

Sabine Bernabè\*, Gorana Krstić\*\*

DOI:10.2298/EKA0879072B

## LABOUR MARKETS AS A TRANSMISSION CHANNEL FROM GROWTH TO POVERTY REDUCTION: EVIDENCE FROM VIETNAM AND BURKINA FASO, 1993-2003<sup>1</sup>

**ABSTRACT:** *Employment is widely perceived as being amongst the most important channels for translating growth into poverty reduction. This paper focuses on two countries, Burkina Faso and Vietnam, with very distinct patterns of growth and poverty reduction between 1993-2003. We use household survey data to examine how employment transmitted growth to the poor in these two countries and find that there are two important factors that maximize the effectiveness of*

*this transmission channel: (1) an increase in labour productivity that is (a) broad based and (b) concentrated in sectors where the poor are disproportionately employed or to which they have access, and (2) strong (domestic and foreign) demand for the goods and services produced by the poor, and access to these markets.*

**KEY WORDS:** *labour markets, pro-poor growth, poverty reduction, informal economy*

**JEL CLASSIFICATION:** J21, I30, O15, O17, J43

\* LICOS Centre for Institutions and Economic Performance, Katholieke Universiteit Leuven, Belgium.

\*\* Faculty of Economics, University of Belgrade, Belgrade.

<sup>1</sup> An earlier version on this paper was prepared within the context of the Operationalizing Pro-Poor Growth (OPPG) work programme, a joint initiative of the Agence Française de Développement (AFD), UK Department for International Development (DFID), German Development Policy (BMZ, GTZ, KfW) and the World Bank. Its aim was to better understand the options facing policy makers in terms of increasing the impact of growth on poverty reduction. A special thanks to Sudhir Shetty, Louise Cord, Gary Fields and Andy McKay for very helpful comments on various drafts of the paper.

## 1. Introduction

Employment is widely perceived as being amongst the most important channels for translating growth into poverty reduction. However there has been limited empirical research to date on the relationship between growth, employment and poverty reduction. This paper focuses on two countries, Burkina Faso and Vietnam, with very distinct patterns of growth and poverty reduction. It examines how employment transmitted growth to the poor in each of these cases between 1993-2003 and what role was played by specific policies and initial country conditions. In particular, we attempt to shed some light on Vietnam's relative success in terms of pro-poor growth. Understanding these questions will be important in informing the formulation of policies that maximize the participation of the poor in the growth process.

Development literature has long highlighted the role of labour markets in transmitting growth to the poor (DFID, 1997, Fields, 2005, ILO, 2003, McKay, 1997, Squire, 1993, World Bank, 1990). This is mainly for two reasons: (1) labour is the most abundant asset of the poor (poor people in developing countries derive little income from other sources than their labour)<sup>2</sup> and (2) what distinguishes the poor from the non-poor is their labour earnings, as labour force status is repeatedly found to be a critical determinant of household welfare in developing countries.

In traditional dual economy development models such as those of Lewis (1954), Kuznets (1955) and Ranis and Fei (1961) labour markets were implicitly perceived as the principal means through which growth would translate into poverty reduction. The Kuznets (1955) hypothesis, of an inverted U shape of the relationship between economic growth and benefits of the poor, argued that investment in capital to stimulate growth would, in the initial stages of development, result in an increase in inequality, but that eventually inequality would decrease as economies would undergo structural changes and labour would shift out of agriculture into industry. Growth would thus automatically "trickle down" to the poor as average labour incomes rose with growth. Later labour market dualism literature also indirectly examined how labour markets transmitted growth to the poor and emphasized the dualistic nature of labour markets in developing countries. They argued that these labour markets were characterized by two sectors: a (richer)

---

<sup>2</sup> Note that not all the poor have sufficient labour assets. For example, households with high dependency rates and some female headed households may have insufficient labour assets. Moreover, although labour is usually the most abundant asset of the poor, the poor often have other assets, including land or livestock.

“formal”, “modern”, “industrial” or “urban” sector and a (poorer) “informal”, “traditional”, “agricultural” or “rural” sector (see Fields, 2005, for a detailed review of dual and multi-sector labour market models). Although the causes and nature of informal employment in developing countries have been much debated over the past thirty years and it is not entirely clear whether informal employment is always associated with a greater risk of poverty than formal employment, there is no doubt that an important share of both total employment and total GDP in low income countries is in the informal sector.<sup>3</sup> Finally, while these development models provide important theoretical frameworks for understanding how labour markets may distribute growth to the poor, there has been very little empirical research on this topic.<sup>4</sup>

Our analysis is based on the Vietnam Living Standard Survey (VLSS 1993, 1998) and Burkina Faso Enquête Prioritaire (EP 1994, 2003). We do not use VLSS 2002, 2004 because these data are not based on the same panel as the 1993, 1998 data and we wish to (a) assess the more immediate impact of the major economic reforms (*doi moi*) which were implemented at the end of the 1980s and (b) ensure comparability with the Burkina Faso data which is for 1994 and 2003.

We distinguish between formal, informal and agricultural employment. We define as informally employed: (1) wage employees for whom the employer does not pay social security contributions (may be approximated by the lack of written agreement) (2) self-employed (own-account workers and employers) in non-agricultural household enterprises (3) unpaid family workers in non-agricultural household enterprises. All others are considered formally employed or self-employed in agriculture (see table A6 in the annex for details).

---

3 Some recent estimates by Schneider (2002) of the size of the informal sector at the end of the 1990s show that informal employment accounts for roughly 40% of the labour force in Africa and Central and South America and approximately 35% in transition countries, compared to only 13% in North America and 18% in Europe. Although measuring the informal sector is plagued with methodological and definitional issues, and cross country comparisons have to be interpreted with great caution, these findings are consistent with other attempts at measuring the informal sector (see Charmes, 2000, Gennari, 2004, Schneider and Enste, 2000, World Bank).

4 One exception is work by the ILO and SIDA, which examines the linkages between economic growth, employment and poverty through a series of country case studies. Recent work by Kakwani et al. (2006) examines the linkages between growth patterns, labour market performances and social policies in Brazil, where growth in per capita incomes is explained by five components: the employment rate, hours of work, the labour force participation rate, productivity and non-labour income.

We focus our analysis on how growth affected earnings and underemployment in sectors where the poor (and non-poor) were employed and whether the poor were able to move into sectors where earnings were higher and/or underemployment was lower. Indeed both theoretical and empirical research on labour markets in developing countries has shown that, contrary to western industrialized countries, the main correlate of poverty is not unemployment, but low hourly labour earnings and underemployment.<sup>5</sup>

The paper is organized as follows. We begin with a brief introduction to Burkina Faso and Vietnam and provide some basic stylized facts at the beginning of the 1990s with an aim to set out the initial country conditions. Section 3 provides a profile of poverty in the labour market in Burkina Faso and Vietnam, identifying who the poor were at the beginning of the 90's, which groups faced the highest risks of poverty and how this changed over 1993-2003. In section 4, we examine how labour markets transmitted growth to the poor in Vietnam. We analyze how growth was reflected in the structure of employment and the extent of underemployment and what the impact was on earnings in sectors where the poor and non-poor were employed. Using panel data we then examine the extent to which the poor in Vietnam were able to benefit from growth by moving out of agriculture and into faster-growing industrial and services sectors. In section 5 we examine how growth affected the structure of employment and earnings in Burkina Faso over 1994-2003. Finally, section 6 draws some conclusions on how specific policies and initial country conditions affected the way in which employment transmitted growth to the poor in Burkina Faso and Vietnam and what factors can help to explain Vietnam's relative success in terms of growth and poverty reduction.

## 2. Introducing Burkina Faso and Vietnam

At the beginning of the 1990s, Burkina Faso and Vietnam were amongst the poorest countries in the world. They started off with similar levels of GDP per capita and poverty rates. However they had very different initial conditions particularly in terms of level of inequality, human capital, structure of employment and

---

<sup>5</sup> In most developing countries unemployment is not an option as unemployment insurance is often inadequate or inexistent. As a result, the majority of the population must engage in some work, for however little, to generate livelihoods. This means that the majority of the poor are employed (see Majid, 2001) and that considerable portions of the labour force may be "underemployed" (or involuntarily working less than normal working hours) (see Hussmanns et al., 1990).

population density. In just over a decade Vietnam has achieved one of the highest rates of economic growth and poverty reduction in the world, while Burkina Faso has seen moderate growth and little poverty reduction.

### 2.1 Some stylized facts at the beginning of the 1990s

At the beginning of the 1990s Vietnam and Burkina Faso were amongst the poorest countries in the world. As shown in table 1, they had a similar level of GDP per capita (roughly US\$ 240 per year) and poverty headcount (roughly 58% and 55% of the population lived below the national poverty line respectively).<sup>6</sup> They were both highly rural economies with approximately 80% of their populations residing in rural areas. Poverty was also concentrated in rural areas, where about two-thirds of households were poor and where more than 90% of their countries' poor populations were concentrated.

However the similarities between these two countries more or less end there. Table 1 shows that, at the beginning of the 1990s, Vietnam was a relatively equal society, with an (consumption) GINI of 0.3, while Burkina was highly unequal with a (consumption) GINI coefficient of 0.47. While low levels of inequality in Vietnam can be attributed to its socialist system, Burkina's higher levels of inequality largely reflect the structure of the labour force as a very small group of formal (urban) employees had relatively high earnings while the vast majority of the population engaged in (mainly subsistence) agriculture.

**Table 1. Vietnam and Burkina Faso at the beginning of the 1990s**

	<i>Vietnam</i>	<i>Burkina Faso</i>
GDP pc (NA) US\$	247.2	241.4
share of urban population	19.9	20
Population density (inhabitants per Km sq.)	240	49
<b>Poverty and inequality</b>		
P0 national (%)	58.1	55.5
P0 urban (%)	25.1	14.7
P0 rural (%)	66.4	63.4
Gini index (consumption)	0.3	0.47
share of poor in rural areas (%)	90.7	96.12
<b>Structure of GDP (%)</b>		

<sup>6</sup> Note that in PPP terms, Burkina's GDP per capita was USD912 in 1994, while Vietnam's was USD1384 (constant 2000 USD).

agriculture	29	35
industry	27	22
services	44	43
<b>Composition of employment (%)</b>		
agriculture	67.4	87.2
Industry	13.8	3.3
Services	18.8	9.5
<b>Human Capital</b>		
Adult literacy rate*	92	18.9
Net enrolment rates primary**	86.7	33.4
Net enrolment rates secondary	30.1	19.9
<b>Governance</b>		
Government Effectiveness - Percentile Rank (0-100) (2002)***	48.5	27.8
<b>Control of Corruption - Percentile Rank (0-100) (2002)***</b>	33	57.7

Sources: SIMA (WDI 2003), (Grimm and Gunther, 2004), (Bonschab and Klump, 2004), Huong et al. (2003), Kaufmann et al. (Kaufmann et al., 2003, Ministry of Economy and Finance of Burkina Faso and World Bank, 2001).

Notes:

\* share of adult population that can read

\*\* enrolment rates for Burkina Faso are by age group (6-12 years) and (13-18 years)

\*\*\* Kaufmann, D., et al (Kaufmann et al., 2003). 0 is lowest score 100 is highest.

Moreover, we see that at the beginning of the 1990s, Vietnam had a much stronger human capital base than Burkina Faso. Vietnam had already achieved universal primary education with net enrolment rates at roughly 87%, while in Burkina only 33% of children aged 6 to 12 years were enrolled in primary education. Secondary enrolment rates were relatively speaking quite low in Vietnam but doubled by 1998 and were in any case considerably higher than Burkina's.

Also very important were differences in the structure of employment. Although Burkina and Vietnam had similar economic structures, in that roughly 30 to 35% of GDP was generated by the primary sector, while the secondary and tertiary sectors accounted for 22 to 27% and roughly 44% of GDP respectively, the structure of employment was quite different. Vietnam already had a small, but nevertheless existing non-agricultural labour force, and most importantly it had a sizeable share of employment in the industrial sector (roughly 14% of

employment), while Burkina's labour force was almost exclusively employed in agriculture and the industrial sector was almost nonexistent (only 3% of total employment). As we will see, these initial conditions significantly influenced their patterns of pro-poor growth during the 1990s.

Furthermore, the striking difference in population densities (Vietnam had 240 inhabitants per sq. km. while Burkina Faso had only 49), plays an important part in explaining why Vietnam was able to achieve high growth rates in labour-intensive manufacturing, while this may not be possible for a sparsely populated country (with low human capital) like Burkina Faso. Not only is Burkina sparsely populated but it is a land-locked Sahelian country, with very limited rainfall and weak natural resource endowment that is very vulnerable to climactic shocks. This is in contrast to Vietnam, which has an extensive coast and is relatively rich in natural resources, both important factors in facilitating the structural shift in agriculture that took place during the 1990s.

Finally, table 1 also presents some indicators that attempt to capture the quality of governance in these two countries. These indicators are developed by Kaufmann (2003) for 199 countries.<sup>7</sup> The Government Effectiveness indicator combines responses on the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of civil service from political pressures and the credibility of the government's commitment to policies. The second indicator, Control of Corruption, measures perceptions of corruption, conventionally defined as the exercise of public power for private gain. It includes different dimensions ranging from the frequency of "additional payments to get things done", to the effects of corruption on the business environment, to measuring "grand corruption" in the political arena or in the tendency of an elite forming to engage in capture of the state apparatus.

We see that at the beginning of the 1990s, Vietnam scored relatively high on the government effectiveness indicator, while Burkina scored very low. As we will see, the existence of an effective public sector, with a competent civil service able to provide a range of public services is not to be underestimated in Vietnam's success in poverty reduction. In contrast, we see that Vietnam scores relatively low on the control of corruption indicator, which may reflect perceptions of increasing corruption that accompany the transition to a market economy, while Burkina Faso scores relatively high.

---

<sup>7</sup> These indicators are based on several hundred individual variables measuring perceptions of governance, drawn from 25 separate data sources constructed by 18 different organizations.

## 2.2 Patterns of pro-poor growth over 1993-2003

Although Vietnam and Burkina Faso started the 1990s with similar levels of GDP per capita and poverty headcount, during the 1990s they experienced two very different patterns of growth and poverty reduction. Ranking a number of countries according to their rates of GDP growth, poverty reduction and change in inequality, we find that Vietnam and Burkina belong to opposite ends of the spectrum.<sup>8</sup> Table 2 shows that whereas Vietnam experienced high rates of economic growth, high rates of poverty reduction and rising inequality, Burkina experienced moderate growth, low poverty reduction and declining inequality.

In just over a decade, Vietnam has transformed itself from one of the world's poorest countries to one of the most successful ones (although it remains a low-income country). These achievements can largely be attributed to a radical and comprehensive economic reform package, better known as *doi moi* (renovation), which began in the late-1980s, following a deep economic crisis. These reforms were aimed at stabilizing and opening the economy, enhancing freedom of choice for economic units and introducing competition so as to create a supportive policy and institutional environment for growth and poverty reduction (Huong et al., 2003). In particular the reform measures included: price liberalisation; devaluation and unification of the exchange rate; increases in interest rates to positive levels in real terms; reducing subsidies to State Owned Enterprises (SOEs); agricultural reforms, including land reform; stimulating private sector development; and the removal of domestic trade barriers.

**Table 2. Economic Growth, Poverty Reduction and Changes in Inequality during the 1990s.**

	Survey year 1	Survey year 2	Annual GDP growth (%)	Annual change in Gini (%)	Annual change in Poverty Headcount (%)
Bangladesh	1992	2000	3.10	1.50	-2.80
Bolivia	1989	2002	1.20	-0.10	-1.00
Brazil	1993	2001	1.50	-0.20	-2.30
Burkina Faso	1994	2003	2.20	-0.50	-1.80
El Salvador	1991	2000	2.50	0.30	-5.40
Ghana	1992	1999	1.60	0.60	-3.80
India	1994	2000	4.40	0.40	-3.30

<sup>8</sup> These are the 14 countries studied in the OPPG program.

Indonesia	1996	2002	-0.80	-0.90	0.70
Romania	1996	2002	0.20	-1.20	6.10
Senegal	1994	2001	2.50	0.70	-2.50
Tunisia	1990	2000	3.00	0.20	-3.80
Uganda	1992	2002	3.30	1.80	-3.90
Vietnam	1993	1998	8.50	1.20	-8.80
Zambia	1991	1998	-2.30	-2.70	1.30

Source: Poverty and income/expenditure data comes from OPPG country case studies, except India poverty headcount data that was obtained from PovCal Net. GDP data was obtained from 2004 WDI (based on national accounts). Country poverty and GINI data is based on expenditure/consumption household surveys, except for Brazil, Bolivia and El Salvador, which are based on income household surveys.

As can be seen from table 2, Vietnam's reform package resulted in spectacular economic growth during the 1990s. Between 1993 and 1998 (the period under consideration), annual GDP growth averaged about approximately 8.5%. A massive increase in foreign direct investment played an important part in stimulating economic growth.<sup>9</sup> As in other East Asian countries, economic growth was led by export manufacturing. Rapid economic growth was accompanied by a sharp reduction in poverty headcount, which declined by roughly 8.8% per year, and a 1.2% yearly increase in inequality (the GINI increased from 0.33 to 0.35 between 1993 and 1998).<sup>10</sup>

In Burkina Faso the 1990s were characterized by economic growth, which - although moderate - was nevertheless positive, following years of negative growth. Economic growth was mainly attributable to gains in competitiveness following the 1994 CFA franc devaluation, a favourable development in the world market price for cotton and the implementation of a wide range of reforms in the framework of stabilisation and structural adjustment programmes (including price and trade liberalisation) (see IMF, 2003). Nevertheless, the investment climate remained one of the least favourable in all African countries and the World Bank ranked Burkina 154<sup>th</sup> of 155 countries in terms of the overall ease of doing business (World Bank). Growth in real GDP per capita averaged 2.2% per

<sup>9</sup> Total registered capital reached over US\$ 48 billion in the period 1988-2002 (Le Dang Doanh, 2002).

<sup>10</sup> Note that between 1993 and 2002, annual GDP growth averaged at about 5.7% per year, while poverty headcount declined at a rate of 7.8% and the GINI increased at a rate of 2.3% (from 0.33 to 0.42).

year between 1994 and 2003 and was largely concentrated in the services sector.<sup>11</sup> Despite moderate growth, however, Burkina experienced a relatively low rate of poverty reduction. Table 2 shows that poverty headcount declined by an average of 1.8% per year. While rural poverty declined as a result of increasing earnings in agriculture, urban poverty rates increased, which resulted in a small decline in inequality (the GINI fell by an average of 0.5% per year).

### **3. Burkina and Vietnam: Poverty and the labour market between 1993-2003<sup>12</sup>**

The vast majority of the poor in Burkina Faso and Vietnam during the 1990s were employed, since the inadequacy of social protection means that unemployment is a luxury that few can enjoy. The poor were mainly employed in agriculture; however there were pockets of vulnerability amongst the non-agriculturally employed. In particular, those that were informally employed were more likely to be poor, everything else being equal, than the formally employed. Moreover, there was great diversity in well-being also amongst the informally employed. The informal wage-employed faced not only a much higher risk of income poverty than their formal counterparts, but they are also faced greater insecurity, voicelessness and powerlessness. Finally, although the rate of poverty reduction was the lowest in agriculture, it accounted for the majority of poverty reduction in both countries.

#### **3.1 Who were the poor in the labour market?<sup>13</sup>**

First of all, table 3 confirms the findings in the existing literature that in developing countries the poor are mainly the working poor and that unemployment is a “luxury” that few can afford, suggesting that the main cause of poverty is indeed low earnings and underemployment and not lack of employment. In both Burkina Faso and Vietnam, at the beginning of the 1990s, 80% or more of the poor were

<sup>11</sup> Note that during the sub-period 1998-2003, growth was mainly led by the cotton sector.

<sup>12</sup> The analysis of poverty in Burkina Faso is based on the *Enquête Prioritaire* 1994 (EPI) and the *Enquête Prioritaire* 2003 (EP03) (for a detailed discussion on the comparability of the 1994 and 2003 EP see Grimm and Gunther, 2004).

<sup>13</sup> The analysis includes only the population aged 15 years and over. It therefore does not capture child labour, which is considerable in both these countries. For example, in Vietnam roughly 30% of children aged 6 to 14 are found to be working in 1998 (Bales, 2000). On the other hand our analysis does capture old-age workers (over 65 years), which, given the inadequacy of pension benefits, are also widespread in both countries.

employed and 20% were either unemployed or inactive.<sup>14</sup> Moreover, in Burkina the share of unemployed was five times higher amongst the non-poor than the poor. In both countries the unemployed are concentrated in urban areas since rural workers are more likely to engage in agriculture, even if they are looking for another job, in order to generate some income. As a result they may not be considered unemployed but, as we will see, they are often “underemployed” (involuntarily working less than normal working hours).

**Table 3. Composition of poor and non poor working-age population by labour market status, beginning and end of the 1990s (% , population over 15 years)**

	Burkina Faso				Vietnam			
	1994		2003		1993		1998	
	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor
Employed	87.7	75.4	88.9	79.3	79.5	73.3	82.8	74.8
Unemployed	0.6	3.1	1.2	3.2	0.5	0.9	0.6	0.6
Inactive	11.8	21.5	10.0	17.6	20.0	25.9	16.6	24.7

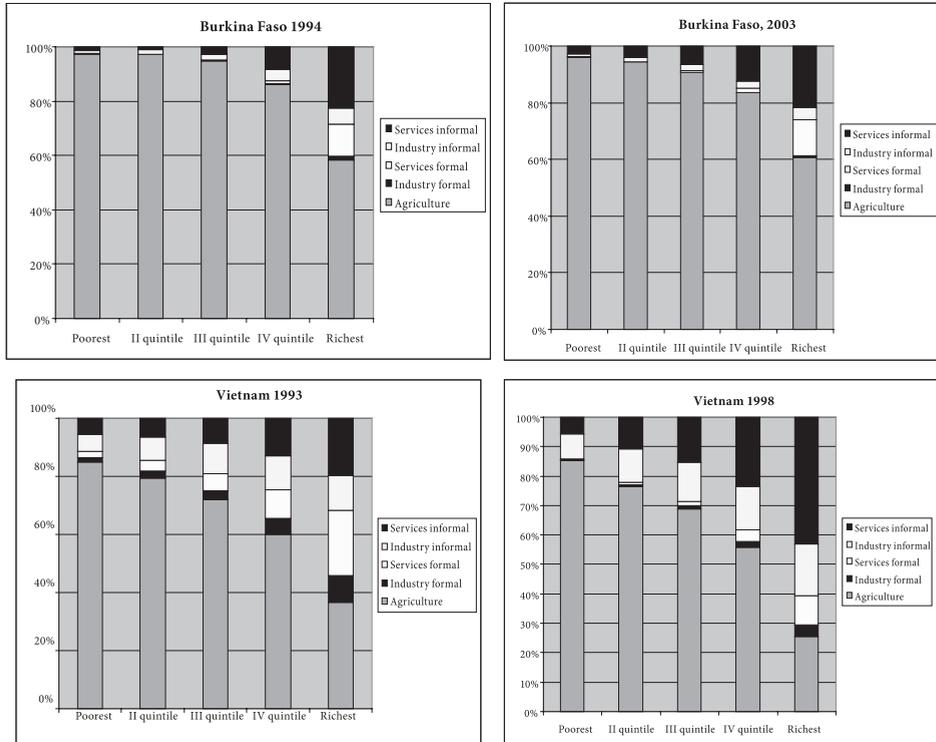
Source: EP I, III and VLSS 1993, 1998

Notes: see table A6 in the annex for definition of variables.

Second, figure 1 shows that in both countries the vast majority of the working poor are employed in agriculture. In Burkina, more than 95% of workers in the bottom three quintiles were employed in agriculture at the beginning of the 1990s, while in Vietnam the share was over 75%. Third, we clearly see that the share of non-agricultural employment increases with consumption quintiles and that the majority of non-agricultural employment is informal. At the beginning of the 1990s, informal employment accounted for roughly 29% of employment in the top consumption quintile in Burkina and 32% in Vietnam.

<sup>14</sup> Note that in this section we analyze the labour force and poverty status of the individual. However poverty (household expenditure) is measured at the household level. We are therefore assuming that resources are equally distributed within the household and we are not capturing the impact of the labour force status of other individuals within the household on household expenditure. We recognize the limits of this approach and we are therefore cautious in inferring direct causality between labour force and poverty status. In the next section we examine the status of the household head to see if results are different and we find that they are consistent with the analysis at the individual level.

**Figure 1. Composition of consumption quintiles by employment status and activity, Burkina Faso and Vietnam, 1993-2003**



Source: EP I, III and VLSS 1993, 1998

Notes:

- (1) See table A6 for definition of employment categories.
- (2) In Burkina Faso, the poverty line is in the third quintile in both 1993 and 2004, while in Vietnam, it is located in the third quintile in 1993 and the 2<sup>nd</sup> quintile in 1998.

Finally, table 4 shows that, in addition to being employed in agriculture, in Burkina the informally employed are mainly self-employed, while in Vietnam, they are mainly wage-employed. Moreover, over the 1990s, the share of informal employees and unpaid family workers in Burkina Faso more than doubled, although they still represented only 2.4% of the poor in 2003. In Vietnam we see a sharp decline in the share of formal employment as a whole and the poor (and non-poor) becoming increasingly concentrated in self-employed agriculture and to a lesser extent in informal self-employment.

**Table 4. Composition of employment by status in employment, poor and non-poor (% , population over 15 years)**

	Burkina Faso						Vietnam					
	1994			2003			1993			1998		
	Total	Poor	Non-poor	Total	Poor	Non-poor	Total	Poor	Non-poor	Total	Poor	Non-poor
<b>Formal:</b>	<b>3.2</b>	<b>0.3</b>	<b>6.9</b>	<b>3.4</b>	<b>0.3</b>	<b>5.9</b>	<b>16.2</b>	<b>9.2</b>	<b>25.0</b>	<b>4.5</b>	<b>1.0</b>	<b>6.7</b>
Employees	2.6	0.1	5.8	2.8	0.1	4.9	5.4	1.6	9.8	1.2	0.1	1.7
Self-employed	0.5	0.1	0.8	0.2	0.1	0.5	7.6	3.9	11.9	3.2	0.5	4.7
Others	0.1	0.1	0.3	0.4	0.1	0.6	3.4	3.6	3.3	0.4	0.4	0.4
<b>Informal:</b>	<b>10.3</b>	<b>3.3</b>	<b>19.1</b>	<b>12.1</b>	<b>5.2</b>	<b>18.0</b>	<b>24.8</b>	<b>20.6</b>	<b>30.0</b>	<b>35.1</b>	<b>22.2</b>	<b>41.7</b>
Employees	1.8	0.3	3.6	2.5	0.8	3.9	14.4	14.3	14.3	19.0	14.6	21.4
Self-employed	6.4	2.3	11.5	6.7	2.8	10.1	10.5	6.3	15.7	15.9	7.6	20.2
Unpaid family workers	2.2	0.8	4.0	2.9	1.6	4.0	0.0	0.0	0.0	0.1	0.0	0.1
<b>Self-employed in agriculture</b>	<b>86.5</b>	<b>96.2</b>	<b>74.0</b>	<b>84.5</b>	<b>94.5</b>	<b>75.9</b>	<b>59.0</b>	<b>70.2</b>	<b>45.0</b>	<b>60.4</b>	<b>76.7</b>	<b>51.5</b>
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: EP I, III and VLSS 1993, 1998

Notes: see table A6 in the annex for definition of variables. Note that whereas in the categories of employment status and sector presented in figure 1, all those employed in agriculture are included in the “agriculture” category, regardless of status in employment; in table 4 wage employees in agriculture are included in the wage employees category as we expect them to exhibit different characteristics from those self-employed in agriculture. These are often landless casual labourers. Moreover, unpaid family workers that are employed in agriculture have been included in the self-employed in agriculture category as they are more similar to those self-employed in agriculture than they are to unpaid family workers in non agricultural household enterprises.

### 3.2 Which groups faced the highest risks of poverty?

Although the bulk of the poor are employed in agriculture, non-agricultural employment is not a guarantee against poverty and there are pockets of poor amongst the non-agricultural employed. In particular, informal employment and especially informal wage-employment significantly increases the risk of poverty in both countries with respect to formal employment, everything else being equal.

Table 5 presents poverty headcount, gap and severity by labour force and employment status of individuals. First, we see that the unemployed generally face lower than average poverty risks, confirming our previous suggestion that unemployment is not associated with lower welfare and that employment is not necessarily a route out of poverty as is often the case in developed economies. This is particularly evident in Burkina, where in 1994 only 17% of the unemployed were poor compared to 52% of the working age population as a whole. Second, we see that individuals employed in agriculture face by far the highest poverty risks. In Burkina Faso in 2003, 51% of those employed in agriculture were poor compared to 43% of the working age population as a whole and in Vietnam 45% were poor compared to 33% of the working age population in 1998. Their poverty is also the most severe, as they are on average much further below the poverty line than any other group.

**Table 5. Poverty measures by employment status and sector, 1993-2003**  
(population over 15 years)

	Burkina Faso						Vietnam					
	1994			2003			1993			1998		
	P0	P1	P2	P0	P1	P2	P0	P1	P2	P0	P1	P2
<b>Total</b>	<b>52</b>	<b>19</b>	<b>9.1</b>	<b>42.9</b>	<b>14.2</b>	<b>6.4</b>	<b>53</b>	<b>16</b>	<b>6.7</b>	<b>33</b>	<b>7.9</b>	<b>3</b>
<b>Employed by Status</b>												
<b>Formal:</b>	<b>5.4</b>	<b>1.9</b>	<b>0.9</b>	<b>3.8</b>	<b>1.1</b>	<b>0.5</b>	<b>31</b>	<b>8.5</b>	<b>3.3</b>	<b>7.2</b>	<b>1.1</b>	<b>0</b>
Employees	2.4	0.6	0.2	2.4	0.7	0.3	17	3.3	1.1	5	0.3	0
Self-employed	17.3	7.9	4.2	10.4	2.7	1.4	29	7.5	2.7	5.1	0.7	0
Others	25	6.6	3.1	9.4	2.3	0.8	58	19	8	34	7.9	3
<b>Informal:</b>	<b>17.9</b>	<b>5.6</b>	<b>2.5</b>	<b>19.5</b>	<b>5.4</b>	<b>2.1</b>	<b>46</b>	<b>14</b>	<b>5.7</b>	<b>22</b>	<b>4.7</b>	<b>2</b>
Employees	10.1	2.6	1	13.8	3.2	1.2	55	18	7.7	27	6.1	2
Self-employed	19.5	6.3	2.7	19.2	5.3	2.1	33	8.4	3	17	3.1	1
Unpaid family workers	19.7	6.3	2.9	24.8	7.3	3.1	67	28	14	18	5.4	2
<b>Self-employed in agriculture</b>	<b>62.1</b>	<b>23</b>	<b>10.9</b>	<b>51.2</b>	<b>17.2</b>	<b>7.7</b>	<b>66</b>	<b>21</b>	<b>8.7</b>	<b>44</b>	<b>11</b>	<b>4</b>
<b>Employed by sector</b>												
Agriculture	61.9	22.9	10.8	51.2	17.2	7.7	65.7	21	8.9	44.6	11.4	4.2
Industry formal	10.8	9.1	4	14.3	4.5	2.2	29.5	7.5	2.7	8.1	1.3	0.3
Services formal	4	1.6	0.8	2.8	0.8	0.4	21.1	4.9	1.7	6.1	0.9	0.2
Industry informal	28.8	9.1	4	25.8	6.9	2.7	44.1	11.9	4.5	25.2	5.3	1.7
Services informal	13.3	4.2	5.8	17.6	4.8	1.9	34.3	9	3.5	14.2	2.7	0.8

Unemployed	17.5	6.1	2.9	21.8	5.9	2.2	39	10	3.8	34	6.8	2
Inactive	37.3	14	6.9	29.9	10.1	4.9	47	14	5.6	18	24	6

Sources: VLSS 1993, 1998, EP I, EP III

Notes:

1. Unpaid family workers exclude those employed in agriculture, which have been classified as self-employed in agriculture. However wage employees in agriculture are included in either formal or informal wage-employed depending on whether or not they have a written agreement and/or social security contributions are paid. All those employed in agriculture (wage- and self-employed) are included in the agriculture category under sector of employment, which explains differences in results for the self-employed in agriculture and the agriculture categories.
2. The poverty headcount index (P0) gives the share of individuals with per capita consumption below the poverty line. The poverty gap (P1) takes into account how far, on average, the poor are below the poverty line, while poverty severity (P2) is the square of the poverty gap and takes into account not only the distance separating the poor from the poverty line, but also the inequality among the poor by giving more weight to those that are the furthest from the poverty line (see Foster et al., 1984).

Third, informal employment is associated with higher poverty risks than the corresponding type of formal employment at the beginning and end of the 1990s. This is confirmed by the multivariate analysis of the correlates of poverty (see table A1 in the annex which presents the results of a probit regression for the probability of a household being poor). After controlling for other household characteristics, we find that at the beginning of the 1990s households headed by the informally employed faced a risk of poverty that was 41% higher than those headed by the formally employed in Burkina and 19% higher in Vietnam. Moreover, the difference is particularly pronounced for wage employees. Table 5 shows that in Burkina, at the end of the 1990s, only 2% of formal wage-employed were poor compared to 14% of the informal wage-employed. The contrast was even starker in Vietnam, where only 5% of formal wage-employed were poor compared to 27% of their informal counterparts. Informal wage-employed, by definition, are employed without a written contract or the payment of social security contributions. They are typically employed in low-skilled jobs (such as construction and trade) on precarious, unprotected contracts. Not only do they face a higher risk of poverty, but they also lack job security and are not protected by labour or other legislation. As such they are not protected against health and safety risks, exploitation, unfair dismissal, discrimination, etc. Moreover, they lack the freedom of association and the right to collective bargaining, which is one of the four core labour standards (ILO, 1998). In other words, the informal wage-employed face multiple dimensions of poverty, which go beyond income

poverty and include insecurity, voicelessness and powerlessness (see World Bank, 1990).

Finally, table 5 shows how poverty risks changed over the 1990s. First of all, although the rate of poverty reduction was lowest in agriculture (poverty headcount declined by roughly 6% per year in Vietnam and 2% per year in Burkina), this sector accounted for the majority of the overall reduction in poverty since the large majority of the poor were employed in agriculture. Second, in Vietnam, poverty headcount and gap decreased most in formal services and industry, where a small minority of the poor was located. As we will see this reflects improvements in productivity and growing wages in these sectors. In Burkina, poverty headcount actually declined only in agriculture and formal services, while poverty increased in informal services and formal industry, reflecting declining real wages in these sectors. We will attempt to explain these changes in the sections that follow by examining how changes in the structure and intensity of employment as well as labour mobility translated into changes in earnings and poverty reduction.

#### **4. How did employment transmit growth to the poor in Vietnam during the 1990s?**

Having identified who the poor are in the labour market, we can now turn to the question of how employment transmitted growth to the poor. As previously discussed, the existing literature suggests that labour markets will transmit growth to the poor if underemployment is reduced and/or the earnings for the poor increase. In turn, changes in earnings and underemployment will be affected by changes in demand and supply of labour, which will be reflected in the structure of employment. We begin by examining how economic growth was reflected in the structure and intensity of employment in Vietnam. We then analyze how it affected earnings. Finally, using panel data, we examine whether the poor were able to move from low earnings sectors to higher earnings sectors.

Between 1993 and 1998, the sectoral pattern of growth in Vietnam was not reflected in a change in the structure of employment. However, it was accompanied by a substantial increase in the share of informal (wage and self) employment. Informal employment provided a route out of poverty for many agricultural workers and a safety net for formal workers who lost their formal positions. However the greatest impact on poverty reduction was not achieved in the fastest growing (industrial and services) sectors, but in agriculture, thanks

to strong improvements in agricultural productivity and strong domestic and foreign demand for crops produced.

#### 4.1 Growth and the structure of employment and underemployment

Between 1993 and 1998, Vietnam's high rates of economic growth were led by exports of labour intensive manufacturing goods. However the sectoral pattern of growth was not reflected in the structure of employment. Table 6 shows that value added in the industrial sector grew by an average of 10% per year, while agriculture and services grew by only 2% and 6% per year. The industrial growth was spurred on by the opening to the international market and led by labour intensive manufacturing industries such as garments and footwear (Dollar, 2004). Indeed, we see that industrial exports grew by an average of 12% per year and agricultural exports contracted by an average of 19% per year.<sup>15</sup> However we observe very little change in the structure of employment. The only sector which saw any meaningful change was the services sector, whose share of the working age population increased by roughly 3% per year.<sup>16</sup> Nevertheless, Vietnam's labour market underwent some very important transformations during this period.

**Table 6. Vietnam growth rates by sector of economic activity 1993-1998 (annual averages)**

	Value added per capita	Employment rate	Share of total exports
Agriculture	2%	-1%	-19%
Industry	10%	1%	12%*
Services	6%	3%	n/a

Source: VLSS 1993, 1998

Notes:

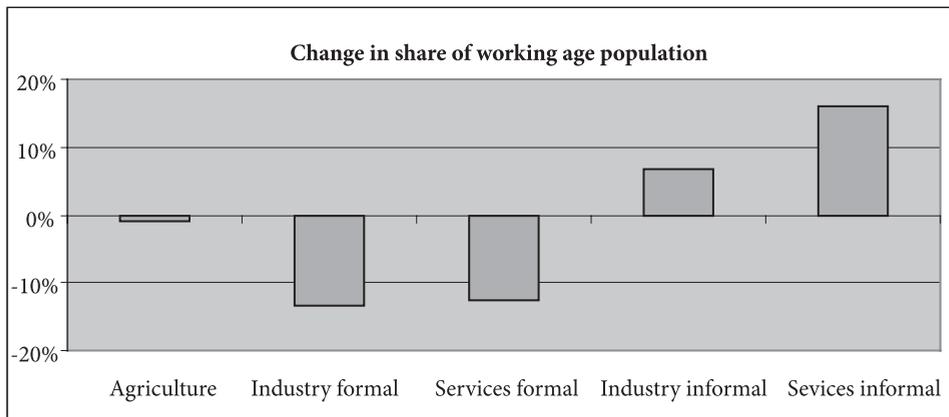
- (1) \*manufacturing increased its share of total exports by 100% while mining industry declined by 24% (see Bonschab and Klump, 2004).
- (2) employment rate is for total employed/working age population (pop over 15 years).

<sup>15</sup> In fact, the share of manufacturing exports alone increased even more during this period (by 100%), while that of mining declined by 24%.

<sup>16</sup> By 2003, the changing sectoral composition of GDP was beginning to be reflected in the composition of employment, as the share of agriculture declined to less than 50%, while the share of industry and services increases to 16% and 25% respectively (Huong et al., 2003). Note that our estimates of the sectoral composition of employment differ from those of Huong et al. because we only include population of working age (i.e. 15 years and over) whereas Huong et al. include children and exclude population aged 65 years and over.

First, there has been a massive informalisation of non-agricultural employment such that an increasing share of the employed is working without social protection and in informal family businesses. Figure 2 shows changes in the employment rate by sector and status in employment. We see a considerable contraction of formal employment and an expansion of informal employment. While the share of working-age population employed in formal industry and services declined by roughly 13% per year, that of informal industry and services expanded by 7% and 16% per year respectively.<sup>17</sup> The contraction of formal employment occurred for both wage- and self-employed. Table 7 shows that the share of formal wage-employment declined from 12% of industrial employment in 1993 to 5% in 1998, while that of formal self-employment declined from 19% to 5%. The story is similar in the services sector.<sup>18</sup>

**Figure 2: Vietnam: change in the employment rate by employment status and sector, 1993-1998 (mean annual percentage change)**



Source: VLSS1993, 1998

Notes: Refers to the primary job. Working age population is population over 15 years.

<sup>17</sup> By 1998, 97% of construction employment and 88% of manufacturing was informal, while in the services sector, 83% of trade employment was informal.

<sup>18</sup> Note that a small share of the increase in informal services employment can be accounted for by a change in the definition of informal wage-employment between 1993 and 1998. In 1993, informal wage-employees were those for whom the employer did not pay social security contributions. In 1998, they were those for whom the employer did not pay social security contributions or who did not have a written agreement (proxy for social security contributions). However, employees of public organizations do not have written agreements in Vietnam as they are hired by a decision from the hiring ministry. As a result some of these are incorrectly considered informally employed. However this does not affect our results significantly as the total share of informal employment would decrease by only 4.5%.

**Table 7. Vietnam, sector of economic activity by employment status, 1993 and 1998 (%)**

	<i>Industry</i>		<i>Services</i>	
	1993	1998	1993	1998
Formal wage-employment	12	5	18	2
Formal self-employment	19	5	27	12
Informal wage-employment	46	53	17	38
Informal self-employment	23	37	39	48
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: VLSS 1993, 1998

Second, economic growth has been accompanied by a decline in the rate of underemployment, particularly in sectors where the poor were employed. Severe underemployment is defined here as involuntarily working less than 15 hours per week in the main job<sup>19</sup>. Table 8 shows that the sectors in which the poor were employed had the highest initial rates of underemployment and saw the greatest decline in underemployment. The greatest reduction in underemployment was achieved in the industrial sector, particularly construction and light industry (manufacturing). Equally, we see agriculture, hotel, restaurant and sales, all sectors where the poor are employed, also showing a decline, albeit smaller.<sup>20</sup> In contrast “other industry” (heavy industry and utilities) and “other services” (public sector), which are both heavily formal, had lower initial rates and experienced a smaller reduction in underemployment. As we will see the decline in the rate of underemployment contributed, in part, to improvements in productivity (output per worker) and growth of real monthly earnings for the poor.

<sup>19</sup> According to the 1982 International Conference of Labour Statisticians, underemployment is defined as “involuntarily working less than the normal duration of work determined for the activity” (Husmanns et al., 1990). Normal working hours for an activity are defined by national legislation and are 48 hours per week (6 days a week, 8 hours per day) for Vietnam and 40 hours per week for Burkina Faso (ILO, 2005). Bales (2000) and World Bank (1995) define *severe* underemployment as involuntarily working less than 15 hours per week, which is the definition adopted in this paper.

<sup>20</sup> Note that data between 1993 and 1998 was not entirely comparable due to a change in questionnaire design. Bales (2000) imputes hours worked from the agricultural activity module.

**Table 8. Vietnam severe underemployment rates by sector of economic activity and settlement type, beginning and end 1990s (%)**

Sector	1993			1998		
	Rural	Urban	Total	Rural	Urban	Total
<b>Agriculture</b>	<b>14.77</b>	<b>20.27</b>	<b>15.1</b>	<b>13.45</b>	<b>21.4</b>	<b>13.77</b>
<b>Industry</b>	<b>10.1</b>	<b>12.55</b>	<b>11.33</b>	<b>5.91</b>	<b>7.94</b>	<b>6.82</b>
Light industry	10.7	12.91	11.82	7.35	8.01	7.66
Construction	8.51	16.09	12.15	2.37	9.76	5.07
Other industry	6.78	4.62	5.65	3.97	3.94	3.96
<b>Services</b>	<b>7.43</b>	<b>7.82</b>	<b>7.64</b>	<b>7.42</b>	<b>7.58</b>	<b>7.5</b>
Hotel/restaurant/ sales	9.02	8.49	8.73	8.87	6.35	7.48
Other services	5.53	6.97	6.3	5.81	9.07	7.53
<b>Total</b>	<b>13.72</b>	<b>11.95</b>	<b>13.38</b>	<b>12.06</b>	<b>9.54</b>	<b>11.57</b>

Source: Bales (Bales, 2000).

#### 4.2 Growth, earnings and poverty

Economic growth was accompanied by a considerable but uneven increase in earnings. Although sectors where the poor were employed saw a considerable increase in earnings, these grew faster in sectors where the non-poor were concentrated. It is important to note that we examine only earnings for wage-employees, as we do not have data for the self-employed, while the analysis on the structure of employment included both. We define earnings to include wages received, both monetary and in-kind.

The informalisation of non-agricultural employment was accompanied by faster growth in formal than informal earnings. At the beginning of the 1990s differences in earnings were not very large between sectors.<sup>21</sup> However, table 9 shows that the contraction in the share of formal wage-employment was accompanied by a greater increase in formal than informal earnings.<sup>22</sup> Mean real monthly earnings grew by 14% for formal wage-employed in services and only 1% for the informally

21 With the exception of formal wage-employed in services (teachers and civil servants) that had particularly low wages but whose wages increased considerably during this period.

22 Note that the difference in mean real formal and informal wages is statistically significant in both years. Differences in earnings between formal and informal services workers are also statistically significant while those between formal and informal industry workers are not.

employed in that sector.<sup>23</sup> Similarly, in industry, formal wage-employed saw an increase of 11% in mean real earnings, while wages of the informally employed grew by 9%. These results may suggest that the productivity (defined as output per worker) of formal wage-employed grew faster than those of the informally employed. This could be due to several factors. It could be that less productive (unskilled) labour was pushed out of formal employment and either placed on temporary contracts or laid-off.<sup>24</sup> It could also reflect a greater investment in capital in the formal sector (particularly in industry). Finally, it could also indicate an increase in the value of formally produced goods thanks to a greater relative increase in demand (including an increase in demand on world markets).

**Table 9. Vietnam mean real monthly net earnings and change in mean real monthly and hourly net earnings for all wage-employed 1993-1998 (annual averages, thousand Dong)**

	1993	1998	<i>Annual change Monthly Earnings (%)</i>	<i>Annual change Hourly Earnings (%)</i>
<b>Total</b>	<b>335.1</b> (8.25)	<b>548.7</b> (8.47)	<b>10.4</b>	<b>8.3</b>
Formal industry	377.5 (19.61)	619.9 (29.55)	10.4	10.9
Formal services	230.3 (11.80)	594.1 (49.04)	20.9	13.8
Informal industry	378.1 (8.35)	609.6 (13.41)	10	9.2
Informal services	343.1 (30.03)	483 (11.57)	7.1	1.1
Industry	378 (7.79)	610.5 (12.46)	10.1	9.6
Services	282.6 (15.44)	489.3 (11.28)	11.6	7
Formal	278.9 (10.61)	609.8 (26.27)	16.9	13.1
Informal	366.7 (11.31)	543.7 (8.90)	8.2	6

Source: VLSS 1993 and 1998.

Notes: standard errors are in brackets

<sup>23</sup> Only part of this difference can be explained by the increase in teachers' salaries over this period.

<sup>24</sup> Bales (2001), for instance, finds a widening wage gap between skilled and unskilled workers, which could, in part, be a result of unskilled workers being pushed into informal employment.

Nevertheless, the increase in real informal earnings at a time of massive expansion in labour supplied into this sector indicates some productivity gains and an increase in demand for informally produced goods and services. Since the informal sector is associated with low skills and is generally labour (rather than capital) intensive, it is unlikely that productivity gains from increased quality of capital or labour could be entirely responsible for the increase in real informal earnings. Another important factor is probably the increase in both domestic and foreign demand for informally produced goods and services, which pushes up the price of these goods and services and increases demand for informal labour. Domestic demand was largely stimulated thanks to the widespread increase in agricultural earnings, which accompanied the structural transformation of the agriculture sector (see below) and increased disposable income of a significant share of the population (see Huong et al., 2003). At the same time, foreign demand for informally produced goods was stimulated by trade liberalization and the resulting increase in demand for Vietnam's manufacturing exports, since the vast majority of manufacturing employment was informal. It is likely that demand for informal services (e.g. petty trade) was largely domestic, while that for informal industry was largely export-led, as reflected by the faster growth in hourly wages in the industrial sector (9% vs. 1% per year). Finally, productivity and wage gains for the informal wage-employed were also partly due to an increase in hours worked (decline in the rate of underemployment) which led to an increase in output per worker and monthly real earnings. This was particularly true for employees in services where yearly mean hourly wages increased only 1% but monthly wages increased 7% per year.

Finally, in the agriculture sector, a structural shift to higher value products led to an increase in productivity and an increase in the intensity of agricultural employment, which resulted in a moderate but broad increase in earnings. Although we do not have data on earnings in agriculture, which are in any case highly unreliable (not least because of the valuation of in-kind earnings), we can use expenditure as a proxy. This of course assumes that agricultural households consume all that they earn (no savings) and may also include consumption of gifts or in-kind transfers. Nevertheless it is widely considered to provide a more accurate approximation of agricultural earnings than income data. Mean real expenditure of agricultural workers increased by approximately 6% per year between 1993 and 1998 and although this was smaller than that in other sectors the impact on poverty reduction was impressive, as the vast majority of the poor were employed in agriculture. This was partly the result of a major land reform, which laid the foundations for the growth of a market for land. The Land Law of 1993 essentially issued land use certificates to all rural households enabling them

to inherit, transfer and exchange their land (see Bonschab and Klump, 2004).<sup>25</sup> This, coupled with the removal of price controls on agricultural goods and trade liberalization, led to an intensification and diversification away from low-value outputs (staple crops) to higher value ones (livestock, aquaculture, perennial crops, fruits) as well as to export crops (rice and coffee). The structural shift was accompanied by an increase in agricultural prices (both paid by consumers and received by producers) relative to non-farm prices and resulted in a strong and broad increase in agricultural earnings.<sup>26</sup>

#### **4.3 What was the impact on poverty?**

Productivity gains and increasing wages in the formal sector where the non-poor were disproportionately employed were reflected in a faster reduction in poverty. However, despite the slower reduction in poverty, the agriculture and informal sectors accounted for the bulk of poverty reduction during this period as the vast majority of the poor were employed in these sectors. Table 5 indicated that poverty headcount declined by roughly 14% per year for the formally employed in industry and services whereas it declined by only 9% and 12% for their informal counterparts and by 6% for workers in agriculture. As we will see, the increase in agricultural earnings accounted for more than 70% of workers who moved out of poverty reduction during this period.

It is important to note that when linking changes in earnings of workers to changes in poverty status of households we must be very cautious, as within a given household there may be individuals employed in different sectors with different earnings. Since earnings are assumed to be shared equally in the household, we cannot entirely attribute a worker's movement out of poverty to changes in his or her earnings. This is particularly true for rural households that may engage in agriculture as well as other non-farm (informal) activities. It is very possible that the significant reduction in poverty observed amongst individuals working in agriculture may in part be thanks to a strong increase in earnings of other

---

<sup>25</sup> It is important to note that land reform began as early as 1981, and was implemented progressively over 20 years, which may have contributed to its apparent success. In the beginning of the 1980s, the "contract system" allowed farmers to use some land plots independently from the policies of cooperatives and thus to experiment in free market exercises. From 1988, decollectivization of land began and land uses rights were granted to individual households (Bonschab and Klump, 2004). A similar gradual land reform programme was also successfully implemented in China.

<sup>26</sup> Between 1993 and 1998 the price of rice rose by 62% while the price of non-food items rose by just 23%. The price of other food items rose even faster than the price of rice so that food prices increased by 68% overall (Haughton et al., 2001).

household members employed in non-agricultural sectors. It may also be due to multiple job-holding, which is particularly prevalent amongst farmers who often also engage in part-time non-agricultural work. Indeed Haughton et al. (2001) estimate that as many as 37% of workers have more than one job.

#### **4.4 How did labour market flexibility and labour mobility enable the poor to benefit from growth? A panel data analysis for Vietnam.**

We use the panel aspect of the VLSS data, which provides matched records of the two waves of the VLSS in 1993 and 1998, to follow workers through time and examine to what extent labour market flexibility and labour mobility allowed the poor to benefit from growth by moving from unemployment or employment in low-earnings sectors to higher earnings sectors. It is important to note that we are following individuals between two points in time that are 5 years apart and that yearly transitions between different labour force states that occurred within the observed period can therefore not be captured. As a result, our findings may underestimate actual labour movements within the five-year period. After briefly reviewing flows between labour force states, we concentrate on job mobility between formal, informal and agricultural employment and assess which types of employment transitions had the greatest impact on poverty reduction.

Vietnam's labour market as a whole is relatively flexible (flows of labour in and out of employment are high) and there is a much higher degree of labour mobility than the figures on structure of employment would suggest. However this is almost exclusively in and out of agriculture and informal employment, while there is very little movement into formal employment. Informal employment provided a route out of poverty for agricultural workers as well as a safety net for formal workers who lost their formal position. However the bulk of poverty reduction was achieved within sectors and most importantly within agriculture.

The labour market is considered to be flexible if the risk of losing and of finding a job is high and if the duration of job search is short and results in a satisfactory worker-job match (see Rutkowski and World Bank. Europe and Central Asia Region. Human Development Sector Unit., 2003). In contrast, a stagnant labour market is characterized by limited labour flows, such that both firing and hiring are on the low side. In many countries high labour market regulation (e.g. high minimum wages, high social security contributions, strict hiring and firing restrictions) increase the cost of labour for employers and therefore lead to an "inflexible" labour market where the unemployed and inactive cannot easily move into employment. The argument goes that flexible labour markets facilitate

the transmission of growth to the poor because they allow the unemployed to easily find jobs during periods of growth.

Labour flows are best described by transition matrixes, which show estimated probabilities that workers move across different labour force states. Table 10 provides transition probabilities across employment, unemployment, and inactivity between 1993 and 1998. The diagonals indicate the percentage of individuals who remained in the same state over the five-year period, while the distribution across rows tells us how the status of individuals changed over the five-year period.

**Table 10. Vietnam: Transition probabilities across labour force states**  
(%, population over 15)

	1998			Total
	Employed	Unemployed	Inactive	
1993				
Employed	88.3	0.3	11.4	100
Unemployed	71.3	5.6	23.1	100
Inactive	54.5	0.8	44.7	100
<b>Total</b>	81.8	0.4	17.8	100

Source: VLSS.

The high degree of mobility from unemployment into employment suggests that Vietnam’s labour market is relatively flexible. Only 6 percent of the unemployed were still unemployed after 5 years, while 71% had found jobs.<sup>27</sup> We also see substantial outflows from inactivity into jobs and significant outflows from employment into inactivity. These findings suggest a relatively flexible labour market, in which individuals are able to move from unemployment and inactivity into employment to take advantage of employment opportunities created by the economic growth. Forteza and Rama (2001) also find low labour rigidity in Vietnam over the period 1970-1999. Their results suggest that the labour market in Vietnam was less rigid than the OECD average and more comparable with the labour market in the USA.

However the vast majority of the unemployed found jobs in the informal sector as the formal sector did not expand. Table 11 shows that the vast majority of the mobility out of unemployment and inactivity was into informal employment and

<sup>27</sup> Also note that 23% of the unemployed became inactive after 5 years. Some of these could be the so-called “discouraged unemployed” who have lost hope of finding a job.

farming. Indeed, 56% of individuals who had been unemployed in 1993 were informally employed by 1998, while only 3% found formal sector jobs. On the other hand, the inactive were more likely to find jobs in agriculture as 34% of previously inactive worked as farmers in 1998 and 19% were informally employed. Only 1.7% found formal jobs.

**Table 11. Vietnam: Transition probabilities by labour market status  
(%, population over 15)**

1993	1998					Total
	Formal	Informal	Farmers	Unemployed	Inactive	
Formal	13.5	52.5	18.8	0.4	14.9	100
Informal	4.6	54.6	29.4	0.8	10.6	100
Farmers	1.3	12.3	75.3	0.1	10.9	100
Unemployed	2.9	56.3	12.0	5.6	23.1	100
Inactive	1.7	18.9	33.9	0.8	44.7	100
<b>Total</b>	3.3	25.1	53.5	0.4	17.8	100

Source: VLSS.

Note: Recall that the categories “farmers” and “agriculture” are not equivalent. Farmers include only self-employed in agriculture, while “agriculture” includes both self- and wage-employed in agriculture.

Therefore these findings suggest that whereas the labour market as a whole may be relatively flexible, the formal labour market may be less flexible. Indeed, as in many developing countries, the concept of labour market flexibility that is applied in western industrialized countries may not be very useful, as the inadequacy of unemployment benefits means that most people must engage in some type of work most of the time. Thus, high labour market regulation may result not in high unemployment rates, but in high informal employment rates. In such a context, the issue of whether flexible labour markets facilitate the transmission of growth to the poor may be best addressed by examining mobility between different types of employment to assess whether the poor are able to move into higher earning sectors. We therefore turn our attention to the sample of individuals who were observed to be employed at the beginning and the end of the five year period.

Regarding labour mobility, table 12 shows transition probabilities between different employment sectors and status from 1993 to 1998. The diagonals indicate the percentage of workers who remained employed in the same sector over the five-year period. The distribution across rows tells us how the employment status of individuals changed over the five-year period.

**Table 12. Vietnam: Transition probabilities by type of employment and economic activity (% , population over 15)**

1993	1998					Total
	Agriculture	Industry formal	Services formal	Industry informal	Services informal	
Agriculture	85.4	0.6	0.8	6.0	7.1	<b>100</b>
Industry formal	18.9	13.4	5.2	41.6	21.0	<b>100</b>
Services formal	12.5	1.0	17.4	5.5	63.6	<b>100</b>
Industry informal	30.6	2.7	3.0	47.2	16.5	<b>100</b>
Services informal	21.1	1.1	6.5	13.9	57.5	<b>100</b>
<b>Total</b>	<b>66.1</b>	<b>1.4</b>	<b>3.1</b>	<b>11.6</b>	<b>17.8</b>	<b>100</b>

Source: VLSS.

First, we find that although agricultural workers were the least likely to leave their sector, approximately 15% did move out of agriculture over this five-year period, which is quite significant by international standards. We see that those who left agriculture moved almost exclusively into the informal sector, with 7% moving into informal services and 6% into informal industry. Moreover, movements out of agriculture were into both self-employment and wage-employment. More than half of those who moved into informal services became self-employed, while those who moved into informal industrial jobs became both self- and wage-employed (see table A2 in the annex). These results indicate that there was a higher degree of mobility out of agriculture than the figures on the structure of employment would suggest. Although the share of agriculture in total employment declined by only 3% over this period, we see that in fact a much higher share of workers moved out of agriculture, while some others moved in. In fact, agriculture accounts for 53% of the mobility in Vietnam during this period in that out of the 30% that changed employment status, approximately 10% were workers who moved out of agriculture and 6% were workers who moved into agriculture (see table A3).

Second, there have been large shifts of labour from formal into informal and agricultural employment, suggesting that these may be providing a social safety net for workers who lose formal sector jobs. We note that 12% and 19% of workers who in 1993 were employed in formal services and industrial jobs respectively

had moved into agriculture by 1998, despite the fact that agriculture was the sector associated with the lowest standard of living. As we will see these workers had lower chances of moving out of poverty, suggesting that agriculture may have served as a safety net for some formal sector workers who were released from formal sector jobs because of restructuring. These transitions are also reflected in the transition probabilities by settlement type, which show that more than 6% of urban employed in 1993 became employed in rural areas in 1998, while only 3% moved from rural to urban areas (see table A4). Similarly, we find considerable movement from formal into informal employment, reflecting the overall contraction of formal employment and expansion of informal employment. Table 12 shows that approximately 63% of individuals who were employed in formal industrial and 69% of those employed in formal services jobs in 1993 had moved into the informal sector by 1998.<sup>28</sup>

Third, although informal employment may be a stepping stone out of agriculture, there is little evidence that it could be a stepping stone into formal employment. Indeed, the evidence from the analysis of Vietnam panel data suggests the opposite may be true, as Table 12 shows there is extremely little movement into formal employment. Movements into formal employment account for approximately 2% of total mobility in Vietnam during this period (see table A3). Although this suggests that there may be barriers to formal employment, it could also be a reflection of the fact that Vietnam was undergoing a transition from centrally planned to market economy, which involves the downsizing of the public (formal) sector and an expansion of the (informal) private sector. Further research is needed to assess whether barriers to formal employment really exist.

Therefore, we find a much higher degree of labour mobility in Vietnam than the figures on the structure of employment would suggest. However, mobility was almost exclusively in and out of agriculture and informal employment. Therefore the next question is: what kinds of movements are associated with greatest reduction in poverty? To simplify the interpretation, we group all formal and informal employed into two categories.

Concerning the impact on poverty, we can state the following. First of all, moving out of agriculture reduced the risk of poverty. Table 13 shows that the change in poverty incidence was higher for those who moved out of agriculture than for

<sup>28</sup> Note that most of the movement from formal industry and services jobs was into informal industry and services jobs suggesting that some of the informalization may have been due to an informalization of contractual agreements (i.e. an increase in temporary or oral contracts).

those who remained employed in agriculture and that it was higher for those who were able to move into formal employment than for those who found jobs in the informal sector. This is confirmed by the multivariate analysis (see table A5), which shows that, relative to staying in agriculture, moving into informal employment significantly increased the probability of moving out of poverty (by 16% in services and 5% in industry), and that the probability of escaping poverty was even higher for those who became formally employed (27% in services, 33% in industry), *ceteris paribus*.

**Table 13. Vietnam: Percentage change in poverty incidence of those who remained employed in 1998 by type of employment (population over 15)**

1993	1998			Total
	Agriculture	Formal	Informal	
Agriculture	-31.3	-70.4	-43.0	-33.2
Formal	-53.2	-62.5	-47.6	-51.2
Informal	-33.8	-36.8	-41.3	-37.1
<b>Total</b>	<b>-32.1</b>	<b>-59.4</b>	<b>-41.4</b>	<b>-33.6</b>

Source: VLSS 1993, 1998

In Vietnam, mobility into informal employment was effective at reducing poverty because, as we have seen, it was accompanied by an increase in demand for informal goods and services, which was reflected in an increased demand for labour in this sector. The increasing demand was due, on the one hand, to the growth in disposable incomes of the rural population that accompanied significant improvements in agricultural productivity during this period, and on the other to trade liberalization and the promotion of export-led manufacturing, which was largely produced by informal workers.

Second, although moving out of agriculture had the greatest positive impact on the probability of moving out of poverty, more than two thirds of workers who moved out of poverty in Vietnam remained or became employed in agriculture. Table 14 shows that agriculture still accounted for 71% of poverty reduction in Vietnam, since 64% of those who moved out of poverty remained employed in agriculture, while the remaining 7% moved into agriculture from formal and informal employment. Similarly, Bales (2001) finds that over 90% of the reduction in poverty occurred because earnings rose within each sector, with the largest gains (55-60%) of poverty reduction accounted for by improvements in income

within the agricultural sector. The inter-sectoral employment shift accounted for only 6 -9% of the poverty reduction.

**Table 14. Vietnam Percentage of employed that moved out of poverty by employment status and sector, 1993-1998**  
(%, population over 15 yrs)

1993	1998					Total
	Agriculture	Industry formal	Services formal	Industry informal	Services informal	
Agriculture	64.3	0.6	0.9	6.4	6.0	78.%
Industry formal	1.0	0.2	0.1	1.0	0.6	2.8
Services formal	1.0	0.1	0.6	0.3	2.4	4.2
Industry informal	3.0	0.2	0.0	3.8	1.3	8.4
Services informal	2.2	0.1	0.2	0.8	3.2	6.5
<b>Total</b>	<b>71.4</b>	<b>1.1</b>	<b>1.8</b>	<b>12.2</b>	<b>13.5</b>	<b>100</b>

Source: VLSS

Third, informal and agricultural employment provided important social safety nets. As we have seen, between 1993 and 1998, the number of formal industrial and services jobs contracted by roughly 18% and this was accompanied by a high level of mobility from formal into informal employment and agriculture. Table 14 shows that the chances of moving out of poverty were higher for those who remained formally employed than for those who moved into agriculture or informal employment. This difference is even greater once we control for individual and household characteristics.

We estimate a probit model to determine individual and labour force characteristics that are associated with “successful” transitions out of poverty. The dependent variable takes on the value one if an individual was “poor” in 1993 to “non-poor” in 1998 and zero if an individual remained poor. The explanatory variables include demographic and educational characteristics of the individual (gender, age and age squared and completed level of education), characteristics of the household (size of the household, receipt of remittances from abroad and location) and economic characteristics of the individual, captured by labour force movements between different types of employment (agriculture, industry formal,

services formal, industry informal, services informal). The results are presented in table A5 in the annex. The model is estimated using the sample of individuals who were employed both in 1993 and in 1998.<sup>29</sup>

The results show that relative to staying in agriculture, those who moved into informal or agricultural employment were 0.5% to 0.9% more likely to move out of poverty, while those who remained in formal employment were 28% more likely to move out of poverty, *ceteris paribus*.<sup>30</sup> These findings suggest that informal and agricultural employment were more safety nets than they were desirable alternatives to formal employment. They suggest that formal workers did not “choose” to move into informal or agricultural employment to increase earnings and well-being, but that these were more “survival strategies” in the absence of formal opportunities.

## **5. How did employment transmit growth to the poor in Burkina Faso over 1994-2003?**

We now examine how growth affected the structure of employment and earnings in Burkina Faso from 1994-2003. Unfortunately we do not have data on hours worked so we are unable to examine the impact on underemployment, which is assumed to be substantial in Burkina, particularly in agriculture. Moreover, we do not have panel data so we cannot analyze labour mobility and labour market flexibility. Finally, while the analysis of the structure of employment is based on the sample of both self-employed and wage-employed workers in both urban and rural areas, the analysis of earnings is limited to the sample of urban wage-employed as earnings data are unavailable for rural areas and are deemed unreliable for the self-employed.

We find that in Burkina Faso, the sectoral pattern of growth was reflected in a change in the structure of employment in that the strong growth in services was accompanied by an increase in the share of employment in this sector. However it

---

<sup>29</sup> The regression coefficients show the marginal effects of each specific characteristic on the probability of escaping poverty, evaluated at the mean of the dependent variable and controlling for all other variables (partial changes). A positive (negative) sign of an estimated coefficient shows that a higher value of the variable increases (decreases) the probability of escaping poverty.

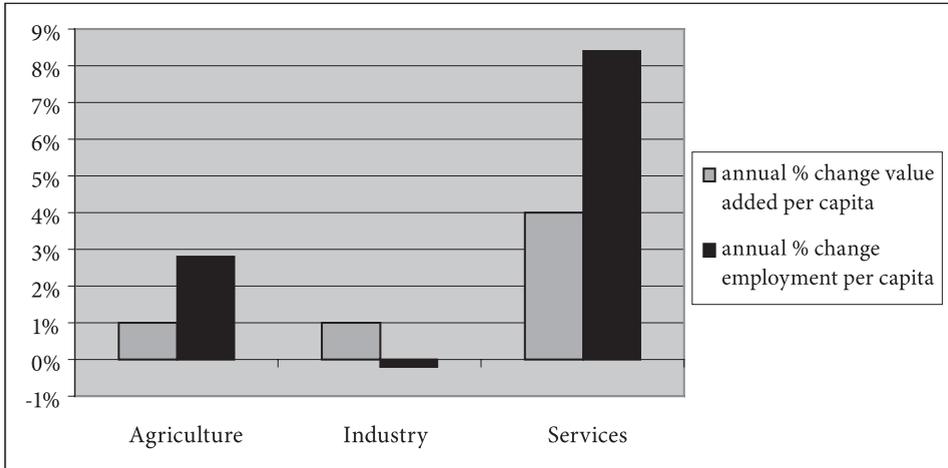
<sup>30</sup> Note that we include all those who moved into informal or agricultural employment and not only those who moved from formal employment. Also, results for those who stayed in formal industrial employment did not significantly affect the probability of moving out of poverty.

was also accompanied by an increase in poverty headcount in services. This was because the expansion in employment was fuelled by an increase in labour supply that was not matched by an increase in demand and led to a decline in earnings in this sector. At the same time, moderate agricultural growth had the greatest impact on poverty reduction but the impact was constrained both because of weak demand for food crops, produced by the majority of farmers, and because the strong gains in cash (cotton) crops were limited to a small group of farmers.

### **5.1 Growth and the structure of employment**

From 1994-2003, the changing structure of employment in Burkina largely reflected the pattern of economic growth. Figure 3 shows that economic growth was led by the services sector, which between 1994 and 2003 grew at an average rate of 4% per year, while agriculture and industry grew at only 1% per year. Growth in services was led by (largely informal) trade, while industrial growth was concentrated in manufacturing. In the agricultural sector, growth was fuelled both by cotton production, which saw an increase in value thanks in part to the 1994 CFA franc devaluation and in part to an increase in the world price of cotton, and by strong growth in food-crop production, particularly after 1998 (see World Bank, 2004). The changing composition of employment largely mirrored the pattern of growth as the share of the working age population employed in services grew at roughly 8% per year, while that of agriculture increased by an average of 2.8% per year.

**Figure 3. Burkina Faso: Growth in GDP and employment rate by sector of economic activity (Annual changes, population over 15years)**



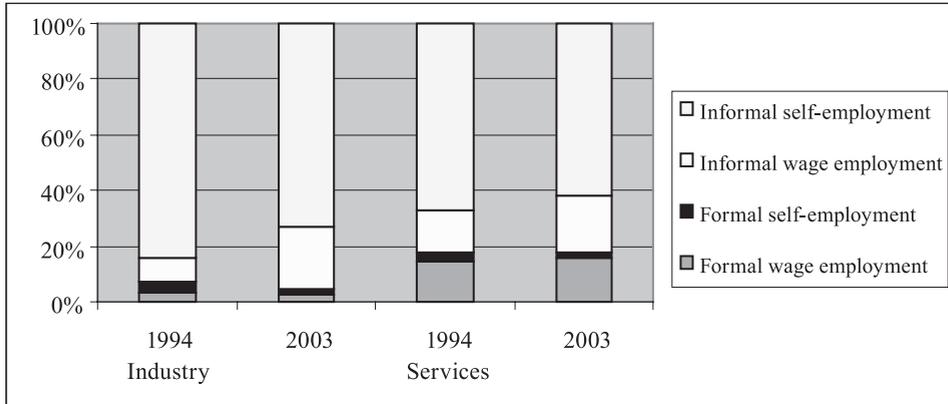
Source: Value added figures from SIMA (World Bank). Similar figures found in (Grimm and Gunther, 2004).

Note: The results for GDP growth in figure 3 differ considerably from those in the Burkina Faso Poverty Assessment (World Bank, 2004) since the latter are based on the period 1998-2003, while the figures in figure 3 are based on 1994-2003.

The changing structure of employment was accompanied by an increase in the share of informal wage-employment in both services and industry. Figure 4 shows that the share of informal wage-employment increased from 15% to 20% of services employment and from 9% to 23% of industrial employment during this period.<sup>31</sup> These findings reflect the deterioration of working conditions highlighted by Grimm and Gunther (Grimm and Gunther, 2004), who find that an increasing share of workers were employed with seasonal, daily or other temporary agreements over 1994-2003.

<sup>31</sup> Note that the increase in informal wage-employment cannot be explained by the timing of the survey. We could expect that part of the increase in informal wage-employment may reflect agricultural workers who find temporary informal wage-employment during the “off season”. However the 1994 survey was carried out just after the harvest, while the 2003 survey was carried out just before the harvest. Therefore, if anything, the results would be biased in the opposite direction (i.e. they would underestimate the extent of informal employment).

**Figure 4. Burkina Faso: Sector of Economic Activity by employment status, 1994-2003**



Source: EP I, III

### 5.2 Growth, earnings and poverty

Growth in the services sector was accompanied by a decline in real earnings and an increase in poverty headcount. Although this result is counter intuitive, it is likely to have been a result of expanding informal labour supply that was not matched by an increase in demand. As we have seen, the expansion of services employment was almost exclusively informal wage-employment in trade. Table 15 shows that the high growth rates in services were accompanied by a decline in real earnings, which was particularly sharp for the informal wage-employed, suggesting that the expansion in services employment was fuelled by an expansion of labour supply, which was not matched by increasing labour demand.<sup>32</sup> It is likely that the supply of labour in the services sector expanded because of the general decline in real incomes following the CFA franc devaluation. As a result labour force participation increased as inactive household members sought employment in order to prevent total household income from declining. Consequently, more workers were producing more output, leading to an increase in value added per capita, but productivity (output per worker) declined and therefore real wages declined. The result was a 4% yearly increase in poverty headcount in informal services, while national poverty headcount was declining. Since informal

<sup>32</sup> Note that the difference in mean real wages between industrial and services workers is significant in both years. Moreover, differences between formal and informal industry workers are also significant for both years as are those for formal and informal services workers.

employment accounts for the vast majority of services employment, this resulted in an increase in poverty headcount in the services sector as a whole. The demand for informal goods and services was probably constrained by the general decline in real incomes (mainly in urban areas) and low earnings in agriculture, where the majority of the population was employed. Moreover, there was virtually no foreign demand for non-agricultural goods. This is in contrast to Vietnam where growth in agricultural earnings resulted in an increased demand for informal goods and services and therefore rising earnings for the informally employed.

Moderate agricultural growth increased agricultural earnings and had a positive impact on poverty reduction. However the impact was constrained by difficulties in marketability and market access. As in the case of Vietnam, since data on earnings in agriculture are less reliable than consumption, we use consumption as a proxy for agricultural earnings. Between 1994 and 2003, mean consumption increased for workers in agriculture by roughly 2% per year and this was as much, if not more, than the change in mean consumption of any other group (mean real consumption actually declined for all but agriculture and formal services workers). This reflects both the gains from cotton farming and the strong growth in food-crop production. On the one hand, the increased earnings in cotton farming were accompanied by an expansion in the share of agricultural employment and an increase in productivity, which fuelled growth and led to an increase in agricultural earnings. On the other, the growth in food-crop production did not translate into a proportional increase in earnings because of marketability and market access constraints. The small urban population, which suffered a decline in real income, and the lack of foreign markets for food-crops, meant that the increased production could not translate into increased earnings (World Bank, 2004). This was compounded by difficulties in accessing urban markets due to poor infrastructure connecting rural to urban areas. Nevertheless, increased earnings in agriculture had a positive effect on poverty reduction overall (poverty headcount declined by 2% per year) and accounted for the bulk of poverty reduction in Burkina during this decade.

**Table 15. Burkina mean real monthly earnings and average annual change for urban wage-employed, 1994-2003**  
(In thousands of CFA F and in 1994 prices)

	1994	2003	Annual change monthly earnings (%)
<b>Total</b>	<b>114.3</b> (13.0)	<b>40.7</b> (1.6)	<b>-7.2</b>
Formal industry	116.8 (46.29)	43.7 (6.81)	-7.0
Formal services	146.6 (19.24)	59.7 (2.07)	-6.6
Informal industry	26.2 (3.31)	14.3 (0.81)	-5.1
Informal services	80.0 (21.82)	24.3 (2.78)	-7.7
Industry	74.1 (24.85)	20.0 (1.75)	-8.1
Services	120.4 (14.51)	43.0 (1.78)	-7.1
Formal	143.1 (17.82)	59.1 (2.01)	-6.5
Informal	71.7 (18.48)	22.7 (2.34)	-7.6

Source: EP I and EP III

Notes:

- (1) Standard errors are in brackets.
- (2) An Ouagadougou decile-specific deflator is used.
- (3) The earnings data may be biased due to the fact that the recall period for wages in 1994 was 7 days, while in 2003 the interviewed person was allowed to choose the recall period and most declared wages on a monthly or yearly basis. In general declarations of individual incomes in households surveys are judged to be largely underestimated (see Grimm and Gunther, 2004).

## 6. Conclusions

This analysis of how employment transmitted growth to the poor in Burkina Faso and Vietnam during the 1990s suggests that there are two important factors that maximize the effectiveness of this transmission channel: (1) an increase in

labour productivity that is (a) broad based and (b) concentrated in sectors where the poor are disproportionately employed or to which they have access, and (2) strong (domestic and foreign) demand for the goods and services produced by the poor and access to these markets.

We find that relative to Burkina Faso, Vietnam's success in terms of pro-poor growth and poverty reduction can, in part, be attributed to the combination of these two factors in agriculture, where the poor were disproportionately employed, and in the informal sector, to which they had access. First, a broad-based increase in agricultural labour productivity combined with a strong domestic and foreign demand for crops produced increased earnings for the majority of the poor and stimulated domestic demand for non-agricultural goods and services produced by the poor. Second, an increase in (low-skilled) informal labour productivity combined with growing domestic and foreign demand for informal goods and services created higher earning opportunities. In turn, higher non-agricultural earnings further stimulated demand for agricultural goods and services, thereby creating a virtuous circle of growth and poverty reduction. All of this was made possible by specific policies and certain critical initial conditions, not least of which were a high population density, an educated workforce, strong institutions and reasonable infrastructure.

First and foremost, Vietnam experienced much larger capital inflow and investment, a structural shift to higher value products, a rise in domestic and foreign demand and a broad-based increase in agricultural labour productivity. Policies aimed at stimulating the agricultural sector (land reform, trade and price liberalization for agricultural products) created a structural shift of agricultural production from low value staple crops to higher value cash (including export) crops, increasing agricultural productivity and earnings for the majority of the poor. Moreover, a sizeable urban population and strong non-agricultural growth in urban areas increased disposable income and stimulated demand for agricultural goods, compounding the increase in demand for export crops. As a result, the vast majority of workers who moved out of poverty between 1993 and 1998 remained or became employed in agriculture.

In contrast, in Burkina Faso the shift to higher-value cash crops was limited to a small group of farmers and the majority of food crop farmers faced weak domestic and essentially no foreign demand for their products. The strongest productivity gains were in the higher-value cotton sector, which affected only a minority of farmers who were already concentrated in the top of the expenditure distribution, while more than two-thirds of farmers engaged mainly in food-

crop production. Moreover, although output of food crops grew, it could not translate into increased earnings due to limited marketability and market access. Domestic demand was constrained by the small urban population and declining real urban incomes, and there was essentially no foreign demand since food crops are effectively non-tradable. Moreover poor roads and infrastructure also created barriers to accessing existing urban markets. As a result, the impact of agricultural growth on poverty reduction was more limited in Burkina than in Vietnam.

However, Vietnam's successful agricultural transformation cannot solely be attributed to good agricultural and trade policies. Vietnam had some very important initial conditions, which Burkina lacked. In particular, Vietnam is rich in natural resources and has an extensive coast line, which made the structural shift to higher value products including aquaculture possible, while Burkina is a land-locked country with limited rainfall and a weak natural resource endowment. In addition, Vietnam had much stronger infrastructure, and particularly a strong road network, which facilitated access to urban markets, while this was a serious constraint in Burkina. Finally, one of the results of Vietnam's socialist system is strong institutions, including the existence of a rural land register, which is nonexistent in Burkina. Therefore, although land distribution was relatively equal in both countries, some important policies and initial conditions made it possible for Vietnam to achieve a broad-based increase in agricultural productivity while this did not happen in Burkina.

Further, in Vietnam, growth was accompanied by an increase in domestic and export demand for (low-skilled) labour-intensive goods and services, which created higher earning opportunities for agricultural workers and increased informal labour productivity, while in Burkina both domestic and foreign demand for non-agricultural goods and services stagnated. The modernization of agriculture in Vietnam translated into higher demand for non-tradable informal goods and services, stimulating demand for informal labour. The creation of low-skilled informal jobs provided a stepping stone out of poverty for agricultural workers.

Moreover, the increase in domestic demand for informal goods and services in Vietnam was compounded by an increased demand for exports of labour-intensive manufacturing goods, which were largely produced by (low-skilled) informal workers. Increasing informal earnings probably also contributed to the reduction in poverty amongst agricultural workers who lived in households with access to non-agricultural sources of labour income. Thus the increased domestic

and international demand for informally produced goods and services ensured that the poor were able to participate in Vietnam's strong economic growth.

In contrast, in Burkina both domestic and foreign demand stagnated. The increase in agricultural earnings was small and therefore did little to stimulate demand for non-farm goods and services. Moreover, the general decline in real incomes following the 1994 CFA franc devaluation further depressed urban demand. At the same time there was little foreign demand for tradable non-agricultural goods. Therefore, as informal labour supply expanded in the services sector, it was not matched by an increase in demand. As a result, although the expansion of employment generated growth in output, productivity declined and wages fell, leading to an increase in the poverty rate in the services sector.

The growth in demand for informally produced goods and services in Vietnam was made possible both by wise trade and export policies and some important initial conditions. First, Vietnam, like many of its East Asian neighbours, has a very high population density and therefore a comparative advantage in the production of labour-intensive manufacturing products, while this would be much more difficult in Burkina Faso, which is sparsely populated. Second, Vietnam started off the 1990s with a much larger non-agricultural sector on which to build non-agricultural growth. Third, Vietnam has a much stronger human capital base, making it possible for agricultural workers to access non-agricultural informal jobs, while much of Burkina Faso's workforce has no education at all. Finally, an important factor contributing to the overall impressive rates of poverty reduction in Vietnam was the commitment of the Government to reducing poverty. A number of programmes were implemented to address the needs of the most vulnerable groups including (but not limited to) employment generation, access to credit and access to infrastructure for poorer, more isolated regions (see Huong et al., 2003).

However, the impressive growth and poverty reduction in Vietnam was not achieved without some negative side effects. Inequality increased considerably and informal, unprotected, precarious employment expanded at the expense of formal protected employment. This highlights the importance of designing better policies to ensure that growth reduces poverty while limiting the impact on inequality and vulnerability.

Finally, the fact that between 1993 and 1998, in the period of fastest growth and fastest poverty reduction in Vietnam, economic growth was concentrated in the industrial sector while more than 70% of workers who moved out of poverty

either remained or became employed in agriculture, suggests that it was the combination of policies that stimulated both (labour-intensive) industrial and agricultural growth that was the key to the impressive achievements in terms of pro-poor growth.

These findings point to the importance of stimulating broad-based agricultural productivity in countries where a significant part of the population is employed in agriculture as an important strategy for achieving pro-poor growth, both because of the direct impact on the earnings of the poor and the impact on domestic demand for non-agricultural goods and services produced by the poor. However this must be accompanied by measures to ensure both marketability and market access for crops produced by the poor. The findings also highlight the importance of accelerating the movement out of agriculture through the expansion of labour-intensive manufacturing and services employment, which is generally informal and accessible to the poor. Given that domestic demand in developing countries is often constrained by the low purchasing power of the majority of the population, stimulating foreign demand for labour intensive manufacturing and services can be critical to job creation in these sectors and therefore to poverty reduction. However, we also show that certain key initial conditions must be met for these policies to translate into growth that is pro-poor. Not least of these are an educated workforce, strong institutions and reasonable infrastructure. Finally, although informal employment may provide a stepping stone out of agriculture and poverty in the short run, it is unclear whether it provides access to formal employment. It is, however, associated with a greater risk of income and non-income poverty than formal employment. Therefore, in the longer run, understanding whether there exist barriers to entering formal employment and what the nature of these barriers is will be important in ensuring that growth accelerates the rate of poverty reduction.

## REFERENCES

Bales, S. (2000), "Viet Nam's Labour Situation and Trends- Analysis based on 1992-93 and 1997-98 Viet Nam Living Standards Data", *Background Paper to the Vietnam Development Report*, Hanoi.

Bales, S., Tung, P. D. & Cuc, H. S. (2001). "Sectoral Changes and Poverty", in Haighton, D., Haighton, J. & Phong, N. (eds.), *Living Standards During and Economic Boom*, Hanoi: Statistical Publishing House.

Bonschab, T. & Klump, R. (2004), "Operationalizing Pro-Poor Growth: Case Study Vietnam", *Operationalizing Pro-Poor Growth*, World Bank, Washington, D.C.

Charmes, J. (2000), "The Contribution of Informal Sector to GDP in Developing Countries: Assessment, Estimates, Methods, Orientations for the Future", *4th Meeting of the Delhi Group on Informal Sector Statistics*, International Labour Office, Geneva.

DFID (1997), "Eliminating World Poverty: A Challenge for the 21st Century", *CM 3789*, Department for International Development, Government of the United Kingdom, London.

Dollar, D. (2004). "Reform, Growth and Poverty", in Glewwe, P., Agrawal, N. & Dollar, D. (eds.), *Economic Growth, Poverty and Household Welfare in Vietnam*, Washington D.C.: The World Bank.

Fields, G. S. (2005), *A Guide to Multisector Labor Market Models*

Forteza, A., Rama, M. & World Bank, (2001), "Poverty and Human Resources", "Labor Market Rigidity and the Success of Economic Reforms Across More than One Hundred Countries", *Development Research Group*, Washington, D.C.: World Bank.

Foster, J., Greer, J. & Thorbecke, E. (1984). "Class of Decomposable Poverty Measures", *Econometrica*, 52, pp. 761-66.

Gennari, P. (2004), "The Estimation of Employment and Value Added of Informal Sector in Pakistan", *7th Meeting of the Expert Group on Informal Sector Statistics* (Delhi Group), UNESCAP, New Delhi.

Grimm, M. & Gunther, I. (2004), "How to Achieve Pro-poor Growth in a Poor Economy. The Case of Burkina Faso" *Operationalising Pro-Poor Growth*, AFD, DFID, BMZ (GTZ), KfW and World Bank,

Haughton, D., Haughton, J. & Phong, N. (Eds.) (2001), *Living Standards During Economic Boom*, Boston MA, Beacon Hill Institute Suffolk University.

Huong, P. L., Tuan, B. Q. & Mihn, D. H. (2003), "Employment Poverty Linkages and Policies in Vietnam", *Issues in Employment and Poverty Discussion Paper 9*, Recovery and Reconstruction Department, International Labour Office, Geneva.

Hussmanns, R., Mehran, F., Verma, V. & International Labour Office. (1990). "Surveys of Economically Active Population, Employment, Unemployment and Underemployment", *An ILO manual on Concepts and Methods*, Geneva: International Labour Office.

ILO (1998), "Declaration on Fundamental Principles and Rights at Work", *ILO*

ILO (2003), "Working Out of Poverty", *Report of the Director-General for the International Labour Conference*, International Labour Office, Geneva.

ILO (2005), 'Working time Database', *ILO*

IMF (2003), "Burkina Faso" *IMF Country Report No. 03/197*, International Monetary Fund, Washington D.C.

Kakwani, N., Neri, M. & Son, H. H. (2006), "Linkages between pro-poor growth, social programs and labor market: The recent Brazilian experience", International Poverty Center. *Working Paper No. 26*, UNDP, NY.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2003), "Governance Matters III: Governance Indicators 1996-2002", World Bank, Washington DC.

Kuznets, S. (1955). "Economic Growth and Income Inequality", *American Economic Review*, 45.

Le Dang Doanh (2002), "Foreign direct investment in Viet Nam: results, achievements, challenges and prospects", *paper prepared for the International Monetary Fund conference on Foreign Direct Investment*, Hanoi, 16-17 August 2002.,

Lewis, W. A. (1954). "Economic Development with Unlimited Supplies of Labour", *The Manchester School*, 22, pp. 139-191.

Majid, N. (2001), "The Size of the Working Poor Population in Developing Countries", *Employment Paper No. 2001/16*, International Labour Office, Geneva.

McKay, A. (1997). "Poverty Reduction through Economic Growth: Some Issues", *Journal of International Development*, 9.

Ministry of Economy and Finance of Burkina Faso & World Bank (2001), "Burkina Faso: Competitiveness and Economic Growth", Ouagadougou.

Ranis, G. & Fei, J. (1961). "A Theory of Economic Development", *American Economic Review*, 51, pp. 533-565.

Rutkowski, J. J. & World Bank. Europe and Central Asia Region, Human Development Sector Unit. (2003), "Does strict employment protection discourage job creation : evidence from Croatia": *World Bank Europe and Central Asia Region Human Development Sector Unit*, Washington, D.C.

Schneider, F. & Enste, D. (2000). "Informal Economies: Sizes, Causes, and Consequences", *The Journal of Economic Literature*, 38, pp. 77-114.

Squire, L. (1993), "Fighting Poverty", 105th Annual Meeting of the American Economic Association, *American Economic Review*,

World Bank "Doing Business", Washington, D.C. <http://rru.worldbank.org/DoingBusiness/default.aspx>.

World Bank “SIMA database”,

World Bank (1990), *World Development Report: Poverty*, New York: Oxford University Press.

World Bank (1995), “World Development Report”, Washington D.C.

World Bank (2004), “Burkina Faso: Reducing Poverty Through Sustained Equitable Growth. Poverty Assessment”, Washington, D.C.

## Annex

**Table A1. Correlates of Poverty, probit results, beginning and end of 1990s**

<i>Dependent variable: poor (dummy)</i>	<i>Vietnam</i>		<i>Burkina Faso</i>	
	1993	1998	1994	2003
Age of Household Head	-0.0255 (0.0038)***	-0.0259 (0.0032)***	-0.0021 (0.0024)	0.0042 (0.0021)**
Age <sup>2</sup> of Household Head	0.0212 (0.0039)***	0.0211 (0.0032)***	0.004 (0.0023)*	-0.0027 (0.0021)
Gender of Household Head (Female=1)	0.0198 (0.0194)	0.0157 (0.0164)	0.0364 (0.0251)	0.0996 (0.0241)***
ln(household size)	0.2338 (0.0196)***	0.2947 (0.0165)***	0.2695 (0.0105)***	0.2637 (0.0111)***
<b>Education of Head of Household</b>				
No education	-0.0035 (0.0208)	0.145 (0.0287)***	0.135 (0.0201)***	0.1076 (0.0190)***
Primary education	f	f	f	f
Secondary education	n/a	n/a	-0.1404 (0.0479)***	-0.0661 (0.0353)*
Technical and higher	n/a	n/a	-0.0898 (0.1725)	-0.2655 (0.0615)**
Lower secondary	-0.1026 (0.0234)***	-0.1125 (0.0148)***	n/a	n/a
Upper secondary	-0.2501 (0.0375)***	-0.1689 (0.0147)***	n/a	n/a
Vocational	-0.2462 (0.0290)***	-0.1808 (0.0163)***	n/a	n/a
University	-0.4368 (0.0434)***	-0.2461 (0.0120)***	n/a	n/a
<b>Labour Force Status of Head of Household</b>				
Formal worker	f	f	f	f
Informal workers	0.1877 (0.0261)***	0.2915 (0.0506)***	0.411 (0.0614)***	0.2551 (0.0539)***
Agriculture	0.1576	0.2908	0.4963	0.3538

LABOUR MARKETS: FROM GROWTH TO POVERTY

Unemployed	(0.0257)*** 0.0025 (0.1681)	(0.0404)*** 0.6212 (0.0707)***	(0.0335)*** 0.5452 (0.0384)***	(0.0289)*** 0.0951 (0.0979)
Inactive	0.1381 (0.0284)***	0.3172 (0.0563)***	0.5219 (0.0451)***	0.3537 (0.0546)***
<b>Household Characteristics</b>				
Received remittances	-0.0098 (0.0198)	-0.0237 (0.0152)	-0.0373 (0.0132)***	-0.0274 (0.0126)**
Have land? Y/N	n/a	n/a	0.028 (0.0223)	0.0006 (0.024)
Size of land used by household.	0 0	0 (0.0000)***	n/a	n/a
Received credit. Y/N?	0.0055 (0.0201)	0.053 (0.0147)***	-0.1337 (0.0195)***	-0.1641 (0.0193)***
Has livestock. Y.N?	-0.0575 (0.0239)**	-0.0228 (0.0194)	-0.1093 (0.0146)***	-0.102 (0.0163)***
Rural	0.3102 (0.0230)***	0.2199 (0.0145)***	0.2316 (0.0221)***	0.1592 (0.0190)***
<b>Region</b>				
Region1	0.056 (0.0274)**	0.0586 (0.0220)***	-0.1826 (0.0274)***	-0.0792 (0.0268)***
Region2	0.0883 (0.0261)***	0.0837 (0.0222)***	0.0623 (0.0321)**	0.0567 (0.0300)*
Region3	-0.1907 (0.0282)***	-0.06 (0.0211)***	0.0421 (0.0354)	-0.1035 (0.0266)***
Region4	-0.174 (0.0509)***	-0.0822 (0.0287)***	0.0963 (0.0344)***	-0.1292 (0.0240)***
Region5	-0.3277 (0.0274)***	-0.2358 (0.0133)***	-0.093 (0.0330)***	-0.0098 (0.0325)
Region6	-0.3016 (0.0246)***	-0.0727 (0.0194)***	-0.0094 (0.0305)	-0.2185 (0.0191)***
Region7	n/a	n/a	-0.0665 (0.0294)**	-0.1517 (0.0233)***
Region8	n/a	n/a	0.1389 (0.0337)***	0.1347 (0.0321)***
Region9	n/a	n/a	-0.0526 (0.0303)*	-0.001 (0.0293)
Region10	n/a	n/a	-0.2031 (0.0355)***	-0.0923 (0.0305)***
Region11	n/a	n/a	-0.0871 (0.0368)**	-0.0781 (0.0321)**
Region12	n/a	n/a	0.0596 (0.0325)*	0.085 (0.0359)**
Ethnic Minority	0.2049 (0.0252)***	0.2315 (0.0248)***	0.03 (0.0158)*	n/a
Observations	4799	5999	8574	8485
<b>L.R. Chi<sup>2</sup></b>	<b>1372.80***</b>	<b>1995.19***</b>	<b>2973.44***</b>	<b>2306.81***</b>

Notes:

- (a) The unit of observation is the head of household.
- (b) The dependent variable for the model is whether the household is below the absolute poverty line (Burkina: 1993: CFA F 53,219; 2004: CFA F 82,672, Vietnam: VND1, 160 in 1993 and VND1, 790 in 1998).
- (c) Standard errors are in brackets.
- (d) \*,\*\*,\*\*\* denote significance at the 10%, 5% and 1% level using two-tailed tests.
- (e) f denotes base category.
- (f) The coefficients refer to marginal effects in percentages, computed at the average value of the variables for continuous variables and for a discreet change from 0 to 1 for dummies.
- (g) L.R. Chi<sup>2</sup> (K-1) refers to the likelihood ratio used to test the goodness of fit of the model and is compared to a Chi<sup>2</sup> distribution of K-1 degrees of freedom, where K is the number of independent variables in the model. (K-1) is 25 for Vietnam and 29 for Burkina 1993 and 28 for Burkina 2004.
- (h) Regions are the following: For Vietnam: control= Northern Mountains, region 1= Northern Uplands, region 2: North Central, region 3: Central Coast, region 4: Central Highlands, region 5: South East, region 6: Mekong River Delta. For Burkina Faso: control= Plateau Centre, region 1: Haut Bassins, region 2: Boucle de Mouhoun, region 3: Sahel, region 4: Est, region 5: Sud Ouest, region6: Centre Nord, region7: Centre Ouest, region 8 : Nord, region 9 : Centre Est, region 10 : Centre, region 11 : Cascades, region 12 : Centre Sud.
- (i) Ethnic Minorities control group: Burkina: Mossi, Vietnam: Kinh and Chinese
- (j) N/a refers to not-applicable

**Table A2. Vietnam: Transition probabilities and percentage change in poverty incidence for movements between agriculture and informal employment. 1993-1998**

Transition probabilities	1998			
	Industry informal Wage-employment	Self-employment	Services informal Wage-employment	wage Self-employment
Agriculture	3.2	2.8	2.8	4.2
<b>% change in poverty incidence</b>				
Agriculture	-38.3	-52.5	-54.7	-46.9

Source: VLSS 1993, 98

**Table A3. Vietnam: Movements between sectors by employment sector and status, % of employed in panel 1993-1998 (population over 15 years)**

1993 Employment type	1998					Total
	Agriculture	Industry formal	Services formal	Industry informal	Services informal	
Agriculture	59.8	0.4	0.6	4.2	5.0	69.9
Industry formal	0.8	0.6	0.2	1.7	0.9	4.1
Services formal	1.1	0.1	1.5	0.5	5.4	8.5
Industry informal	2.6	0.2	0.3	4.0	1.4	8.5
Services informal	1.9	0.1	0.6	1.2	5.2	9.0
Total	66.1	1.4	3.1	11.6	17.8	100.0

Source: VLSS 1993, 98

**Table A4. Vietnam: Transition probabilities by settlement type, % (population over 15)**

1993	1998		Total
	Rural	Urban	
Rural	96.7	3.3	100
Urban	6.4	93.6	100
Total	85.5	14.5	100

Source: VLSS.

**Table A5. Probit Vietnam panel on probability of moving out of poverty, controlling for type of labour market transitions**

<b>Dependent variable: poor in 1993 &amp; not poor in 1998 (dummy)</b>	
Female93	0.0303 (0.0169)*
Age93	0 (0.003)
Age93	0.0078 (0.0043)*

---

<b>Education of individual</b>	
No education	f
Primary education	0.1736 (0.0222)***
Lower secondary	0.2272 (0.0241)***
Upper secondary	0.2308 (0.0393)***
Vocational	0.2194 (0.0484)***
University	0.319 (0.0433)***

---

<b>Labour market status of individual</b>	
Stayed in agriculture	f
Moved to agriculture	0.0795 (0.0350)**
Stayed in industry formal	0.0636 (0.193)
Moved to industry formal	0.3327 (0.0895)***
Stayed in industry informal	0.0826 (0.0473)*
Moved to industry informal	0.0541 (0.0320)*
Stayed in services formal	0.2789 (0.1240)**
Moved to services formal	0.2717 (0.0818)***
Stayed in services informal	0.0953 (0.0522)*
Moved to services informal	0.1643 (0.0312)***

---

<b>Household Characteristics</b>	
Lhsize 93	-0.095 (0.0226)***
Other household members changed employment status	0.0928 (0.0196)***
Stayed or moved to urban area	0.1222 (0.0326)***
Received remittances 93	0.0209 (0.023)

---

---

<b>Region</b>	
Northern Mountains	f
Red River Delta	0.1405 (0.0243)***
North Central	0.0789 (0.0260)***
Central Coast	0.1672 (0.0313)***
Central Highlands	0.1138 (0.0495)**
South East	0.399 (0.0267)***
Mekong River Delta	0.1251 (0.0287)***
Observations	4064
LR chi2(27) = 519.98	
Pseudo R2 = 0.0926	

---

Source VLSS

Notes:

- (a) the unit of observation is the individual.
- (b) The dependent variable for the model is whether an individual's consumption pc was below the poverty line in 1993 and above it in 1998. (VND1,160 in 1993 and VND1,790 in 1998).
- (c) standard errors are in brackets.
- (d) \*,\*\*,\*\*\* denote significance at the 10%, 5% and 1% level using two-tailed tests.
- (e) f denotes base category.
- (f) the coefficients refer to marginal effects in percentages, computed at the average value of the variables for continuous variables and for a discreet change from 0 to 1 for dummies.
- (g) L.R. Chi<sup>2</sup> (K-1) refers to the likelihood ratio used to test the goodness of fit of the model and is compared to a Chi<sup>2</sup> distribution of K-1 degrees of freedom, where K is the number of independent variables in the model.

**Table A6. Definitions of labour market categories**

	<b>Burkina Faso</b>	<b>Vietnam</b>
Employed	Worked during the last 7 days in the main or additional job.	Worked during the last 7 days in the main or additional job.
Formal employees	Salaried employees with paid social contributions	Employees with written contract and paid social contributions.
Formal self-employed	Own-account workers/employers in a family business outside agriculture with more than 5 employees or paid social contributions	Own-account workers/employers in a family business outside agriculture with fixed location; if hired labour exists, they have a written contract or paid sick leave.
Others (formal)	Others not classified into above categories; 'others' in agriculture reclassified as farmers.	Others not classified into above categories; 'others' in agriculture reclassified as farmers.
Informal employees	Employees with no written contract or no social contributions paid.	Employees with no written contract or no social contributions paid.
Informal self-employed	Own-account workers/employers in a family business outside agriculture with 5 or less employees	Own-account workers/employers in a family business outside agriculture with no fixed location; or, if hired labour exists, they have no written contract or no sick leave paid.
Unpaid family workers (informal)	Worked unpaid for a household enterprise outside agriculture; those in agriculture reclassified as farmers.	Worked unpaid for a household enterprise outside agriculture; those in agriculture reclassified as farmers.
Farmers	Self-employed in agriculture, 'others' and 'unpaid family workers' in agriculture.	Self-employed in agriculture, 'others' and 'unpaid family workers' in agriculture.

LABOUR MARKETS: FROM GROWTH TO POVERTY

Unemployed	Not worked in the main or additional job over the reference period (7 days) and looking for job.	Not worked in the main or additional job over the reference period (7 days) and looking for job.
Inactive	Persons of the working age who were not employed or unemployed.	Persons of the working age who were not employed or unemployed.
Agriculture	All workers working in agriculture	All workers working in agriculture
Industry formal	Formal workers in industry	Formal workers in industry
Industry informal	Informal workers in industry	Informal workers in industry
Services formal	Formal workers in services	Formal workers in services
Services informal	Informal workers in services	Informal workers in services
Working age population	Population over 15 years	Population over 15 years
Welfare indicator	Consumption expenditure	Consumption expenditure
Welfare deflator	Inter-regional and inter-temporal	Regional and monthly price deflator
Absolute poverty line (value in local currency)		
Yr. 1	53,219 CFA F	1,160 VND
Yr. 2	82,672 CFA F	1,790 VND
Equivalence scales	N/A	No Per capita
Earnings	Monthly wages for urban households only. Not clear whether or not it includes payments in kind	Monthly wage received from the main job. Wage employed only. Includes in-kind payment but excludes social contribution payments.

Source: EPM I, III (1994 and 2003) and VLSS.