation techniques (ILO Employment Trends Unit (2010) "Trends Econometric Models: A Review of the Methodology," http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_elm/---trends/documents/publication/wcms_120382.pdf) when original source data are unavailable). Margolis et al. (2010) demonstrates the importance of this problem and discusses alternative imputation mechanisms that can be used in the developing world in the absence of regularly reported labor market data.

Table 2.1: Main Macroeconomic and Labor Market Indicators across Types

	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
Initial level (1995-1999)				
GDP per capita	1,224	3,406	209	464
$2/day poverty rate	30%	15%	85%	56%
Percentage growth				
GDP per capita	33%	26%	23%	18%
Labor productivity	24%	19%	18%	8%
Total labor force	21%	15%	30%	29%
Youth labor force	11%	-3%	32%	23%
Total employment	21%	16%	30%	31%
Youth employment	13%	-2%	32%	24%
Changes				
$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 Sector share	-0.46	-0.51		0.95
Recent level (2005-2008)				
Female labor force participation	45%	49%	67%	54%
Adult employment to working age population ratio	62%	63%	77%	68%
Youth unemployment rate	21%	21%	10%	18%
Voice and accountability indicator	-0.51	0.22	-0.53	-0.52
Political stability and absence of violence indicator	-0.54	0.02	-0.74	-0.54
Pension coverage among working age population	20%	30%	4%	8%
Number of countries available				
Total	25	23	17	13

Sources: WDI, ILO-KILM and Worldwide Governance Indicators.
Notes: Initial level figures refer to the 5-year average of available data from the period 1995-1999, while change and growth figures compare initial level average to the 4-year average of available data from the period 2005-2008. Data available for all countries in groups 1-4 and all variables except (Initial poverty rate – Change in poverty rate - Self, unpaid family and household employment share – Public sector share countries available/total countries in group): 20-15-10-5/25 Type 1 countries, 17-11-17-12/23 Type 2 countries, 9-4-1-0/17 Type 3 countries, 11-7-1-2/13 Type 4 countries and 19-11-5-5/55 Type 5 countries. Estimates of governance indicators range from approximately -2.5 (weak) to 2.5 (strong) governance performance.

Figure 2.1: Country Groupings by Development Path



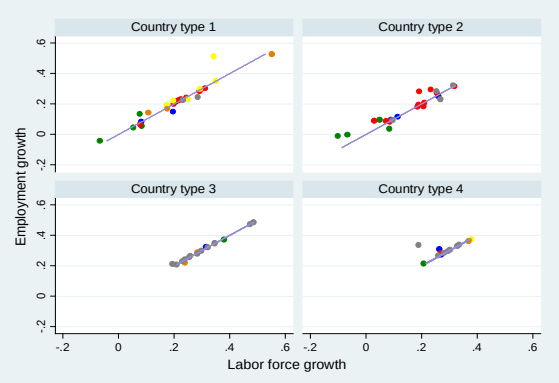
A first observation is that, across clusters, employment has been growing in line with the labor force. This can be seen in Figure 2.2, which plots growth rates for all countries where data are available between the baseline period (1990-1995) and the comparison period (2005-2008). Although there are 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 (Type 1) and 20 percent (Type 2) between the baseline and comparison periods 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 Type 3 countries and 23 percent in Type 4 countries.

The rapid expansion of employment, however, masks five important challenges. The first is the **high and growing 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 low-income countries (Type 4) and close to 85 percent in very low-income countries (Type 3). This problem is less severe in the case of upper middle-income countries (Type 2) where informality has been declining, but remains an issue in middle-income countries. Growth in self-employment is matched by an increasing share of informal wage and salary employment.[7] Although the share of informal employment generally decreases with income,[8] it remains a

[7] Informality is defined as lack of access to social insurance and/or the failure to pay social security taxes. See Perry et al. (2007), World Bank (forthcoming-a), World Bank (forthcoming-b).
[8] See Loayza and Rigolini (2006).

cause for concern even in higher-income countries.[9] The majority of these self-employed jobs are not productive and generate low earnings, and as a result many of these workers and their families remain poor (poverty rates in Type 3 and Type 4 countries are 85 and 56 percent respectively). 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. Bringing more employment into the formal wage and salary sectors while improving the productivity of the self-employed continue to be challenges for many of these governments.[10]

Figure 2.2: Labor Force and Employment Growth (1990-1995 to 2005-2008)



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

High rates of self-employment are explained in part by the important role that agriculture still plays as a source of jobs, particularly in low-income countries. The share of agricultural employment has been declining across the board but in some cases only slowly. In very low-income countries, 38 percent of workers are employed in agriculture. In countries such as Liberia, Sierra Leone, or the Central African Republic, over 50 percent of all employment is in agriculture. Countries in Type 4, which tend to be slightly wealthier than those in Type 3, have experienced significantly faster shifts out of agricultural employment. Even in this cluster, however, agriculture still accounts for 22 percent of all jobs.

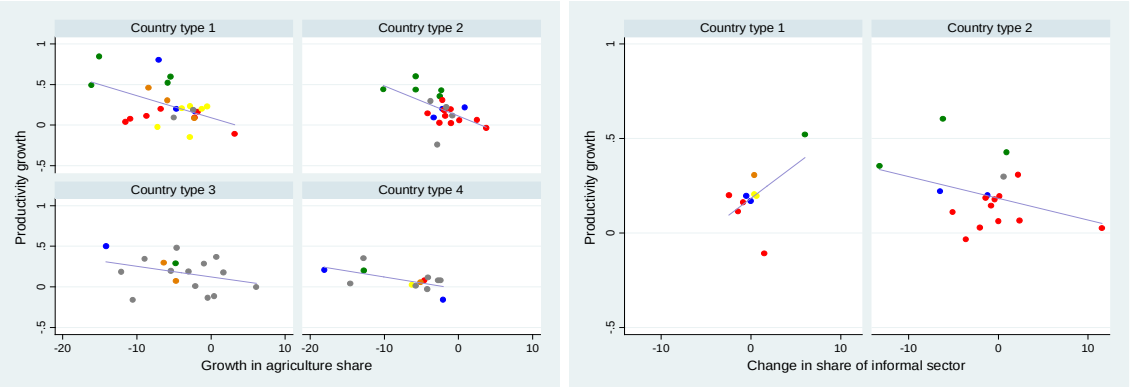
While higher labor productivity and earnings will require a reallocation of jobs out of agriculture and the unorganized sector, the types of reallocations matter. Indeed, the relationship between productivity growth and changes in the sectoral allocation of employment varies across clusters. Across the set of countries in the second cluster, for example, higher productivity

[9] See Ribe et al. (2010).

[10] Flagship reports in the LAC, MENA, and ECA regions investigate the issues related to informality and discuss policy options ranging from institutional reforms to skills development for marginalized workers. See Perry et al. (2007) for LAC, World Bank (forthcoming-a) for MENA, and World Bank (forthcoming-b) for ECA.

growth is strongly associated with a reduction in both the shares of agricultural and self-employment (see Figure 2.3), which suggests that the structural transformations taking place in these countries are leading to productivity gains and higher quality jobs. In Type 1, however, increased productivity growth is strongly associated with an *increase* in self and family employment, despite a similar negative relationship between productivity growth and agricultural employment. Meanwhile, in Types 3 and 4, the association between productivity growth and shifts out of agricultural employment is weaker, again implying that movement out of agriculture alone in these lower-income countries is not sufficient to raise productivity. In general, the right type of structural transformation is not easy to achieve and will not happen overnight. Interventions that increase productivity and access to social protection for workers in the agricultural and "unorganized sector" are therefore key priorities for countries with large numbers of workers in these sectors.[11]

Figure 2.3: Productivity, Agriculture Share, and Informality



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

[11] See Fox and Gaal (2010); World Bank (2010g).

The high share of employment outside the formal sector is also correlated with **high exposure to income shocks and limited access to risk management systems**. It is estimated that less than 20 percent of the world's labor force has access to social security. Even in Type 1 countries, only 30 percent of the labor force is covered. The situation is even more dramatic in Types 3 and 4, where less than 10 percent of the labor force is covered by public pensions, mainly civil servants and a small contingent of formal workers in the private sector. Not surprisingly, 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.[12] But even those who are covered are not covered all the time. Data for some countries in Type 2, for instance, show that there are frequent movements in and out of the social security system; these reflect transitions between formal and informal employment, and between employment and unemployment. On average, workers only contribute during half of their active life; low-income workers have lower contribution densities.[13]

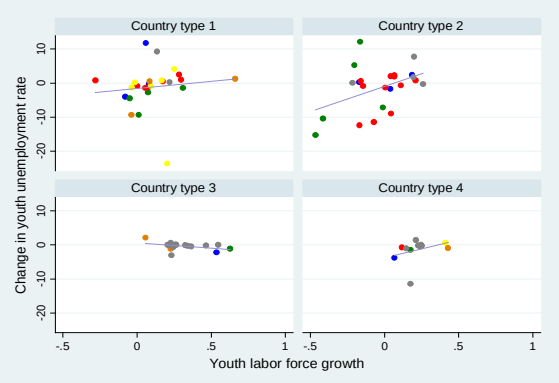
A **low female participation rate,** which drives adult employment rates down and keeps an important source of human capital idle, is another major issue facing the majority of low- and middle-income countries. The participation of women in the labor market is particularly low in middle-income countries (45% in Type 1 and 49% in Type 2). The lowest rates are observed in the Middle East and North Africa, which averaged 26.8 percent over the 2005-2008 time period. Participation rates tend to be higher in low-income countries in part because minimal household earnings force more women to work. 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.

High unemployment rates among youth also pose a severe challenge in many countries. As in the case of low female participation rates, youth unemployment tends to be higher in middle-income countries, but there is considerable heterogeneity and only weak linkages to the growth rate of the youth labor force (see Figure 2.4).[14] Youth unemployment is particularly high in the Middle East and North Africa region where it averages 26.5 percent, ranging from 17.0 percent in Morocco to 37.5 percent in Iraq. In other regions, countries with high youth unemployment rates include Indonesia (28 percent youth unemployment rate) and South Africa (40 percent). The latter is a legacy of apartheid that calls for serious attention, as it is unusually high and long

[12] See Ribe et. al. (2010); Holzmann et al. (2009).
[13] See Levy (2008); Forteza (2010).
[14] Serbia, for example, saw its youth labor force shrink by 16 percent, while youth unemployment grew by 12 percentage points.

term, with a large number of discouraged nonparticipants.[15] More recently, the great recession has highlighted the vulnerability of youth employment in many Type 2 countries.[16]

Figure 2.4: Youth Unemployment vs. Youth Labor Force Growth



Note: blue=EAP, green=ECA, red=LAC, yellow=MENA, orange=SA, and gray=SSA.

In low-income countries, youth unemployment rates tend to be lower but remain a serious concern. While the youth unemployment rate is low in the very low-income Type 3, the youth labor force has been growing very rapidly (32 percent on average). Youth may be finding work in these countries, but they are often forced to take low-quality and low-productivity jobs. In Type 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, a prolonged school-to-work transition may have long-lasting consequences for youth.[17]

A final challenge for middle- and low-income countries is the need to improve the management of migration flows and remittances. Except for upper middle-income countries, the average share of workers' remittances is above 6 percent of GDP. All countries have sizeable diasporas, particularly the very low-income countries, where over 16 percent of the native-born population lives 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 United Arab

[15] See Lam (2008); Levinsohn and Pugatch (2011).
[16] See Cho and Newhouse (2011). Their analysis covers many Type 2 countries such as South Africa, Bulgaria, Lithuania, Turkey, Argentina, Brazil, Chile, Costa Rica, and Mexico.
[17] See Margolis et al. (2001), World Bank (2006), Kahn (2010), and Oreopolous et al (2011).

Emirates). The issue here is not migration itself – migration is a choice that workers and their families make, presumably to obtain better jobs and increase their 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.[18] Second, migrants can be exposed to abuse and exploitation in receiving countries.[19] Migration management that benefits both sending and receiving countries is a policy issue that is only now beginning to receive the serious attention it deserves.

III. What are the Constraints to the Creation of Good Jobs?

Ultimately the labor market outcomes discussed in the previous section – the lack of sufficient formal wage employment and the large share of workers involved in low productivity activities, vulnerability to income shocks, high youth unemployment rates, low female participation rates, and important migration flows – depend on three factors: (i) decisions by entrepreneurs to create, expand, downsize, or close businesses or establishments; (ii) occupational choices made by workers; and (iii) the efficiency of the job-matching process. Several formal and informal institutions affect these decisions and, as a consequence, 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.[20] These decisions can be affected by both passive and active labor interventions and the design of mandatory insurance programs.

In this section we discuss some of the main factors that can contribute to explain current labor market outcomes in middle and low income countries. We focus on five sets of indicators: (i)

[18] See Holzmann and Jorgenson (2002).
[19] See Holzmann et al., (2011)
[20] 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 of 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.

macroeconomic policy; (ii) investment climate; (iii) labor market regulations; (iv) education and skills; and (v) social insurance policies.[21]

3.1 Macroeconomic Policy

A stable macroeconomy, balanced budgets, and competitive exchange rates are some of the key ingredients to promote investments and employment creation. Countries with high inflation, which creates uncertainty about the real rate of return of different projects, are less likely to attract investments. Large deficits and high public debts can lead to high interest rates, the crowding-out of private investments, and less employment creation. Moreover, an appreciation of the real exchange rate can affect the competitiveness of export oriented sectors, reducing investments and employment.

Comparing macroeconomic indicators among the countries in this study suggests qualitative differences across clusters (see Table 3.1). Type 1 and 2 countries, which are the highest income and among the most productive countries, have low inflation, succeed in attracting foreign direct investment, and have relatively high gross capital formation, but on average they have run budget and current account deficits. Type 4 countries, although facing slightly higher inflation and carrying slightly more public debt, have run budget surpluses, on average. These countries have also experienced a high level of gross capital formation, albeit primarily of domestic origin as seen by the low level of foreign direct investment.

Table 3.1: Challenges - Basic Macroeconomic Indicators

	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
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

ource: WDI.

Notes: Figures refer to the 4-year average of available data from the period 2005-2008. Data available for all countries in Types 1-4 and all variables. red=serious, yellow=moderate and green=mild

Type 3 and 4 countries, on the other hand, are in a more delicate situation, despite running budget surpluses on average. These countries have the lowest rate of gross capital formation

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

and have run high current account deficits. Moreover, their very low levels of foreign direct investment suggest that access to new innovations/technologies will be limited. This is a risky prospect given that this cluster contains, on average, the poorest countries. Thus far, relatively low capital formation and foreign direct investment (FDI) have not appeared to constrain labor productivity growth, which was high in the past. In the future, however, increases in the capital stock may be needed to enable these countries to absorb a rapidly growing labor force while maintaining labor productivity growth.

3.2 Investment Climate Institutions and Infrastructure

The creation of new jobs depends ultimately on the ability of entrepreneurs to expand existing businesses or start new ventures. The evidence available today shows that although large firms tend to account for the majority of jobs in the developed world,[22] this may not be the case in the developing world.[23] Furthermore, new establishments of existing firms and small new firms (including nonemployers) are responsible for most of the new jobs created.[24] Not all the new firms that are created survive; in fact most do not. But those that succeed, the "gazelles," ultimately become the engine of employment and productivity growth.[25] It is this process of firms' entry and exit, of job creation and destruction that keeps economies healthy. A business environment that shortcuts this process by precluding innovation and the creation of new firms, or by making exits and jobs destruction costly, will most likely lead to an inefficient allocation of resources, stagnant productivity, and slow employment growth.[26]

Although the relationship between a business-friendly environment and job creation is complex, the empirical evidence typically points to a positive link. For example, a high tax rate can reduce firms' profitability and thus discourage entry and future investments.[27] The importance of infrastructure for job creation has been highlighted in numerous BEEPS[28] and ICA[29] studies.

[22] See Haltiwanger et al. (2010).
[23] See Ayyagari et al. (2011).
[24] See Haltiwanger et al. (2010) and Ayyagari et al. (2011).
[25] See Haltiwanger et al. (2010).
[26] See Haltiwanger et al. (2008).
[27] Kolko et al. (2011).
[28] The Bank's Business Environment and Enterprise Performance Survey (BEEPS) lists several key indicators of constraints to doing business including tax rates and administration; corruption and crime; business licensing; labor regulation; skills of work force; infrastructure such as transportation, water, and electricity; and access to finance and land.
[29] Investment Climate Assessments (ICAs) run by the World Bank have tended to focus in the past on administrative conditions for business and infrastructure, as well as issues of access to credit. Examples of this approach are the Investment Climate Assessments in Mongolia, Mozambique, and Ethiopia (Types 3, 4, and 5). More recently, however, Investment Climate Assessments in Turkey, Mauritius, Albania, and South Africa (Types 1 and 2) move beyond simple business environments and have begun integrating features discussed in previous sections, such as policies to promote skills development, adoption of new technology, and productivity of microenterprises.

Other studies shed light on the importance of access to finance,[30] deregulation of entry,[31] and governance and corruption[32] for job creation.

Among the countries in our sample, those in Type 2 tend to be the most politically stable. Table 3.2 reports each cluster's average voice and accountability and political stability scores, taken from the world governance indicators, which range from -2.5 to 2.5. Only Type 2 has an average positive score for both indicators. Type 3, on the other hand, is most prone to political instability or violence. Not surprisingly, pension coverage is also highest in the upper middle-income Type 2, although even in that cluster, over two-thirds of adults remain uncovered.

Other measures of the business environment tell a similar story, although the low-income clusters fare significantly worse. Countries in Type 2 have the most accommodating business environments, while those in Type 3 have the worst, particularly when it comes to access to credit.[33] Developing countries tend to be underserved by credit bureaus and public registries, which provide information on the creditworthiness of borrowers to lenders and thus facilitate access to credit. These problems are particularly relevant in Type 3 countries, where on average only 1 in 10,000 people is covered by a private credit bureau and 5.6 out of every 1000 are covered by a public credit registry. These obstacles to accessing capital can be a serious constraint to job creation and productive investment.

[30] Demirgüç-Kunt and Maksimovic (1998); Galindo and Micco (2005); Ayyagari et al. (2006).
[31] Klapper et al. (2004); Branstetter et al. (2010).
[32] Fisman and Svensson (2007).
[33] For this analysis, the Bank's ICAs have been used to characterize the business environment based on 8 categories of indicators: macroeconomic stability and trade policy; infrastructure such as transportation, electricity, and communication; access to land and finance; market structure and entry barriers; regulations and licensing; property rights and contract enforcement; security and crime; and local governance and corruption.

Table 1.2: Challenges - Business environment and Governance indicators

	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
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
Voice and accountability indicator	-0.50	0.20	-0.50	-0.50
Political stability and absence of violence indicator	-0.50	0.00	-0.70	-0.50

Source: Doing Business and Worldwide Governance Indicators.

Notes: Figures refer to most recent year data. Data available for all countries in Types 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).

Administrative failures associated with long delays in opening or closing a business, or excessive tax reporting requirements, can also increase transaction costs and reduce incentives to invest. Often these administrative obstacles appear in the same countries that impose stringent labor market regulations (see Section 3.3), further reducing the incentives of firms to create jobs. Procedures for creating a business and cumbersome tax regulations tend to be particularly problematic in Type 4 countries. Procedures to close a business, on the other hand, are a problem across the board, although Type 2 countries are relatively less affected.

Weak infrastructure can be an even more serious hurdle to attracting investment and innovation and inducing employment creation. For example, a lack of readily available electricity or water can make additional investment much more costly if the new facilities need to include off-grid electricity generation. Likewise, an absence of paved roads, railways, or maintained waterways can make the transportation of goods to market more costly and reduce the incentive to invest in poorly-served areas. *Table 3.3 shows that, again, countries in Types 3 and 4 face particular challenges in improving infrastructure to encourage productive investments.* Although it is an imperfect measure of electrification, electricity consumption in these types of countries was roughly one-fifth of the level found in Type 2 countries. In addition, and despite very limited data on the subject, it also appears that the road networks in Type 4 and especially Type 3 countries may be severely underdeveloped. This can reduce the incentives for new entrepreneurs to start firms and create jobs in poorly equipped areas, and can keep existing firms from expanding their operations due to the cost of transporting their production out of their local market along poorly maintained roads. As a general rule,

infrastructure problems in all clusters tend to be more common in rural areas, where economic activity, productivity, and employment creation are often less dynamic than in urban areas.

Table 3.3: Challenges – Infrastructure

	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
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 Types 1-4 are as follows – Countries reporting data/total countries in group: 22/25 (Electricity consumption) and 9/25 (Paved roads) Type 1 countries, 21/23 (Electricity consumption) and 9/23 (Paved roads) Type 2 countries, 8/17 (Electricity consumption) and 2/17 (Paved roads) Type 3 countries, and 10/13 (Electricity consumption) and 3/13 (Paved roads) Type 4 countries.

3.3 Labor Market Regulations and Institutions

In most countries, labor laws (generally through the national labor code) provide legislative requirements with which employers and employees must comply for hiring and employing workers, as well as terminating employment. Labor laws are, among other things, designed to equalize the bargaining power between employers and employees, but they also establish rules to prevent practices that society considers abusive and unacceptable. For example, they may prohibit employers and unions from engaging in specified "unfair labor practices" and establish obligations for both parties to engage in good faith collective bargaining. Labor laws aim to protect workers from arbitrary, unfair, or discriminatory actions by their employers, while protecting employers against arbitrary industrial action by workers and their unions.

The main aspects of labor law include: (i) entry into an employment contract (mandatory provisions of employment contracts, probation periods); (ii) term of employment contract, including fixed-term contracts, part time employment, and working hours; (iii) paid and unpaid leave, maternity leave, and family leave; (iv) wages and benefits including minimum wages; and (v) contract termination, including notification and approval by a third party, advance notice, mandatory (re)training, and severance payments.

The most frequent issues surrounding labor regulations concern hiring and dismissal procedures[34] *and minimum wage policies.* Regarding the former, one problem is restrictions on contractual diversity. Legislation often imposes constraints on the use of fixed-term contracts, part-time contracts, on-call contracts, zero-hour contracts, contracts for workers hired through temporary employment agencies, and freelance contracts, even if these are established features of modern labor markets in developed countries. In terms of the minimum wage, most

[34] See Kuddo (2009).

of the problems are related to high levels of discretion in minimum wage setting and adjustment, which leads to excessive uncertainty, and systems where levels are set without consideration of worker productivity.[35]

Across clusters there are concerns regarding the rigidity of labor regulations. Despite low coverage due to a large informal sector (particularly in Types 3 and 4), some aspects of the legislation can be quite restrictive. Although the poorest countries (Type 3) have the weakest social protection coverage (see Section 3.5), they, along with Type 1 countries, also tend to have the most rigid labor markets (see Table 3.4). For example, Type 3 countries have, on average, a minimum wage that is more than 50 percent of value added per worker, they provide for severance pay equal to almost 19 weeks of earnings, and 88 percent of the countries require administrative notification in advance of layoffs of at least nine workers. Furthermore, in nearly half of the Type 1 countries, administrative approval is required before groups of workers can be dismissed. When contrasted with Type 2 countries, Type 1 and Type 3 countries have more rigid labor markets along almost all dimensions.

Table 3.4: Challenges - Labor market regulations

	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
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%
Fixed term contract prohibited for permanent tasks	50%	61%	59%	23%

ource: 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 one, five, and ten years of job seniority. Data available for all countries in Types 1-4 and all variables except the notification and approval variables, for which one country in Type 1 (Bolivia) is missing data.

Although the evidence from the literature is mixed, it usually shows that laws aimed at providing job security reduce turnover, lead to the creation of fewer jobs, and may slow productivity growth.[36] For example, there is evidence from Latin America showing that job protection is correlated with lower turnover in Colombia, Brazil, and Peru,[37] and longer job tenure more generally. In principle, this could increase employment and provide incentives to

[35] See Cho et al. (2010).

[36] See Kuddo (2009) for a review of the literature.

[37] Kugler (1999), Gonzaga (2003), and Saavedra and Torero (2000).

increase investment in human capital within the firm, since workers with strong job protection resemble a fixed asset for the firm.[38] However, evidence suggests that lower job turnover can also lead to lower job creation,[39] less demand for unskilled workers[40] and higher average unemployment rates.[41] Finally, there is growing evidence that tighter labor regulations can negatively affect productivity growth by increasing the cost of labor adjustments and reducing the incentives that firms have to innovate and adopt new, especially labor-saving, technologies.[42]

The literature on the impact of minimum wages is also mixed, being sensitive to the actual wage level and the type of labor market where it is implemented. A minimum wage can be an efficient policy response to increase wages and even employment in imperfectly competitive labor markets, like those found in most countries.[43] In practice, a minimum wage that is low enough relative to economy-wide average earnings is not likely to have major impacts on employment. A minimum wage that is too high, however, can reduce incentives to create jobs in the formal sector, particularly for youth. Moreover, there is no evidence that a minimum wage is a good instrument to reduce poverty or inequality.[44]

Issues related to labor regulations are less important for labor markets in Types 3 and 4 despite their rigidity because such a large share of employment is outside of wage and salary work; they need to receive attention, however, in the other clusters. A particular challenge for countries in Types 1 and 2 is rethinking the tradeoff between the advantages to incumbents provided by labor market regulations and the benefits of flexible labor markets that can generate additional employment, especially in the formal sector. Higher minimum wages, more severance pay, longer paid vacations, and longer advance notice are intended to improve the quality of jobs for those who occupy them. However, if these regulations reduce the incentives to hire new workers or lead employers to exit the formal sector, there can be significant negative effects on "outsiders," namely workers who do not manage to get or keep one of the protected jobs.

3.4 Education and Skills

The accumulation of human capital through the acquisition of knowledge and skills is recognized as central for economic development. More educated workers not only have better job opportunities, earn more, and have more stable and rewarding jobs, they also are more

[38] See Holzer (1991).
[39] See Kugler (1999) for the case of Colombia.
[40] See Montenegro and Pages (2003) for the case of Chile.
[41] Elmeskov et al. (1998), Lazear (1990), and Addison and Grosso (1996).
[42] See Hopenhayn and Rogerson (1993) for an analysis using a general equilibrium model of job search; Cappelli (2000) and Hobjin and Jovanovic (2001) for analyses of the impact on the cost of labor adjustments; and Scarpetta and Tressel (2004) for direct effects on productivity growth.
[43] Card and Krueger (1997), Manning (2003).
[44] See Kuddo (2009) and Cho et al. (2010) for a review.

adaptable and mobile.[45] Workers who acquire more skills also make other workers and capital more productive and, within the firm, they facilitate the adaptation, adoption, and ultimately invention of new technologies. This is crucial to enable technological change and economic diversification. Through all these channels, a more educated and more skilled labor force is likely to contribute to faster employment and economic growth.[46]

In the developing world, unfortunately, the majority of the labor force has very low levels of education (see Table 3.5). Countries in Type 2 have the best indicators, yet the average number of years of schooling is only 8.5 (primary plus a couple of years of secondary). For comparison, this same average in OECD countries is 11.9 years. Moreover, only 31 percent of the working age population in these developing countries has successfully finished high school and less than 8 percent have a university diploma. Again, in advanced economies these shares are 56 and 14 percent respectively.

Table 3.5: Challenges – Skills

	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
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

ource: 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 Types 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.

There is, of course, a clear divide between the middle- and upper middle-income countries of Types 1 and 2 and those in the other groups, where providing even basic skills to the population remains a challenge. Countries in Types 1 and 2 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 countries in Types 3 and 4, 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 Type 3 and 4 countries like Kenya, Mongolia, Tajikistan, or the Kyrgyz Republic, literacy rates and average education have reached levels comparable to Type 1 and Type 2 countries. Nevertheless, in general, a

[45] There is a vast literature empirically supporting the value of investing in education to develop human capital and on the contribution of education to growth and development (see, for example, Vandenbussche et al., 2004; Aghion et al. 2008; Helpman, 1992; Hanushek and Kimko 2000; Krueger and Lindahl 2001; Hanushek and Woessmann 2007).

[46] See Helpman (2010).

priority for the countries in Types 3 and 4 continues to be expanding educational opportunities and ensuring the presence of teachers and the availability of textbooks.[47]

Still, these 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.[48] For many developing countries, particularly in low-income settings, assessments of education quality are disappointing.[49,50]

The challenge of providing labor market-relevant skills is complicated by two factors. First, there is tremendous diversity in the types of skills that matter to different types of employers. Second, the set of skills desired by the labor market changes as economies develop. For example, recent empirical analyses show that success in the labor market does not just depend on the acquisition of technical skills. Cognitive and non-cognitive skills, in part acquired in early childhood and during basic and secondary schooling, are also important determinants of employment dynamics and earnings later in life[51] and facilitate the acquisition of technical skills and education more generally.[52] The literature has also found that the demand for higher-level cognitive skills, relative to demands for manual job-specific skills, tends to increase with technological progress, development, and diversification of the economy.[53]

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

[47] See the World Development Report (2007); World Bank (2007, 2008).
[48] See the *Skills toward Employability and Productivity* (StEP) framework publication "Stepping Up Skills for More Jobs and Higher Productivity" (World Bank, 2010).
[49] See Glewwe and Kremer (2006); World Bank (2008); Robalino et al. (2011); Boissiere (2004).
[50] 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 assessments of academic achievement in LAC, and Robalino et. al. (2011) for South Asia.
[51] 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), Heckman and Masterov (2007), 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.
[52] See Bowles and Gintis (1976); Heckman et. al. (2006).
[53] See Autor, Levy and Murnane (2003); Goldin and Katz (2007).

employer demands.[54] In Tunisia, the share of higher educated youth among unemployed youth has been rising and currently is the largest among all education levels. Graduate curricula are often criticized as the source of high unemployment among tertiary educated youth, and more than 50% of university graduates are in jobs that do not use the skills they acquired in university.[55] In Macedonia, where youth unemployment (particularly long-term unemployment) is prevalent, skills mismatch is pervasive. Employer surveys show that soft skills such as responsibility and team work are more appreciated than job specific skills such as foreign languages or technical skills.

Compounding the problems of low educational attainment, quality, and potential skill mismatches is the phenomenon of low or declining rates of return to education. Recent evidence for very diverse countries, from Latin America to South Asia, shows that investments in different levels of education are not always worth their cost. In Latin America, rates of return on education are generally positive, but have been falling over the last decade in the case of secondary and higher education. In South Asia, rates of return to certain levels of education can be negative in several countries. Low or falling rates of return ultimately reflect a mismatch between the supply and demand; if the demand for a given skill set grows less rapidly than the supply, wages are expected to fall and push down the return to the investment. The factors behind these dynamics are complex, but they deserve careful attention if incentives to investment in education and training are to be preserved and enhanced.

3.5 Social Protection

Social insurance policies are important determinants of labor market dynamics and the quality of jobs.[56] If well designed, social insurance programs can not only protect workers' consumption against various shocks, but also facilitate labor mobility and improve workers' bargaining power. This can reduce failures in labor markets, allow better matches between skills and jobs, and provide incentives to engage in higher risk/higher return activities, which can in turn contribute to productivity growth and employment creation. But badly designed social insurance policies often have adverse impacts on labor markets by restricting labor mobility, reducing labor demand, and providing incentives for informality or labor force withdrawal. This happens, for instance, when social insurance benefits are not portable, when the tax-wedge that finances the contributory programs is too high, when out-of-work benefit

[54] See Robalino et. al. (2011).
[55] See the *Skills toward Employability and Productivity* (StEP) framework publication "Stepping Up Skills for More Jobs and Higher Productivity" (World Bank, 2010).
[56] The rationale for having these programs is that many individuals may not have the ability to self-insure against risks such as disease, longevity, or unemployment due to "myopia," liquidity constraints, and capital and insurance market imperfections (see Barr, 2004 and Kuddo et. al. (2011)).

levels are too high or last too long, and/or when the design of non-contributory programs to expand coverage induces implicit taxes on formal work.

Social insurance programs cover considerably different sets of risks across countries (see Table 3.6). 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 Type 2), while the others rely on severance pay regulated through the labor code (see next section). Severance pay is riskier (since the systems are not funded) and usually associated with long legal and administrative processes. Outside of Types 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. [57]

Table 3.6: Challenges - Social protection

	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
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 for countries in Types 1-4 are as follows: 23/25 (Risks covered) and 22/25 (Pension share) Type 1 countries, 23/23 (Risks covered) and 19/23 (Pension share) Type 2 countries, 14/17 (Risks covered) and 12/17 (Pension share) Type 3 countries, and 11/13 (Risks covered) and 11/13 (Pension share) Type 4 countries.

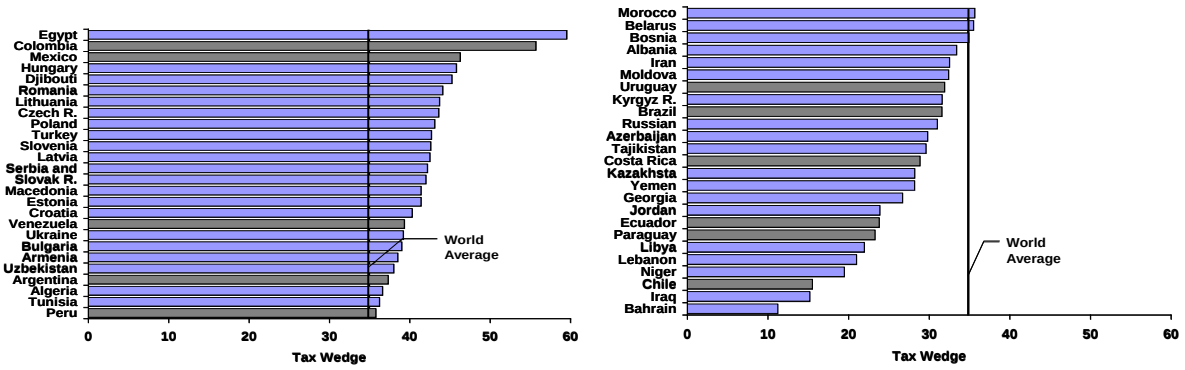
While there are many reasons for the observed low levels of coverage, two of the most important are low productivity and earnings, and a weak capacity to enforce regulations. Low productivity firms, usually small or micro-firms, typically self-select into the informal sector: they cannot afford the minimum costs of labor imposed by social security, which can be high.[58] Moreover, social security laws 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. The incentive and non-compliance issues that reduce coverage are further aggravated by low enforcement capacity. When comparing

[57] 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 a 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.
[58] See World Bank (2005).

the benefits and the expected costs of non-compliance, poor enforcement can reduce the expected costs; as a result, some employers can choose to evade, with some studies finding that underreporting to the pension system can be as high as 30% of the covered wage bill in formal firms.[59] There are also employees who prefer higher take-home pay to the benefits offered by the social security, particularly when non-contributory arrangements are in place or the perceived value of the benefits is low.[60]

More generally, social insurance programs can affect labor market outcomes through implicit and explicit taxes and subsidies within the various insurance programs, particularly in countries in Types 1 and 2.[61] These distortions can affect behavior on the **supply** side of the labor market in several ways. First, *incentives to search for and keep jobs may be affected by the presence of unemployment insurance systems that are not actuarially fair*, as is the case in most countries with such systems.[62] Second, a *lack of portability of benefits can restrict labor mobility*. This is quite common in countries with fragmented social insurance systems.[63] Finally, *decisions to participate in the labor force, and in particular to retire early, can be affected by the design of the pension system*.[64] In particular, system parameters such as high minimum pensions can push individuals to delay entry into the labor market or retire earlier in order to receive higher rates of return on their contributions.

Figure 3.1: Tax-Wedges around the World



Source: Ribe et al., (2010)

[59] See World Bank (2005).
[60] See Perry et. al. (2007); Ribe et al. (2010).
[61] See Robalino et al., (forthcoming).
[62] See Robalino et al. (2009) for a review, Tatsiramos (2010) and Vodopivec (2009) for a discussion. One alternative, individual unemployment savings accounts, can also distort behavior if the mandated precautionary savings rate is too high and/or the interest paid on the accounts is too low. In this case, workers may have incentives to collude with employers and simulate dismissals, thereby allowing the individual to withdraw his or her forced savings. See Chapter 5 in Ribe et al. (2010) for details.
[63] See Forteza (2010).
[64] In poorly designed defined-benefit pension systems, the rates of return that individuals receive on their contributions depend on when they join, how often they contribute, and when they retire (Robalino et al., 2005).

*From the **demand side,** social insurance programs can affect firm behavior when funded through payroll taxes with a high tax wedge (the difference between the cost of labor and take-home pay) and when regulations impose dismissal taxes (or severance pay)*. Both payroll taxes and severance benefits in countries around the world can be quite high (see Figure 3.1). In particular, Type 2 countries such as Colombia, Mexico, Lithuania, and Turkey present a larger tax wedge than the world average, followed by Type 1 countries including Algeria, Tunisia, Peru, and Morocco. There is evidence that the level of formal employment declines as the tax wedge grows;[65] there is also evidence that mandatory severance pay reduces turnover and incentives to create jobs.[66] The net effect is likely to be a reduction in formal employment among existing firms. Moreover, high labor costs can also deter the entry of new firms. As these firms are often precisely those that innovate,[67] a poorly designed social insurance system can, indirectly, slow down labor productivity growth.

IV. Areas for Future Research and Policy Analysis

The discussion in Section 2 identifies common challenges across countries, including low participation rates (particularly among women), a high share of employment in agriculture or unproductive self-employment or unpaid family businesses, high unemployment rates (particularly among youth), and vulnerability to income shocks and poor working conditions. Although it is difficult to identify the exact determinants of these problems, Section 3 outlines issues that deserve attention, such as macroeconomic and investment policies, education and training, labor regulations, and social insurance programs.

In this section we propose an agenda for research and policy analysis that would focus on three strategic objectives aiming to improve labor market opportunities and increase earnings: (i) ensuring that enough quality work – salaried and non-salaried – can be created; (ii) managing risks and facilitating labor market transitions, particularly from inactivity to work; and (iii) building skills. The relative priority given to each of these objectives will depend on the country context, in particular, the level of economic and institutional development, the demographic composition and skills profile of the population, and labor market conditions.[68] In general, reforms should be coordinated, to exploit complementarities and avoid unintended consequences. Indeed, many policy interventions will have implications for all three strategic objectives.

[65] See Ribe et al., (2010).
[66] See Ribe et al., (2010).
[67] See Haltiwanger et al. (2010).
[68] For a detailed information on different types of countries depending on structural conditions and labor market outcomes, see the SP background paper "Labor Markets in Middle and Low Income Countries: Challenges and Implications for the Social Protection Strategy."

4.1 Ensuring that enough quality jobs can be created

What characterizes a high-quality job? We focus on two essential job characteristics that are essential for promoting social protection: the stream of earnings generated by the job, and worker's psychological and physical wellbeing. Low-quality jobs are those that generate low and/or volatile income streams, often not sufficient to lift individuals and their dependents out of poverty. These low-quality jobs may also expose workers to undue risk of disease, psychological stress, or degrading lifestyles. The review presented in Section 2 suggests that a majority of the labor force is engaged in low-quality jobs in agriculture, low productivity self-employment, and informal wage employment; these types of employment either do not generate sufficient earnings or expose individuals to a high variability in earnings and poor working conditions without providing access to risk management systems.

There are two major areas that policymakers must address to improve the overall quality level of jobs to address issues of labor market opportunities and acceptable levels of earnings.

The first agenda item for policymakers to focus on in order to create high-quality jobs is ensuring that, at all levels, the process of creating and destroying businesses and jobs is efficient. This type of vibrant economic activity is needed from the low skilled self-employed who creates a job for himself, through new household micro-enterprises that employ family members, to the start-up that hires a few skilled youth, to existing firms that expand current establishments or create new ones. Good ideas or projects should be able to be funded and eventually implemented in an environment conducive to growth and job creation; bad ideas should be filtered out and discarded so that human and physical resources can be put to better use. Clearly, not all good ideas need to be transformed into large corporations, and many businesses will choose to remain small. Productivity, however, should be sufficiently high to allow entrepreneurs to register their businesses and pay wages (or generate earnings) that ensure a decent standard of living.

The second agenda item for policymakers involves improving the quality of the jobs that already exist. Some low-skilled self-employed workers, as well as some entrepreneurs running small-scale low productivity businesses, have economic potential if their enterprises are well managed, while others do not. The goal of public policy in this case is to help promising businesses realize their potential, while assisting those individuals involved in non-economically viable activities to exit and transition to a more productive occupation. The relative importance of each of these agenda items will depend on the economic circumstances of each country; improving the quality of existing jobs is a greater priority in the poorer clusters, for example, but in most cases both policy areas are important.

Policies that promote macroeconomic stability and an investment-friendly business environment (including labor regulations) can contribute to both policy areas. The focus here should remain on understanding how different parts of the regulatory framework (including labor regulations) affect the creation of firms and jobs in different sectors and regions, and at various levels of productivity. There is evidence highlighting the importance of competition in facilitating firm entry, innovation, and productivity growth.[69] Research also shows that significant reductions in regulations can increase the number of businesses and wage employees.[70] In addition, anti-trust institutions can play an important role in maintaining competitive markets, which ultimately create more jobs. But important questions remain in terms of how regulations can be designed to protect workers without reducing incentives to create formal jobs. Enforcement of labor regulations in developing countries also remains an open policy question.[71]

Direct policy interventions to stimulate investments in particular sectors can also help create productive firms. Even in a perfect business environment with low macroeconomic and microeconomic risks, investments and new business will not simply appear; there may be other market features, such as increasing returns to scale, agglomeration externalities, coordination failures, and information spillovers that inhibit the development of new economic activity.[72] For example, 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 initial entrants.[73] In this case, policy can contribute to the creation of high-value firms by temporarily subsidizing investments, offering guaranteed loans to firms, facilitating the creation of necessary physical infrastructure, and mobilizing skilled workers. But there remain questions about how these policies should be implemented – starting with how to "target industries" – that will need to be addressed in the future.[74]

Interventions that support self-employment and entrepreneurship (the second agenda item) have received little attention and relatively little is known about their effectiveness. These policies attempt to influence several factors in promoting entrepreneurship: 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

[69] See, for example, Aghion et al, (2005) and Hallward-Driemeier and Thompson (2009).
[70] See Bruhn (2011) and Klapper and Love (2010).
[71] See Hallward-Driemeier and Pritchett (2010).
[72] See Hausmann (2008).
[73] See Hausmann et al (2011).
[74] 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.

and markets; and liquidity constraints. Interventions of this sort include business and life skills training, advisory services, networking, improving access to finance, and micro-franchising.

It is difficult to extract reproducible lessons from the evidence, because entrepreneurship programs are heterogeneous and are typically comprised of a package of interventions. Randomized control trials carried out on a sample of microfinance clients in Peru,[75] Tanzania,[76] Bosnia-Herzegovina,[77] Dominican Republic,[78] and Pakistan[79] indicate that while business training improves business knowledge and business practices, there is little discernible 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.[80] Evaluations of youth programs that provide entrepreneurial skills show that much depends on curriculum, pedagogical approach, and whether participants have to actually start a business or not.[81] For example, an evaluation of Argentina's *Microemprendimientos Productivos*, which targeted welfare beneficiaries of a large safety net intervention, reports that the intervention failed to increase income for the average participant in the short-run.[82] Some evaluations of matching grants for SMEs in Argentina[83] and Tunisia show positive results on employment creation, but a similar program in Mauritius found mixed results.[84] Mentoring for SMEs in Mexico led to large, but imprecisely measured, increases in profits and sales, but no increase in employment over one year.[85] Consultants to improve management practices in India increased productivity by 11 percent and annual profits by over USD 200,000 per firm, but induced no significant change in employment in the first year.[86] In general, most results measure impacts over the short run; little is known about the medium term impact of these programs.

Microfranchising and agricultural extension programs appear to be more promising. Microfranchising programs remove the difficult step of business design by replication of a successful existing business in sectors from pharmaceutical drugs, to ice cream, to solid waste collection, to domestic or phone services, to the provision of water. In addition, the risk of failure 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. Interventions that

[75] See Karlan and Valdivia (2011).
[76] See Bjorvatn and Tungodden (2010).
[77] See Bruhn and Zia (2011).
[78] See Drexler, Fisher and Schoar (2011).
[79] See Mansuri and Gine (2011).
[80] See Banerjee, Duflo, Glennerster and Kinnan, (2009).
[81] 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).
[82] See Almeida and Galasso (2009).
[83] See Castillo et al, (2010).
[84] See Biggs (1999)
[85] See Bruhn, Karlan and Schoar, (2011).
[86] See Bloom, Eifert, Mahajan, McKenzie, and Roberts, (2011).

focus on increasing the productivity, integration, resistance to shocks, and competitiveness of the agricultural sector also merit more attention, particularly in the cases of countries in the low-income clusters. 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.[87]

Within these two agenda items for policymakers, one area of focus for Social Protection and Labor, in coordination with the IFC, FPD, ARD, DEC, and PREM, is the design and implementation of programs to support self-employment and entrepreneurship. The following activities deserve attention:

- **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, and low productivity firms; interventions can take place at the level of the individual, firm, or community.
- **Understanding what types of entrepreneurship programs are effective for specific groups**. This is essential to design programs tailored to different population subgroups and go beyond the "one-size-fits-all" approach.
- **Identifying whether public programs are needed to provide insurance to entrepreneurs.** Uninsured risks, resulting from failures in insurance markets, may deter potentially successful entrepreneurs either from establishing businesses, or from engaging in high-risk/high-reward activities. An important policy question is whether there are cost effective programs that can be considered to provide insurance and promote entrepreneurship.
- **Identifying implementation issues that are crucial for a program to succeed and be scaled up.** Recent evaluations showing muted results do not imply that the entrepreneurship programs in question are always ineffective; they can reflect problems with design or implementation.
- **Recognizing the skills that 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 second area of focus for Social Protection and Labor is the design of labor regulations that are able to provide protection to workers without reducing incentives to create quality jobs.

[87] See World Bank (2007c).

Open policy questions include:

- **How to simplify and redesign labor regulations to focus on the most important risks facing workers.** Given limited institutional capacity, particularly in low income countries, there might be a need to rethink labor regulations. One possibility is to concentrate on specific failures in labor and product markets that reduce the bargaining power of workers relative to employers and selectively focus enforcement capacity on policies that address these failures, reinforcing the limited capacity with civil society involvement where possible. Policies amenable to such treatment could include those that address appropriate working conditions in terms of health and safety, working hours and leave policies, minimum wages, and advance notice in the case of dismissal.
- **How to improve enforcement.** Issues that should be addressed include: (i) what is the efficient amount of resources devoted to enforcement; (ii) how to combine controls and penalties without discouraging small entrepreneurs; (iii) how to limit the opportunities for harassment and corruption associated with increased enforcement; and (iv) how to involve civil society in the process to expand labor regulations to informal sector workers.

4.2 Facilitating labor market transitions and managing risks

Policy can improve labor market outcomes, and ultimately earnings and households' welfare, by promoting workers' transitions into employment or better jobs, while helping them manage risks such as workplace injury, disability, or job loss. High unemployment rates, for instance, can reflect inefficient transitions from school to work, out of unemployment, or between jobs. Similarly, low participation rates can sometimes be explained by generous transfer programs or early retirement provisions, the lack of support services (e.g., for child care), or prevailing social norms (e.g., women not being allowed to work outside the household). Movement out of agriculture or low productivity self-employment can be constrained by a lack of information about alternative opportunities, mobility costs, lack of skills (see below), or lack of credit.

Access to risk management programs is also an important determinant of an individual's welfare. Insurance is not only important to smooth consumption in the presence of income shocks, but also to encourage transitions into more productive, and often higher risk, activities that generate higher earnings. For instance, workers with access to unemployment benefits have more time and resources to find jobs that better match their skills.

Part of the policy agenda for the Social Protection and Labor practice is the design and implementation of policies and programs that activate individuals and facilitate labor market transitions. The relevant programs fall into two categories: (i) programs to stimulate labor demand; and (ii) programs to support job search and improve employability. The first set of

programs mainly includes public works and wage subsidies,[88] while the second brings together interventions such as intermediation, counseling, job-search assistance, training, skills certification, and social services that facilitate mobility (e.g., child care). The entrepreneurship promotion programs of Section 4.1 can also become part of the portfolio when wage and salary jobs are lacking. In all cases, programs need to be coupled with policies that create the right incentives for work.

Evaluations of activation and active labor market programs have been mixed, but this may partly reflect flaws in program design. As with entrepreneurship programs, weak evaluations should not be interpreted as suggesting that the active labor market programs as a whole are unnecessary or useless.[89] These programs aim to address real market failures, and successful examples do exist. These successful programs often integrate multiple interventions, including linking individuals to jobs, and benefit from the strong involvement of the private sector. For example, "Training plus" programs consist of technical and/or life skills training followed by work experience through private sector internships and job placement assistance. Several of these programs have proven to be quite successful at placing individuals in jobs. Interventions such as the *Jovenes* programs in Latin America (mainly targeted to unskilled youth)[90] and *Probecat* in Mexico[91] fit into this category.

The challenge is to better understand how to design and implement integrated interventions that respond to the needs of different workers in different country settings.[92] Specific issues include:

- **Understanding Employability Constraints.** Relevant products could include a stock taking of the most successful methods used to profile different types of constraints in high income countries, a statistical toolkit that utilizes various data sources to help analyze the main constraints to employability across different groups, and an exploration of techniques used to provide profiling and counseling services across different programs and settings.

[88] Some of these and other programs (such as work-sharing) have also been used to protect jobs during a recession. Their use, however, is more controversial. More effective interventions to temporarily help firms in distress can include credit and access to public tenders.

[89] See Cunningham et al., (2010).

[90] *Jovenes* programs have a strong emphasis on demand-driven skills training, ensured by ex ante agreements with the private sector to provide internships to their graduates. Wages during the internship are financed by the program.

[91] The program, which is not specifically targeted to a disadvantaged population, provides a stipend equivalent to the minimum wage to beneficiaries while the private sector businesses provide the training and the internship (for a minimum of three months) and cover the training costs. Most importantly, private firms have to agree to retain at least 70 percent of the trainees for a year each in order to participate in the program (Ibarraran and Rosas, 2009).

[92] For a detailed review of programs and a more in-depth discussion of the various issues, see Almeida et al. (2011). For a recent discussion about how wage subsidies are used in Tunisia, see Robalino et al. (2011).

- **Understanding incentive-compatible designs of income support schemes.** Income support programs can be designed to encourage recipients to search for jobs or enter training programs that increase their employability and earnings potential. Although initial evidence suggests that cash transfer programs have limited impacts on labor supply,[93] evidence linking specific program design features to employment outcomes remains in short supply.
- **Investigating the appropriate contracting, auditing, and payment systems for the outsourcing of service delivery to the private sector**. The private sector in many cases has helped deliver a wider array of services to an increasingly diverse clientele, while reducing costs. Despite their importance, there remains little understanding of how to best create and operate markets for service delivery.

Another area of research would focus on the design of insurance programs that can cover a majority of the labor force without creating distortions in labor markets. Recent studies suggest that expanding access to social insurance such as pensions and unemployment benefits would require opening systems to all workers, most likely on a voluntary basis since it is difficult to enforce compliance. This raises several policy questions and technical challenges:

- **How to account for individual heterogeneity when setting the mandate of social insurance programs**. Individuals have different preferences and needs, yet most systems impose a universal mandate. This can create implicit cross-subsidization, provide incentives for informality, and increase the tax-wedge. Alternative schemes need to be considered in which individuals are more involved in choosing the benefits they receive.
- **How to move toward efficient and equitable redistributive arrangements**. A priority is to develop best practices for gradually moving existing social insurance programs toward contributory programs based on *actuarially fair risk pooling* and/or *savings*. Explicit redistributive arrangements can then be added as complements to these basic arrangements. 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.
- **How to reduce the tax-wedge without affecting the adequacy of benefits**. As discussed above, tax-wedges are generally high and can discourage the creation of formal wage employment. Further research and policy analysis are needed to look at alternative financing options. Relying on general revenues financed out of consumption taxes – at least for the redistributive part of the programs - is one possibility. Another is to

[93] See Fiszbein, et al (2009).

improve targeting in the distribution of transfers, so that ineligible people do not receive benefits and the amount that needs to be financed is reduced.

- **How to design voluntary savings schemes for informal sector workers**. Informal workers are disproportionately excluded from the financial sector and thus may not have sufficient access to (or knowledge of) private savings instruments. The best design for public voluntary contribution systems is unclear, and it is difficult to evaluate alternative arrangements in the field. Pilot experiments should be launched to understand the constraints affecting workers' willingness to save (e.g., information, skills, access, liquidity constraints, trust, social norms), while innovative interventions that can influence savings behavior through incentives should be tested.
- **How to adapt administrative systems**. More efficient and universal social insurance programs will require better administrative systems to manage their various business processes: identification, registration, targeting, collection of contributions, calculation of benefits, and benefit payments. The Bank should therefore: (i) take stock of best practices and promising technologies; (ii) develop a tool-kit to benchmark administrative systems; (iii) develop operational manuals to guide the design and implementation of various programs; and (iv) support efforts to refine targeting methodologies that attempt to reach the informal sector.

4.3 Developing Skills

As discussed in Section 3, one of the main constraints preventing individuals from improving their labor market opportunities is that they lack the right skills. Low-skilled workers are more likely to be in low-productivity/low-quality jobs, either in agriculture, as self-employed workers, or in informal wage employment. Transiting into formal wage employment or successful entrepreneurship is unlikely for many of them. Many skilled workers, on the other hand, might not have acquired the appropriate skills to compete for a limited number of good jobs, and may either face long school-to-work transitions or frequent movement between low-quality jobs in the informal sector.[94]

Comprehensive skills development policies should target both the large ***stock of unskilled workers already in the labor market*** *and, over the medium term,* ***new labor market entrants****.* Both types of policies are complicated by the multiplicity of channels through which skills are acquired – from parents and families in the early years of life, through schools, universities, and vocational centers as children get older, and ultimately via on–the-job training and work experience.

[94] See Perry et al., (2007).

The focus for the Social Protection and Labor sector would be on training policies that target individuals who are leaving the formal general schooling system or are already in the labor market. These include 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. In this way, the skills agenda is intimately related to the work on entrepreneurship and labor market transitions.

The challenge is to improve the design of current programs, taking into account the market failures they are trying to address and the limitations of government intervention.[95] Some of these market failures include poaching and matching externalities in non-competitive labor markets, imperfect information in capital markets that constrain a firm's ability to invest in training, coordination failures that lead workers to under-invest in training (due to a lack of high productivity jobs on the market) at the same time as employers are failing to create high-productivity jobs (due to a lack of skilled workers), and limited information and individual "myopia" that leads to insufficient investments in training or sub-optimal career choices. Governments are also susceptible to failures, and many programs currently operating are part of the problem instead of the solution.

The Social Protection and Labor sector's contributions should focus on the following priority areas:

- **Measuring skills**. An important question is how to define and measure the set of skills that determine labor market outcomes in developing countries. One of the main avenues for further research is thus the development of routinely-administered national surveys of workers and employers in developing countries that can accurately measure the supply and demand of technical, cognitive, and non-cognitive skills.[96]
- **Assessing failures in the market for skill acquisition.** There is an urgent need to better assess the main markets and governmental failures that impair the provision of training, and to evaluate the impact of alternative corrective policy interventions. A first step would be to improve current data collection and ongoing monitoring and evaluation systems (M&E) across all programs. Another step would be to define a more systematic approach to identifying constraints facing individuals looking to acquire skills or firms seeking to provide them. This could involve evaluating information problems and myopia among different groups of workers and assessing the likelihood that more information and/or incentives could affect skill acquisition.
- **Improving knowledge about program design and implementation.** When designing a new program, important decisions must be taken concerning governance, management

[95] See Almeida et al. (forthcoming).
[96] The Bank has already pioneered this type of survey in Lebanon and Peru, and is exploring the possibilities for expanding to more countries.

structures, public vs. private provision, financing mechanisms, payment systems to providers, decentralization and autonomy, regulations to control quality, and how to target and deliver subsidies (to individuals or firms). Efforts should be undertaken to fill the knowledge gaps with respect to these design features.

V. Conclusions and Implications for the Bank's Work on Labor and Youth

This paper has reviewed main trends in labor markets around the word, identified some of the key challenges that countries face to improve them using the MILES framework, and discussed implications in terms of research and policy analysis. The agenda that emerges for the Bank's work on labor is ambitious and its implementation will require a coordinated effort between the regions and networks, in particular HD, FPD, PREM, and DEC. It will also require rethinking current institutional arrangements and knowledge management tools with the aim of increasing their operational impact. We propose actions at five levels:

1. Leveraging internal resources and partnerships through development of a knowledge platform on labor.
2. Moving towards a second generation of impact evaluations of labor market programs.
3. Improving the capacity to monitor, benchmark, and analyze labor markets.
4. Improving the capacity to track and develop operational guidelines for promising or successful labor market interventions while rethinking training.
5. Adapting policies and programs to the specific issues facing youth.

5.1 Knowledge Platform

There are several challenges and constraints to closing the knowledge gaps surrounding the jobs agenda. Part of the problem is content-related: the agenda is inherently multi-sectoral and, as suggested by the MILES framework, requires coordination of policy interventions at various levels. In addition, the data and instruments needed to assess market failures are often not available and there is often insufficient knowledge about how best to design and implement particular policies (e.g., employment services or support to small entrepreneurs). The other part of the problem is due to institutional constraints. The organization of knowledge production and management on the subject of jobs has made it difficult to close current knowledge gaps due to: (i) the lack of a systematic process to digest current cross-sectoral research into forms that can most usefully inform policy; (ii) the mismatch between some of the research in the academic community and the demands from policymakers; and (iii) the disconnect between research findings and policy recommendations on one hand, and local political and institutional constraints on the other.

A joint initiative of HD, FPD, and PREM, the Jobs Knowledge Platform (JKP) addresses these constraints. The JKP is an international network of researchers, policy analysts, and policymakers that links the Bank with universities, think-tanks, academic associations, other international organizations, donors, and elements of civil society such as labor unions and chambers of commerce. The network aims to identify knowledge gaps in the jobs agenda in developing countries, foster relevant research, link research to policy, and disseminate best practices and innovations.

The JKP has three core objectives:

- **Making knowledge accessible**: The JKP will mobilize leading academics and policy analysts to build a virtual encyclopedia of issues related to job creation – a Wiki bringing together labor, finance, macroeconomics, industrial organization, and trade economics as they affect firm growth, job creation, and labor market outcomes. Beyond direct virtual access, the dissemination of best practices will be supported by policy and technical notes, newsletters, and virtual lectures by internationally renowned academics and policymakers.
- **Filling knowledge gaps by matching research to policy interests and developing innovative, cross-sectoral approaches**. During an initial stage, the JKP will be used to identify knowledge gaps. In a second stage, the JKP will mobilize resources for research that can fill the knowledge gaps. This will be done by: (i) facilitating access to and/or supporting the collection of relevant data (e.g. panel labor force surveys); (ii) linking researchers and institutions – particularly between "north and south;" (iii) having prestigious scientific journals dedicate special issues to specific research questions; (iv) creating fellowships and research grants; and (v) organizing high level dissemination activities.
- **Enhancing the impact of knowledge on policy**. Information and knowledge are necessary but not sufficient to achieve successful reforms; more is needed to help policymakers transform ideas and policy recommendations into new laws and programs. Despite constraints related to the political economy of reform, the outcomes of a given policy debate can be improved by helping frame the discussion and exposing stakeholders to the experiences of other countries that have gone through similar processes. The main contributions of the JKP to this process are to: (i) coordinate discussion platforms where on-going reforms are followed continuously, with commentary from experts and stake-holders; (ii) facilitate South-South partnerships where experiences in the implementation of successful reforms can be shared; (iii) disseminate knowledge about the experiences of successful reformers and reforms; and (iv) work with various international forums to bring together all the relevant actors on specific themes.

5.2 Impact Evaluations

Policy interventions and programs that the Bank supports are increasingly subject to rigorous evaluation. In the area of labor markets, there have been important recent initiatives to evaluate programs[97] such as the Dominican Republic's Youth Development Program; India's National Rural Employment Guarantee; Liberia's Economic Empowerment of Adolescent Girls; Malawi's Apprenticeship Program and Entrepreneurial Support for Vulnerable Youth; South Africa's Wage Subsidy for Youth; Tunisia's Turning Theses into Enterprises; Turkey's ISKUR Training Program; and Uganda's Social Action Fund.

The goal moving forward is to mobilize resources to fund evaluations that provide information not only about whether a given program makes a difference but also why it succeeded or failed and whether it is cost-effective. The evaluation will address several key questions, including how governance arrangements, delivery systems, and choices about content affect the impact of a given program; how these effects change with the target group and economic environment; and how much the time of exposure to the interventions makes a difference. More attention will also be given to the valuation of the economic costs and benefits of various interventions.

Beyond the evaluation of government pilots or programs, resources should also be mobilized to fund field experiments that can improve our knowledge of specific interventions. For example, experiments to understand how different incentives, targeted to different population groups in different settings, can affect savings behavior would be useful when considering extension of social insurance to currently uncovered workers (see Section 4.4), while evaluating how changes in the components of an entrepreneurship promotion program can affect entrepreneurial success and aid in the design of such programs for the future (see Section 4.1).

5.3 Data, Indicators, and Modeling Tools

Beyond program evaluation, good labor policy needs to start with a good assessment of labor markets, a task constrained, in part, by limited data. Today, there is no systematic process to track, collect, and analyze available surveys that provide labor market data (mainly household, labor force, and enterprise surveys). For many countries, these are either not available or infrequently updated. Even among the countries that have surveys, individuals or firms are usually not followed over time and therefore these surveys cannot be used to study labor market dynamics. Data about earnings, a primary indicator of the quality of a job, is also seldom

[97] Many of these impact evaluations were financed by the Spanish Impact Evaluation Fund.

available and often unreliable. Looking forward, a three pillar strategy is proposed:

- **Improving labor market assessments and benchmarking**. *The proposal is to partner with ongoing efforts to standardize and track the production of relevant labor market data, and collaborate with the regions in the analysis of specific issues*. While several regions within the Bank are actively engaged in standardizing household survey data, the most comprehensive collection of labor market data is the International Income Distribution Database. This archive, which is maintained by the Development Research Group, covers 251 surveys in 126 countries (Montenegro and Hirn, 2009). The Labor Team would complement these efforts by first creating and maintaining a small, complementary database of standardized panel surveys that could be used to track labor market transitions.[98] The second step would be to establish, in consultation with labor market experts, the sets of indicators that should be tracked and benchmarked at both the macro and micro levels, beyond what is available in current databases such as WBI and KILM. The various surveys in the databases could also be used to attempt to correlate observed policies and institutions with labor market outcomes.

- **Upgrading imputation models**. *Given frequent gaps in labor market data within and across countries, it is important to improve the methods used to impute missing data*. Imputation techniques are widely used today by the institutions managing databases on labor indicators. There are, however, concerns regarding their reliability. The proposal is to launch a concerted effort with key internal and external partners to further develop these techniques, building on recent innovations.[99]

- **Strengthening countries' LM information systems and survey instruments**. *Beyond helping to mobilize resources to improve countries labor market information systems, there is room to work on the improvement of current instruments*. In particular, most surveys do not collect information on the extent to which firms or workers comply with labor market regulations (e.g., minimum wages, minimum labor standards, social security contributions, and severance pay), individual job satisfaction and preferences towards social security benefits, or details about the job search process. There have been ad-hoc initiatives to expand/improve current instruments, but a more systematic and coordinated effort is needed.

5.4 Operationalization of Key Labor Market Interventions and Training

Ultimately, the impact that the Bank has in countries results from the quality of the operations it supports and helps design; as a result, it is necessary to have more a systematic process to

[98] This database on panel surveys of workers can be used to obtain a better understanding of labor market transitions and patterns of job creation and destruction.
[99] See Margolis et al. (2010).

disseminate and apply best practices. Even today, TTLs rely mainly on their own initiative and informal arrangements to learn about the design and implementation of operations in other countries which are similar to the ones they are preparing (e.g., a training project for vulnerable youth). The proposal looking forward is to (i) *dedicate resources to create an inventory of labor market interventions*, and (ii) *develop toolkits (i.e., operational manuals and technical notes) to guide the design and implementation of best practice operations*.

Training activities need to become more focused on implementation issues. To date, training activities have been developed to inform interested parties about the many dimensions of the jobs agenda, but these often sacrifice depth in exchange for breadth; going forward, the balance needs to change. The proposal is to complement the Labor Markets Core Course (LMCC) with targeted, intensive training on the design and implementation of specific interventions. The LMCC provided by HDNSP could be shortened to give a general perspective on labor market issues and policies. Other one or two week courses would be provided on topics such as youth employment, design of unemployment benefits systems, or the organization of employment services. These could be offered regionally, depending on the policy priorities for given groups of countries, or could take the form of on-line courses, which would expand their reach considerably. Additional resources would also need to be allocated to assess the impact of these courses through more detailed surveys, evaluations, and follow-up with the participants.

5.5 Special Issues Regarding Youth

The analysis of demographics and youth labor market outcomes has shown that youth labor market issues are relevant for all clusters. The growing share of young workers in the labor force in many countries, especially in Types 3 and 4, can be a key factor in explaining unemployment growth, and the fact that youth are less experienced than adults means finding jobs can be more challenging for them. More importantly, long unemployment periods for youth might have long lasting consequences.[100] An implication is that the social benefit of any policy intervention that helps young people durably transition into the world of work, other things being equal, can be higher than for adults.

Because of these reasons, the work of Social Protection and Labor should give special consideration to youth issues when designing and implementing any of the interventions discussed in this section.

- **Skill development programs should consider that some personality traits, non-cognitive skills, and attitudes are still malleable, at least during childhood and youth.** There is evidence in the psychological literature that personality continues to

[100] See Margolis et al. (2001), World Bank (2006).

develop during young adulthood, with personality stabilizing by age 30.[101] Personality characteristics and non-cognitive skills influence occupational choice,[102] so these elements should be considered when designing the curriculum and pedagogical approaches and selecting trainers for skills development programs for youth.

- **Skills development programs for youth should foster the development of self-regulation, a positive identity, and "productive" preferences.** Recent research has found that a young person's proneness to deviant or risky behavior, academic failure, or low performance in the job market is less a function of vulnerability to adverse circumstances and more a heightened sensitivity to external factors, including positive ones.[103]

- **Familiarity with the internet and other technologies creates opportunities for innovation in the delivery of training, labor intermediation, and entrepreneurship programs to youth.** One example of a business training program relying fundamentally on web-based content is the IFC's *SME Toolkit: Build your business* program. This program includes material on creating a business plan, starting a business, financial literacy, etc. Elsewhere, the use of cell phones has been used by some programs like *SoukTel* to connect employers and people looking for a job via text messages in Somalia and Palestine.

- **Alternative or complementary arrangements for youth need to be incorporated into social insurance programs**. For reasons of lack of trust in the system or myopia, young people may be disproportionately reluctant to contribute voluntarily to pensions. Unemployment insurance systems can also present a problem, particularly if countries move to programs based on savings. Finally, alternative avenues for financing health insurance for youth may need to be explored, since current systems based on payroll taxes penalize youth, whose expected health costs are likely to be lower and who often do not have families. Moving to systems based on premiums, for instance, could make them less expensive, more competitive, and more attractive.

- **Entrepreneurship programs also need to take into account the extra intensity with which certain constraints affect youth.** Most youth do not have the social networks, business skills, and money to start a business, in part due to a lack of labor market

[101] Longitudinal studies that track college students have shown that personality traits show a certain level of persistence but also that there are changes during this period of life (Robins et al., 2001). Roberts et al. (2003) found that work experiences were related to changes in personality from age 18 to 26 using a panel of individuals in New Zealand. These authors also found that personality traits at age 18 predicted work experiences at age 26, suggesting the presence of unobserved common factor that influence both personality and work experiences.
[102] Empirical evidence shows that the decision to start a business and entrepreneurial performance are affected by a series of cognitive and non-cognitive skills. See Heckman et al. (2008) and Ciavarella et al. (2004).
[103] See Belsky and Pluess (2009); Belsky et al. (2007).

experience and assets that might serve as collateral. These issues suggest a shift in emphasis for some program components (i.e. towards mentoring and access to capital) when designing entrepreneurship programs for youth.

Annex 1: Cluster analysis

Cluster analysis is a statistical technique to reveal subgroups based on similarity without imposing an a priori structure on the raw data. Groupings through cluster analysis are done in such a way that observations in a cluster are similar to each other, while those across different clusters are dissimilar. By grouping the similar observations together and separating the dissimilar ones, each group provides a concise description of similarities and differences in the data.

There are several different methods to generate clusters from data, each depending on a different measure of "distance" between data points within the cluster. The analysis undertaken here uses the Euclidean distance as a measure of distance, and the Ward clustering method to assign countries with similar experiences.[104] The Euclidean distance between the data from two countries X and Y is defined as $d(X,Y) = \sqrt{\sum(x_j - y_j)^2}$. Assuming that there are $i = 1,2,\dots n_m$ countries with $j = 1,2,\dots J$ variables for each country i in Cluster m, and letting the total number of clusters be M, the Ward method assigns countries in each cluster by minimizing the variance of the data within cluster,

$$W = \sum_{m=1}^{M}\sum_{j=1}^{J}\sum_{i=1}^{n_m}(x_{ijm} - \overline{x_{jm}})^2,$$

where $\overline{x_{jm}}$ is within cluster mean of variable *j* over all countries in the Cluster *m*.

Since the cluster analysis as used here aims to identify the countries that have followed a similar development path, focusing on labor market evolutions over time, variables that are thought to affect the main labor market indicators are used for the purposes of clustering the countries. In order to capture the differential growth rates of the size of the labor force by gender and age group, the percentage change in the population of each gender and age group (youth and adults) was selected. Likewise, to capture the differential growth rates of employment by gender and age, the percentage changes of the size of the employed population are added. The analysis includes the percentage growth in the number of people working in each sector (agriculture, industry, and service) to reflect the structural transformation in the labor market, and the percentage change in average years of schooling to

[104] See Everitt et al. 2001 for a detailed explanation on cluster analysis, including different distance measures and methods.

consider the skills level of the workforce. Finally, to capture the initial state of each country, average GDP per capita during the period of 1995-1999 was also included.

The results of cluster analysis identify four different development paths, as described in the text.[105] The extent of population ageing or the size of the youth bulge, shifts from agriculture to industry and to services, employment growth by gender and age, and progress in education, as well as the initial GDP level are the determining features of each cluster. As the results show, countries from different regions and income levels fall into the same cluster, meaning that they share common patterns of labor market evolution. This suggests that simple grouping by region and income levels, although a natural first step, masks important heterogeneity within regions or income levels, and commonality across regions and income levels, in the development paths taken by each country.

While cluster analysis provides useful information on different development paths for countries across different regions and income groups, there remain several caveats to this approach. First, the results from cluster analysis can vary widely depending on the methods used, and the scale and type of variables included. The analysis undertaken here is constrained in particular by the availability of data, with the variables used being chosen so as to give as accurate a picture of labor market changes as possible and balance orders of magnitude as much as possible while limiting the number of countries eliminated due to missing data. Thus the grouping from this exercise is not definitive, and a different set of variables could potentially lead to a different set of development paths.

Also, the cluster analysis only groups countries by similarity of observed variables, and in no way implies a causal relation between inputs and outcomes. Once the clusters have been determined, descriptive statistics for other variables that were not used to establish membership in the cluster, such as productivity growth, GDP or National Income growth, or poverty reduction, can be calculated. The discussion does not imply causality, but rather considers how sets of variables move together on average for particular groups of countries. It is important to remember that the stock taking and grouping of countries into development paths is a descriptive exercise, and more detailed econometric analysis would be required to determine a causal link between the inputs and outcomes as described in this paper.

[105] Detailed tables providing descriptive statistics for each cluster are presented in Annex 2.

Annex 2: Detailed Statistics for Each Cluster

Table A2.1: Type 1: Middle Income, Rapid Growth, and Structural Change

	Mean	Number of countries		Mean	Number of countries
Outcomes					
Percent GDP per capita growth	33%	25	Percent Labor productivity Growth	24%	25
Percent GNI per capita growth	55%	25	Change in $2/day poverty rate	-8.58	15
Inputs					
Baseline average GDP per capita	1224	25	Baseline average $2/day poverty rate	30%	20
Labor Force			**Unemployment**		
Percent population growth	12%	25	Change in adult employment to working age population ratio	1.38	25
Percent working-age population growth	19%	25	Change in youth employment to working age population ratio	-0.95	25
Percent youth population growth	15%	25	Change in youth unemployment rate	-1.13	25
Change in female labor force participation	2.32	25			
Change in youth labor force participation	-1.77	25	**Employment**		
			Percent employment growth	21%	25
Skills			Change in agricultural employment share	-5.51	25
Change in average years of schooling	0.92	25	Change in public sector employment share	-0.46	5
Change in percent literate	11.96	20	Change in self, unpaid family and household employment share	0.37	10
Countries					
East Asia & Pacific	China, Indonesia, Philippines				
Europe & Central Asia	Albania, Armenia, Kazakhstan, Ukraine				
Latin America & Caribbean	Bolivia, Ecuador, Guatemala, Guyana, Hondouras, Paraguay, Peru				
Middle East & North Africa	Algeria, Egypt, Jordan, Morocco, Syria, Tunisia				
South Asia	India, Maldives, Sri Lanka				
Sub-Saharan Africa	Swaziland, Namibia				

Sources: WDI, ILO-KILM.

Notes: "Percentage growth" figures refer to percentage increase in four-year average value of the period 2005-2008 relative to the five-year average of values for the baseline period 1995-1999. "Change" figures refer to percentage point change between comparison and baseline intervals. Color code for countries based on income level in 2009: red=low income, blue=lower middle income and green=upper middle income.

Table A2.2: Type 2: Upper Middle Income, Aging, and Declining Informality

	Mean	Number of countries		Mean	Number of countries
Outcomes					
Percent GDP per capita growth	26%	23	Percent Labor productivity Growth	19%	23
Percent GNI per capita growth	50%	23	Change in $2/day poverty rate	-4.23	11
Inputs					
Baseline average GDP per capita	3406	23	Baseline average $2/day poverty rate	15%	17
Labor Force			**Unemployment**		
Percent population growth	9%	23	Change in adult employment to working age population ratio	1.98	23
Percent working-age population growth	14%	23	Change in youth employment to working age population ratio	-2.86	23
Percent youth population growth	7%	23	Change in youth unemployment rate	-1.46	23
Change in female labor force participation	2.40	22			
Change in youth labor force participation	-4.40	23	**Employment**		
			Percent employment growth	16%	23
Skills			Change in agricultural employment share	-2.20	23
Change in average years of schooling	0.92	23	Change in public sector employment share	-0.51	12
Change in percent literate	6.02	16	Change in self, unpaid family and household employment share	-1.33	17
Countries					
East Asia & Pacific	Fiji, Malaysia, Thailand				
Europe & Central Asia	Bulgaria, Lithuania, Russian Federation, Serbia, Turkey				
Latin America & Caribbean	Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Jamaica, Mexico, Panama, Uruguay				
Middle East & North Africa					
South Asia					
Sub-Saharan Africa	Botswana, Gabon, Mauritius, South Africa				

Sources: WDI, ILO-KILM.

Notes: "Percentage growth" figures refer to percentage increase in four-year average value of the period 2005-2008 relative to the five-year average of values for the baseline period 1995-1999. "Change" figures refer to percentage point change between comparison and baseline intervals. Color code for countries based on income level in 2009: red=low income, blue=lower middle income and green=upper middle income.

Table A2.3: Type 3: Very Low Income, Young, Balanced Employment Growth

	Mean	Number of countries		Mean	Number of countries
Outcomes					
Percent GDP per capita growth	23%	17	Percent Labor productivity Growth	18%	17
Percent GNI per capita growth	42%	17	Change in $2/day poverty rate	-6.63	4
Inputs					
Baseline average GDP per capita	208.7	17	Baseline average $2/day poverty rate	85%	9
Labor Force			**Unemployment**		
Percent population growth	25%	17	Change in adult employment to working age population ratio	0.83	17
Percent working-age population growth	29%	17	Change in youth employment to working age population ratio	0.13	17
Percent youth population growth	31%	17	Change in youth unemployment rate	-0.36	17
Change in female labor force participation	1.23	17			
Change in youth labor force participation	0.04	17	**Employment**		
			Percent employment growth	30%	17
Skills			Change in agricultural employment share	-4.08	17
Change in average years of schooling	0.73	17	Change in public sector employment share		0
Change in percent literate	15.57	8	Change in self, unpaid family and household employment share	15.56	1

Countries	
East Asia & Pacific	Cambodia
Europe & Central Asia	Tajikistan
Latin America & Caribbean	
Middle East & North Africa	
South Asia	Bangladesh, Nepal
Sub-Saharan Africa	Burundi, Central African Republic, Ghana, Liberia, Malawi, Mali, Mozambique, Niger, Rwanda, Sierra Leone, Togo, Uganada, Zambia

Sources: WDI, ILO-KILM.

Notes: "Percentage growth" figures refer to percentage increase in four-year average value of the period 2005-2008 relative to the five-year average of values for the baseline period 1995-1999. "Change" figures refer to percentage point change between comparison and baseline intervals. Color code for countries based on income level in 2009: red=low income, blue=lower middle income and green=upper middle income.

Table A2.4: Type 4: Low Income, Slow Productivity Growth, Structural Change

	Mean	Number of countries		Mean	Number of countries
Outcomes					
Percent GDP per capita growth	18%	13	Percent Labor productivity Growth	8%	13
Percent GNI per capita growth	40%	13	Change in $2/day poverty rate	-11.60	7
Inputs					
Baseline average GDP per capita	463.7	13	Baseline average $2/day poverty rate	56%	11
Labor Force			**Unemployment**		
Percent population growth	21%	13	Change in adult employment to working age population ratio	2.75	13
Percent working-age population growth	27%	13	Change in youth employment to working age population ratio	-0.49	13
Percent youth population growth	26%	13	Change in youth unemployment rate	-1.40	13
Change in female labor force participation	2.74	13			
Change in youth labor force participation	-1.67	13	**Employment**		
			Percent employment growth	31%	13
Skills			Change in agricultural employment share	-7.36	13
Change in average years of schooling	0.86	13	Change in public sector employment share	0.95	2
Change in percent literate	11.66	7	Change in self, unpaid family and household employment share	-2.48	1
Countries					
East Asia & Pacific	Mongolia, Papua New Guinea				
Europe & Central Asia	Kyrgyz Republic				
Latin America & Caribbean	Nicaragua				
Middle East & North Africa	Yemen				
South Asia	Pakistan				
Sub-Saharan Africa	Benin, Cameroon, Kenya, Lesotho, Mauritania, Senegal, Sudan				

Sources: WDI, ILO-KILM.

Notes: "Percentage growth" figures refer to percentage increase in four-year average value of the period 2005-2008 relative to the five-year average of values for the baseline period 1995-1999. "Change" figures refer to percentage point change between comparison and baseline intervals. Color code for countries based on income level in 2009: red=low income, blue=lower middle income and green=upper middle income.

Table A2.5: Type 5: Residual Countries

	Mean	Number of countries		Mean	Number of countries
Outcomes					
Percent GDP per capita growth	21%	38	Percent Labor productivity Growth	16%	23
Percent GNI per capita growth	47%	38	Change in $2/day poverty rate	-11.55	11
Inputs					
Baseline average GDP per capita	1434	43	Baseline average $2/day poverty rate	47%	19
Labor Force			**Unemployment**		
Percent population growth	15%	46	Change in adult employment to working age population ratio	1.11	27
Percent working-age population growth	20%	46	Change in youth employment to working age population ratio	-1.16	27
Percent youth population growth	18%	46	Change in youth unemployment rate	-0.57	27
Change in female labor force participation	1.71	40			
Change in youth labor force participation	-1.77	32	**Employment**		
			Percent employment growth	23%	27
Skills			Change in agricultural employment share	-5.32	49
Change in average years of schooling	0.87	16	Change in public sector employment share	-0.53	5
Change in percent literate	13.09	27	Change in self, unpaid family and household employment share	2.05	5

Countries	
East Asia & Pacific	Kiribati, DR (North) Korea, Lao PDR, Marshall Islands, Micronesia, Myanmar, Palau, Solomon Islands, Timor-Leste, Tonga, Vietnam
Europe & Central Asia	Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kosovo, FYR Macedonia, Moldova, Montenegro, Romania, Turkmenistan, Uzbekistan
Latin America & Caribbean	Cuba, Grenada, Haiti, Suriname, Venezuela
Middle East & North Africa	Djibouti, Iran, Iraq, Lebanon, Libya, West Bank and Gaza
South Asia	Afghanistan, Bhutan
Sub-Saharan Africa	Angola, Burkina Faso, Cape Verde, Chad, Comoros, DR Congo, Rep of Congo, Côte d'Ivoire, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Madagascar, Nigeria, São Tomé and Principe, Seychelles, Somalia, Tanzania, Zimbabwe

Sources: WDI, ILO-KILM.

Notes: "Percentage growth" figures refer to percentage increase in four-year average value of the period 2005-2008 relative to the five-year average of values for the baseline period 1995-1999. "Change" figures refer to percentage point change between comparison and baseline intervals. Color code for countries based on income level in 2009: red=low income, blue=lower middle income and green=upper middle income.

Annex 3: Regional Priorities Concerning Labor Markets

Table A3.1: Key Issues in Employment by Region

Region	Income Level	Type (# of countries)	Key Issues	Main Messages
SSA	LIC - LMIC	1 (2) 2 (4) 3 (13) 4 (7) 5 (20)	* Informal/agriculture sector productivity * Youth skills and employment * Business environment (e.g. infrastructure, transaction costs associated with government)	* Improve basic education and ensure learning (World Bank, 2008) * Broaden employment/business opportunities and provide second chance learning (World Bank, 2008) * Invest in infrastructure and business environment (Fox and Gaal, 2009)
SA	LMIC-LIC	1 (3) 2 (0) 3 (2) 4 (1) 5 (2)	* More and better jobs: infrastructure and labor regulation * Informal sector productivity and protection * Skills of workforce (particularly women)	* Address constraints to business including infrastructure, labor regulation, conflicts (World Bank, 2011) * Improve the effectiveness of labor market institutions in protection * Provide basic skills (literacy/numeracy) training
EAP	LMIC - LIC-UMIC	1 (3) 2 (3) 3 (1) 4 (2) 5 (10)	* Informal sector's productivity and protection * Social insurance system with wider coverage * Skills development	* Provide protection to the uncovered population (Wagstaff et al., 2009) * Improve both vocational and academic education (Jimenez, 2011)
MENA	LMIC-UMIC	1 (6) 2 (0) 3 (0) 4 (1) 5 (5)	* Youth and female employment (unemployment) * Labor regulation * Informality/public sector employment	* Provide work opportunities particularly for youth and women, and improve job matching (Briefs, 2011) * Ensure labor market flexibility and incentive compatible tax system (Angel Urdinola and Kuddo, 2010) * Reduce public sector dominance in formal employment, and improve productivity and protection for informal sector (Gatti et al. forthcoming; Dhillon and Yousef, 2010)
ECA	UMIC-LMIC	1 (4) 2 (5) 3 (1) 4 (1) 5 (10)	* Population ageing and sustainability of social insurance * Youth unemployment * Investment climate including labor regulation	* Reform social insurance for incentive compatible and sustainable design (Holzman et al, 2009; Mukesh et al. 2007) * Provide the second chance learning, encourage entrepreneurship, and get the private sector involved (World Bank, 2007) * Ensure investment climate conducive to job creation and reduce rigidity of labor regulation (Kuddo, 2009)
LAC	UMIC-LMIC	1 (7) 2 (11) 3 (0) 4 (1) 5 (4)	* Informal sector protection without labor market distortion * Labor regulation * Quality education and skills for the future	* Establish an incentive compatible social insurance and labor institutions (Ribe et al. 2010) * Reduce labor market regulation and entry barrier (Kaplan, 2009) * Invest in early childhood education and improve quality of education (World Bank, 2008, 2010)

Annex 4: Summary of the World Bank's Recent Studies by Topic

Study/Report	Region/Country	Main Question	Main Messages
Informality			
Loayza and Rigolini (2006)	Global	Cyclicality of informal sector.	Informal employment is in general counter-cyclical, and the extent of counter-cyclicality is lower with a larger informal sector and better police and judicial services.
Perry et al. (2007)	LAC	Informality: definition, motivation, dynamics, earnings, productivity, social protection, and institutions.	Informality depends on both exclusion from the formal sector and incentives to leave it. Policy suggestions include: 1) Productivity increasing programs for both formal and informal workers, 2) social protection for all, 3) formalization of informal workers, 4) enforcement of labor law, 5) improving the legitimacy of the state.
World Bank (forthcoming-a)	MENA		Informality is examined in the context of the region's labor market where the segmentation between public and private sector, employment gap in gender, and youth bulge exist.
World Bank (forthcoming-b)	ECA		Institutions related to tax policy and administration, social insurance, and education may encourage workers to enter and stay in the informal sector, and the role of institutions will be examined.
Levy (2008)	LAC	The effect of providing benefits to informal sector.	Adding a separate social policy for informal sector is believed to unduly encourage low productivity informal sector, intensify the segmentation of labor market, and hamper economic growth while contributing little to poverty reduction.
Sakthivel and Joddar (2006)	India	Social security coverage for the unorganized workforce in India.	The majority of the workforce in India works in unorganized sector and is not covered by social security.
Social insurance			
Holzman et al. (2009)	Global	Expanding social pension to uncovered people.	Voluntary social insurance system, universal and delinked from work status, with financial incentives to increase the take-up would be useful to reduce the coverage gap.
Wagstaff (2007)	Global	Social Health insurance (SHI).	SHI does not necessarily bring better delivery and quality of health care. It provides little incentive

			for non-poor informal sector to participate.
Hsiao, Shaw, and Fraker (2007)	Global	SHI in various developing countries.	Each country case shows policy considerations for each step of SHI from design, to implementation, to expansion, and ultimately to universal coverage.
Vodopivec (2009)	Global	Unemployment insurance.	Given large informal sector, weak administrative capacity, large political risks, and corruption in developing countries, this study suggests five adaptations from standard UI system: self insurance, simplified monitoring of job-search behavior, piggybacking existing system, employer and employee as main sources of funds, modest benefits.
Ribe et al. (2010)	LAC	Social insurance including pension, unemployment insurance, health insurance as well as other protection measures.	Framework for social insurance for all (universal coverage), with adequate mandate system (well defined contribution and payment) and subsidy (redistribution) is suggested.
Rafael et al. (2008)	LAC	The coverage of pension programs in 18 countries in LAC.	The coverage of employed workers increases with income quintile and firm size, and little progress was made from 1990's to 2000's.
World Bank (2003).	ECA	Old age pension.	Pension expenditures, socioeconomic and demographic structure change, and EU integration require reform in pensions: parametric change diversifying the source of funding and paradigmatic change overhauling the system.
World Bank (2009)	ECA	The impacts of the great recession on pension system in ECA.	Given a larger challenge of demographic structure, governments are advised not to make any long term policy changes to address short term fiscal concerns due to the great recession.
Mukesh et al. (2007)	ECA	Population ageing and its implications on LM, financial market, pension system, public expenditure, and education.	In order to prevent old age poverty and facilitate consumption smoothing in the face of population ageing, not only parametric reform, but also substantial design change of pension systems should be considered.
World Bank, (2010a)	China	Social health insurance.	Integrating segmented medical insurance systems and setting up a monitoring framework is critical.
Wagstaff et al. (2009)	China	Social health insurance.	The impact evaluation of Chinese voluntary health insurance system shows that it has increased outpatient and inpatient utilization, and has reduced the cost of deliveries. But it has not reduced out-of-pocket expenses per outpatient

			visit or inpatient spell.
Thorton et al. (2010)	Nicaragua	Randomized experiments: Social health insurance.	The impact evaluation of voluntary social health insurance in Nicaragua shows that designing benefits and premiums conducive to take-up is important.
Chetty and Looney (2005)	Indonesia	The impacts of unemployment on consumption patterns.	Unlike the US, Indonesian households sacrifice human capital investment in response to unemployment.
ALMPs			
Angel-Urdinola and Kuddo (2010)	MENA	Review of ALMPs for youth in MENA.	There are issues to be addressed in coordination, the type and objectives, targeting, accreditation, and monitoring and evaluation of the programs.
Card et al. (2011)	Dominican Republic	Impact of classroom and private internship training on employability of low income, unskilled youth.	Negligible impacts on employment and positive effects on earnings (10%), but not significant.
Attanasio et al. (2008)	Colombia	3 months in class + 3 months OJT	Significantly positive effects on employment and earnings for both males (8%) and females (18%), with larger impacts on females. Impacts from in class training but not from OJT.
Education			
WDR (2007)	Global	Policies for youth with focus on school to work transition (education and labor market policy).	Great progress toward completion of primary schooling, but large drop-out at secondary level and lack of basic skills even after completion of primary school pose new challenges.
World Bank (2010b)	Global	Early Childhood Development.	Guide provides (1) existing information on the usefulness of ECD, (2) practical information on recently relevant ECD topics, such as measurement of child development outcomes and policy instruments, and (3) latest evidence on intervention and major knowledge gaps.
World Bank (2007a)	ECA	Linking vocational education and labor market outcomes.	Reforming current vocational education system to improve efficiency is needed to improve quality.
World Bank (2010c)	LAC	Early Childhood Development.	It is important to intervene during the window of opportunity from conception to 24 months.

World Bank (2008)	Ghana and Pakistan	Education policy relevant for LM returns.	High returns to basic cognitive skills exist, especially in lower income countries. Increasing completion rate of primary schools (quantity) as well as quality improvement to ensure skills development in primary school are critical.
World Bank (2010d)	Indonesia	Education policy for transition to work and quality jobs.	Ensure basic quality and generic skills development in schools, rather than increasing the number of vocational schools.
Labor Market Regulation			
Freeman (2009)	Global	The relationship between labor market institutions and economic performance.	It is not clear that labor market institutions strongly affect economic performance.
Boeri et al. (2008)	Global	LM institutions and regulations, and functioning of LM (MW, MB, EPL, UIB).	Theoretical background and international evidence of the effects of each institution and regulations on economic performance, to shed light on policies in developing countries.
Fox and Oviedo (2008)	AFR	LM institutions and outcomes.	Labor institutions are not a main barrier to labor market outcomes. Used legal origin (former British colony or not) and DB indicators to proxy for strict legal regulation.
Angel-Urdinola and Kuddo (2010)	MENA	LM regulations.	EPL in MENA is rigid by international standards, as other labor institutions such as collective bargaining are not in effect. It works as a barrier to employment with large heterogeneity across countries, and needs to be modernized.
Kuddo (2009)	ECA	Labor code reform.	There is large heterogeneity; there have been reforms across many ECA countries; reform of the national employment protection legislation has focused on easing existing regulation to facilitate more contractual diversity; labor law still plays an important role in protecting workers, as collective bargaining isn't widespread in ECA countries.
World Bank (2005)	ECA	LM institutions.	Strong institutions, enforcement capacity, and employment protection work as barriers to job creation and need to be addressed.
Cunningham (2007)	LAC	MW.	MW in general reduces employment and slightly increases earnings.
Garcia and Fares (2008)	AFR	Policies for youth.	De-regulation to remove market segmentation, investment in human capital, and ALMPs.

Besley and Burgess (2004)	India	LM regulations and labor productivity.	Not only being a barrier to job creation, labor regulation could also be an impediment to productivity by preventing mobility and productivity-enhancing labor reallocations.
Sharma (2009)	India	LM regulations and labor productivity.	Deregulation and flexible labor laws can facilitate labor mobility moves from informal to formal sector.
Job creation, Productivity, and Growth			
Ayyagari et al. (2011)	Global	Contribution of SMEs in employment, job creation, and growth.	In developing countries, small and young firms have higher job creation rates than large and mature firms.
World Bank, (forthcoming-c)	SA	Constraints to better jobs: low productivity despite progress in education, and business environment (infrastructure, conflicts, and institutions).	Labor market institutions need reform; raising agriculture productivity is important; differentiating policy for conflict affected areas.
Fox and Gaal, (2010)	AFR	In non-oil exporting but fast growing countries, why is job growth so small? Economic environment for job creation: demographics, wage and salaried employment, economic growth, and structural change in wage employment changes between 1995-2005.	Argues that labor market is relatively flexible and labor regulation is not the main issue, but business costs captured in doing business, including transaction costs with government and infrastructure, should be addressed to increase quality employment (measured as wage employment).
World Bank (2005)	ECA	Productivity, investment climate, and labor market institutions and job creation.	Increasing pace of job creation and facilitating the reallocation of jobs and workers to more productive sector is needed.
IADB(2009)	LAC	Long term dynamics of employment, jobless growth, low productivity growth, regulation for worker protection, social security, main barriers to firms' growth (constraints in investment climate) and role of regulation.	Creation of good jobs: business environment, protection against unemployment, ALMPs, and improving quality of jobs.

Kaplan (2009)	LAC	The effects of labor regulation reform on job creation.	Labor regulation reform increased overall employment, and in particular, small firms benefited more.
World Bank (2007b)	MENA	Job creation.	With continued economic growth, employment increased with a large increase in working age population. It is important to create jobs in more productive areas.
World Bank (2010e)	India	Low productivity informal, dual formal, regional differences, labor regulations, and ALMP.	Regulatory reforms and active labor market policies are particularly important for job creation.
World Bank (2010f)	Indonesia	Labor market regulation, skills development, safety net.	More unemployment benefits and lower severance payments; quality improvement in vocational schools and additional training facilities for a second chance; more inclusive social protection rather than focusing on formal sectors.
World Bank (2010g)	Nigeria	Employment growth.	Building enterprise sector, productivity and skills, trades.

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Abstract

This paper reviews labor market trends throughout the developing world, identifies issues and policy priorities across groups of countries, and derives implications for the World Bank's new Social Protection and Labor Strategy. Five key issues are identified: a high and growing share of the labor force that is self-employed or working in household enterprises, exposure to income shocks with limited access to risk management systems, low female participation rates, high youth unemployment rates, and the need to manage migration flows and remittances. The paper then details a three-pronged agenda based on providing incentives and conditions for work, improving the efficiency of job creation, and managing risks/facilitating labor market transitions. This suggests that the Bank should emphasize self-employment and entrepreneurship promotion, provision of skills and development opportunities, and facilitation of labor market transitions into and between jobs, while protecting workers from shocks and paying particular attention to youth.

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