PART I

# Major trends in wages

### 1 The global economic context: Crisis, recession and employment

#### 1.1 Economic growth rates vary widely by region

After a period of robust economic growth in the early years of the twenty-first century, the world economy contracted in 2009 as a result of the global financial and economic crisis (see figure 1). The impact of the crisis has been felt very diversely across the globe. In the group of more developed economies, 2009 came to be seen as the year of the "Great Recession", the most severe economic downturn since the "Great Depression" of the 1930s. While the recovery in 2010 was initially stronger than expected, the sovereign debt crisis and the various austerity measures that accompanied it led to a significant deceleration of growth thereafter, particularly in Europe. The group of emerging markets and developing countries, by contrast, avoided a generalized recession and has succeeded in maintaining higher growth rates than developed economies since the year 2000.



Figure 1 Annual average economic growth, 1995-2012 (GDP in constant prices)

Note: Country groups are those used by the IMF and described in the appendix of IMF, 2012b. Major advanced economies include Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. Emerging markets and developing economies comprise a group of 151 economies that are not classified as advanced economies. Figures for 2012 are projections.

Source: IMF World Economic Outlook database.



Figure 2 Total unemployment rates in the world and in developed economies, 2005–11 (as % of labour force)

Note: Figures for 2011 are preliminary estimates. For the definition of "developed economies", see Appendix I. Source: ILO, 2012a.



### Figure 3 Annual average global real wage growth, 2006–11

\* Growth rates published as "provisional estimates" (based on coverage of c. 75%).

Note: Global wage growth is calculated as a weighted average of year-on-year growth in real average monthly wages in 124 countries, covering 94.3 per cent of all employees in the world (for a description of the methodology, see Appendix I).

2

#### **1.2 Global unemployment rates remain high**

The impact of the global financial and economic crisis on labour markets has often been analysed through the prism of the unemployment rate, particularly in developed economies, where unemployment rose from less than 6 per cent to more than 8 per cent of the labour force, with double-digit figures in Greece, Ireland, Portugal and Spain for example.<sup>1</sup> In developing countries unemployment rates fluctuated less. Even so, worldwide unemployment has increased by 27 million since the start of the crisis, bringing the overall number of unemployed to about 200 million or 6 per cent of the global labour force (figure 2). Perhaps the most serious concern relates to youth unemployment, which has reached alarming proportions. The ILO estimates that in 2011 unemployment affected 75 million young people aged 15–24 worldwide, representing more than 12 per cent of all young people. Many more do not appear in the unemployment statistics because they have become so discouraged as to have stopped looking for work.

### 2 Real average wages

#### 2.1 Slowing growth across a varied landscape

#### Global estimates of real average wage growth

Employment and unemployment figures do not tell the full story of the impact of the crisis on labour markets. The present report looks at the wages of paid employees.<sup>2</sup> The main unit of measure used for wages is the monthly average wage, rather than hourly or daily wages, expressed in real terms (i.e. adjusted for inflation), which has been identified as an ILO "decent work indicator".<sup>3</sup> Trends in real average monthly wage reflect changes in average labour income (before taxes and transfers) and hence provide a clearer picture of variations in the purchasing power of wages. As will be discussed in the next sections of the report, trends in real average wages vary across regions and countries. Yet the impact of the crisis is clearly noticeable at the aggregate level. Figure 3 reveals that for the last four successive years (from 2008 to 2011), the growth in real monthly average wages remained positive but has fallen to well below pre-crisis rates. This is true whether or not we include official wage statistics from China, although omitting China from the analysis significantly reduces global wage growth, given the country's large size (in terms of number of wage-earners) and its exceptionally high rate of economic growth.<sup>4</sup>

#### Comparability of national statistics and working time

These global estimates (and the subsequent regional estimates) need to be interpreted with care. First, there are differences across countries in the way wages are estimated by national statistical offices. While the most developed economies carry out regular establishment surveys and specific surveys on the structure of earnings, other countries collect wage data through labour force surveys, and definitions of what is counted as a wage sometimes differ. Coverage can also vary across countries. While the ILO generally seeks to obtain data for all paid employees, in practice coverage is sometimes restricted to certain geographical areas (for example, metropolitan areas) or specific subgroups of employees (for example, non-agricultural employees). As with many other economic variables, these differences make it difficult to compare levels across countries. Yet it is still possible to draw meaningful conclusions about changes over time.

Secondly, changes in monthly average wages summarize innumerable changes at enterprise level and at sectoral level, including not only changes in the hourly wage rate but also changes in the number of hours worked. In many countries the global economic crisis has led to shorter hours of work owing to reductions in the amount of overtime, an increase in time-related underemployment, and/or an increase in the proportion of part-time relative to full-time employees, all of which negatively affect total monthly wages. Various countries have also implemented "work-sharing" programmes: reductions in working time in order to avoid lay-offs.<sup>5</sup> Most typically, a three- or four-day working week has replaced the more usual five-day working week. In other instances, daily hours have been reduced or plants have been temporarily shut down for periods of several weeks or even months. A reduction in working hours usually leads to proportional reductions in monthly wages, but in the context of "work-sharing" programmes governments have often provided wage supplements through partial unemployment compensation.<sup>6</sup>

#### The "composition effect"

The use of aggregate wage data, as opposed to tracking a panel of individuals, may also give rise to what is known as a "composition effect": a change in average wage levels that results from a change in the composition of the wage-earner segment of the labour force rather than from changes in earnings of those who remain employed throughout. This may introduce a bias. As pointed out in the previous edition of the *Global Wage Report* (ILO, 2010a), this bias may be "countercyclical", meaning that aggregate data may underestimate the decline in the real wages of individuals who keep their jobs during recessions and, later, underestimate the upward trend in their wages during recoveries. For example, low-skilled workers with temporary employment contracts might be the first to be dismissed by enterprises during a recession. Since the remaining workforce then consists of relatively better-paid workers, this can bias trends in average wages upwards. The reverse effect might be observed during the recovery, if low-paid workers are the first to be rehired (see also ILO, 2012b).

#### 2.2 The gender pay gap

#### A smaller gap but women may not be better off

Figure 4 presents changes in the average gender pay gap between 1999–2007 and 2008–11, illustrating the evolution of the gap in all countries over the crisis where such data are available. As the data show, the gender pay gap has declined in the crisis years in most countries. However, interpretation of this decline is complicated by the "composition effect", as a narrowing of the gender pay gap does not necessarily imply that the situation of women has improved. The case of Estonia shows how a decline in the gender pay gap can be achieved not through improvements in the situation of

4



#### Figure 4 The gender pay gap (GPG), 1999-2007 and 2008-11

Note: The gender pay gap (GPG) is defined as  $GPG = ((Em - Ew)/Em)^*100$ , where Em stands for the average wage of men and Ew is the average wage of women (see ILO, 2012b). The change in the GPG is defined as the average of the GPG between 2008 and 11 minus the average of the GPG between 1997 and 2007. Data are not available for all countries for all years; averages for the two periods are calculated using the data available for each country during both periods. Source: ILO Global Wage Database.

women but through a deterioration of the labour market circumstances of men relative to women. Figure 5 illustrates the tendency for the gender pay gap in Estonia to change in a pro-cyclical fashion, widening in times of growth and narrowing during recession. The marked decline in 2009, during the most recent crisis, happened because men were more concentrated in sectors most adversely affected by the crisis and worked fewer hours. Consequently, in 2009 the gender pay gap narrowed because of a decrease in male wages as a result of a decline in the number of hours worked by men (see Anspal, Kraut and Rõõm, 2010.)

Figure 4 focuses on the direction of change between the two periods, rather than on differences among countries. This is because differences in the data sources and/ or employee coverage used by different countries affect estimates of the gender pay gap. The case of Norway, shown in figure 6, illustrates how the gender pay gap varies depending on whether all, full-time, or part-time employees are chosen. The gender pay gap for part-time work is low, indicating that men and women who work part-time have similar pay. In contrast, the gender pay gap for full-time employees is higher, as male full-time employees earn considerably more than female full-time employees. Finally, the gender pay gap for all employees is even higher than that for full-time employees, owing to the fact that women are overrepresented among part-time workers, whose hourly wage rates were only about 80 per cent of those of full-time workers in 2011.



Figure 5 The gender pay gap in Estonia, 1993–2009

Note: The gender pay gap (GPG) is defined as  $GPG = ((Em - Ew)/Em)^*100$ , where Em stands for the average wage of men and Ew is the average wage of women (see ILO, 2012b).

Source: Graph reproduced from Anspal, Kraut and Rõõm, 2010.

7



Figure 6 The gender pay gap in Norway by employment status, 2008-11

Note: The gender pay gap (GPG) is defined as GPG = ((Em - Ew)/Em)\*100, where Em stands for the average wage of men and Ew is the average wage of women (see ILO, 2012b).

Source: ILO calculations based on data from Statistics Norway.

Changes over time are less sensitive to employee coverage. Even so, interpretation of changes in the gender pay gap over time should be considered alongside other labour market indicators which reflect changes in the conditions of work and employment for women.

### 3 Regional estimates

#### 3.1 Overall growth masks a complex picture

As noted above, there are large differences in the growth rate of real average wages across regions and countries, with wages generally growing faster in areas of stronger economic growth. Figure 7 shows our estimates of the growth of real monthly average wages by region from 2006, including the years of the crisis. As with our global estimate, the regional estimates are weighted estimates (as explained in Appendix I) and so are heavily influenced by wage trends in larger economies, such as China in Asia, the United States in the developed economies, Russia and Ukraine in Eastern Europe and Central Asia, Brazil or Mexico in Latin America and the Caribbean, or South Africa in the



Figure 7 Annual average real wage growth by region, 2006–11



\* Growth rates published as "provisional estimates" (based on coverage of c.75 %).

\*\* Growth rates published as "tentative estimates" (based on coverage of c.40-c.74%).

Note: For coverage and methodology, see Appendix I.

Source: ILO Global Wage Database.

African continent. We see that in developed economies the growth of real wages fluctuated within a narrow range of approximately plus and minus 1 per cent. In other regions, the fluctuations were typically larger.

Table 1 takes a longer view and shows the cumulative increase in real average wages since 2000. We see that between 2000 and 2011 global real monthly average wages increased by close to one quarter, but differences across regions are stark. In Asia real average wages approximately doubled, in Latin America and the Caribbean as well as in Africa they increased by slightly less than the world average, while in developed economies they increased by about 5 per cent. In Eastern Europe and Central Asia average wages almost tripled: as will be shown later, this was in part a recovery of the ground that was lost in the early phase of the transition towards market economies in the 1990s. In the Middle East, our tentative estimates suggest that wages may have declined.

<sup>()</sup> Growth rates published but likely to change (based on coverage of less than 40%).

Regional group	2000	2006	2007	2008	2009	2010	2011
Africa	100.0	103.9	105.3	108.1**	108.6**	115.4**	117.8**
Asia	100.0	149.0	158.8	165.1	174.6	185.6	(194.9)
Eastern Europe and Central Asia	100.0	204.4	233.9	253.4	244.4	257.9	271.3
Developed economies	100.0	103.3	104.5	104.1	104.9	105.5	105.0
Latin America and the Caribbean	100.0	105.4	108.5	109.3	111.0	112.6	115.1
Middle East	100.0	98.3	100.1	97.2	95.8**	(94.6)	(94.4)
World	100.0	112.8	116.1	117.3	118.8	121.3	122.7*

#### Table 1 Cumulative real wage growth by region since 2000 (index: 2000 = 100)

\* Growth rates published as "Provisional estimates" (based on coverage of c. 75%).

\*\* Growth rates published as "Tentative estimates" (based on coverage of c. 40%- c. 74%).

() Growth rates published but likely to change (based on coverage of less than 40%).

Note: For coverage and methodology, see Appendix I.

Source: ILO Global Wage Database.

In spite of the faster growth in real average wages in emerging regions over the last decade, absolute differences in wage levels across countries and regions remain considerable. Figure 8 shows estimates by the US Bureau of Labor Statistics comparing hourly direct pay for time worked in manufacturing in 2010. The hourly rate of pay varied from almost US\$35 in Denmark, through a little more than US\$23 in the United States, to US\$13 in Greece, between US\$5 and US\$6 in Brazil, and less than US\$1.50 in the Philippines. Using a different and non-comparable methodology, total hourly compensation costs in manufacturing were estimated at US\$1.36 in China for 2008 and at US\$1.17 in India for 2007 (United States Department of Labor, Bureau of Labor Statistics, 2011). Although these differences are measured in current US dollars and therefore are dependent on exchange rate fluctuations, they nonetheless point towards the persistence of wide gaps in wages and labour productivity across the world.

#### 3.2 Developed economies

#### Wages and inflation

In developed economies, average wages underwent a double dip, falling in 2008 and again in 2011 (see figure 7).<sup>7</sup> Figure 9, which highlights trends in *nominal* average wages and price inflation in advanced economies, shows that in 2008 unusually high inflation exceeded nominal wage increases, and hence led to falling real wages.<sup>8</sup> In 2009, the year of the global economic recession, both nominal wages and consumer prices more or less froze. Since then, the recovery of nominal wage growth stalled in 2011 but the increase in consumer prices returned to pre-crisis rates, which explains the fall in real wages in that year.



## Figure 8 International comparison of hourly direct pay for time worked in manufacturing, 2010 (US\$)

Note: Direct pay for time worked is wages and salaries for time actually worked.

Source: United States Department of Labor, Bureau of Labor Statistics (BLS), 2011.



Figure 9 Trends in nominal wage growth and inflation in advanced economies, 2006–11 (%)

Note: The figure exclusively refers to countries classified by the IMF World Economic Outlook report as "advanced economies" and hence excludes certain countries classified in this report as "developed economies" (for a list of these countries, see Appendix I). Nominal wage growth and inflation figures are not strictly comparable across countries owing to differences in the way each country is weighted in the regional estimate. The figure nonetheless illustrates the argument in the text.

Sources: ILO Global WageDatabase; IMF World Economic Outlook database.

#### Wages and productivity

Figure 10 shows the average annual growth rates in output and in the number of people employed in developed countries for the years before the crisis (1999–2007) and after the beginning of the crisis (2008–11). Figure 11 shows the average annual growth rates of real average wages and of labour productivity as measured by real output per person employed.<sup>9</sup> Taken together, these two figures provide a picture of how economic growth affected the labour force and how the "Great Recession" affected labour markets. Looking at the period before the crisis, we see that employment grew by an amount equal to or less than GDP in almost all countries (as can be seen by the fact that only Italy and Spain lie to the right of the 45-degree line bisecting figure 10(a)). Because GDP grew faster than employment, labour productivity (GDP per employed person) by definition increased. This can be seen by the fact that all countries except Italy and Spain lie on the right of the vertical axis in figure 11(a).

Did the growth of labour productivity translate into higher real wages? Figure 11 shows that most countries did indeed experience a period of growth in both real wages and productivity (indicated by the cluster of countries in the top right corner of figure 11(a)). In a number of countries, such as in Denmark, France, Finland, the United Kingdom, Romania and the Czech Republic, there was a close connection between wage and productivity growth (as shown in figure 11). But there are also many countries where the two variables were less closely synchronized. Figure 11(a) shows



Figure 10 Growth in output and employment in developed economies, 1999-2007 and 2008-11 (%)

Note: For country abbreviations, see Appendix I.



# Figure 11 Growth in real wages and labour productivity in developed economies, 1999–2007 and 2008–11 (%)



Note: Both the top (a–b) and bottom (c–d) pairs of graphs refer to countries in the developed economies region. They have been separated only for reasons of legibility. If 1999, 2007, 2008 or 2011 data were unavailable, the next closest period's data point was used to estimate the trend. For country abbreviations, see Appendix I.

Sources: ILO Global Wage Database; ILO Trends Econometric Model, March 2012.

that in Greece and Iceland average wages grew ahead of labour productivity, while in Spain and Italy labour productivity declined but wages did so only marginally (in the case of Italy) or not at all (in the case of Spain). In some of the largest economies of the region, by contrast, wage growth trailed behind productivity growth: this occurred in the United States, in Japan and especially in Germany, where average wages declined in spite of positive average labour productivity growth in the years 1999–2007 (see figure 35 for more details on Germany).

#### Economic growth and employment growth

What has happened in the years since the "Great Recession"? It is apparent from figure 10(b) that all those countries where GDP contracted on average over 2008–11 also saw employment falling or at best static (with the exception of Luxembourg, where employment grew). Conversely, most economies with positive GDP growth during the crisis also succeeded in expanding employment. Interestingly, though, during the years of the crisis employment suffered more than output in a number of countries, including Spain, Ireland, Portugal and Bulgaria. In the United States, employment fell in spite of slow but positive economic growth.

Consequently, it is clear from figures 11 (b) and (d), though, that most countries recorded positive labour productivity growth during 2008–11 in spite of the crisis (as shown by the fact that most countries are on the right side of the vertical axis in these sections of the figure). Many of these countries also saw moderate increases in real wages, including Germany, which seems to have changed course of action, allowing for wage growth in excess of labour productivity after years of wage moderation. One of the exceptions is the United Kingdom, where in spite of productivity gains real average wages declined sharply under the influence of relatively high inflation. In some countries wages declined considerably more than labour productivity: these included Greece and some newer EU countries. In Greece, where wages were growing ahead of productivity before the crisis, average wages were forced down by austerity programmes and cumulatively fell by close to 15 per cent over 2010 and 2011 alone. Overall, a comparison of figures 10 and 11 produces little evidence of a simple tradeoff between wage moderation and employment growth during the crisis.

#### 3.3 Eastern Europe and Central Asia

#### From recovery to crisis

In the group of (non-EU) Eastern European and Central Asian countries, the regional growth rate in real average wages fluctuated widely, from double-digit rates before the crisis to the hard landing of 2009. Although positive wage growth returned in 2010 and 2011, the rates reached then were not nearly as high as before the crisis. Taken together, figures 12 and 13 show that before the crisis, output expanded faster than employment (figure 12), as a result of which labour productivity grew in all countries (figure 13). Strikingly, the gains in productivity before the crisis were accompanied by even larger real wage increases of more than 10 per cent a year, on average, in a majority of countries. In many cases, this was a result of the process of recovery from the transition to market economies. Figure 14 shows that real wages in Russia initially fell to less than



# Figure 12 Growth in output and employment in Eastern Europe and Central Asia, 1999–2007 and 2008–11 (%)

Note: For country abbreviations, see Appendix I.



# Figure 13 Growth in wages and labour productivity in Eastern Europe and Central Asia, 1999–2007 and 2008–11 (%)

Note: If data for 1999, 2007, 2008 or 2011 were unavailable, the next closest year's data point was used to estimate the trend. For country abbreviations, see Appendix I.

Sources: ILO Global Wage Database; ILO Trends Econometric Model, March 2012.



Figure 14 Index of real wages in the Russian Federation since 1990 (1990 = 100)

Source: ILO calculations based on data from the Russian Federation Federal State Statistics Service, 2011.

half of their 1990 value, before progressively recovering and tripling in the years after 2000. Ukraine followed a similar pattern, with real wages falling sharply between 1992 and 1999 before increasing more than threefold in real terms up to 2009.<sup>10</sup>

#### Wages reined in

More recently, between 2008 and 2011, productivity grew more slowly but remained largely positive, and real wage growth became more closely aligned with productivity growth. There were exceptions: in Serbia and Albania, real wages fell in spite of positive labour productivity growth, a reflection of the freezing of nominal wages in the public sector. In Serbia, an agreement with the IMF signed in April 2009 included a commitment by the Serbian Government to keep public sector wages and pensions frozen in nominal terms in 2009 and 2010 – as a result of which real wages in the public administration declined (Arandarenko and Avlijas, 2011). This measure came with a ban on new employment in the public sector. Similarly, on the advice of the IMF, budgetary restrictions on wage growth in the public sector have been introduced in Albania.

But the regional picture shown in figure 7 is most strongly influenced by the trends in the two largest economies, namely the Russian Federation and Ukraine. In both countries wage growth slowed in 2008 and turned negative in 2009, before bouncing back to about half of pre-crisis rates in subsequent years. An analysis of the impact of the crisis on the Ukrainian labour market reveals that much of the decline in monthly wages was due to an increase in involuntary underemployment in 2009, when every fifth employee in Ukraine worked fewer hours than he or she would have liked. Many employees had to go on unpaid leave, especially in the industrial sector (ILO, 2011d),<sup>11</sup> while others saw their basic wages frozen and their bonuses cut (Kulikov and Blyzniuk, 2010).

#### 3.4 Asia and the Pacific

#### High growth, dominated by China

The trends in Asia, and particularly in East Asia, contrast sharply with those in other regions. Reflecting the region's resilient economic performance during the crisis, wages in Asia have continued to grow at high rates (as shown in figure 7). This particularly reflects the influence of China, where wages in "urban units" increased on average at double-digit annual rates over the full decade, according to the *China Yearbook of Statistics*. Using these official figures of an annual rate of growth of 12 per cent per annum, real average wages in China have more than tripled over the decade from 2000 to 2010, prompting questions about the possible end of "cheap labour" in China. In figure 15, we see that without China, where the growth of GDP and wages was exceptionally high during the past years, the picture looks considerably different, reflecting the less positive story of wages in countries such as the Republic of Korea or India during the last four years.

Looking at figures 16 and 17, we see that most countries in the region had economic growth rates that averaged 5 per cent or more in the years 1999–2007, accompanied in the sub-period from 2002 to 2007 by average annual employment growth of 1.2 per cent in East Asia, 1.8 per cent per annum in South-East Asia and the Pacific, and 2.2 per cent in South Asia (ILO, 2012a). It must be emphasized at this point, however, that the growth in overall employment in developing countries – where most people cannot afford to be unemployed – is closely related to trends in



Figure 15 Annual average real wage growth in Asia, 2006-11

() Growth rates published but likely to change (based on coverage of less than 40%). Note: For coverage and methodology, see Appendix I.



#### Figure 16 Growth in output and employment in Asia, 1997–2007 and 2008–11 (%)

Note: For country abbreviations, see Appendix I.



# Figure 17 Growth in output and in numbers of paid employees in Asia, 1997–2007 and 2008–11 (%)

Note: For country abbreviations, see Appendix I.

23

the size of the labour force. Hence we also present GDP growth alongside the growth in the number of paid employees in figure 17, which leaves out the self-employed or family helpers. Even so, we see that output growth exceeded the growth of paid employment in most countries.

#### A caveat on labour productivity: the role of paid employment

What has been the impact on wages of these growth rates? The juxtaposition of data on average wage growth and labour productivity, as in figure 18, must be interpreted with care in developing countries. This is because average wages refer to the earnings of *paid* employees (who represent less than 50 per cent of workers in some Asian countries), while labour productivity measures the GDP of *all* employed people (both employees and self-employed). A better comparison would be between average wages and the productivity of paid employees, but data on the latter are generally not available. In principle, one suspects that the growth in output across all workers underestimates the growth in labour productivity of paid employees, a substantial proportion of whom work in the more productive and dynamic industrial sectors. Also, when comparing wage growth and productivity growth in China, one must keep in mind that the former only cover State-owned enterprises, collective-owned units and other type of companies linked to the State (see note 4). The decline in the labour share in China documented in Part II of this report suggests that wage growth was in fact lower than productivity growth in China.

#### Purchasing power under threat

In spite of these caveats, figure 18 clearly shows that in general gains in both productivity and real wages have been positive, and quite substantial, both before and during the years of the crisis. Yet in some countries, wage growth as measured by official statistics was clearly disappointing over the period 1999–2007. Among the East Asian countries, relatively low wage growth was recorded, for example, in Thailand. In South Asia, too, measures of real average wages stagnated in the decade before the crisis. In India, wage trends are somewhat unclear. The authoritative sources of data on wage growth in India are the Annual Survey of Industries by the Central Statistics Office and the real wage index published by the Labour Bureau. Both data sources indicate that real wages declined in a majority of recent years, shrinking the purchasing power of wage earners. This would explain the many concerns expressed by workers in India about rapidly increasing prices, particularly food prices. The trend, however, is surprising in the light of the country's rapid economic growth over the last decade. It also contrasts with our analysis of the Employment–Unemployment Survey from the National Sample Survey Office (NSSO), conducted every five years along with the Consumer Expenditure Survey, in which salaried and casual workers report a 150 per cent increase in their earnings - much higher than the 52 per cent increase in the consumer price index - in the five years between 2004/05 and 2009/10.



Figure 18 Growth in wages and labour productivity in Asia, 1997-2007 and 2008-11 (%)

Note: If data for 1999, 2007, 2008 or 2011 were unavailable, the next closest year's data point was used to estimate the trend. For country abbreviations, see Appendix I.

#### 25

#### 3.5 Latin America and the Caribbean

#### Crisis withstood by robust performance

In Latin America and the Caribbean, the financial crisis interrupted a strong economic cycle. Figure 19(a) shows that during the pre-crisis years 1999–2007, average annual growth in both GDP and employment was positive and robust in a majority of countries, while figure 19(b) reflects the relatively short duration of the global crisis in this region. We see that over the period 2008–11, both GDP and employment grew at fairly solid rates in a majority of countries, in spite of the economic contraction in some major economies in 2009. Note, though, that in Central America and the Caribbean, where economies are strongly connected to the North American market, the recovery was slower than in South America.

Figure 20 covers the period between 2004, which marked the start of the continent's strong economic cycle, and 2011 – a period over which GDP grew on average by 4.4 per cent. We see that Latin America was severely affected by the global economic crisis in 2009, but rebounded rapidly in 2010, supported by the recovery in commodity prices as well as the implementation of countercyclical monetary and fiscal policies. The latter was possible as the region enjoyed a healthy fiscal situation and had reduced external debt to manageable levels during the years of expansion. What is striking is not only that the recession was short, but also that the recovery involved the creation of new jobs and led to a significant reduction in the unemployment rate, which fell from 10.3 per cent in 2004 to 6.8 per cent in 2011 (as illustrated in figure 20).

#### Positive figures explained by data from Brazil

These economic trends are also reflected in the wage data. Regional estimates (in figure 7) show that in Latin America and the Caribbean average real wages grew in all years between 2006 and 2011, in spite of the crisis in 2009. As in Asia, the lowest real wage growth occurred in 2008 as a result of a peak in inflation, reflecting increases in international prices of foodstuffs and oil. On the contrary, in 2009 international prices fell significantly as a result of the international slowdown, on average halving inflation in the region. This significant reduction in inflation slightly improved the purchasing power of wages, despite the economic contraction.

Overall, these regional wage trends in Latin America and the Caribbean are heavily influenced by large countries such as Brazil, where wage growth remained positive throughout the period (see figure 21).<sup>12</sup> Looking at the performance of a group of 14 countries for which we have full information for the period 2005–10, we observe that many other countries experienced some deterioration in their real wages in 2008 and again in 2010. Real wages contracted in ten out of 14 countries in 2008, while in 2010 there were six countries where this occurred. In both years, the majority of countries where real wages fell were in Central America and the Caribbean, as their economies are more dependent on the economic situation in the United States.





Note: For country abbreviations, see Appendix I.



Figure 20 Economic growth and unemployment in Latin America and the Caribbean, 2004–11 (%)

Sources: IMF World Economic Outlook database; ILO, 2011e.



Figure 21 Annual average real wage growth in Brazil, 2006-11

Source: ILO Global Wage Database.

#### Productivity up, employment up, wages up – but not everywhere

Figure 22 provides data on the annual growth of average real monthly wages during the period 2004–11, which covers the years of strong economic growth and for which consistent wage data are available for a relatively large number of countries. We see that, overall, the countries with high labour productivity growth also showed a substantial increase in real wages. So for example, average real wages grew at over 3 per cent per annum in Brazil, Peru and Uruguay, and at over 2 per cent per annum in Chile and Costa Rica. In the overwhelming majority of these countries, the unemployment rate declined, meaning that labour market indicators generally improved. Conversely, countries where GDP per capita grew only slowly during this period also saw only modest improvements (as in Honduras and Mexico) or even reductions (as in Nicaragua and El Salvador) in real wages. Three countries where good economic performance was not reflected in average real wage growth are Colombia, the Dominican Republic and Panama.

## Figure 22 Growth in wages and labour productivity in selected Latin American and Caribbean countries, 2004–11 (%)



Note: If data for 2004 or 2011 were unavailable, the next closest year's data point was used to estimate the trend. For country abbreviations, see Appendix I. Sources: ILO Global Wage Database; ILO Trends Econometric Model, March 2012.

#### 29

#### 3.6 The Middle East

#### Declining trade saps demand for migrant workers

The global economic crisis had the effect of initially slowing down economic growth in most countries in the Middle East (figure 23). The main impact of the crisis in this region took the form of declining international trade. There was a sharp drop in the demand for exports from less developed Middle East economies, and a temporary fall in 2009 of the value of exports for oil producers in the countries of the Gulf Cooperation Council (GCC),<sup>13</sup> after which oil prices and government spending both increased. In the GCC countries, where expatriate workers far outnumber native workers, the slowdown in employment growth was perhaps only temporary (though statistical information is lacking), with the exception of the Emirate of Dubai where the economic downturn appears to have translated into a reduced demand for migrant workers, particularly in construction. Migration issues are also prominent for other Middle Eastern countries, with many Syrians working in the construction sector in Lebanon, or a majority of workers in the Jordanian apparel industry coming from South Asia.

#### Statistical challenges

The effects of the global crisis on wages in this region are difficult to assess, for at least two reasons. First, few countries publish regular wage statistics. The only country in the Middle East to produce quarterly surveys on wages is the Kingdom of Bahrain, whose Labour Market Regulatory Authority publishes estimated average basic wages of all employees, compiled from a combination of household surveys and administrative data. By contrast, Saudi Arabia publishes annual data from its Annual Economic Survey of Establishments with a two-year lag, meaning that the most recent statistics available at the time of writing of this report were for the year 2009. Also, the wage statistics in the region are sometimes of questionable quality, though some improvements are being made in this respect: Tunisia, for example, conducted its first wage survey with the assistance of the ILO in 2011. Nevertheless, such data as are available suggest that in a majority of Middle Eastern countries wages have not increased very much, or perhaps even declined, during the past few years (figure 24).

Another complication arises with interpretation of the wage data, because average wages can hide tremendous differences between those of native workers and those of migrant workers, whose respective wages are the outcomes of very different systems of wage determination. In the GCC economies, large differences in wages between expatriate and native workers are the combined result of "Arabization" processes, which seek to increase the proportion of local workers in the private sector; the sponsorship system, which restricts the free movement of migrant workers between jobs; and public employment policies, which generate jobs that are exclusively directed at local people and offer wages that in many cases are higher than those available in the private sector. In fact, the low participation rate of women in the labour market together with the high proportion of women working in public sector jobs sometimes results in a negative gender pay gap (a situation where women earn more than men). This was the case, for example, in Syria, where in 2010 only about 13 per cent of





Note: For country abbreviations, see Appendix I.

women were economically active, but where about 74 per cent of women in paid employment worked in the public sector, where wages were about 1.5 times those prevailing in the private sector (see Syrian Arab Republic, Central Bureau of Statistics, 2011a, b).

#### The Arab Spring: Local workers and migrant remittances

Findings from surveys show that "fair pay" and high costs of living are top priorities among young people in the Arab region (ASDA'A, 2012), and the Arab Spring seems to have prompted several countries to make further increases in wages for local people working in the public sector. Yet when it comes to the private sector, minimum wages and collective bargaining are underdeveloped in the Arab region. This has several unintended consequences including asymmetric bargaining power between workers and employers and the possibility of social and political unrest. Although remittances from GCC countries seem to have remained more resilient than expected, other destination countries may have passed the cost of the crisis onto migrant workers. In countries that are net senders of migrants, drops in remittances severely affect household incomes, with repercussions in the form of reduced aggregate consumption and savings, increasing rates of unemployment and a drop in the country's own wages (World Bank, 2011).



Figure 24 Growth in wages and labour productivity in the Middle East, 1999-2011 (%)

Note: If data for 1999 or 2011 were unavailable, the next closest year's data point was used to estimate the trend. For country abbreviations, see Appendix I. Sources: ILO Global Wage Database; ILO Trends Econometric Model, March 2012.

#### 3.7 Africa

#### Transition and turbulence

In the years before the crisis, Africa went through a period of relatively rapid economic growth, with annual growth rates of around 6.5 per cent over the period 2004–08. During the years 2008–11 the economic environment deteriorated, and North African countries in particular faced both external and internal challenges. External challenges arose from the close economic connection with the depressed European economies, while internal challenges reflected the radical changes and political transitions towards more democratic regimes in Egypt, Tunisia and Libya. In the short run, this period of transition has been associated with reduced flows of foreign investment and trade, and also falling tourism. Figure 25, which plots output and employment growth, shows how severely Libya's economy was affected during the period 2008–11.

#### Unemployment: An unaffordable luxury for most

Figure 25 (a) highlights the extent to which, in the period 1999–2007, output growth exceeded employment growth in a large number of countries, leading to sometimes substantial gains in labour productivity. An earlier study estimated the annual growth rate of labour productivity in sub-Saharan Africa at 1.9 per cent per annum over the period 2000–09 (ILO, 2010b). But here again, as emphasized in the section above on Asia, in poor developing countries employment growth often follows growth in the working-age population, as unemployment benefits are underdeveloped and most people just cannot afford to remain unemployed. For this reason we also show (in figure 26) how GDP growth related to the growth of paid employment in Africa. Here we see that economic growth was accompanied by relatively strong increases in the number of paid employees.

#### Limited data show moderate wage increases

How have these developments affected wages? Data on the evolution of average wages in Africa are relatively scarce. Only a few countries in Africa, including Botswana, Egypt, Lesotho, Mauritius, South Africa and Uganda, carry out quarterly or annual establishment surveys of the kind conducted by developed countries in order to measure the evolution of earnings. Morocco publishes an index of nominal average wages, compiled on the basis of earnings reported to the Caisse Nationale de Sécurité Sociale, its social security institution. In the majority of remaining countries, wage data are at best collected through labour force surveys that are implemented at irregular intervals, and are not always comparable across years. Our tentative regional estimate in figure 7 shows that wage growth since 2006 has generally been moderate, with the exception of 2010 when regional average wages increased considerably, mostly owing to the large weight of South Africa in the regional estimate. Figure 27 shows the real wage growth and labour productivity growth between 1999 and 2011 for selected countries. In 2010, according to official figures, real average wages increased by nearly 10 per cent in South Africa, where wage growth remains unequally distributed.



#### Figure 25 Growth in output and employment in Africa, 1999-2007 and 2008-11 (%)

Note: For country abbreviations, see Appendix I.



## Figure 26 Growth in output and numbers of paid employees in Africa, 1999–2007 and 2008–11 (%)

Note: For country abbreviations, see Appendix I.



## Figure 27 Growth in wages and labour productivity in selected African countries, 1999–2011 (%)

Note: If data for 1999 or 2011 were unavailable, the next closest year's data point was used to estimate the trend. For country abbreviations, see Appendix I. Sources: ILO Global Wage Database; ILO Trends Econometric Model, March 2012.

### 4 Minimum wages and the working poor

In current economic conditions, minimum wages remain a topic of debate on the policy agenda and in the public domain in both developed and developing countries. As part of its Decent Work Agenda, the ILO encourages member States to adopt a minimum wage to reduce working poverty and provide social protection for vulnerable employees.<sup>14</sup> ILO standards further recommend that minimum wages should be set by authorities after consultation with social partners, and that a balanced approach should be adopted which takes into account the needs of workers and their families as well as economic factors, including levels of productivity, the requirements of economic development and the need to maintain a high level of employment. <sup>15</sup> Along the same lines, the European Commission recently expressed the view that Member States should establish "decent and sustainable wages" and that "setting minimum wages at appropriate levels can help prevent growing in-work poverty and is an important factor in ensuring decent job quality" (see European Commission 2012a, p. 9). Debates continue regarding the level at which minimum wages should be set.

#### 4.1 Developed economies

#### Different mechanisms, different perceptions

Among developed economies, minimum wages vary substantially as a proportion of full-time median earnings, ranging from about 60 per cent in New Zealand and France to less than 40 per cent in Japan, Spain and the United States (figure 28). The differences in the levels of minimum wages among countries reflect the different institutional mechanisms through which levels are determined (Lee, 2012). They also reflect different perceptions about the risks that minimum wages may pose in respect of the displacement of low-paid workers or the number of jobs available in the labour market. These factors, alongside variations in average wages, also partly explain why the absolute level of the minimum wage varies so widely across developed economies (figure 28).

Just as perceptions about the optimal level of the minimum wage diverge, so do views about the role of this policy instrument during periods of economic crisis. Focusing on developed economies only, it appears that policy-makers actively used the minimum wage as a social protection tool for the most vulnerable workers at the beginning of the crisis through 2009 (see figure 29). However, in later years the minimum wage was in most cases only adjusted with a view to compensating for inflation; this can be seen in figure 29, where in the years after 2009 real minimum wages grew in developed economies by considerably less (or even declined).

#### Crisis response brings compulsory cuts

In Greece, the minimum wage has been severely cut, losing 22 per cent of its previous value<sup>16</sup> (the value in figure 28 refers to the minimum wage before this adjustment). This change was made on the request of the European Central Bank, the European Commission and the IMF as a condition for giving the Greek Government access to bailout funds from the European Financial Stability Facility (EFSF). According to the IMF (IMF, 2012c), wage cuts were necessary if the country was to regain competitiveness and growth, ends that could not be achieved through national currency devaluations or interest rate adjustments. The IMF also considered that the minimum wage in Greece was substantially higher than in other developed economies, even though the statistics presented in figure 28 suggest it was not out of range. In Portugal, access to the EFSF came at the condition of a minimum wage freeze.

#### 4.2 Developing and emerging economies

Minimum wages are also widely used in developing and emerging economies, although here information about the levels at which they are set relative to median or average wages is more difficult to obtain (given that information on average wages is often based on a narrow subset of paid employees in the formal economy or in urban areas). A recent study, however, showed that, just as in developed economies, the extent of minimum wage adjustments during the crisis varied among both low-income and middle-income countries. The joint ILO–World Bank inventory of policy responses to the financial and economic crisis found that 22 out of the 55 low- and middle-income countries surveyed reported changes in the minimum wage over the period from mid-2008 to the end of 2010.<sup>17</sup>



## Figure 28 Minimum wage levels in selected developed economies, in PPP\$ and as a share of median full-time wage, 2010

Notes: If the 8 per cent supplement for holiday pay is included, the minimum/median wage ratio amounts to 47.1 per cent in the Netherlands. If 13th and 14th months' salary is included, the minimum/median wage ratio amounts to 56 per cent in Portugal and 43.8 per cent in Spain. Sources: ILO Global Wage Database; Low Pay Commission, 2012.



Figure 29 Minimum wage growth in developed economies, 2006-11

Note: Based on a non-weighted simple average of estimated growth rates of real and nominal minimum wages including 26 developed economies. Source: ILO Global Wage Database.

#### Waged work and privilege in developing countries

A reservation frequently advanced about minimum wages in developing countries is that all wage-earners belong to an elite group, which enjoys higher standards of living and privileges not accessible to others such as the self-employed or those involved in family work. While it is true that waged employment is typically associated with higher-productivity activities, superior employment conditions and greater rights at work as compared with own-account or contributing family work, many waged and salaried workers in developing countries are in fact living with their families in poverty, as discussed in box 1. Figure 30 provides estimates of the share of waged and salaried workers living below the US\$1.25 and US\$2 international poverty lines for 32 developing countries. These estimates imply that out of a total number of approximately 209 million wage earners who worked in these 32 developing countries at different points in time from 1997 to 2006, about 23 million were earning below US\$1.25 a day and 64 million were earning less than US\$2 per day. This indicates that minimum wages, in spite of their limitations, remain a relevant tool for povery reduction.

One country in Latin America where the minimum wage has had a significant impact is Brazil. Although the minimum wage revaluation strategy has been pursued for about 20 years, it has accelerated since 2005, when, as part of a strategy to foster domestic consumption, regular adjustments were systematically linked to inflation plus GDP growth. This same strategy was followed even during the financial crisis years when wage policy was part of a countercyclical strategy. By contrast, in Mexico the minimum wage has increased only very modestly in real terms between 2005 and 2011, as the minimum wage policy has been strongly determined by efforts to achieve a fiscal balance (as minimum wages determine many social security benefits) and increase export competitiveness. As a result, minimum wages are below market levels, even for unskilled workers. These two cases illustrate the different approaches towards minimum wages.

Asia has experienced several developments in the realm of minimum wage growth and minimum wage setting. Across the region, minimum wage growth has been positive in almost all countries since 2005. This growth has been coupled with positive economic growth and solid real average wage growth over the same period (see figure 15). At the same time, all of these factors have occurred alongside growth in the share of employees in total employment and hence the proportion of workers that can be directly affected by a minimum wage. For instance, in China progress has been made towards improving enforcement and coordination among provinces in terms of minimum wage setting mechanism by including social partners; Malaysia, which announced a first-time minimum wage in 2012; and the Philippines, which simplified its complex minimum wage system. In India, minimum wages paid through the National Rural Employment Generation Scheme (NREGS) appear to have reduced non-compliance with minimum wages in the private sector (Rani and Belser, 2012).

Minimum wages in the Middle East largely declined between 2005 and 2011 and, generally, are a limited policy tool within the region. While employees represented about 66 per cent of total employment in 2011, the legal coverage of minimum wages is often more restricted, if a minimum wage exists at all. For instance, in some

countries the minimum wage is restricted to the national population or discriminates against migrant workers who receive lower rates. In other cases, the minimum wage may only apply to the public sector, as is the case in Bahrain.

#### Box 1 Poverty among waged and salaried workers

The working poor are defined as employed members of households living below a defined poverty line (see Kapsos and Horne, 2011). For international comparisons, the PPP-adjusted poverty lines of US\$1.25 or US\$2 a day are typically used to determine extreme and moderate poverty, respectively; households with daily per capita consumption below these lines are classified as poor.<sup>18</sup> Extreme poverty among workers in developing countries is often associated with subsistence activities – for example, own-account workers or contributing family workers operating in small-scale agricultural work. There is indeed evidence to back up the association between the working poor and subsistence agriculture: a recent ILO study found that in 53 countries with available data from national household surveys, four out of five workers in extreme poverty (below the US\$1.25 poverty line) were living in rural areas, and that 68 per cent of the working poor were employed in the agricultural sector (see Kapsos and Horne, 2011).

Yet data from many of the same surveys indicate that a narrow focus on poverty among own-account and contributing family workers would substantially undercount the extent of working poverty in developing countries. Figure 30 shows that in Madagascar, for example, more than 80 per cent of waged and salaried workers were poor in 2005, with more than half living in extreme poverty. In Mozambique, Burundi and Tajikistan, over 60 per cent of employees were living in poverty, and in Cambodia, the Republic of the Congo and Pakistan over 50 per cent of employees were poor, according to the most recent survey data.

How do these figures compare with the incidence of poverty among own-account workers and contributing family workers? Across the 32 countries, the share of poor own-account and contributing family workers exceeds that of poor wage earners in all but two countries (Pakistan and Tajikistan). In many countries, therefore, having a waged or salaried job is associated with a lower probability of being poor than for own-account or contributing family workers. However, in some countries, being in waged employment does not convey large advantages in terms of the likelihood of being poor versus the other employment categories. For instance, in Cambodia 56.5 per cent of employees were living below the US\$2 poverty line in 2004, versus 65.8 per cent of own-account workers and unpaid family workers.

In addition, poor waged and salaried workers often make up a large share of the overall working poor in developing countries. In Indonesia in 2002, the number of wage earners living below the US\$2 poverty line was estimated at 15.5 million, versus 29.4 million poor own-account and contributing family workers – amounting to more than five poor waged and salaried workers for every ten poor own-account and unpaid family workers. In Pakistan in 2005, there were eight wage earners living in extreme poverty for every ten poor own-account and unpaid family workers. Thus, while the working poor in developing countries are indeed disproportionately engaged in agricultural activities in rural areas, policies aimed at improving productivity and raising the earnings and welfare of the poor must also take into consideration the large numbers of waged and salaried workers living with their families in poverty.

#### Box 1 Poverty among waged and salaried workers (continued)

Figure 30 Employed working poor (earning below US1.25 and US2 a day), as % of total employees



Source: ILO calculations based on national household survey data.

Source: Steven Kapsos, Labour Economist, ILO.