

## Understanding the Relationship between Economic Growth, Employment and Poverty Reduction\*

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- a. Growth in one sector of the economy will not automatically translate into benefits for the poor: much will depend on the profile of growth (its employment - or productivity - intensity), the sectoral location of the poor, and the extent of mobility across sectors.
- b. For employment-intensive growth to translate into poverty reduction it must occur in a “more productive” sector, while “less productive” sectors may require productivity-intensive growth to ensure a decline in headcount poverty.
- c. Country-specific quantitative and qualitative analysis is required to identify constraints to job creation, productivity and mobility and to ensure that the poor are able to participate in more and better job opportunities.

### Introduction

Whether they are subsistence farmers, salaried workers, or self-employed entrepreneurs, poor people derive most of their income from work. This basic fact means that the level of employment, the quality of jobs, and the access which the poor have to decent earnings opportunities will be crucial determinants of poverty reduction. The intuition that jobs matter for development has not been lost on the governments of low income countries and the vast majority of national development strategies look to employment generation as a major channel for poverty reduction.

Despite the intuitive notion that employment matters for poverty reduction, there is insufficient empirical research in this area. While there is a broad consensus that not all growth spells have the same impact on poverty, there have been relatively few attempts to systematically unpack the relationship between economic growth, employment and poverty reduction. Data deficiencies in many low income countries and the difficulty of ascribing causality to correlative relationships between changes in income and employment may each go some way to explaining the dearth of research to date.

What research there is both underscores the importance of jobs for poverty reduction and highlights the extent of the unfinished analytical agenda. Studies have demonstrated that the sectoral pattern of growth will affect the extent of poverty reduction: Loayza and Raddatz (2006) find that growth in unskilled intensive sectors contributes to poverty reduction; Satchi and Temple (2006) find that growth in agriculture may increase poverty while growth in the urban sectors may cause it to fall. But there remains a lack of

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\* The opinions expressed and arguments employed in this paper are the sole responsibility of the authors, and do not necessarily reflect those of the OECD or the governments of its member countries.

consensus on which sectors are most important for poverty reduction or whether changes in employment or productivity will have the greatest impact. For instance, access to non-farm rural employment and informal urban employment emerged as important factors in some, but not all, of a sample of 14 countries which experienced pro-poor growth in the 1990s (World Bank 2005); and while Coxhead and Warr (1995) find that increases in agricultural productivity reduce poverty, Fane and Warr (2002) detect only a meagre impact.

This paper aims to bridge some of the gap between an intuitive understanding that jobs are crucial for poverty reduction and a lack of empirical research to demonstrate the nature of this relationship. Its objective is to provide policy-makers and analysts with the tools by which to understand the interaction between growth, changes in both the number and the quality of jobs, and poverty reduction and to devise appropriate policy responses. Specifically, it aims to address the following three questions:

- How does the sectoral pattern of growth affect its poverty impact?
- Is employment-intensive or productivity-intensive growth more important for poverty reduction?
- What policies may facilitate the poor’s participation in growth?

Since there is strong evidence to suggest that labour markets in developing countries are usually segmented between “more productive” and “less productive” jobs sectors, Part II provides an overview of theories on labour market segmentation. The goal is not, nor can it be, to provide a “one size fits all” model of segmented labour markets. Rather, it is to highlight some of the most common patterns of segmentation and its implications for the relationship between economic growth and poverty reduction.

Part III offers a three step framework for observing the relationship between economic growth, employment, and poverty reduction. The framework enables analysts to determine: first, the extent to which growth is associated with changes in employment (the quantity of jobs) or productivity (the quality of jobs); second, the relationship between these changes and poverty reduction, and; third, correlations with the broader policy and institutional environment. Part III demonstrates recent applications of each of these steps, while highlighting data challenges and the scope for future research.

As this paper’s main objective is to bridge a gap between empirical research and policy, Part IV demonstrates how findings on the relationship between economic growth, employment and poverty reduction might inform policy-making. While appropriate policy responses will always be country-specific, Part IV draws on extensive country based analysis to demonstrate a range of potentially relevant policy options. These include measures to expand employment-intensive growth in “more productive” sectors, improve productivity of “less productive” jobs, enhance the mobility of the poor between sectors, and promote conducive policies and institutions, while paying due concern to political economy constraints.

## Labour market segmentation and its implications

### *Labour market segmentation in theory*

Labour markets in low and middle income countries tend to be highly segmented, with different wages and conditions of employment in each sector and limited mobility from “less productive” to “more productive” jobs. In contrast to basic neoclassical models predicting the equalization of wages, segmented labour market models predict that institutionally set wages (due, for example, to regulatory interventions or the bargaining power of workers) will ration “more productive” jobs. Since some workers cannot afford to remain unemployed, they will accept a “less productive” job in which earnings and/or conditions of employment are below the level set in the “more productive” sector. Box 1 provides a brief explanation of the various labels employed in the description of segmented labour markets.

#### **Box 1. “More productive” vs. “less productive” jobs, and other labels**

Models of labour market segmentation revolve around the identification of two or more distinct sectors. These sectors have received various labels. Some of the most common forms of distinction are summarized here.

**“Primary” vs. “secondary” sectors.** Dickens and Lang (1986) use the labels “primary” and “secondary” to distinguish between high-paying unionized jobs and lower-paying non-unionized jobs.

**“Insiders” vs. “outsiders.”** Knight and Yueh (2004) distinguish between “insiders” (urban dwellers) and “outsiders” (rural-to-urban migrants) in China. They find evidence that “insiders” positions remain protected against competition from “outsiders.”

**“Good” vs. “bad” jobs.** Avirgan *et al.* (2005) Use the labels “good” and “bad” jobs to distinguish between formal work and informal work in a number of developing countries, noting that earnings are consistently lower and working hours longer in the informal sector.

**“Upper-tier” vs. “easy entry” jobs.** Fields (2004) distinguishes between rationed “upper-tier” activities and almost unlimited “easy entry” activities, which cut across both the formal and informal sectors.

It should be noted that while this paper employs the labels “more productive” and “less productive,” this distinction, like all those summarized above, describes a single phenomenon: namely, the division of the labour market between jobs with good conditions and pay, which are limited in number, and jobs in which conditions and pay are generally much lower.

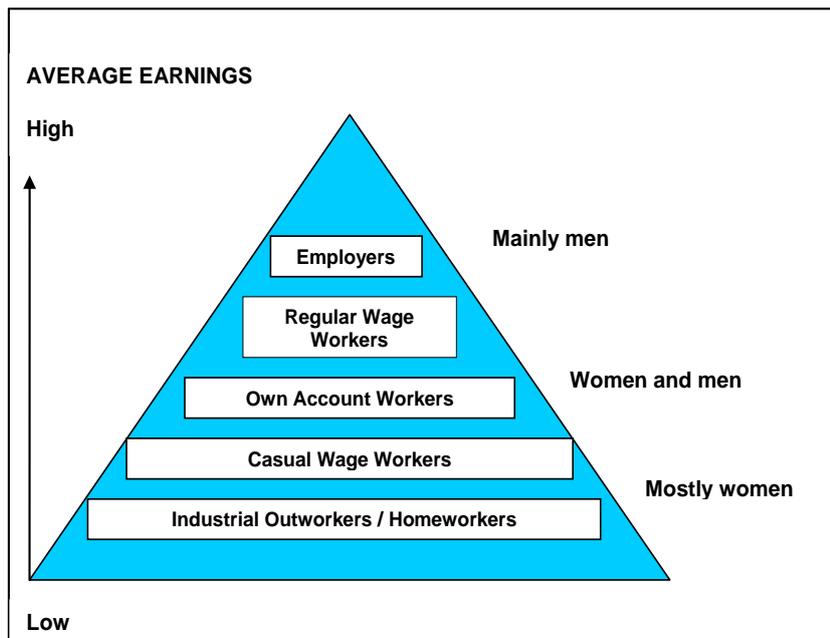
As one of the first to recognize the saliency of a segmented labour market model in developing countries, Lewis (1954) sought to explain “the workers on the docks, the young men who rush forward asking to carry your bag...and the like.” Lewis identified a dual labour market in which workers who were unable to obtain jobs in the formal sector took up work in a free entry, unregulated informal sector. While wages in the formal sector were kept at above market levels, those in the informal sector would fall as labour supply increased.

Recent revisions of the dual labour market model have challenged the notion of the informal sector as a free entry sector of last resort. Maloney’s research in Mexico (2003) suggests that some workers may choose between formality and informality on the basis of a rational cost-benefit analysis. Informal sector employers may feel compelled to offer

terms and conditions of employment which are comparable to those in the formal sector so as to attract good workers and reduce turnover. Instead of representing a distortion-free sector, the informal sector will be subject to spill-over effects of formal sector regulations.

Other responses to the standard dual model have asserted that it is insufficient to explain the “multi-faceted employment dynamics in developing economies” (Chen *et al.*, 2005). Suggesting that both the formal and informal sectors are subject to internal segmentation, these models draw attention to “upper tier” and “easy entry” activities in all sectors of the economy (Fields, 2004). They accept that both “more productive” and “less productive” jobs can exist in agriculture, in the urban formal sector, and in self-employment. Figure 3 characterizes a typical pattern of segmentation within the informal sector. Employers and wage workers occupy the “upper tier” of this sector: positions within this tier may be competitively sought after and actively preferred to jobs in the formal sector. Meanwhile, outwork and homework constitutes a free entry sector of last resort.

**Figure 3: Segmentation of informal employment**



Source : Adapted from Chen *et al.* (2005)

Leonardi (1998) argues that while segmented labour markets are by now an “established fact,” it “remains to be proven” along what lines segmentation exists. The exact pattern of segmentation is of course context specific and cannot be dictated *a priori*. But while conceptions of dual or multiple labour markets will differ in their details, they share common features: the existence of two or more sectors with different wage setting mechanisms, with limited upward mobility for workers in the “less productive” sectors. In addition to the institutional barriers to mobility generated by the rationing of “more productive” jobs, there may be geographical barriers (for instance, poor infrastructure connecting urban and rural areas), legal barriers (such as weak enforcement of property rights), or barriers due to discrimination based on ethnicity, race or gender, which make it

particularly difficult for the poor to participate in sectoral growth. Figure 1's characterization of women as concentrated mainly in the "less productive" jobs tiers of the informal sector is all too familiar in many developing countries (Chen *et al.*, 2005) and indicates that certain groups among the poor may face even greater barriers to mobility than their peers.

### ***Implications of labour market segmentation***

It is beyond the scope of this paper to establish the precise pattern of labour market segmentation in developing countries. Rather, the goal here is to highlight the likely implications of significant segmentation on poverty reduction (see Box 2).

#### **Box 2. Implications of labour market segmentation**

Labour market segmentation has four principal implications for the relationship between economic growth and poverty reduction.

First, the overall rate of economic growth is likely to be lower under segmented conditions than in a fully integrated market, since bottlenecks inhibit the efficient flow of labour force participants between jobs.

Second, whereas the neoclassical labour market model would predict that an increase in labour demand in one sector of the economy will cause wages to rise across all sectors, labour market segmentation implies that factor returns will not equalize across sectors. In other words, growth in one sector may not have an effect on wages in other sectors of the economy. Segmentation indicates that for growth to impact the poor, it must occur in a sector in which they are located or to which they at least have access.

Third, growth that results in increased employment opportunities in "less productive" jobs sectors may not be enough to alleviate poverty. Since work in these sectors is characterized by low wages and/or poor conditions, a simple multiplication of similar opportunities will result in the expansion of underemployment and/or exploitation. On the other hand, growth which results in increased productivity in the "less productive" jobs sector may help to reduce poverty since it will help to raise wages, in effect bringing "less productive" jobs closer to the standards of "more productive" jobs.

Fourth, growth that results in an increase in the number and productivity of jobs may need to be accompanied by policies to enhance the mobility of the poor across sectors. Since barriers to movement can stem not only from the rationing of "more productive" jobs but from geography, infrastructure, and legal and cultural norms, the participation of the poor in growth will depend in part on concerted efforts to identify and remove these obstacles.

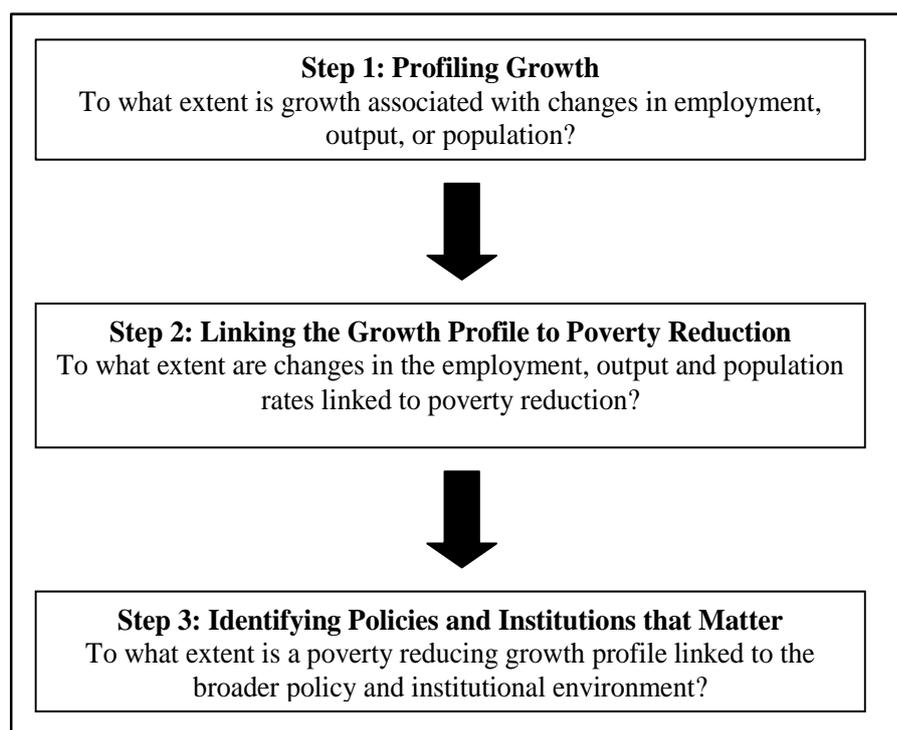
## **A three step framework**

### ***Objectives of the framework***

1. The objectives of the framework provided below are threefold. It aims to help analysts understand first, how the sectoral pattern of growth affects its poverty impact and second, whether employment-intensive or productivity-intensive growth is more important. Finally, the framework aims to shed light on the broader policy and institutional environment which might facilitate the poor's participation in growth.

2. Alongside gaps in relevant data in many developing countries, the difficulty of assigning causality in the relationship between growth, employment and poverty reduction is probably a major reason for deficiencies in the current research agenda. A thorough analysis of the mechanisms by which the sectoral patterns of growth impact poverty would require a complex general equilibrium model. Such models risk stretching data beyond their limits and also pose immense challenges to analytical capacity.
3. Recognizing that the demands of general equilibrium models are often prohibitive in the context of limited data and capacity, the framework offered here is more modest. It provides analysts and policymakers with tools to observe correlations between employment generation and productivity growth, poverty reduction, and the broader institutional and policy environment. While correlations are of course not an indication of causality, this framework offers a pragmatic and feasible response to the absence of a thorough analysis of even correlative relationships in many countries. It can provide empirical input into debates on how the quantity and quality of jobs are linked to poverty. And it may help to stimulate discussion on the appropriate policies for enabling the poor's full participation in economic growth.

**Figure 4: The three step framework**



The framework provides three stages of analysis. First, it decomposes economic growth into changes in both the quantity *and* quality of jobs. Second, it ascertains whether improvements in employment or productivity are most readily associated with poverty reduction, and whether this pattern changes by sector. Third, it highlights the

broader policy and institutional environment which is associated with a poverty reducing pattern of growth (Figure 4).

### ***Step 1: Profiling growth***

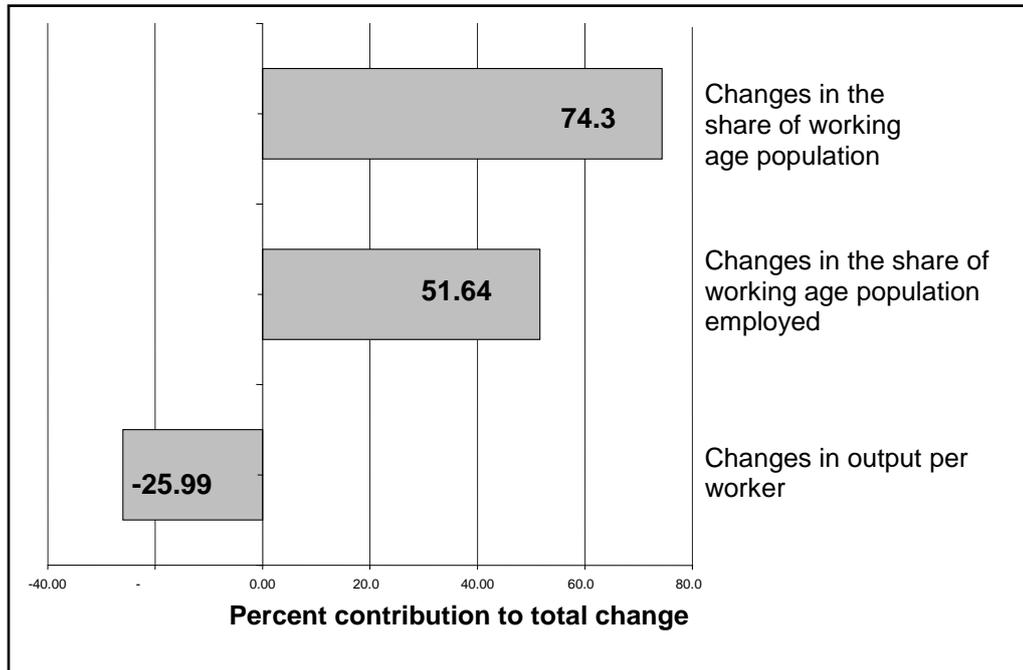
The first step in understanding how sectoral growth affects poverty via its impact on the quantity and quality of jobs is to find a suitable methodology for profiling growth.

Analysis of the relationship between growth and employment has traditionally focused on the employment elasticity of growth – that is, the percentage change in employment in response to 1 percentage change in output. This measure has three notable shortcomings. First, it says nothing about the actual extent of job creation since a country that grew by 1% and enjoyed a 1% increase in employment would have the same employment elasticity rate as a country which had a 10% growth rate accompanied by a 10% increase in employment. Second, the measure does not take demographic changes into account, although growth in population often swamps increases in employment. Third, and most obviously, the employment elasticity of growth says nothing about the quality of new jobs created.

A simple way of understanding how growth is associated with increases in the quantity and quality of jobs is to perform a decomposition of *per capita* GDP growth into three components: productivity changes, employment rate changes and demographic changes. The amount of growth that can be attributed to changes in output per worker can be obtained by calculating the resulting growth in *per capita* value added between two points in time under the hypothetical scenario in which employment rates and the share of the working age population remain constant, but output per worker has changed as observed. Similarly, the amount of growth attributed to changes in employment or the share of the working age population can be obtained by calculating *per capita* value added when the other two components are held constant.

Figure 5 shows the results of this growth decomposition, using the example of Nicaragua over a four year period (2001-2005), during which value added growth totalled 12%. It shows that almost three-quarters (74%) of the increase in growth can be linked to changes in the structure of the population. In other words, had everything else stayed the same, the reduction in the number of dependents per working age person would have generated a growth rate of 5.3% (or 74% of 7.12). Changes in employment were also important: accounting for over half (51%), of the observed growth. This means that if productivity and the number of dependents per working age member had both remained constant, the higher rate of employment would have generated a GDP growth rate of 3.6% (or 51% of 7.12).

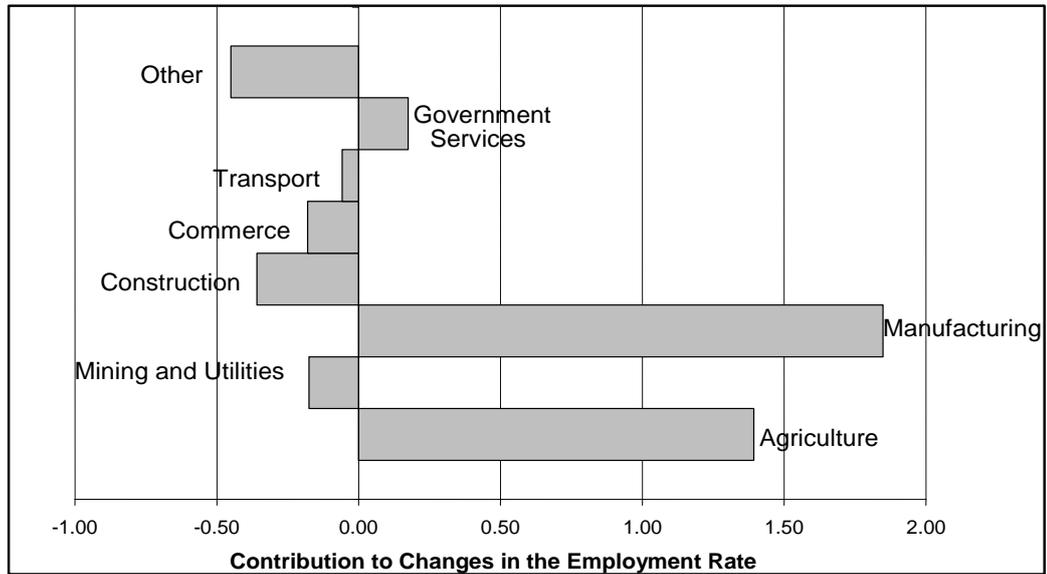
Unfortunately, changes in productivity acted in the opposite direction. Indeed, had population and employment levels remained constant, shrinking productivity would have had a negative impact equivalent to more than a quarter (26%) of the actual observed growth rate. Put differently, had productivity not changed, observed growth would have been close to 9%, but decreases in productivity meant that growth was 7.12%.

**Figure 5: Aggregate employment and productivity profile of growth (Nicaragua 2001-5)**

*Source:* Calculations based on data from Better Care Network (BCN) and EMNV

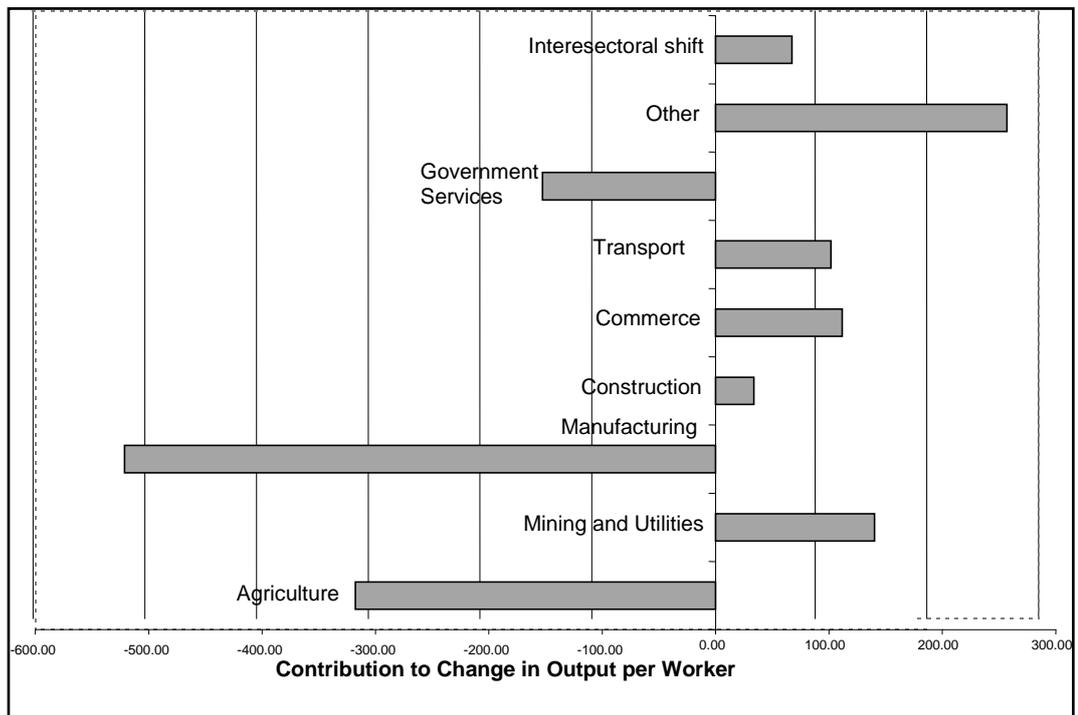
The decomposition of growth can easily be extended to multiple sectors so as to detect any variance in the employment and/or productivity intensity of growth by sector. Figures 6 and 7 show the results of a decomposition of the employment and productivity growth rates by sector in Nicaragua. The employment rate grew by 2.19% total, with increases in manufacturing and agricultural employment contributing most to this trend (Figure 6). But agriculture, manufacturing and government services all saw decreases in output per worker and, given their large share in total employment, this had important negative effects on aggregate output per worker (Figure 7).

**Figure 6: Contribution of each sector to changes in the employment rate (Nicaragua 2001-2005)**



Source: Calculations based on data from BCN and EMNV.

**Figure 7: Composition of each sector to change in output (Nicaragua 2001-2005)**



Source: Calculations based on data from BCN and EMNV.

In sum, in contrast to traditional measures of the employment elasticity of growth, this first step of the framework enables analysts to discover whether growth is most

readily associated with increased employment-intensity (changes in the quantity of jobs) or increased productivity-intensity (changes in the quality of jobs), while accounting for the impact of demographic change. The easy application of this methodology to individual sectors of the economy makes it particularly valuable for understanding the relationship between growth and employment in segmented labour markets.

### **Step 2: Linking the growth profile to changes in poverty**

The second step is to identify links between the growth profile and poverty reduction, both across the economy and by sector. This can be done by regressing each of the components of the growth profile identified in step 1 above (productivity changes, employment changes, demographic change) against percentage changes in poverty.

If employment-intensive growth reduces poverty, then changes in the employment rate could be expected to be significantly and negatively correlated with changes in the poverty headcount. If, on the other hand, the income of the poor rises due to increased productivity then, changing productivity will be negatively correlated with changes in the poverty headcount.

As in the first stage of analysis, step 2 can also be broken down by sector (See Annex 1, which also describes an alternative way for analyzing the relationship between the growth profile and poverty reduction in cases in which there are insufficient observations on headcount poverty over the requisite time period). Rather than applying *a priori* assumptions regarding which sector provides a repository of “good” or “bad” jobs, step 2 enables the analyst to identify “more productive” and “less productive” sectors, based on the observed relationship between the growth profile and poverty reduction (Table 4).

**Table 4. The relationship between employment-intensive and productivity-intensive growth and poverty reduction**

	<b>employment-intensive growth</b>	<b>output-intensive growth</b>
<b>“more productive” jobs sector</b>	<b>+ve</b> correlation with poverty reduction	<b>+ve</b> correlation with poverty reduction
<b>“less productive” jobs sectors</b>	<b>neutral/ -ve</b> correlation with poverty reduction	<b>+ve</b> correlation with poverty reduction

Applying this methodology to a sample of countries, Gutierrez *et al.* (2007) find strong evidence that the sectoral pattern of growth and its employment and productivity-intensities matter for poverty reduction. While employment-intensive growth in the secondary sector (manufacturing, construction, mining and utilities) is correlated with poverty reduction, employment-intensive growth in agriculture is correlated with increases in the poverty headcount. On the other hand, productivity-intensive growth in agriculture is significantly correlated with poverty reduction, whether through increases in sectoral productivity or through the movement of workers into other sectors. In other words, across the countries studied, the secondary sector seems to represent a repository of “more productive” jobs while agriculture is associated with lower productivity on average.

Within these broad findings, Gutierrez *et al.* (2007) discover a high level of heterogeneity. While manufacturing and agriculture represent, respectively, “high productivity” and “low productivity” sectors across the sample as a whole, this pattern holds less true in certain regions. For instance, in Latin America employment-intensive growth in the secondary sector is not robustly correlated with poverty reduction, indicating the likelihood of internal segmentation between “more” and “less productive” manufacturing jobs, and upper-middle income countries are found to have a different set of relationships between sectoral patterns of growth and poverty reduction than lower-income countries.

In sum, the second step of this three-step framework enables analysts to identify whether employment-intensive growth or productivity-intensive growth is more correlated with poverty reduction, and whether these relationships vary by sector. Analysis to date indicates a high level of heterogeneity across regions and levels of development, demonstrating scope for much deeper research.

### ***Step 3: Identifying the underlying conditions which matter for poverty reduction***

If step 2 reveals that certain sectoral patterns of growth (such as increased employment-intensity in the services sector or greater productivity-intensity in agriculture) are correlated with poverty-reduction, the policy relevance of this observation will hinge in part on identifying the broader variables associated with this pattern of growth. Step 3 enables analysts to identify whether certain policies or institutional conditions are correlated with particular growth patterns.

This can be done by regressing the measure of the sectoral pattern of growth against a vector of possible explanatory variables, such as education, labour market regulations, the investment climate, and trade. Explanatory variables should be taken from the beginning rather than the end of the spell since this may make it easier to detect a line of causality running from these variables to poverty reducing patterns of growth. Annex 1 provides equations to enable analysis of these relationships.

Cross-country analysis confirms that the broader policy and institutional environment will affect the extent to which growth reduces poverty (Gutierrez *et al.*, 2007). For example, across a sample of countries, minimum wage legislation appears to significantly reduce employment-intensive growth in the secondary sector, while openness to trade appears to boost it. Education is robustly and positively associated with productivity-intensive growth in agriculture. These tentative findings demonstrate the scope for future research, since significant heterogeneity in the relationship between the broader institutional and regulatory environment and the sectoral pattern of growth could be expected between regions and countries.

### ***A note on data***

Application of the three stages of this framework of course requires data on total and sectoral GDP, poverty, population and employment, as well as policy and institutional variables. Possible sources for this data are summarized in Table 5 below. Particularly when it comes to determining institutional and policy variables, the suggestions offered in Table 5 are by no means the sole sources of data. Some notes of caution regarding use of this data and advice on overcoming its shortcomings are also offered in Box 3 below.

**Table 5. Possible sources of data**

<b>Data</b>	<b>Source</b>	<b>Notes on Coverage</b>
Aggregate GDP	World Development Indicators (World Bank)	Annual, since 1960
Sectoral GDP	U.N. National Accounts Data	Value added disaggregated into 7 sectors, since 1970
Population	U.N. Population Division	Annual, since 1950
Employment and labour force	ILO-KILM Database	Up to 20 labour indicators, since 1980
Poverty	PovCalNet (World Bank)	Based on household surveys, either income or consumption poverty, since early 1980s
Labour regulations	Rama and Artecona (2002); Sulla, <i>et al.</i> (Forthcoming).	Includes minimum wage, severance pay, union membership, strikes, since late 1940s
Investment climate	International Country Risk Guide	Includes investment profile, since 1984
Trade	Sinnot and Lopez (2003)	Measures openness to trade, 1960s onwards

### **Box 3. Understanding and overcoming data limitations**

To perform all three stages of the framework described above, data on GDP, population, employment, labour force, and poverty must be available for the same two consecutive points in time, while data on broader policy and institutional variables should be available for the first time period.

Unfortunately, these demands are in some cases too high: low income countries, and particularly those in sub-Saharan Africa, often suffer from missing or inconsistent data, especially on headcount poverty and labour market outcomes. The most comprehensive data on poverty, derived from household surveys, is available from the World Bank.\* But many countries have an inadequate number of surveys, while changing sample sizes and definitions pose problems for comparability. The ILO's KILM database is the most comprehensive source of information on labour force and employment rates. But it poses some problems for comparisons across countries or within countries across time. The main difficulty for cross-country comparisons is that definitions and coverage vary. In particular, some countries report values for formal employment only and other leave out sectors such as agriculture. Changes in sample and survey design pose problems for within country comparison. In addition, key observations for many sub-Saharan African countries are lacking entirely.

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### **Box 3. Understanding and overcoming data limitations (*continued*)**

There are nonetheless a number of pragmatic steps which analysts can take when some of this data is inconsistent or lacking. As mentioned above, Annex 1 describes an alternative way for analyzing the relationship between the growth profile and poverty reduction in cases in which there are insufficient observations on headcount poverty over the requisite time period. As for the shortcomings in employment and labour force data, the KILM database alerts users to variations between survey design, changes in samples, and breaks in series, making it possible to control for differences in measurement and coverage. And studies for some sub-Saharan Africa countries, based on household surveys, can provide supplementary data where ILO data is inadequate.\*\*

Gutierrez *et al.* (2007) demonstrate that analysis of the relationship between growth, employment and poverty reduction is viable in a range of developing countries, in spite of serious shortcomings in the data. The team was able to gather relevant data and perform analysis for a total of 106 growth spells in 39 developing countries, although only one-fifth of these were low income (as opposed to middle income) countries, and only 4 were in sub-Saharan Africa.

\* <http://go.worldbank.org/5IJ993CJ40>

\*\* See, for instance: World Bank (2007a) for Senegal; World Bank (2007b) for Ghana; and World Bank (2007c) for Madagascar.

## **Policy implications for promoting poverty reducing economic growth**

The three step framework described above can help to inform policy by demonstrating whether certain sectoral patterns of growth or particular policy and institutional contexts are correlated with poverty reduction. This section considers four sets of policy implications which might be generated by application of the framework, drawing widely from existing country-based analysis (Hull, 2006).<sup>1</sup> Finally, it alerts development practitioners to the political economy of labour market reforms.

### ***Promoting employment-intensive growth in “more productive” sectors***

As shown in Gutierrez *et al.* (2007), the sectors of the economy which constitute repositories of “more productive” jobs will vary by region and country. Steps one and two of the three step framework enables analysts to shed the assumption that a particular sector (for example, manufacturing) must automatically be equated with “good” jobs. Instead, “more productive” jobs are any jobs in which employment intensive growth is correlated with poverty reduction, whether in services, manufacturing, agriculture or even certain segments of the informal economy.

Once a link between poverty reduction and employment-intensive growth has been established for a particular sector, an obvious question becomes: are there any feasible policies to expand employment in this sector? For instance, country-based analysis for Argentina, Burkina Faso, Chile, Tunisia, and Ukraine, among others, has pinpointed the growth of small and medium enterprises (SMEs) as a potential source of poverty reduction.<sup>2</sup> Among the policies to expand the employment base in this sector, Burkina Faso has strengthened development and support services for SMEs. A study for Mexico recommends a strategy for targeting interventions to improve factor productivity growth

in small enterprises.<sup>3</sup> Analysis for Turkey recommends policies to strengthen the links between SMEs and larger firms, so that the former benefit from economies of scale in the latter.<sup>4</sup>

By way of further example, the rural non-farm sector is also identified in a number of country studies as a source of potentially dynamic poverty-reducing employment in a number of countries, including Pakistan and India.<sup>5</sup> Policies to boost employment in this sector include investments in infrastructure to strengthen linkages between agriculture, off-farm opportunities, and urban markets. Analysis for Ukraine suggests policies to incentivize farms to make use of local input supply services, and analysis for Sierra Leone points to support for dynamic agro-business, agro-processing and fisheries sectors as a means of strengthening non-farm employment opportunities.<sup>6</sup>

In sum, wherever “more productive” jobs sectors are located, policies should direct support to potentially dynamic areas, while promoting linkage through supply chain integration, in order to strengthen demand for workers.

### ***Boosting productivity-intensive growth in “less productive” sectors***

While policies to expand job opportunities in “more productive” sectors are essential for poverty reduction, the majority of the working poor will remain employed in “less productive” jobs, at least in the short term. Again, since the sector in which these jobs are concentrated cannot be determined *a priori*; the first two steps of the three step framework can be helpful in identifying those sectors where an expansion of employment opportunities alone is not associated with reduction in the poverty headcount. In such sectors, policymakers must search for possibilities to boost productivity-intensive growth.

Agriculture is often, but not always, identified as a “less productive” sector. While it remains Cambodia’s most important employer in numerical terms, *per capita* value-added in agriculture has grown less than in other sectors, contributing to a widening urban-rural divide.<sup>7</sup> As in Kyrgyz Republic, flagging levels of productivity in rural areas is often ascribed to a failure to diversify into more profitable products and agro-processing.<sup>8</sup> Strategies to boost productivity in agriculture often consist of increasing public investments in roads, irrigation, the intensification of farming methods and diversification into higher yield crops. They also look to encouraging those crops which are likely to generate commercial processing and export demand. (See for instance analysis for Bangladesh, Pakistan, Punjab, and Lesotho)<sup>9</sup>. Radwan (1995) notes that for growing productivity to impact the poor, efforts should be made to ensure that the absorption of innovative technology is not institutionally biased towards large producers, by ensuring that small-scale farmers have access to credit and extension.

The informal sector represents another segment which is often, although by no means always, associated with “less productive” jobs. As in Bolivia, jobs in this sector can become trapped in a bad equilibrium: while low productivity and hence low earnings means employers cannot afford to comply with regulations which are prerequisites for entering the formal sector, informality limits the potential for productivity growth.<sup>10</sup> Analysis for countries as diverse as Bosnia and Bolivia identifies the following constraints to productivity: weak access to credit; inability to tap export markets; difficulty in accessing international production chains; and the absence of economies of scale in which productivity is higher and regulatory burdens become more manageable.<sup>11</sup>

Recommended policies concentrate on drawing the informal sector along a continuum toward formality, by easing access to credit, enhancing the quality and organization of informal production, and facilitating relationships with formal firms. In Kenya, a Small and Medium Enterprise Development Project has helped to strengthen linkages to financial services providers and markets, enabling informal enterprises to grow and to graduate from informal to formal status.<sup>12</sup> Developing linkages with the formal sector through sub-contracting is common in the garment industry in South Asia and may be a way of ensuring that the informal sector has access to markets, raw materials and technology. Steps must be taken, however, to ensure that these arrangements are not employed as a means of circumventing core labour standards.<sup>13</sup>

To sum up, policies to improve the quality of “less productive” jobs must focus on enhancing incentives for diversification into more commercially viable sub-sectors (such as export-oriented agriculture or garment production), helping enterprises to escape from low productivity traps. Access to credit, technology, and infrastructure will play important roles in strengthening linkages with “more productive” sectors.

### ***Ensuring access to more and better jobs***

As stated in Box 2, barriers to mobility can stem from geography, infrastructure, and legal and cultural norms, as well as the rationing of “more productive” jobs. If such barriers exist, the expansion of “more productive” jobs alone will not be enough to ensure poverty reduction: policies will be required to enable the poor to move more freely from “less productive” to “more productive” sectors.

The first step to removing barriers to mobility is to identify them. For this purpose, the three step framework must be backed up with additional quantitative and qualitative research. Depending on country context, research could address the following questions:

- Do insecure property rights, or other institutional weaknesses, dissuade people from moving or seeking more productive employment?
- Do workers lack sufficient skills or qualification to transition into higher earning opportunities?
- Do the poor suffer from a deficit of information about job openings?
- Do significant infrastructure problems prevent easy movement?
- Are legal and/or informal norms skewed against women, youth and/or ethnic minorities in the workplace?
- Do particular groups suffer from work-related exploitation or violence?

Box 4 (over) highlights just some of the barriers to labour market mobility that have been identified in country-level research.

#### Box 4. Barriers to Mobility \*\*

*Institutional.* In Pakistan, weak property rights are shown to limit the extent to which farmers are willing or able to diversify out of farming by selling or leasing their land. In Poland, housing market rigidities are identified as a significant barrier to labour market mobility.<sup>2</sup> In China, the household registration system traps temporary migrants in “less productive” sectors of the urban economy.

*Educational.* In Lesotho, education and technical training have a strong influence on workers’ chances of wage employment and the level of earning. In Honduras, a male urban worker with a post-secondary degree earns approximately 100% more than a male urban worker with high school education and 170% more than a male urban worker with primary school education. In Pakistan, education is an important determinant of mobility, through its effects on female labour force participation, rural-urban migration and participation in the rural non-farm sector.

*Informational.* While all countries suffer from imperfect information between “buyers” and “sellers” of employment, the problem tends to be greatest in developing countries due to the weakness of formal channels for the exchange of labour market information (such as vacancy advertising or employment offices) and the prevalence of rural and informal sectors. Barriers to information flows between potential employers and employees are found to be highest in the informal sector, in rural areas, and among women in Trinidad and Tobago (Murphy and Strobl, 2008).

*Infrastructural.* Poor transport is identified as a major constraint on the urban poor’s ability to get a job in Latin America. In Honduras and Madagascar, off-farm employment has been limited by a lack of good transportation and roads to bridge the physical distance between rural areas and urban centers. As well as directly limiting access to good jobs, living “off-road” can have indirect impacts on work-force participation through its effects on access to education, health and credit (Sender *et al.*, 2005).

*Informal.* Racial discrimination, gender discrimination and discrimination related to the stigma of coming from certain neighborhoods is found to account for the prevalence of the poor in “less productive” sectors and their inability to move to “more productive” jobs in Latin America. In India, members of Scheduled Castes and Tribes are more likely to be trapped in casual labour jobs and have lower access to “more productive” off-farm employment

*Violence and exploitation.* Bonded labour, under which the worker is tied to an employer and required to work for very low or zero wages, is determined partly by religion, ethnicity and caste in Pakistan. The use of in-kind wages and wage arrears in Russia forces workers to remain attached to “less productive” jobs by hampering their ability to move (Friebel and Guriev, 2000). In sub-Saharan Africa, informal sector and casual workers tend to have low organizational and bargaining capacity, making them unable to defend their interests against unscrupulous employers (Sender *et al.*, 2005). One study finds that women in Mozambique who sought wage employment against the wishes of their husbands were often severely beaten (Sender *et al.*, 2004).

\*\* Drawn from: Pakistan, *idem*; 2004. “Poland – Growth, employment and living standards in pre-accession Poland”; 2005. “China – Integration of National Product and Factor Markets - Economic Benefits and Policy Recommendations”; 2004. “The urban poor in Latin America”; 2006. Lesotho, *idem*; 2006 “Honduras – Poverty assessment: attaining poverty reduction”; 2004. “Drivers of sustainable rural growth and poverty reduction in Central America, Honduras case study”; 2005. “Madagascar – Development policy review: sustaining growth for enhanced poverty reduction”; 2006. “India – Inclusive growth and service delivery: building on India’s success”

Analysis to date suggests a range of policy interventions to help dismantle such obstacles to mobility:

- **Institutional.** In a number of cases, enhanced mobility rests on the reform of institutions associated with restricted movement of the workforce. Policy recommendations for Pakistan suggest increasing the security of property rights as a means of encouraging movement out of agriculture – enabling farmers who want to diversify into potentially more productive off-farm employment to sell or lease their land.<sup>14</sup> Research for China suggests that remnants of the household registration system be phased out and highlights the necessity of reforms of urban social policies that currently limit rural migrants’ access to benefits.<sup>15</sup> Analysis for Poland underscores the importance of policies to reduce rigidities in the housing market, alongside the provision of targeted mobility grants to enable individuals to overcome financial constraints on their mobility.<sup>16</sup>
- **Educational.** Education, in its various guises, is often a crucial precondition for labour market adjustment to more profitable economic activities. In Ecuador, the creation of a considerable mass of secondary educated workers is deemed necessary for enabling participation in more technologically advanced sectors.<sup>17</sup> Country-based analysis for Egypt and Kenya has called for stronger links between training institutes and private sector sources of demand, as a means of increasing market relevance of the labour force.<sup>18</sup> The historical case of Ireland demonstrates how a small economy, with a history of chronic labour migration, can develop into a prosperous niche by shifting its comparative advantage towards products and services based on skilled labour. The Irish example has been used as a reference point for other countries, such as Moldova.<sup>19</sup> In rural economies, educational improvements have been shown to increase returns to small-scale farmers because educated farmers are readier to absorb new production techniques and innovate (Radwan). Education levels are also positively associated with ability to adapt agricultural activities effectively to climate change-induced risks in sub-Saharan Africa (Maddison, 2007).
- **Informational.** The experience of East Asian countries demonstrates the potential role played by the expansion of employment services and search assistance, and in particular E-systems, in overcoming informational barriers in the labour market. For instance, in Malaysia employment offices in different areas are able to share information about job seekers and vacancies via networks and the internet (Betcherman *et al.*, 1999). Organizations in the informal economy, such as the Self-Employed Women’s Association (SEWA) in India, can also provide potentially isolated workers with access to information about employment opportunities and markets (World Bank 2006).
- **Infrastructural.** The provision of reliable and affordable transport is identified as key to enabling the urban poor to reach the best opportunities in Latin America, while good rural roads and reliable electricity and water supplies are essential for accessing off-farm employment in rural areas, according to a country study for Ukraine.<sup>20</sup> In Nepal, improved transportation and communication has facilitated the convergence of agricultural and nonagricultural wages across regions in recent decades.<sup>21</sup> Infrastructure reforms can even be addressed to enhance labour market participation of specific groups. As noted in a Gender Assessment for Pakistan, investment in timesaving infrastructure is critical to encouraging women’s participation in work activities.<sup>22</sup>

- **Overcoming discrimination, violence and exploitation.** Responding to employment differentials across age and gender lines, research often recommends vocational training and apprenticeship programmes specifically targeted to young people (Kenya) and women (Poland).<sup>23</sup> However, due to experiences in the MENA region where, despite generally high levels of education, women’s labour force participation remains low, analysis also suggests that the increased availability of educated women alone will not improve employment prospects in certain social and cultural environments.<sup>24</sup> Investments in education and training should be accompanied by other interventions to break a web of socio-cultural practices which prevent full-capacity participation in the labour market. Trade Unions, which in some countries have made efforts to mobilize members outside their traditional constituencies, can play an important role in strengthening the voice of marginalized groups (Sender *et al.*, 2005, World Bank 2006), while donors can provide capacity-building programmes to strengthen organizations that provide workplace empowerment for discriminated groups. Governments may also need to revisit laws and affirmative action policies regarding the fundamental rights and educational and labour market opportunities of minorities.

### ***Institutional and policy reforms***

The third step of the three step framework enables analysts to ascertain whether particular policies and institutions are positively or negatively associated with poverty-reducing patterns of growth. The results generated by this step can help to inform discussions with policymakers about the appropriate reforms to promote a broader environment conducive to growth in both the quantity and quality of jobs.

Country-level studies have helped to identify a host of policies and institutions which act as constraints to job creation and productivity. These include the legal and regulatory hurdles to business entry, operation and exit, and poorly designed labour market regulations. For instance, inflexible or costly hiring and firing regulations are identified as an obstacle to employment growth in Chile, India (World Bank 2005), Mexico and Zambia, among others.<sup>25</sup> Wage rigidity – indicated by the absence of a statistical relationship between employment and the real wage – can also hamper job creation. In many developing countries it has been related to the inflexibility of public sector wages (see, for instance, analysis for Uruguay, the Caribbean, and Tunisia), while binding minimum wages are also thought to increase the reservation wage.<sup>26</sup>

Investment Climate Assessments (ICAs) demonstrate that corruption can pose a major barrier to employment creation and firm productivity. Studies for Afghanistan and Ukraine note that intricate regulatory regimes tend not to be perceived as a major barrier by firms because they are loosely enforced. However the non-enforcement of regulations presents a problem in itself – the opportunity for arbitrary application of rules and corruption.<sup>27</sup> In Lao, “tall poppy syndrome” (by which larger or more successful firms are subject to higher levels of regulation and face a greater number of business inspections), incentivizes firms to produce at suboptimal levels, hampering productivity and labour demand.<sup>28</sup>

A number of country-level studies corroborate Gutierrez *et al.* (2007) cross-country finding that openness to trade is associated with a poverty reducing pattern of job creation. Anti-export biases of trade regimes are identified as hampering the productivity of jobs in Morocco and Bangladesh.<sup>29</sup> Non-tariff barriers to trade – including poor storage facilities and port infrastructure, and delays at customs – are also identified in

Afghanistan, Kenya, Kyrgyz Republic and Peru.<sup>30</sup> Indeed, though a number of country studies identify tariffs as problematic, most recognize that inefficiencies in customs, complex standards regimes, and transit problems can act as greater barriers to trade (and hence the creation of “more productive” jobs) than tariffs themselves.

In response to the policy and institutional barriers to job creation, country-level policy advice often recommends measures to lower the costs of doing business and introduce more flexible labour market regulations. For instance, a study for Tunisia recommends lowering minimum capital requirements for starting a business, while one for the state of Orissa in India looks to simplifying the procedures for firm entry and exit.<sup>31</sup> Recent reforms in Colombia brought down the costs of firing workers as a means of encouraging employers to recruit more workers during boom periods, while in the Slovak Republic a new Labour Code introduced the option of non-standard contracts (World Bank, 2006). Strategies to alleviate wage rigidity often suggest reforming public sector compensation policies or the introduction of sub-minimums to encourage the employment of often excluded groups, such as young people.<sup>32</sup>

In order to ensure job security with minimal distortions in the labour market, social protection measures should be de-linked from specific jobs, where possible. As noted in the 2006 World Development Report, the “design of the optimal solution” will depend on the “institutional and administrative capacity of government and on the structural characteristics of the labour market” (World Bank 2006). In low income countries, public works programmes may be the most feasible policy response. These programmes are self-targeting (avoiding high demands on administrative capacity) and can be implemented even if levels of informality are high. If well-designed, labour-intensive public works programmes for infrastructure can also have a lasting impact on the quantity and quality of jobs by releasing binding constraints to growth (Radwan, 1995).

ICAs often advise measures to reduce corruption, so as to create a more predictable business environment which will be more attractive to investors, and hence a source of job-creating growth. In Zambia, a proposed anti-corruption strategies consists of action to raise the likelihood of getting caught and punished for corrupt behaviour by improving transparency and accountability mechanisms and strengthening the judiciary.<sup>33</sup> In Columbia and Cambodia, measures to reduce the opportunities for corruption consist of reducing red tape and unnecessary administrative procedures<sup>34</sup>

To boost employment creation following trade liberalization, country advice recommends a complementary agenda, including improvements to customs, ports and other critical infrastructure, regulatory reforms, innovation and education.<sup>35</sup> The adoption of international product standards, including sanitary and phytosanitary measures, are also identified as prerequisites for realizing the job-creating potential of tariff reductions.<sup>36</sup>

### ***Understanding the political economy of reform***

Reforms to policies and institutions to improve the quality and quantity of jobs can be highly sensitive from a political economy standpoint, even if they make sense from efficiency or equity perspectives. Labour market “insiders” – sometimes represented by powerful labour unions – often lobby to maintain regulations that operate in their favour, while “outsiders” – concentrated in less productive sectors – will suffer from ongoing vulnerability to the vagaries of the labour market. For policymakers, the challenges rest in finding the correct balance between job creation and job protection and forging a viable

reform path. Box 5 contains some key insights into the political economy of highly sensitive reforms garnered from recent experiences in Chile, Colombia, Croatia, Poland and Slovakia, among other countries.

**Box 5. Political economy insights on successful labour market reforms \*\***

An “agent of change” (whether a government unit, an employer organization or a progressive trade union) is often crucial to champion controversial labour market reform.

Measures to increase voice and accountability of the poor may be essential to ensure that the government’s labour policy agenda is not entirely dominated by politically powerful labour market “insiders.” Democratic local governments and strong autonomous associations, such as informal sector unions, will play an important role in strengthening outsiders’ positions.

Public information campaigns can help to build societal consensus for reform by documenting the high costs of bad labour market policies and demonstrating the benefits of reform.

Policymakers should identify “unlikely” coalitions of support for reform. For instance labour market “outsiders” (such as informal sector workers) and employers in the independent private sector may have shared interests in supporting welfare and efficiency enhancing reforms.

Comprehensive reforms have a higher likelihood of success than piecemeal reforms. Reforms should cover a range of labour market policies and be linked with reforms to social production systems. Efficient product markets will help to ensure that labour market “insiders” cannot capture wages at the expense of “outsiders”.

At the same time, due attention should be paid to the sequencing of reforms. For instance, a recent Country Economic Memorandum for Morocco notes that there is limited potential to reduce minimum wages or alter the exchange rate regime in the short term, even though these strategies are considered optimal from the perspective of reducing labour rigidities and stimulating export-led growth. Instead, it suggests pursuing two less controversial reforms - trade liberalization and tax modernization – first.

Losers may require compensation. The most effective forms of compensation will simultaneously address obstacles to reentering the labour market (for instance through support for education and training or transport vouchers).

\*\*For further information see World Bank (2006); 2005. Ukraine, *idem*; 2006. Morocco, *idem*.

## Conclusion

The objective of this paper has been to contribute to the understanding of the relationship between employment and poverty reduction. Its goals have been to provide tools to assess the impact of employment-intensive and productivity-intensive growth under segmented labour market conditions, and to enable a transition from research to policy outcomes. Specifically, it has sought to help analysts and policy-makers address three questions.

First, how does the sectoral pattern of growth affect its poverty impact? This question is of particular relevance under the segmented labour market conditions commonly found in developing countries. Growth in one sector of the economy will not

automatically translate into benefits for the poor: much will depend on the profile of growth (its employment- or productivity-intensity), the sectoral location of the poor, and the extent of mobility across sectors.

Second, is employment-intensive or productivity-intensive growth more important for poverty reduction? This will depend on the quality (or productivity) of jobs in the sector in which growth occurs. Put simply, for employment-intensive growth to translate into poverty reduction it must occur in a “more productive” sector, while “less productive” sectors may require productivity-intensive growth to ensure a decline in headcount poverty. The first two steps of the framework in Part III provide tools for profiling growth (according to its employment- and productivity-intensity) and assessing its impact on poverty.

Finally, what policies will facilitate the poor’s participation in growth? Step three of the framework suggests that a range of policies – pertaining to both the labour market directly and the policy and institutional environment more broadly – can promote a poverty-reducing sectoral pattern of growth. Country-specific quantitative and qualitative analysis is required to identify constraints to job creation, productivity and mobility. Depending on the sector in question, policymakers may wish to boost employment and/or productivity, while ensuring that the poor are able to participate in more and better job opportunities. Part IV draws on existing research to highlight policies pertaining to infrastructure, education, trade, the investment climate and human rights, among other key concerns.

## Notes

- 1 Hull (2006) reviews World Bank Analytical and Advisory Activities (AAA) from 2004 until August 2006, identifying more than 100 pieces of AAA with a substantial focus on the topic of employment generation. This paper draws on some of the most pertinent findings of the review. Individual studies are referenced below in footnote form. All are World Bank publications unless otherwise stated.
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- 3 2005, “Mexico – Income generation and social protection for the poor”.
- 4 2006, “Turkey – Country economic memorandum: Promoting sustained growth and convergence with the European Union”.
- 5 2004, “Pakistan – Rural factor markets: policy reforms for growth and equity”; 2006. “India – Inclusive growth and service delivery: building on India’s success”.
- 6 2004, “Achieving Ukraine's agricultural potential: stimulating agricultural growth and improving rural life”; 2005. “Sierra Leone – Revitalizing rural development and agriculture”.
- 7 2005, “Cambodia – Rural sector strategy note - towards a strategy for rural growth, and poverty reduction”.
- 8 2005, Kyrgyz Republic. “Country Economic Memorandum - Enhancing the prospects for growth and trade”
- 9 2005, “Bangladesh – Growth and export competitiveness”; 2005, “Pakistan, Punjab – Economic report: towards a medium-term development strategy”; 2006, “Lesotho – Country economic memorandum: growth and employment options study”.
- 10 2005, “Bolivia – Country economic memorandum: policies to improve growth and employment”.
- 11 2005, Bolivia, *idem*; 2005 “Bosnia and Herzegovina – Labour market update: the role of industrial relations”; 2003.
- 12 2005, “Kenya – growth and competitiveness”.
- 13 [www.ilo.org/public/english/region/asro/bangkok/feature/inf\\_sect.htm](http://www.ilo.org/public/english/region/asro/bangkok/feature/inf_sect.htm)
- 14 2004, Pakistan, *idem*.
- 15 2004, China, *idem*.
- 16 2004, Poland, *idem*.
- 17 2005, “Ecuador – Investment climate assessment”.
- 18 2005, “Egypt – Country assistance strategy”; 2005, Kenya, *idem*.
- 19 2005, “Moldova – Educational policy note”.

- 20 2004, The Urban Poor, *idem*; 2005, Ukraine *idem*.
- 21 2006, “Resilience amidst conflict: an assessment of poverty in Nepal.”
- 22 2005, “Pakistan – Country gender assessment - bridging the gender gap: opportunities and challenges.”
- 23 2005, Kenya, *idem*; 2004, Poland *idem*.
- 24 See for instance, 2005, “Jordan – The Economic Advancement of Women in Jordan: A Country Gender Assessment”
- 25 2004, Chile – New economy study; 2005, Mexico, *idem*; 2004, Zambia – An assessment of the investment climate.
- 26 2005, A time to choose, Caribbean development in the 21st century; 2004, Tunisia – Employment strategy; 2004, Uruguay – Poverty Update (2003). According to a study on Colombia (2005, “Labour market adjustment, reform and productivity in Colombia: What are the factors that matter?”), if the minimum wage had been kept constant at 1995 levels, unemployment for men and women would have been 7 and 4 % lower in 2002, respectively.
- 27 2005, Ukraine, *idem*; 2005, The investment climate in Afghanistan: exploiting opportunities in an uncertain environment.
- 28 2004, Country Economic Memorandum - Realizing the development potential of Lao PDR.
- 29 2006, Morocco, Country Economic Memorandum: Fostering Higher Growth and Employment with Productive Diversification and Competitiveness; 2005, Bangladesh, *idem*.
- 30 2005, Afghanistan, *idem*; 2005, Kenya, *idem*; 2005, Kyrgyz Republic, *idem*; 2004, Peru – Microeconomic constraints to growth: the evidence from the manufacturing sector.
- 31 2004, Tunisia – Development Policy Review - making deeper trade integration work for growth and jobs; 2005, India, Orissa – Investment climate assessment: towards a high performing state.
- 32 2005, Organization of Eastern Caribbean States – Country Assistance Strategy; 2005, Bosnia and Herzegovina, *idem*; 2005, Ukraine, *idem*.
- 33 2004, Zambia, *idem* 2005.
- 34 Colombia – Country economic memorandum: the foundations for competitiveness; 2004. Seizing the global opportunity: investment climate assessment and reform strategy for Cambodia.
- 35 2005, Central American Free Trade Agreement (DR-CAFTA): challenges and opportunities for Central America; 2005, Guatemala – Country economic memorandum: challenges to higher economic growth.
- 36 2005, Kyrgyz Republic, *idem*. 2004, Serbia – an agenda for economic growth and employment.



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