

KILM 15. Wages and compensation costs

This chapter presents two distinct and complementary indicators. The first, table 15a, shows trends in average monthly wages in the total economy for 126 countries, while the second, table 15b, presents the trends and structure of employers' average compensation costs for the employment of workers in the manufacturing sector, available for 33 countries.

These two indicators differ in their nature and primary objectives. Wages are important from the workers' point of view and represent a measure of the level and trend of their purchasing power and an approximation of their standard of living, while the second indicator provides an estimate of employers' expenditure toward the employment of its workforce. The indicators are, nevertheless, complementary in that they reflect the two main facets of existing wage measures; one aiming to measure the income of employees, the other showing the costs incurred by employers for employing them.

For most employees, wages – the income they receive from paid employment – represent the main part of their total labour-related income. Information on workers' wages is a valuable economic indicator for planners, policy-makers, employers and workers themselves. The statistical series in table 15a show nominal average wages and real average wages.

From the employers' standpoint, wages are only one component of the cost of employing labour, which is usually referred to as labour costs (according to the ILO concept), employment costs or compensation costs. Other cost elements include employers' expenditure on social security benefits, provided either as direct payments to the employees or as contributions to funds set up for the purpose, as well as the cost of various

benefits, services and facilities (such as housing, vocational training and welfare provisions) which are primarily intended to benefit workers. Table 15b presents both the level and structure of compensations costs, with distinction made between total hourly direct pay and hourly social insurance expenditures and labour-related taxes. Assessing the change in labour costs over time can play a central role in wage negotiations and in implementing and assessing employment, wages and other social policies. Information on labour cost per unit of labour input (that is, per time unit) is particularly useful in the analysis of certain industrial problems, as well as in the field of international economic cooperation and international trade.

Introduction

Table 15a presents trends in average monthly wages, both in nominal and real terms (i.e. adjusted for changes in consumer prices), where available. Average wages represent one of the most important aspects of labour market information as wages are a substantial form of income, accruing to a high proportion of the labour force, namely persons in paid employment (employees). In most developed economies, more than 85 per cent of the employed population are paid employees, and the share of paid employees has been constantly rising in many of the newly industrializing countries (see KILM 3). Information on wage levels is essential to evaluate the living standards and conditions of work and life of this group of workers in both developed and developing economies. It helps to assess how far economic growth and rising labour productivity (KILM 16) translate into better living standards for ordinary workers

and to the reduction of working poverty (KILM 17).¹

There is also a particular need for information on average wages in planning economic and social development, establishing income and fiscal policies, fixing social security contributions and benefits, and in regulating minimum wages and for collective bargaining. Policy-makers, as well as employers and trade unions, pay close attention to wage trends. At the global level, the ILO's biennial *Global Wage Report* analyses wage trends across different regions and discusses the role of wages policies (see box 15a).² In addition to the relevance of wage data, international standards were long ago developed, adopted and implemented for the concepts, scope and methods of collection, as well as for the compilation and classification of wage statistics (see "definitions and sources"). This should, in principle, facilitate international comparisons.

The indicator of table 15b is concerned with the levels, trends and structures of employers' hourly compensation costs for the employment of workers in the manufacturing sector. The measure is shown for all employees and it includes the total compensation cost levels expressed in absolute figures in US dollars and as an index relative to the costs in the United States (on the basis of US = 100). Total compensation is also broken down into "hourly direct pay" with subcategories "pay for time worked" and "directly paid benefits", and "social insurance expenditure and labour-related taxes" with all variables expressed in US dollars.

¹ This was also the rationale for including average real wages into the ILO's list of Decent Work Indicators; see *Guide to the Millennium Development Goals Employment Indicators* (Geneva, ILO, 2nd edition, 2013); http://www.ilo.org/empelm/what/WCMS_208796/lang-en/index.htm.

² For the latest report, please refer to ILO: *Global Wage Report 2014/15: Wages and income inequality* (Geneva, 2015); <http://www.ilo.org/global/research/global-reports/global-wage-report/2014/lang-en/index.htm>
Data associated with the *ILO Global Wage Report* is available in ILOSTAT; www.ilo.org/ilostat.

Average hourly compensation cost is a measure intended to represent employers' expenditure on the benefits granted to their employees as compensation for an hour of labour. These benefits accrue to employees, either directly – in the form of total gross earnings – or indirectly – in terms of employers' contributions to compulsory, contractual and private social security schemes, pension plans, casualty or life insurance schemes and benefit plans in respect of their employees. This latter group of benefits is commonly known as "non-wage benefits" or "non-wage labour costs" when referring to employers' expenditure and in table 15b is captured in "social insurance expenditures and labour-related taxes".

Compensation cost is closely related to labour cost, although it does not entirely correspond to the ILO definition of total labour cost contained in the 1966 ILO resolution concerning statistics of labour cost, adopted by the 11th International Conference of Labour Statisticians (ICLS),³ in that it does not include all items of labour costs (see box 15c). In particular, the costs of recruitment, employee training, and plant facilities and services, such as cafeterias, medical clinics and welfare services, are not included. It is estimated that the labour costs not included in hourly compensation costs account for around 1 to 2 per cent of total labour costs for those countries for which information is presented. This measure is also closely related to the "compensation of employees" measure used in the system of national accounts,⁴ which can be considered a proxy for total labour costs.

³ ILO, Resolution concerning statistics of labour cost, adopted by the 11th International Conference of Labour Statisticians, Geneva, 1966; http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087500/lang-en/index.htm (see box 15c).

⁴ See *System of National Accounts 2008* (New York, United Nations, 2009); <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>.

Use of the indicator

Real wages in an economic activity are a major indicator of employees' purchasing power and a proxy for their level of income, independent of the actual work performed in that activity. Real wage trends are, therefore, useful indicators, both within countries and across them. Significant differences in the purchasing power of wages, over time and between countries, reflect the modern world economy, and comparisons of the movement of real wages can provide a measure of the material progress (or regression) of the working population. Real average wages are therefore an important indicator for monitoring changes in working conditions. And they should be reviewed in conjunction with trends in working poverty (KILM 17) and the low pay incidence.

Trends in nominal wages can be used to inform adjustments in minimum wages, the lowest remuneration that employers may legally pay to workers under national law.⁵ While there is no single, recommended ratio between minimum wages and average wages, information on average wages can inform policy-makers when setting minimum wages and enable them to monitor whether those at the bottom of the distribution fall behind general wage increases.⁶

Social partners – workers' and employers' organizations – rely on wage data for collective bargaining. A fundamental concern of employees and trade unions is to protect the purchasing power of wages, particularly in periods of high inflation, by raising nominal wages in line with changes in consumer prices. Real wage increases become feasible without putting the sustainability of enterprises into jeopardy when labour productivity is growing.

⁵ Note that minimum wages are set in nominal terms, so nominal average wages are the primary comparator. For a review of minimum wage legislation, see ILO: *Working Conditions Laws Report 2010* (Geneva, 2010).

⁶ See Chapter 5.2 of ILO: *Global Wage Report 2010/11: Wage policies in times of crisis* (Geneva, 2010).

When used together with other economic variables such as employment, production, and income and consumption, trends in average real wages are valuable indicators for the analysis of overall macroeconomic trends, as well as in economic planning and forecasting. Importantly, they can indicate the extent to which economic growth and rising labour productivity translates into income gains for workers. These, in turn, influence aggregate demand, and countries with external surpluses can utilize wage policies to re-balance their economies by strengthening domestic consumption.

Information on hourly compensation costs (table 15b), like total labour cost, is valuable for many purposes. The level and structure of the cost of employing labour and the way costs change over time can play a central role in every country, not only for wage negotiations but also for defining, implementing and assessing employment, wage and other social and fiscal policies that target the distribution and redistribution of income. At both the national and international levels, labour costs are a crucial factor in the abilities of enterprises and countries to compete. When specific to the manufacturing sector, labour costs serve as an indicator of competitiveness of manufactured goods in world trade. This is why governments and the social partners, as well as researchers and national and international institutions, are interested in labour cost information that can be compared between countries and industries. Also, the measurement and analysis of non-wage labour costs have become an important issue in debates on labour market flexibility, employment policies, analyses of cost disparities, and comparisons of productivity levels among countries.

Not all countries compile statistics on total labour costs as defined in the relevant ILO resolution. This is because special surveys are required, which tend to be costly and burdensome, particularly for employers. Although guidelines are given to ILO constituents with regard to the type of information to be compiled and published,

ILO information on average labour costs in manufacturing is derived from various sources. It is expressed in different time units, and information on hours of work – required to calculate hourly labour costs – is not always available from the countries covered. International comparisons are thus hampered by a lack of harmonization in terms of definitions, methodology and measurement units. National definitions of earnings differ considerably, earnings do not include all items of labour compensation and the omitted items of compensation may represent a large proportion of total compensation.⁷

For these reasons, table 15b is based on another source of information, namely the estimates of hourly compensation costs of employees in manufacturing as compiled by the Conference Board.⁸ The Conference Board series adjust published earnings data for items of compensation not included in earnings and although these estimates do not entirely correspond to the ILO definition of total labour costs, they are closely related to it and account for nearly all labour costs in any country presented within the indicator, resulting in the most reliable available series in terms of international comparability.

Information on compensation or labour costs is not generally available separately for men and women. Many establishments from which this information is collected do not maintain separate data by sex for non-direct pay. In addition, the distribution of male and female workers according to occupation, levels of skill and supervisory responsibilities are often dissimilar within an industry, between establishments and among countries. Therefore, comparisons of compensation cost

information between men and women based on an allocation of costs proportional to the respective number of persons or the amount of earnings could lead to erroneous conclusions. The same remarks apply to the measurement of total labour costs, where it is even more difficult to allocate the cost of certain components, such as welfare services or vocational training, between men and women. With these difficulties in mind, the ILO resolution concerning statistics of labour cost did not recommend the compilation of labour cost statistics according to sex.

Definitions and sources

The annual average wages (table 15a) are presented both in nominal and in real terms. The series of wage statistics are generally available in nominal terms, expressed in absolute figures and in national currency. This reflects the way these data are collected, usually from those who pay wages (enterprises) or from those who receive them (paid employees). Wage statistics in nominal terms (and in national currency) are required by policy-makers, who set minimum wages in nominal terms, or by employers and trade unions, who bargain over nominal wage rates. Other data users also need nominal wage data, for example if they want to compare wage levels to other indicators that are available in nominal form (such as poverty thresholds or prices of goods), or if they want to convert them from one currency to another.

However, changes in nominal average wages are not necessarily very informative when it comes to assessing changes in the welfare of wage earners: they indicate only the earnings of an average employee in monetary terms, but not the amount of goods and services that can be purchased with wages. In other words, nominal wages do not provide information on the purchasing power of employees. This purchasing power is influenced by, among other factors, increases (or decreases) in prices of goods and services that employees acquire, use, or pay for – i.e. by the inflation rate. Average monthly wages

⁷ Capdevielle, P. and Sherwood, M.: “Providing comparable international labor statistics”, in *Monthly Labor Review* (Washington DC, BLS, June 2002); <http://www.bls.gov/opub/mlr/2002/06/art1full.pdf>.

⁸ The United States Bureau of Labour Statistics (BLS) had an International Labour Comparisons (ILC) program which compiled this data but it was eliminated in 2013. Upon its termination, the Conference Board acquired all the BLS data files and now continues to produce updates to the series; <http://www.conference-board.org/ilcprogram/>.

are therefore not only presented in nominal terms, but also in real terms by adjusting for changes in consumer prices. Note, however, that the consumer price index (CPI) reflects price changes as viewed from the perspective of the average consumer and that some wage earners might experience a different rate of price changes (for example, when they spend a higher proportion of their income on food items than the average consumer).⁹

Both the nominal and real average wage series are presented in national currency. This enables data users to calculate nominal and real wage growth rates without distortion caused by exchange rate fluctuations, and to link wage data to other data expressed in national currency. It also takes account of the fact that wage levels may not be strictly comparable across countries due to methodological differences, while growth rates are less likely to be affected by statistical effects.

Table 15a shows average monthly wage series from the ILO's Global Wage Database that were compiled for the latest edition of the *Global Wage Report* on the basis of official, national sources. The series referring to real average monthly wages are generally taken directly from the National Statistical Office if available. Otherwise, nominal values are collected and deflated by the International Monetary Fund's (IMF) CPI. In cases where neither real values nor the IMF CPI are available, data on the CPI are collected directly from national sources. Real wages are standardized to a common base year, namely the base year that individual countries use as the CPI base year.¹⁰

Nominal average monthly wages are based on a variety of national sources, as published by national statistical agencies. In an

ideal case, the indicator refers to monthly average wages in the sense of "earnings" (as defined by the 12th ICLS; see box 15b)¹¹ for the entire economy and all employees in a given country. However, countries use different approaches when collecting wage data. Methodological differences relate to the type of source used, the coverage of the source, and how the data are aggregated to produce monthly average wages. When data for the target concept were not available, closely related wage series were used instead (for details refer to "limitations to comparability").

The most common source for wage data – in particular in advanced economies, in Central and South-Eastern Europe and the CIS countries – are labour-related establishment surveys. They collect data at the source, namely from establishments that employ workers. Since establishments usually keep accurate records of all wages paid for their own book-keeping and for tax purposes, this approach has the advantage of producing reliable wage data without having to rely on the re-call of individual employees. However, in countries where enterprises routinely pay wages outside their normal book-keeping (so-called "envelope wages") in order to avoid taxes and social security contributions, the establishment-based approach has limitations.

Household surveys, the second major source for wage data, have the advantage that they cover all employees regardless of where they work.¹² Wage data from household surveys usually cover the public and private sector, formal and informal enterprises and all industrial sectors. There are, however, a number of subtle methodological differences that can affect comparability between countries of wage levels based on household

⁹ For some purposes, other price measures such as the producer price index (PPI) or implicit GDP deflator might be more appropriate.

¹⁰ In most cases, data on CPIs from the IMF's World Economic Outlook are used. The base year information for individual countries can be found in the IMF metadata.

¹¹ Resolution concerning an integrated system of wages statistics, adopted by the 12th International Conference of Labour Statisticians, Geneva, 1973; http://www.ilo.org/global/What_we_do/Statistics/standards/resolutions/lang--en/docName--WCMS_087496/index.htm.

¹² Persons living in institutional households, such as military barracks, prisons or monasteries, are commonly excluded.

surveys (for details refer to “limitations to comparability”).

Finally, a few countries rely on administrative data sources such as social security records to compile wage data, or combine several different primary sources to produce a synthetic wage series. In some countries the national accounts sections of central statistical offices produce the wage series that match the desired concept most closely. However, national accounts are only a useful source for data on average wages when compensation of employees is disaggregated into its two major components – wages and salaries and employers’ social contributions – and when matching data on total wage employment exist.

While most countries report wages with a calendar month as a reference period, some report only daily, weekly or annual wages. In order to ensure comparability, these source data were standardized into the same monthly reference period, e.g. annual wages were divided by 12 months to produce average monthly wages.

Hourly compensation costs for employees in manufacturing (table 15b) are estimates from The Conference Board based on national statistics from establishment and labour cost surveys. Earnings statistics are obtained from country-specific surveys of employment, hours and earnings, or from manufacturing surveys or censuses. Total compensation is computed by adjusting each country’s average earnings series for items of total hourly direct pay, social insurance and labour-related taxes and subsidies not included in earnings. Where countries measure earnings on the basis of “hours paid for”, the figures are also adjusted in order to obtain estimates of earnings based on “hours actually worked”.

Adjustment factors are obtained from various sources, such as periodic labour cost surveys (interpolated on the basis of other information for non-survey years), annual tabulations of employers’ social security contribution rates, and information on contractual and legislated changes in fringe

benefits. The statistics are further adjusted, where necessary, to take account of major differences in workers’ coverage, industrial classification systems and changes over time in survey coverage or frequency.

A country’s compensation costs are computed in national currency units and converted into US dollars using the average daily as published by either the US Federal Reserve Board or the International Monetary Fund. For euro area countries, data are converted to US dollars using the euro to dollar exchange rate only for years in which the euro was officially currency in the countries. For years prior to adoption of the euro, the data in the old national currency for all years are converted to US dollars using historical US dollar to national currency exchange rates or fixed exchange rates established at the time of the country’s conversion to the euro.

The hourly compensation measures relate to manufacturing as defined by the North American Industry Classification System (NAICS). NAICS is the common industrial classification used by the United States, Canada, and Mexico. The NAICS definition of manufacturing differs somewhat from the definition of manufacturing used in other countries. In such cases, BLS makes adjustments to ensure comparability across the series.

The following definitions apply to the data series in table 15b:

Total hourly compensation costs include (1) total hourly direct pay, (2) employer social insurance expenditures and (3) labour-related taxes.

Total hourly direct pay includes all payments made directly to the worker, before payroll deductions of any kind, consisting of *pay for time worked* and *directly-paid benefits*. definition is the equivalent of the ILO concept of “gross earnings”, which consists of (a) pay for time worked, including basic time and piece rates, overtime premiums, shift differentials, other premiums and bonuses paid

regularly each pay period, and cost-of-living adjustments, and (b) other direct pay, such as pay for time not worked (vacations, annual holidays and other paid leave for personal or family reasons, civic duties, and so on, except sick leave), seasonal or irregular bonuses and other special payments, selected social allowances and the cost of payments in kind.

Social insurance expenditures refer to the value of social contributions (legally required as well as private and contractual) incurred by employers in order to secure entitlement to social benefits for their employees; these contributions often provide delayed, future income and benefits to employees.

Labour-related taxes refer to taxes on payrolls or employment (or reductions to reflect subsidies), even if they do not finance programs that directly benefit workers.

All employees include production workers as well as all others employed full or part time in an establishment during a specified payroll period. Temporary employees are included. Persons are considered employed if they receive pay for any part of the specified pay period. The self-employed, unpaid family workers and workers in private households are excluded.

Limitations to comparability

As mentioned in the preceding section, country-specific practices differ with respect to the sources and methods used for wage data collection and compilation, which in turn have an influence on the results and comparability across countries. The main sources of information (establishment censuses and surveys, and household surveys) usually differ in terms of objectives, scope, collection and measurement methods, survey methodology and so on. The scope of the information may vary in terms of geographical coverage, workers' coverage (for example, exclusion of

part-time workers)¹³ and establishment and enterprise coverage (based on establishment size or sector covered).

While most countries include firms regardless of size into establishment surveys, some countries exclude small firms with less than five or less than ten employees. Some countries also limit the coverage to the private sector (i.e. exclude the public sector) or to specific industries within the private sector (such as manufacturing). If small enterprises pay lower wages than large enterprises or wages differ between the public and the private sector, these exclusions will affect the level of the collected wage data – depending on how large differences are, and how many employees are excluded from the coverage. However, if wages in the excluded establishment move roughly in line with those enterprises for which data are available, these exclusions will only have a marginal effect on trends over time. Even data with less than full coverage can therefore be a useful proxy to analyse wage growth in an economy.

Establishment surveys usually draw their sample from an establishment register that is maintained either by the central statistical office or another institution, such as the Registrar of Companies. In developing countries with a large informal sector, this is a serious limitation since many small, unregistered establishments are missing from the sample frame. Also excluded are individual households employing paid domestic workers, which account for a significant proportion of total paid employment in some developing regions.¹⁴ In some developing countries, establishment

¹³ It should be noted here that wage series covering all persons employed should not be directly compared with series covering employees only, since a bias may be introduced with the inclusion of working proprietors and contributing family members.

¹⁴ According to ILO estimates, the global share of domestic workers in paid employment was 3.6 per cent in 2010, but it reached 11.9 per cent in Latin America and the Caribbean and 8.0 per cent in the Middle East. See ILO: *Global and regional estimates on domestic workers*, Domestic Work Policy Brief No. 4 (Geneva, 2011).

surveys therefore capture only a small proportion of all wage employees (those in the public sector and those in large, modern enterprises). Under these circumstances, collecting information from the recipients of wages can be the better alternative.

Household surveys encompass a greater range of jobs and workers than establishment surveys, however, they tend to experience problems associated with self-reporting of earnings. Furthermore, household surveys display methodological differences that can affect comparability. For instance, some surveys collect data on the usual monthly wages while others ask for the actual wage received in the past month. At times it is also not clear whether respondents are asked to report their gross or net wages (i.e. before or after deduction of taxes and compulsory social security contributions). These differences can have a material effect on the reported level of wages, while they are less likely to have a major impact on trends over time as long as the survey instrument remains unchanged.

Even when using the same concept of wages (for example, earnings), there are likely to be differences with regard to the inclusion or exclusion of various components (such as periodic bonuses and allowances, or payments in kind). Earnings statistics show fluctuations that reflect the influence of both changes in wage rates and supplementary payments. In addition, daily, weekly and monthly earnings are dependent on variations in hours of work (in particular, hours of paid overtime or short-time working), while hourly earnings are influenced by the concept of hours of work – hours actually worked, hours paid for, or normal hours of work – used in the computation (see KILM 7 for information on the various concepts pertaining to hours of work).

When making comparisons of real wage trends between countries, one should keep in mind that this indicator is not only based on country-specific series of wages, but also that measures of real wages will be affected by the choice of the price deflator, that is, the CPI. The scope of CPIs can vary not only in terms

of the types of household or population groups covered, but also in terms of the geographical coverage. Country-specific practices also differ regarding the treatment of certain issues relating to the computation of CPIs, including the treatment of seasonal items, new products and quality changes, durable goods and owner-occupied housing, the inclusion or exclusion of financial services and indirect taxes, and so on.

Other factors may influence the comparability of real wage trends – and therefore purchasing power – across countries. One is the reference period of both wages and CPIs. Annual averages of hourly or monthly wages may be averages of information based on weekly, monthly or quarterly reference periods. In some cases, they are based on the whole calendar or financial year. On the other hand, the CPI data are annual averages of an index that is compiled, in most cases, monthly, or in a few cases quarterly or biannually. When nominal wages and CPI information do not refer to exactly the same period, this can give rise to problems for countries experiencing rapid inflation.

When using the information presented in table 15b on hourly compensation costs to make comparisons of international competitiveness, it should be borne in mind that differences in hourly compensation costs are only one factor in competitiveness and therefore, when used alone, may be misleading. It is also important to remember that this indicator measures compensation of employees specific to manufacturing and is significant only in so far as countries strive to compete in the manufacturing sector. However, when used in conjunction with other indicators, such as labour productivity (KILM 16), relative changes can be helpful in assessing trends in competitiveness.

Care should also be taken not to interpret hourly compensation costs as the equivalent of the purchasing power of worker incomes, for two reasons. The first relates to the components and nature of compensation costs. In addition to the payments made directly to the workers, compensation includes

employers' payments to funds for the benefit of workers. Such "non-direct pay" can include current social security benefits such as family or dependants' allowances, deferred benefits, as in payments to retirement and pension funds, or various types of insurance entitlements, such as unemployment and health benefit funds, which will represent income to workers only under certain conditions. In a few countries, non-wage costs also include some taxes paid by employers – or deductions for subsidies received – for the employment of labour, such as taxes on employment or payroll.

The second reason for differentiating hourly compensation costs from the concept of workers' purchasing power lies in the fact that the prices of goods and services vary greatly among countries, and the commercial exchange rates used here to convert national figures into a single currency do not indicate relative differences in prices. A more meaningful international comparison of the relative purchasing power of workers' income would involve the use of purchasing power parities (PPPs), that is, rates at which the currency of one country must be converted into the currency of another in order to buy an equivalent basket of goods and services.

In spite of the various adjustments made to the series of hourly compensation costs of employees in manufacturing (table 15b) in order to ensure a high level of comparability across countries and over time, differences may still be found in the information presented. The average earnings series used as a basis for these estimates may be influenced by changes over time in the industrial structure, that is, the growth or decline of establishments, levels of activity and changes in the structure of the workforce employed (changes in the relative proportions of men and women, skilled and unskilled labour, full-time and part-time workers, and so on). All these factors influence the levels of earnings and workers' benefits within a country.

Hourly compensation costs are partly estimated, and each year the most recent information is subject to revision by The Conference Board. For example, in 2001 the

hourly compensation costs series were revised for the United States from 1997 onwards to incorporate results on non-wage costs from an annual survey of manufacturers. In 2006, data for Mexico were revised back to 1999 to incorporate benchmark data from an industrial census and data for Ireland and Norway were revised back to 2001 to incorporate non-wage compensation costs from the 2004 labour cost surveys.

The comparative-level figures are averages for all manufacturing industries and are not necessarily representative of all component industries. In some countries, such as the United States and Japan, differentials in hourly compensation cost levels by industry group are quite wide, while other countries, such as Germany and Sweden, have narrower differentials. Furthermore, changes over time in relative compensation cost levels in US dollars are also affected by (a) the differences in underlying national wage and benefit trends measured in national currencies, and (b) frequent and sometimes sharp changes in relative currency exchange rates.

Further to limitations to comparability for each of the indicators, there are also limitations concerning the comparison between the indicators. Making comparisons of wage rates, earnings or labour costs over time and between countries is probably one of the most difficult tasks for the users of the information presented in this publication. Users should, in particular, be aware of the following issues:

- (1) Within each of the indicators, the information may be affected by differences in sources; that is, there may not be a close correspondence between the concepts and definitions used, the scope and coverage, the methods used for compilation, and the ways in which the information is presented. Table 15a is based on unadjusted national data that reflect these differences. Table 15b, a number of adjustments have been made by The Conference Board to ensure a high level of comparability between countries; however, some disparities may still exist. Users should

take account of the notes to the tables for each indicator.

(2) Care should be taken when comparing trends in annual average wages and hourly compensation costs for the same countries. It should be noted that wages and total compensation costs are not substitutes for each other. The difference between the two may be affected by factors such as the rapid growth (or the freeze) of nominal wages and the development of non-wage benefits, changes over time in the nature of social security schemes and benefits, the relative contributions of employers, employees and the state to such schemes, and so on.

(3) Finally, it should be noted that the series presented in table 15a show the trends in real and nominal monthly wages based on information expressed in national currency, while table 15b shows the levels and trends of

hourly compensation costs and their structure in US dollars. In the first indicator, account has been taken of changes in the consumer price index (CPI) in each country, while in table 15b, to produce a real series in addition to the nominal series, nominal national data have been converted into US dollars and are thus affected by variations, over time and between countries, in the US dollar exchange rates.

In spite of these comparability issues, which are inherent in the underlying statistical series, every effort has been made to choose information that is as close as possible to the target concept and thus comparable across countries. As long as users are alert to these issues, the wage and labour compensation indicators presented can provide valuable insights for socio-economic analyses.

Box 15a. The ILO's Global Wage Report

The biennial Global Wage Report is the ILO's flagship publication on wage trends and wage policies. It uses a number of indicators to analyse global wage developments, including the growth of average real wages, the low-pay incidence (defined as the share of wage workers with earnings below two-thirds of the median) and the wage share in national income. It is unique in its global scope and builds on data from 130 countries and territories (in its last edition) that between them account for approximately 95.8 per cent of the world's wage workers. Based on a standard methodology that corrects for the remaining response bias, the report documents wage growth for the world and in seven regions.

The report also provides practical illustrations of how collective bargaining, minimum wages and income policies can be building blocks of effective wage policies that contribute to equitable outcomes. It is inspired by the objective to promote "policies in regard to wages and earnings, hours and other conditions of work, designed to ensure a just share of the fruits of progress to all and a minimum living wage to all employed and in need of such protection", one of the central elements of the Decent Work Agenda (see ILO Declaration on Social Justice for a Fair Globalization). The relevance of this approach has been underscored by the global economic crisis, during which many governments expanded income support policies and wage subsidies in order to stabilize domestic demand and to support recovery.

Further information is available from the Inclusive Labour Markets, Labour Relations and Working Conditions Branch (INWORK), the ILO's lead programme on wage data analysis and policy advice, or online at <http://www.ilo.org/travail/lang--en/index.htm>. The econometric model developed in the paper utilizes available national household survey-based estimates of the distribution of employment by economic class, augmented by a larger set of estimates of the total population distribution by class together with key labour market, macroeconomic and demographic indicators. The output of the model is a complete panel of national estimates and projections of employment by economic class for 142 developing countries, which serve as the basis for the production of regional aggregates.

Source: Kapsos, S. and Bourmpoula, E. (2013). "Employment and economic class in the developing world", ILO Research Paper No. 6. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_216451.pdf.

Box 15b. Resolution concerning an integrated system of wages statistics, adopted by the 12th International Conference of Labour Statisticians, October 1973 [relevant paragraphs]

8. The concept of earnings, as applied in wages statistics, relates to remuneration in cash and in kind paid to employees, as a rule at regular intervals, for time worked or work done, together with remuneration for time not worked, such as for annual vacation, other paid leave or holidays. Earnings exclude employers' contributions in respect of their employees paid to social security and pension schemes and also the benefits received by employees under these schemes. Earnings also exclude severance and termination pay.

9. Statistics of earnings should relate to employees' gross remuneration, i.e. the total before any deductions are made by the employer in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums, union dues and other obligations of employees.

10. (i) Earnings should include: direct wages and salaries, remuneration for time not worked (excluding severance and termination pay), bonuses and gratuities and housing and family allowances paid by the employer directly to his employees.

- (a) Direct wages and salaries for time worked, or work done, cover: (i) straight-time pay of time-rated workers; (ii) incentive pay of time-rated workers; (iii) earnings of piece-workers (excluding overtime premiums); (iv) premium pay for overtime, shift, night and holiday work; (v) commissions paid to sales and other personnel. Included are: premiums for seniority and special skills, geographical zone differentials, responsibility premiums, dirt, danger and discomfort allowances, payments under guaranteed wage systems, cost-of-living allowances and other regular allowances.
- (b) Remuneration for time not worked comprises direct payments to employees in respect of public holidays, annual vacations and other time off with pay granted by the employer.
- (c) Bonuses and gratuities cover seasonal and end-of-year bonuses, additional payments in respect of vacation period (supplementary to normal pay) and profit-sharing bonuses.

(ii) Statistics of earnings should distinguish cash earnings from payments in kind.

Box 15c. Resolution concerning statistics of labour cost, adopted by the 11th International Conference of Labour Statisticians, October 1966 [relevant paragraphs]

The 11th ICLS (Geneva, 1966) adopted a resolution concerning statistics on labour cost, recommending the following International Standard Classification of Labour Cost:

- I. Direct wages and salaries**
 1. Straight-time pay of time-related workers
 2. Incentive pay of time-rated workers
 3. Earnings of piece-workers (excluding overtime premiums)
 4. Premium pay for overtime, late shift and holiday work
- II. Remuneration for time not worked**
 1. Annual vacation, other paid leave, including long-service leave
 2. Public holidays and other recognized holidays
 3. Other time off granted with pay (e.g. birth or death of family members, marriage of employees, functions of titular office, union activities)
 4. Severance and termination pay where not regarded as social security expenditure
- III. Bonuses and gratuities**
 1. Year-end and seasonal bonuses
 2. Profit-sharing bonuses
 3. Additional payments in respect of vacation, supplementary to normal vacation pay and other bonuses and gratuities
- IV. Food, drink, fuel and other payments in kind**
- V. Cost of workers' housing borne by employers**
 1. Cost for establishment-owned dwellings
 2. Cost for dwellings not establishment-owned (allowances, grants, etc.)
 3. Other housing costs
- VI. Employers' social security expenditure**
 1. Statutory social security contributions (for schemes covering old age, invalidity and survivors, sickness, maternity, employment injury, unemployment, and family allowances)
 2. Collectively agreed, contractual and non-obligatory contributions to private social security schemes and insurances (for schemes covering old age, invalidity and survivors, sickness, maternity, employment injury, unemployment and family allowances)
 - 3a. Direct payments to employees in respect of absence from work due to sickness, maternity or employment injury, to compensate for loss of earnings
 - 3b. Other direct payments to employees regarded as social security benefits
 4. Cost of medical care and health services
 5. Severance and termination pay where regarded as social security expenditure
- VII. Cost of vocational training**, including fees and other payments for services of outside instructors, training institutions, teaching material, reimbursements of school fees to workers, etc.
- VIII. Cost of welfare services**
 1. Cost of canteens and other food services
 2. Cost of education, cultural, recreational and related facilities and services
 3. Grants to credit unions and cost of related services for employees
- IX. Labour cost not elsewhere classified**, such as costs of transport of workers to and from work undertaken by employer (including reimbursement of fares, etc.), cost of work clothes, cost of recruitment and other labour costs
- X. Taxes regarded as labour cost**, such as taxes on employment or payrolls, included on a net basis, i.e. after deduction of allowances or rebates made by the State.