

17. Living wage in context: Wage ladder and wage trends

PART I. BACKGROUND AND CONCEPTUAL FRAMEWORK

It is important to put living wage estimates into context by comparing them with other wage and economic indicators and so observe how far prevailing wages, minimum wages, and poverty line wages are from a living wage. Recent trends in real wages are also important, because they help put current wages into an historical context. This is especially relevant for countries and industries where real wages have fallen in recent years and therefore workers are facing increased pressure.

PART II. APPROACHES

This chapter describes two approaches that should be used in a living wage report to provide a contextual backdrop for a living wage estimate. One approach graphically illustrates in a ‘wage ladder’ the size of gaps between a living wage estimate, prevailing wages, and other wage indicators. A second approach uses graphs of recent trends in real wages of workers and wage costs to employers. Note that this chapter has a different format than other chapters because examples are provided throughout the chapter.

17.1 Wage Ladder

17.1.1 What is a wage ladder?

A wage ladder is a tool for illustrating how a living wage compares with other wages and economic benchmarks for a country. The wage ladder was first developed by Rut Tufts for the Jo-In project in Turkey (Lally, 2011), and has been further developed since. Its purpose is to illustrate gaps between a living wage and other wages and economic benchmarks in a simple visual format. Wage ladders typically include wage and economic benchmarks that are commonly used and understood by the public, such as legal minimum wage, collectively bargained wages, average

wages, poverty line wages, and wages required for decency according to politicians, trade unions, NGOs, researchers, and others. The idea is to include a variety of reference points in a wage ladder in order to put the living wage into perspective and illustrate where the living wage is in comparison with other commonly understood wage indicators. 'When charted together these figures [a wage ladder] provide a backdrop against which to consider the wages paid by factories in the region or country' (Lally, 2011).

17.2 Wage Ladder Tool

We developed an Excel program to graphically display a wage ladder. It provides for the living wage and prevailing wages of up to four different types of workers for a particular industry or establishment to be displayed on the chart with components of prevailing wages shown in stacked columns (sum of basic wages, cash allowances, in kind benefits, and taxes). Overtime pay can be shown as the highest stack in a prevailing wage column, so that it can be viewed as an addition to prevailing wages without overtime. Similarly, the living wage can be displayed as the sum of basic wage, cash allowances, in kind benefits, and taxes. This Excel program is available on request from the authors.

The wage ladder tool allows for up to seven horizontal reference points to be displayed on the wage ladder such as average wages, poverty line wages, and minimum wage. These reference points are represented by horizontal lines on the chart as the so-called 'rungs of the ladder'.

17.2.1 Displaying the living wage and prevailing wages in an establishment or an industry in a wage ladder

- **Living wage**

The living wage is displayed as a stacked bar in the wage ladder tool – so that various components of the living wage can be displayed. The highest stack on the living wage column should be statutory deductions from pay so both gross and net living wage are shown in the same column.

- **Prevailing wages in industry or establishment**

When a living wage study and estimate focuses on a particular industry or establishment, wages of typical workers in that industry or establishment should be included in a wage ladder to illustrate the gap between current wages and a living wage. Because wages differ by occupation, seniority, grade and type of contract, there are

almost always several prevailing wages for an industry or establishment. Estimates for important types of workers should usually be included in a wage ladder. This helps facilitate discussion between workers and employers as well as with the value chain about improving wages.

17.2.2 Typical reference points to include in a wage ladder

To construct a meaningful wage ladder, reference points should be comparable to the living wage to the extent possible in terms of year, whether expressed per hour, per day or per month, and forms of remuneration included. When it is not possible to make reference points fully comparable, notes to the wage ladder should clearly indicate differences such as different years, and inclusion or exclusion of taxes, overtime pay, in kind benefits, cash allowances, various bonuses, etc. Note that average wage data generally indicate gross wages (before taxes), include overtime pay and exclude the value of in kind benefits. Poverty line wages measure how much after tax wages are needed to avoid poverty.

Typical reference points charted on a wage ladder (usually displayed as horizontal lines) include the following possibilities. Note that all of the following would not be included in a wage ladder for a particular country or location.

- **Average wages by occupation and industry**

Data on average wages in different industries and occupations are very relevant and almost always available from government statistical office websites and from ILO LABORSTAT. The coverage (e.g. urban formal sector registered establishments), sources, and wage components included (e.g. whether or not overtime and in kind benefits are included) should be indicated. We have also found it effective to include the wage of the lowest paid government worker in wage ladders.

- **Minimum wages**

Most countries have a statutory minimum wage. This represents a floor wage below which employers are not legally allowed to pay. In many countries, there are several legal minimum wages that might differ by occupation, sector, region, and/or city. Minimum wages can be per hour, day, or month. This means that it may be necessary to adjust minimum wages so that they are for the same reference period and for a similar sector and geographical area as the living wage. Minimum wages are *gross wages* without overtime since they are before taxes.

- **National poverty line wage**

Most countries have poverty lines, and many countries have separate rural and urban poverty lines. Poverty lines are usually stated per person per day and so need to be multiplied by the living wage reference family size and divided by the living wage number of full-time earners per family to determine a poverty line wage for comparison with a living wage. For example, if a national poverty line was 30 pesos per person per day, the reference family size was 4 persons and the number of full-time workers per family was 1.5, then the national poverty line wage would be 2,433 pesos per month (i.e. $30 \times (365/12) \times 4/1.5$). Poverty line wages indicate *net take home wage* – they do not take payroll taxes or income taxes into consideration. Whenever possible, a rural poverty line or an urban poverty line should be used depending on the location of the living wage study, because rural and urban poverty lines are usually quite different. When a country has different poverty lines for different family sizes, the poverty line for the living wage reference family size should be used.

- **World Bank international poverty line wages**

Two World Bank international poverty lines are commonly used:

\$1.90 PPP per person per day extreme poverty line, and

\$3.10 PPP per person per day poverty line.¹

In October 2015, these poverty lines replaced \$1.25 PPP and \$2 PPP a day poverty lines previously used by the World Bank. What happened was that the World Bank re-estimated PPPs in 2011 and found that the purchasing power of national currencies relative to the United States was different than they previously thought in 2005. This helps explain why the World Bank extreme poverty line went from \$1.25 PPP to \$1.90 PPP, and the poverty line went from \$2 PPP to \$3.10 PPP, since the new poverty lines are measured in the new 2011 PPPs whereas the old poverty lines were measured in 2005 PPPs.

Additional – higher – poverty lines are suggested by the World Bank for some regions. We suggest using these higher poverty lines for Latin America and the Caribbean, Eastern Europe and Central Asia, and upper middle income countries since they are more realistic.

In more developed regions, higher international poverty lines [than \$2 a day in 2005 PPP] are more appropriate. When comparing poverty rates across countries within Latin America and the Caribbean (LAC) region, the \$4 a day [in 2005 PPP] poverty line provides a more meaningful standard. For Eastern Europe and Central Asia (ECA) region, the \$5 [in 2005 PPP] a day poverty line is often used.² (World Bank, 2015)

Note that since these values are expressed in 2005 PPP they imply somewhere around \$6.2 PPP and \$7.75 PPP in 2011 PPP.

International poverty lines expressed in PPP are meant to be understandable to the public. A \$3.10 PPP poverty line is meant to be the local equivalent to what \$3.10 would buy in the United States. This means that in order to calculate World Bank poverty lines in local currency, it is necessary to multiply a country's PPP for private consumption in the current year (expressed in 2011 PPP) by \$3.10. The World Bank World Development Indicators database includes 2011 PPP values by year for each country. Since a PPP value is not reported by the World Bank for the current year, it is necessary to estimate the current PPP value by multiplying the 2011 PPP value for the latest available year by the ratio of cumulative inflation in the country in subsequent years and months and dividing by cumulative inflation for the same period of time in the United States, the comparator country for PPP.

To translate World Bank poverty lines into poverty line wages it is necessary to follow the same procedures described above for national poverty line wages (i.e. multiply by days per month and living wage reference family size and divide by the living wage number of full-time equivalent workers per family). As with national poverty line wages, the World Bank poverty line wages represent *net take home wages*.

- **Collective bargaining agreement wages**

Wages in collective bargaining agreements (CBAs) are useful benchmarks, because they have been agreed to by workers and employers. When CBAs specify cash allowances and in kind benefits, the value of these benefits should be included in the CBA wage used in the wage ladder to the extent feasible so that the CBA wage is comparable to the living wage. Overtime pay should be excluded from a CBA wage, because a living wage should be earned in standard working hours. Note that CBA wages are *gross wages*, since they are before taxes.

- **Trade union estimates of living wage**

It is common for trade unions and trade union officials to indicate how much they believe that workers need to earn for decency. They often, but not always, refer to this as a living wage. It is useful to include this estimate in a wage ladder as a reference point.

- **Living wage estimates from NGOs and researchers**

It is not unusual for NGOs and researchers to estimate a living wage. It is useful to include these on a wage ladder as reference points

when they exist. For example, we found that the Worker Rights Consortium (2010) estimated a living wage for the Dominican Republic and Center for Social Concern (2016) estimates each month for major cities in Malawi how much it costs for a basic needs basket of goods and services for a family. The Asia Floor Wage (2015) is available for 12 Asian countries.

- **Living/decent wage estimates of politicians and others**

It is common for politicians and others to indicate how much they feel that workers need to earn for decency. For example, the President of the Dominican Republic, referred to 10,000 pesos per month as a ‘misery wage’ around the time we were doing a living wage study (Dominican Today, 2013). We included this wage in a wage ladder for the Dominican Republic. It was very effective, because our living wage estimate was not much above the President’s ‘misery wage,’ even though it was well above what many workers were earning in the banana sector that was the focus of our living wage study in the Dominican Republic.

17.3 Example of Wage Ladder for Fresh Cut Flower Farms in Lake Naivasha, Kenya

Figure 17.1 is a wage ladder for Kenya with focus on fresh cut flower farms in the area around Lake Naivasha. It indicates, in stacked columns, our living wage estimate and prevailing wages for greenhouse workers (most common type of flower farm worker) who began working on their farm at different times between 1997 and 2014 since pay is based on seniority. Horizontal cross lines/reference points in Figure 17.1 include statutory minimum wage for agriculture, World Bank poverty line wages, the national urban poverty line wage for Kenya (since Lake Naivasha flower farm workers live in urban areas), the average wage for urban formal sector employees, a low income employee according to Kenyan income tax law, and a trade union estimated living wage.

17.3.1 Interpretation of the Kenya wage ladder

The wage ladder for Kenya provided information about how the living wage compared with other wage indicators and with prevailing wages of greenhouse workers in the flower farm industry. Some insights follow:

1. Comparing living wage to other benchmarks
 - a. All flower farm workers earned well above the minimum wage for agriculture. However, only flower farm workers with more than 10

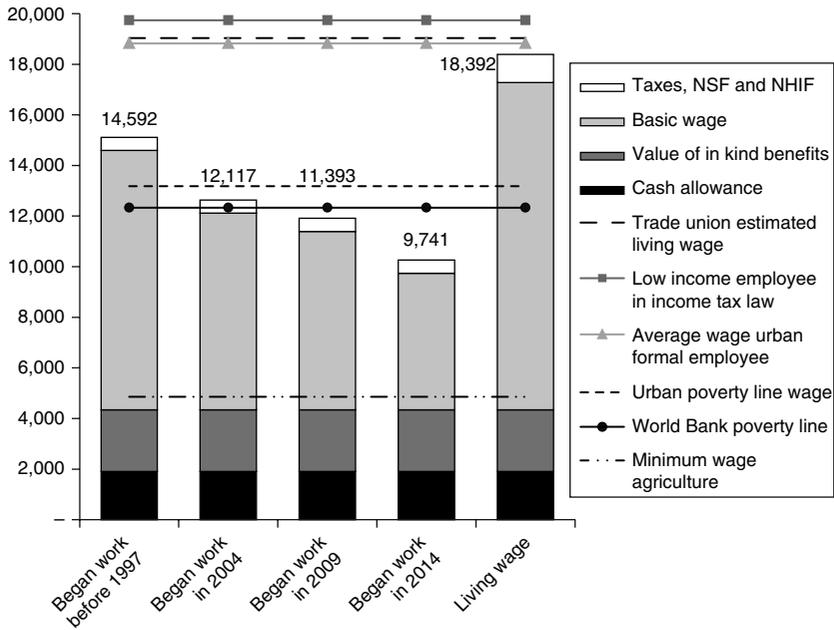


Figure 17.1 Example of wage ladder for flower farm workers in the area around Lake Naivasha, Kenya (in Kenyan shillings per month)

- years of seniority earned more than the World Bank poverty line wage and the government urban poverty line wage.
 - b. Our living wage was similar to the living wage according to the trade union representing flower farm workers.
 - c. Statutory deductions and taxes were important. There were deductions from pay for social security, national health insurance schemes, and union fees. Workers would also pay income tax if they earned a living wage.
2. Comparison between the living wage and prevailing wages in the fresh flower farm industry
 - a. There is a considerable gap between what workers earn and a living wage. This gap is greater for workers with less seniority.
 - b. The gap between prevailing wage and living wage is significantly increased by statutory taxes workers have to pay.

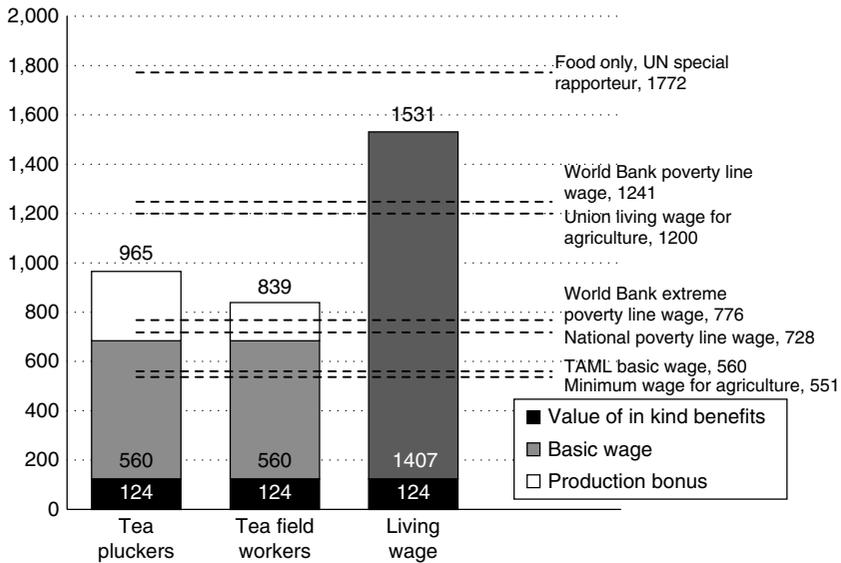


Figure 17.2 Example of wage ladder for tea estate workers in southern Malawi (in Malawi kwacha per day)

3. Information about prevailing wages
 - a. Cash allowances and in kind benefits are important parts of the pay of flower farm workers.
 - b. There are large differences in worker pay by seniority.

17.4 Example of Wage Ladder for Tea Estates in Southern Malawi

Figure 17.2 is an example of a wage ladder for tea estates in southern Malawi. Average wages for tea field workers and tea pluckers are shown because together they comprise a high percentage of tea estate workers. Their wages are compared with our living wage estimate as well as with a variety of reference points.

17.4.1 Interpretation of the wage ladder for southern Malawi

The wage ladder helps illustrate the following:

1. Comparing living wage to other benchmarks
 - a. Our living wage is above the World Bank poverty line wages, union living wage for agriculture and the national poverty line

- wage. It is also well above the minimum wage for agriculture and the Tea Association of Malawi (TAML) basic wage. But our living wage is well below what the UN Special Rapporteur estimated to be the cost of food only.
- b. The minimum wage and the Tea Association of Malawi basic wage are even lower than the World Bank extreme poverty line wage.
2. Comparison of prevailing wages on tea estates and the living wage
 - a. There is a large gap between what tea estate workers earn and a living wage.
 3. Information about prevailing wages
 - a. Wages of tea estate workers are very low. Tea field workers earn even less than the World Bank poverty line wage.
 - b. In kind benefits and production bonuses are an important part of compensation for tea estate workers.

17.5 Recent Trends and Changes in Wage

To understand the context of current wages and assist a meaningful dialogue between government, stakeholders and the value chain, figures showing changes in real wages (i.e. wages adjusted for inflation) in recent years are very useful. Graphs of wage trends expressed in USD are useful for export industries that sell all or almost all of their output in foreign currency. The past 10 years is usually a reasonable reference period to use, as it is long enough for trends and changes to become apparent without being too far in the past. The context of a large gap between current wages and a living wage is quite different in countries and industries where real wages have been falling over time compared with countries and industries where real wages have been rising over time. Which wage trends to graph should be determined by what is important in the location and/or industry.

17.5.1 Need to adjust for inflation to maintain purchasing power of wages

Wages should be adjusted for inflation before graphing them over time, so that real wages are shown rather than nominal wages. This is done by dividing nominal wage in year x by inflation since the initial year in the wage series to year x .

17.5.2 Usefulness of indexing real wages to a base year

It is informative to illustrate wage trends over time by indexing real wages to a particular initial or base year so that graphs illustrate percentage change. For example, real wages for 2005–2015 would be divided by the

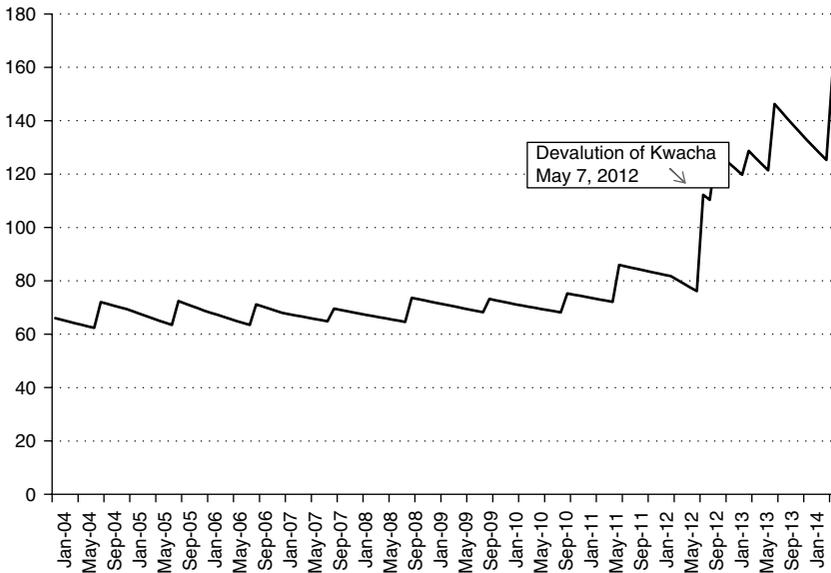


Figure 17.3 Real basic wage per day of tea estate workers (in real 2004 kwacha), Malawi, 2004–2014

2005 value. Wages in 2005 would be 1.0. Wages in subsequent years would indicate the percentage increase or decrease in real wages since 2005.

17.5.3 Examples of graphs that illustrate recent changes in real wages

17.5.3.1 Example 1: Malawi: Case of almost no change in real wages for years followed by rapid increase in real wages Figure 17.3 for Malawi clearly shows that real wages of tea estate workers increased dramatically following the devaluation of the kwacha in 2012 – but this occurred after many of years with very little change in real wages. Notice the sawtooth pattern between 2004 and 2012 when real wages repeatedly fell and rose. This reflected a fixed nominal wage, which was depreciated by inflation until wages were raised to keep up with inflation.

17.5.3.2 Example 2: Kenya: Case of decreasing real wages Figure 17.4 shows that real wages on fresh cut flower farms in Kenya fell between 2004 and 2014. This fall in real wages was especially steep for new hires compared with workers with 10 years of seniority and came about because of the terms in CBAs. This figure also shows how real wages were related to real minimum wages. See example 4 in Section 17.5.4 for a discussion.

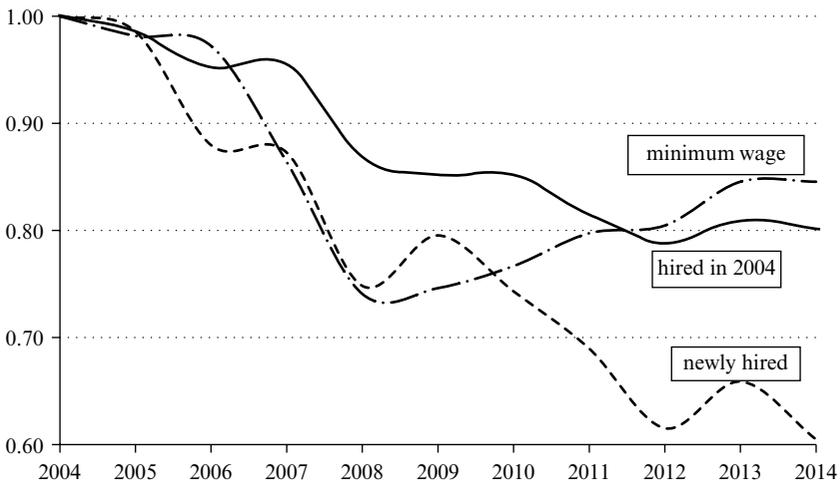


Figure 17.4 Change in real flower farm CBA wage (basic wage plus cash allowances) and statutory minimum wage for agriculture, indexed to 2004, Kenya 2004–2014

17.5.4 Graphs that compare prevailing wages and minimum wage in recent years

It is interesting for readers to see graphically how prevailing wages in an industry have changed in recent years compared with the statutory minimum wage. This can be shown in a figure that includes statutory minimum wage and prevailing wage.

17.5.4.1 Example 3: Malawi: Case where prevailing wage tracks statutory minimum wage but tends to be slightly higher Figure 17.5 for Malawi shows how the basic wage for tea workers in Malawi closely tracks the statutory minimum wage. Figure 17.5 also shows that the wage for tea workers is adjusted more frequently than the statutory minimum wage and is usually slightly higher than the statutory minimum wage.

17.5.4.2 Example 4: Kenya: Case where decrease in real value of prevailing wages was greater than decrease in real value of minimum wage Figure 17.4 for Kenya illustrates that the purchasing power or real value of both the statutory minimum wages and the wages of flower farm workers fell between 2004 and 2014. The fall in real wages of flower farm workers was fairly continuous. In contrast, the real value of the statutory minimum wage bottomed out in 2008 at the time of the world financial crisis and

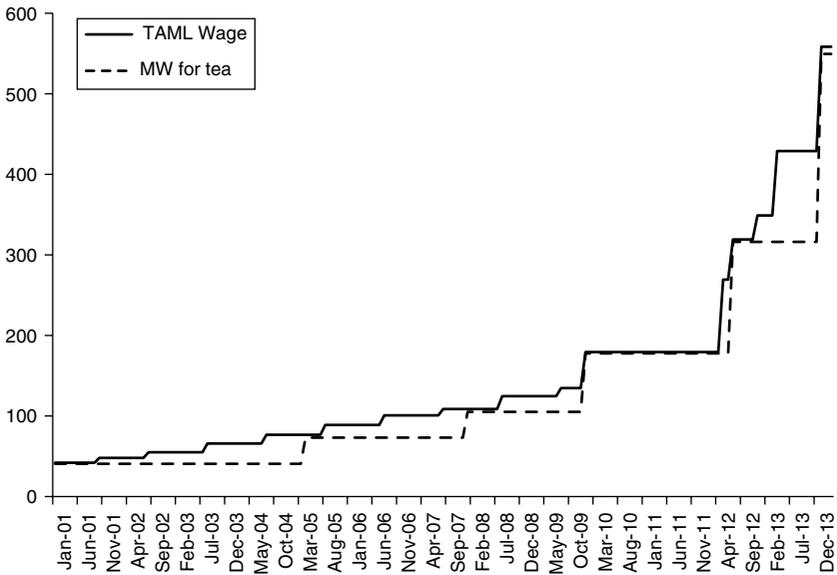


Figure 17.5 Basic daily wage of tea estate workers (TAML wage) and statutory minimum wage (MW), Malawi 2001–2014 (in Malawi Kwacha)

increased after this. As a result, the purchasing power of the minimum wage fell less than the purchasing power of flower farm wages.

17.5.4.3 Example 5: Chengdu, China: Case where real average wages increased rapidly and at a faster pace than real minimum wage Figure 17.6 for Chengdu, China, shows a large increase in both real average wages and real minimum wage between 2006 and 2014. Real wages increased by 125% and real minimum wages increased by 85%.

17.5.5 Graphs that illustrate recent changes in wages expressed in US dollars

An important metric for employers in export industries is wage costs in dollars, because their revenues are in foreign currency. For this reason, it is often useful to graph how prevailing wages in dollars changed in recent years.

17.5.5.1 Example 6: Increasing wages in dollars for Kenyan flower farms Figure 17.7 indicates large continuous increases in prevailing wages in US dollars over the past 10 years for fresh cut flower farms in

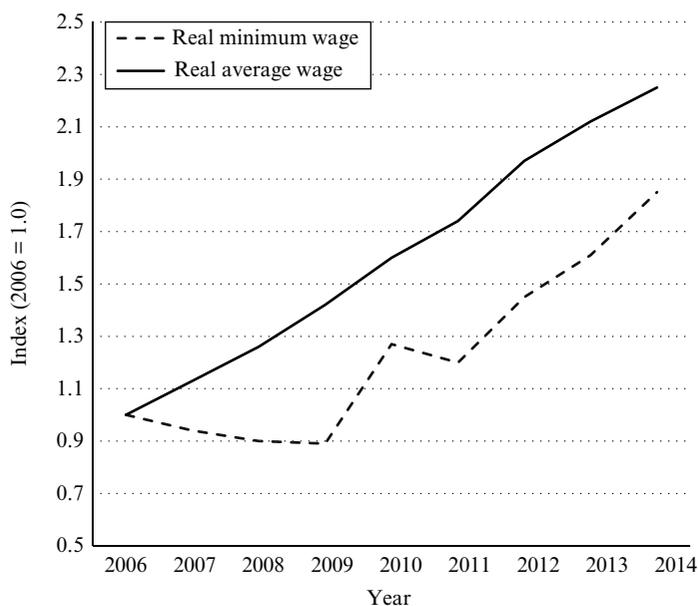


Figure 17.6 Real minimum wage and real average wages indexed to 2006 urban Chengdu, China, 2006–2014

Kenya. This means that these employers experienced increasing cost pressure unless export prices and/or productivity substantially increased.

17.5.6 Graphs that compare wage trends to other economic indicators

Depending on the situation, it can be effective to include in a living wage report a figure that compares wages and other economic indicators. This can help provide a context for stakeholder discussion. Sometimes this can be done using a figure from another report or publication. We did this in our Dominican Republic living wage report where we included a figure from an ILO report (Figure 17.8).

17.5.6.1 Example 7: Graph comparing changes in real wages and real labor productivity: Case of a disconnect between labor productivity and wages Figure 17.8 compares real wages and real labor productivity in the Dominican Republic between 2000 and 2010. It clearly shows that real wages decreased and then plateaued despite a large increase in labor productivity, which indicated that the expected link between labor productivity and wages broke down in the Dominican Republic.

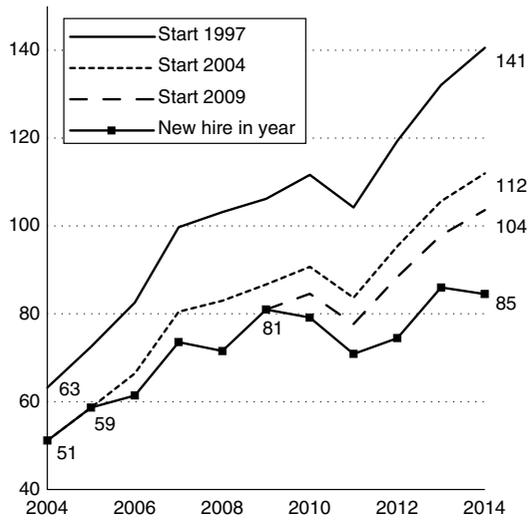
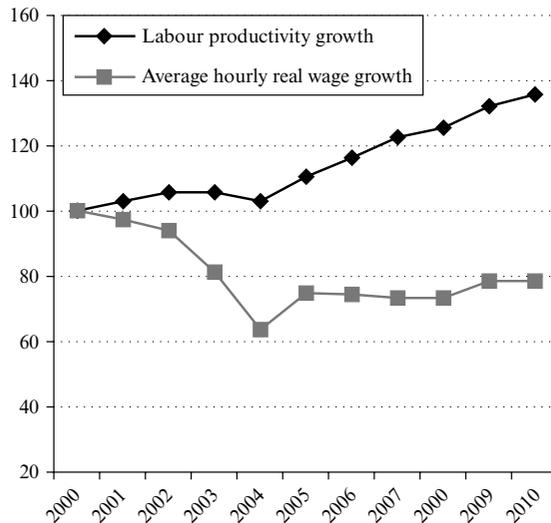


Figure 17.7 Flower farm basic wage plus cash allowances per month in US dollars, Kenya 2004–2014



Source: ILO (2013).

Figure 17.8 Real average hourly wage and labor productivity, 2000–2010, for the Dominican Republic (index 2000=100)

NOTES

1. According to the World Bank, 'Purchasing Power Parity conversion factor is the number of units of a country's currency required to buy the same amounts of goods and services in the domestic market as U.S. dollar would buy in the United States' (World Bank, 2016). PPPs in developing countries typically indicate that the purchasing power of local currencies is two to three times greater than their equivalent amount in UDS. This difference, however, varies greatly across developing countries. It is greater than three in India and Pakistan (3.3), less than two in China (1.7), and fairly close to 1 in Brazil (1.2).
2. Other World Bank sources also mention the \$4 per day (in 2005 PPP) poverty line measure in Latin America and the Caribbean (World Bank, 2015) and Eastern Europe and Central Asia (World Bank, 2014).

