

OIC ACCREDITATION CERTIFICATION PROGRAMME FOR OFFICIAL
STATISTICS

Labour Cost Statistics

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Chapter I

Introduction

1.1 What is labour cost statistics?

When manufacturers determine the price of a certain commodity, they take into account the cost of labour. This is because they need to get revenues bigger than the total cost of production. If the demand for a commodity or the consumer willingness to pay for the item decreases, companies should adjust labour costs so that the production process remains profitable. When it is possible to reduce the number of workers and production, this requires, in contrast, increasing the levels of productivity and reducing indirect labour costs or other factors that reduce the production.

Consequently, the cost of production is considered a key element in the production process in any sector or activity; it determines the investment trends in any country, it also helps demonstrate and explore the comparative advantage of any country in comparison with the world. From this standpoint, ensuring the development of international standards of acceptable comparisons between countries helps in planning at the national or global level in trade balances and relations. Labour economies theories depend to a great extent on the labour cost in terms of determining the supply and demand or trade relations and agreements between states and other common uses.

1.2 Its importance and reasons for providing it:

Through identifying the nature of the labour cost statistics, it shows that the element of work and its availability is not enough to meet the purpose of any study related to the economics of labour and production market. Rather, such element is supposed to be linked to the price of an hour of work, which manifests in the direct and indirect wages and labour laws that oblige enterprises and companies to respect in terms of benefits, compensation, the end of the service, etc. In this sense, providing statistics on the cost of labour is a key part of economic statistics for a clear image of the economy in any country.

On the other hand, the provision of labour cost statistics is deemed as an important foundation to be able to help the three parties in the labour market to reach a minimum wage. This is on the basis that determining the minimum wage is supposed to be in harmony with the labour opportunity cost for employers and not crossing limits in raising wages to the extent that may disrupt the production process and thus pushing negatively on investment.

Labour cost statistics programs are supposed to be designed on the basis of providing measurements and indicators for employers on the basis of the level, composition and evolution of labour costs. It is also possible to use the information provided by the surveys on the labour cost to shed light on part of the *workers income from employment*, such as, for example, direct

wages, elements and components of accompanying wages that are not covered through wage statistics, average of the annual gains and their structure and other related statistics.

From this standpoint, the International Labour Organization (ILO) issued a resolution in October 1966, during its 11th International Conference of Labour Statisticians, in which it refers to the necessity of each State to provide and produce labour cost statistics on employers in that the key sectors in the economy are covered, especially the sub-activities of the industry and mining, construction activities, agriculture, telecommunications, transportation and other activities, if possible and according to the circumstances of countries.

ILO continued to issue related resolutions. In October of 1973, during the 12th International Conference of Labour Statisticians, the Organization issued a resolution on the integrated system of wage statistics, which is the basis for the calculation of the labour cost through the concepts covered by the resolution. Thus, the two resolutions were adopted for the development of the basic rules of the guide.

1.3 Comprehensiveness and scope of the guide

To provide a comprehensive material that meets the basic purpose of the guide and to enable the guide users get acquainted with the fundamentals, principles and concepts of labour cost statistics, an attempt has been made to cover key themes of labour cost statistics, without going further into details with methodologies for data collection and sample design because they are, according to the Classification of Statistical Activities (CSA) document issued by the United Nations, outside the scope of the labour cost statistics.

The beginning of first chapter of the report presents a definition of the labour cost statistics, its importance and reasons for providing such statistics. It was followed by concepts and terms related to the importance of the definition and what all the term related to labour cost and its components, which depends entirely on the International Standard Classification of the labour cost of the International Labour Organization. The third chapter shows the main indicators coming out of the labour cost statistics, their types and mechanism of calculating them. The last chapter addresses the main issues related to the statistical unit of labour cost surveys, reference period and then the most important contents of the survey form and the mechanism of its data processing and detailed indicators calculation. We would like to note that the third chapter shows the differences in the types of indicators that interest to researchers, employers, investors and decision-makers, while the fourth chapter presents the questions that are supposed to be covered by the form and the mechanism for linking such questions to derive more detailed indicators.

Chapter II

Concepts and terms

2.1 Labour cost statistics definition:

According to what is identified by the International Labour Organization 1966, labour cost statistics is defined as:

For the purposes of labour cost statistics, labour cost is the cost incurred by the employer in the employment of labour. The statistical concept of labour cost comprises remuneration for work performed, payments in respect of time paid for but not worked, bonuses and gratuities, the cost of food, drink and other payments in kind, cost of workers' housing borne by employers, employers' social security expenditures, cost to the employer for vocational training, welfare services and miscellaneous items, such as transport of workers, work clothes and recruitment, together with taxes regarded as labour cost. The guide will provide more details about "the international standard classification of labour cost" which indicates the labour cost components¹.

Taxes on labour or employment directly affect the labour cost incurred by the employers in employment. Such taxes, in the countries where they are considered as part of the labour cost, should be identified separately in an order that allows including or excluding them for international comparisons purposes. These taxes should be included on a net basis, i.e. after deducting any discounts or allowances imposed by the government.

It is worth noting that all the costs that are supposed to enter in the calculation of the labour cost are those costs incurred by the employers and not by any other party. Some countries provide contributions in terms of social assistance, provision of aids to stimulate employment, investment, production or any other reason. In such case, they should be separated and referred to clearly, considering that such contributions may be continuous or intermittent, and therefore affecting the measurement of change in labour cost and reduces the level of its accuracy. Taking this issue into account does also facilitate international comparisons.

2.2 Concepts and terminology²:

¹ International Labor Organization, 1966. 11th International Conference of Labour Statisticians. Resolution on Labour cost statistics.

² Source of **Concepts and terminology** is from two resolutions:

- International Labor Organization, 1966. 11th International Conference of Labor Statisticians. *Resolution on Labor cost statistics*.

Based on the International Standard Classification of labour Cost, which is annexed to the resolution concerning statistics of labour cost of 1966, as well as the resolution of 1973 concerning wages statistics, the related concepts will be presented as they are stipulated by the resolutions with some examples.

International Standard Classification of labour Cost:

The term “**labour cost**”, as mentioned above, refers to the set of direct or indirect costs to employment. Sometimes, the components of labour cost vary according to the circumstances of each country. There are, for instance, standards for the European Union and others for many major or industrial countries. For this guide to be more convenient for all the countries, the **International Standard Classification of Labour Cost**, issued by the **ILO in 1966**, was fully adopted. This latter puts forward ten major types of costs, and each of them is further detailed into a number of elements.

A. Direct wages and salaries: They are straight-time pay of time-rated workers, and include:

1. Incentive pay of time-rated workers (Including also responsibility premiums, dirt, danger and discomfort allowances, cash indemnities for meals, sandwiches, etc., payments under guaranteed wage systems, cost-of-living allowances and other regular allowances which are regarded as direct wages or salaries).
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
5. Commissions paid in exchange for sales

B. Remuneration for time not worked, and includes:

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 member, marriage of employees, functions of titular office, union activities).
4. Severance and termination pay where not regarded as social security expenditure.

C. Bonuses and gratuities, and include:

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.

D. Food, drink, fuel and other payments in kind

E. Cost of workers' housing borne by employers:

1. Cost for establishment-owned dwellings.

• International Labor Organization, 1973. 12th International Conference of Labor Statisticians. *Resolution on an integrated system of wages statistics.*

2. Cost for dwelling not establishment-owned (allowances, grants, etc.).
3. Other housing costs.

F. 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).
3. (a) Direct payments to employees in respect of absence from work due to sickness, maternity or employment injury, to compensate for loss of earnings;

(b) 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.

G. Cost of vocational training (Including also fees and other payments for services of outside instructors, training institutions, teaching material, reimbursements of school fees to workers, etc.)

H. 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.

I. Labour cost not elsewhere classified such as costs of transport of workers to and from work undertaken by employer (including also reimbursement of fares, etc.), cost of work clothes, cost of recruitment and other labour costs.

J. Taxes regarded as labour cost (For instance, taxes on employment or payrolls. Such taxes should be included on a net basis, i.e. after deduction of allowances or rebates made by the State).

Earnings:

The concept of earnings, as applied in the wages statistics, is related to the cash and in kind wages paid to employees / workers, and as a general rule at regular intervals, for the performed time or work with compensation for the time that has not been performed, such as the annual vacations and other paid leaves. The earnings do not include all the employers' contributions in respect of their employees paid to social security and retirement systems, as well as the benefits received by employees under these programs. The earnings also do not include layoffs or termination payments or voiding contracts.

Earnings statistics should be related to the total compensation of employees, such as the total before any deductions by the employers related to taxes, contributions of employees and workers in the social security and retirement programs, life insurance premiums and syndicate dues and other obligations of employees.

The earnings should include: Direct wages and salaries and wages paid off-duty (Except wages cuts and end of services), and the allowances, bonuses, housing and family allowances paid directly by the employer to his staff. This is stipulated in the labour cost definition in Articles a, b and c. Table and outputs are also supposed to distinguish between cash and in kind payments.

Wage rates:

Data of wages rates by time should be linked to an appropriate period of time such as an hour, day, week, month or other customary period used for the purposes of determining the rates of specific wages.

Wages rates should include basic wages and living-cost allowances and other guaranteed allowances paid regularly, excluding overtime payments, bonuses, grants, family allowances and other social security payments provided by employers. Excluded are also the ex gratia payments in kind and the supplements to normal wage rates.

Wages rates statistics specified or applicable based on laws, regulations, collective agreements or arbitral awards (usually the minimum wage rates or standard wages) should be clearly separated from the statistics that points to the real rates of wages paid for workers at the individual level. Each of these types of wage rates is useful for certain purposes.

Wage rates should also be separated on the basis of the normal working hours from special rates and others such as piece-based, overtime rates and rates of compensation for work in holidays and displacement.

Wage payments in kind:

Given the dual nature of the wage in terms of cost for the employer and gains for the employee, it might be necessary to evaluate the payment of wages in kind in accordance with each of these concepts.

In principle, for the earnings statistics, In-kind payments should be measured on the basis of the value due to the employee, because earnings refer to the wage or income from a specific group of workers. The evaluation for the wages rates statistics and labour cost, on the other hand, should be done on the basis of cost for the employer because such data refer to unit cost of working hours.

Wages in kind evaluation on the basis of market rates in retail generally provides a reasonable estimate of the value owed to the employee. This method is adopted when collecting income data, including wages, through household surveys.

When the earnings/compensations data are provided by the employer, it is in general easier for them to express the money value of any payments in kind included on an equal footing regarding the cost of the goods or services on them. But, in case the employers were not able to provide the actual cost incurred, it would be appropriate to use the producers' prices or wholesale prices. However, to assess the income level of the employees, the difference between the cost to the employer and retail prices should be adjusted whenever payments in kind are large in amount.

Hours actually worked:

The hours actually worked should include:

- A. Hours actually worked during the usual working periods.
- B. Overtime work to the working hours during the usual working periods, and are generally paid in higher wages than regular wages (overtime)
- C. Time spent in the workplace, for example, to work on equipping the workplace and prepare it for work, repairs, maintenance and cleaning of machines and equipment, and preparing invoices, worksheets and reports such as the personnel officers.
- D. Time spent in the workplace waiting or wait for a certain reason such as low work offers, breakdown of machines due to a defect, water interruption or blackouts, some accident or stop work in the workplace and paid for the workers with the contracts guarantee.
- E. Short breaks periods

In contrast, the hours actually worked do not include the following:

- A. Paid leave hours, annual, medical and paid leaves, and the official holidays.
- B. Lunch break
- C. Time spent on the way between home and work and vice versa.

The following figure summarizes the integrated system of concepts and terms which in total constitute the labour cost and the related indicators in terms of their coherence and integration.

Figure (1): Summary of labour cost statistics

Labour Cost (LC)	Direct LC	Direct wages and salaries	Cash/Earnings	Wages and Salaries	Compensation of employees
		Payments related to paid leaves			
		bonuses and grants,	Wages and Salaries in kind		
		Food, drink, fuel and other payments in kind			
	Indirect LC	Cost of workers' housing borne by employers	Employers social contributions		
		Employers' social security expenditure			
		Cost of welfare services			
		Cost of vocational training			
		Labour cost not elsewhere classified			
		Taxes			

Full time employees: Includes employees/workers (not including trainees) where their regular working hours are the same according to the collective agreement or according to the working hours established in the institution, although the contract is less than one year.

Part time employees: Includes employees/workers (not including trainees) where their regular working hours are the same according to the collective agreement or the working hours established in the institution, whether on a daily, weekly or monthly basis (half a day, two thirds of the day, and so on)

Chapter III

Indicators

Labour cost statistics enables us to provide the following fundamental indicators:

Basic Labour Cost
 Unit Labour Cost
 Unit Labour Cost
 Labour Cost Index

In parallel, we can add the following indicators:

Daily or monthly **wage rate** or hourly wage rate for the production of a commodity or service
Average of hours actually worked for every employee with a wage in the relevant enterprises

The following are the details:

- Basic Labour Cost is defined as the average labour cost for each worker

The indicator provides information about each worker's share of the total labour cost in a given sector or activity. Therefore, it indicates the average labour cost per worker in any activity or sector. But this does not mean that having just one worker in a given activity such as a bakery it will cost the employer "the average labour cost per worker", this is because the cost gets lower as the the number of workers increases in the light of other capital and employment costs. However, the indicator gives information on the average labour cost compared to the normal average in the number of workers in the sector concerned.

The indicator is calculated as follows:

$$LCW = \frac{\sum_{i=0}^n LC_i}{\sum_{i=0}^n W_i}$$

LCW: The average cost per worker in a given sector or activity or the general average (During a specific reference period, one year is the most common)

LC: Total labour cost per enterprise (Data measured on the basis of sampling design method)

W: Number of workers in each enterprise (Data measured on the basis of sampling design method)

i: enterprise

n: Number of enterprises in a given sector or activity or the total number

Example: To find out the labour cost in the paper industry in a given country, information about the total cost of labor in every factory of paper during a specific period of time is

needed (a comprehensive inventory, enterprise sample survey or official records), As well as the number of employees during the same period of time who worked effectively for production. Bearing in mind that the talk is about the size of human capacity, that is to say, if the worker X worked half the period and has been replaced by another worker Y for the rest of the period, the number of workers is one and not two. Thus, the average labour cost during the reference period is the result of dividing the total of all factories labour costs (Processed in the case of sampling - in the weights adjustment factories) according to the previous definition and dividing them by the number of workers.

- Hourly Labour Cost is defined as the average labour cost per each performed working hour

This indicator is more accurate than the previous one in measuring the average labour cost where there are various changes in labour and making the workers perform extra tasks and during holidays. In such case, working hours are used regardless of time, number of workers and their change. This indicator measures the hours actually worked for the production of a given commodity or service.

It is calculated as follows:

$$LCH = \frac{\sum_{i=0}^n LC_i}{\sum_{i=0}^n H_i}$$

LCH: The average of the cost of the hour actually worked in a given sector or activity or the general average (During a specific reference period, one year is the most common)

LC: Labour cost total per enterprise (Data measured on the basis of sampling design method)

H: Number of hours actually worked in each enterprise (Data measured on the basis of sampling design method)

i: enterprise

n: Number of enterprises in a given sector or activity or the total number

Example: The same example as the previous one, but with the replacement of the workers number with the hours actually worked.

- Unit Labour Cost is defined as the average labour cost per each output unit

What is calculated here is the indicator relevant to the enterprises with specific outputs. Such indicator can be used to calculate Labor cost as part of the total cost of production of a given commodity, which can be separated from other goods and has a separate cost and dedicated to the production of that item.

It can be calculated as follows:

$$LCU = \frac{\sum_{i=0}^n LC_i}{\sum_{i=0}^n U_i}$$

LCU: The average cost for the production of a single unit of a given commodity in a given sector or activity (During a specific reference period, one year is the most common)

LC: Labour cost total per enterprise (Data measured on the basis of sampling design method)

U: The number of production units (coherent units) that are produced during a specific reference period in each enterprise (Data measured on the basis of sampling design method)

i: enterprise

n: Number of enterprises in a given sector or activity or the total number

Example: To calculate the cost of producing cars tires, the unit here is the car tire. As it is in the above example, the average cost of producing a single car tire is the sum total of dividing the labour cost used for the production of tires during a specific reference period by the total of the produced tires during the same reference period.

- **Labour Cost Index**

Labour cost index is a continuous semi-annual or annual process. It aims at ensuring the growth and mobility of the above mentioned indicators: the average of the cost of the hour actually worked, the average cost for the production of a single unit and the labour cost.

The labour cost index is calculated in a simple manner as follows:

$$I_{LC} = \frac{LC_t}{LC_0} \times 100$$

I: Labour Cost Index

LC: One of the three above mentioned indicators for the labour cost average or rate

t: Time unit, in that “t” represents the current year, while 0 represents the base year

Example: If the average cost of the hour actually worked in the production of paper is 21.000 dinar [sic] in 2016, and the cost was 14.000 USD in 2000, which is the base year, the index, i.e. the change rate, between 2000 and 2016 is:

$$21,000/14,000*100=150$$

Labour Cost Index is 150%

This means that the cost of the hour actually worked during 2016 has increased by 50% compared to 2000.

- **Wage rate:** An indicator that measures the average of a worker’s wage in the sectors or activities under consideration. Here, we should be accurately identify the reference period, collect data on the basis of a whole year and identify the workers’ wages as part-time or full-time.

It is crucial when collecting wages data to identify the basis on which the payment is usually based, whether it is hourly, daily, weekly or monthly, and then calculating the wage according to the dominant circumstances. Where an enterprise pays on a weekly basis, and the dominant circumstances of the same activity is the daily wage, the days actually worked, on the basis of which the payment is done, are calculated.

Example: If an enterprise pays on a weekly basis and the normal working days agreed upon are five working days, then the daily wage of such enterprise is the sum total of dividing the weekly wage by five days, and the result would be the average daily wage of a worker in this enterprise. Therefore, where the payment mechanisms differ between the enterprises, reliance should be on one basis for each enterprise and then calculation of the general average of all the enterprises in a given sector or activity.

- **Average of hours actually worked per worker:** The indicator the average of hours worked for each worker in a given activity or sector; the agriculture sector is usually excluded. For the purpose of international comparison, the average is supposed to be on a weekly basis, and data should be collected throughout the year and on a quarterly basis.

The indicator is calculated as the sum of dividing the total of the hours actually worked by the number of workers who performed these hours of actual work during the week. It is very important to distinguish between the different types of labour such as permanent, full, partial labour and others.

Chapter IV

Data collection and processing

4.1 Introduction

This chapter aims at providing some instructions on the mechanism of labour cost data collection, processing and dissemination. International standards that help in the provision of comparable indicators at the international level will be used. This chapter gives some relevant information to help in the designing samples and surveys in a detailed manner.

Data source: to provide labour cost statistics, field sample surveys should be conducted because such statistics cannot be provided from the administrative records. The following are some details about labour cost survey:

4.2 Statistical unit:

System of National Account issued by the United Nations (SNA 2008) identifies two main types of statistical units: institutional unit – the institution and the enterprise. The statistical unit in labour cost surveys is the enterprise. It allows the provision of data about each enterprise individually, especially when their products and titles differ due to the variation of labour costs from one region to another.

The institution: it is defined as a capable economic entity as it enjoys right of owning assets and liabilities, having links with economic activities and entering into transactions with other parties.

The enterprise: an enterprise is an institution or part of it, located in one place, specialized basically in one major productive activity (non assistant), which brings the majority of the added value (With the possibility of production by secondary activities), and about which data are available, allowing the calculation of the operating surplus, i.e. providing data about: workers, expenses, production and revenue, and fixed assets. Units that produce for specific purposes of the enterprise are not considered as independent enterprises if they are located within the enterprise itself; but if these units are located outside the boundaries of the entity and as a separate building, they are then considered as supporting activity units, such as warehouses and garage for the maintenance of the enterprise equipment but not for services for the public.

4.3 Reference period:

According to the international recommendations, for a comprehensive period of labour cost surveys, the reference period is recommended to be 12 months of the agenda of the year, wherever possible; otherwise, the typical fiscal year is supposed to be considered to cover all the yearly and irregular costs.

4.4 Economic activities:

According to the UN definition of the economic activities, which is the International Standard Industrial Classification of Economic Activities (ISIC4) or Classification of Economic Activities in the European Community (NACE Rev. 2), countries enjoy the freedom of choosing the targeted economic activities. Sometimes only the most common activities in that country are relied upon. However, for the purpose of international comparisons, coverage should include a wider spectrum of economic activities.

Economic activity: it is a term that refers to a process of incorporating a set of actions and activities that are carried out by a particular unit which uses labour, capital, goods and services to produce specific products (goods and services). The main economic activity refers to the nature of the work performed by the institution, for which it was established according to the International Standard Industrial Classification of Economic Activities (ISIC4), and contributes the greatest value added in the case of multiple activities within the same institution.

4.5 Periodicity of labour cost surveys:

In light of the cost of such surveys in the absence their availability in the administrative records in most countries, and in light of the possibility of estimation annually based on the records such as inflation in the prices of the production inputs and the product, changes in wages and others, it is possible that the periodicity of a survey can reach up to five years. In other words, the implementation every five years, according to the ILO resolution 1966, unless there were activities that develop in the use of technology, which alters the ratio of labor cost to total cost of production.

4.6 Labour cost survey questionnaire:

The questionnaire is the main instrument for collecting accurate and analyzable data. Thus it is supposed to be designed according to the international standards in order that its results can be comparable, depend on international concepts and also responsive to many requirements of decision makers, employers and trade unions, researchers and others.

The following are the most important components of the basic labour cost questionnaire. These components are supposed to be provided as a minimum to be able to calculate the labour cost accurately and in a manner that enables separation between the types of costs and linking them to other important sub-variables. The following variables come at the level of a single enterprise.

a) Defining variables

ID1: size of the enterprise – number of employees in the enterprise

ID2: address

ID3: the major economic activity

ID4: the secondary economic activity

b) Background global variables about production and the added value which allow us to measure labour cost rate to the total cost (as an optional choice)

1. Employees of the institution and their compensations.
2. Value of production from the major activity and the secondary activities.
3. Requirements of production from the different commodities and services.
4. Fees, taxes and subsidies on production.
5. The institution's assets, net additions to these assets and their depreciation during the reference year.

Employees of the institution:

Male individuals working in the institution or females who are not receiving salaries and wages for their work in the institution such as the employers or their families, or those who receive salaries and wages for their work in the institution, regardless of the mechanism by which they receive their salary or wages. Interns in the institution are not considered to be among the workers.

Production (outputs):

Product is defined as goods and services produced by the institution, excluding the value of any goods and services used in an activity in which the company does not take into account the risks of using the products in production, and with the exception of the value of goods and services consumed by the same enterprise except goods and services used for capital formation (fixed capital or changes in inventories) or for final self-consumption.

Intermediate consumption:

It consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital.

Value added:

It is a concept that is related to production and refers to the value generated by any unit performing any productive activity. Gross value added is the sum total of subtracting the intermediate consumption from the total production. The net value added is the result of subtracting the consumption of fixed capital from the gross value added.

Compensation of the employees: (indicator)

It is an indicator that measures the total remuneration, in cash or in kind, including social insurance contributions, payable by an enterprise to an employee in return for work done by the latter.

Taxes on production:

These are compulsory cash or in kind payments and they are free of charge made by producers to the government. They consist of taxes on products paid on goods and services when produced, sold or transferred, and other taxes on production paid by a resident producer as a result of going through the production process.

Fixed assets:

They are productive assets used themselves repeatedly or continuously in productive processes for a period of time exceeding one year.

Gross fixed capital formation:

It is measured by the total value of the acquisitions of the producers of new products and a list of productive assets less the value of their disposals of fixed assets of the same type.

c) Basic variables for the labour cost statistics:

A: Variables related to the Employees

This element is considered essential in labour cost statistics, and it is as follows:

A1 : the total number of employees with a wage according to the following details:

A11 : number of full-time employees (interns not included)

A12 : number of part-time employees (interns not included)

A121 : number of part-time employees transferred to full-time units (interns not included)

A13 : number of interns

A131 : number of interns transferred to full-time units

B : Variables related to Hours Worked

This variable is related to the table and types of employees mentioned above, and the variable are as follows:

B1 : total of the hours actually worked by all the salaried employees

B11 : number of hours actually worked by full-time employees (interns not included)

B12 : number of hours actually worked by part-time employees (interns not included)

B13 : number of hours actually worked by interns

C : Variables related to Paid Hours

They include the total number of paid hours to all the employees during the reference period (hours worked by employees hired through temporary employment agencies are included in the activity of the agency that employed them, according to ISIC4, and not in the activity of the enterprise where they actually worked such as cleaning companies). The total hours of work is divided according to full-time and part time employees and interns, as in the previous variables.

C1 : total of paid hours:

C11 : number of paid hours for full-time employees (interns not included)

C12 : number of paid hours for part-time employees (interns not included)

C13 : number of paid hours for interns

Paid hours are defined as follows:

- Normal working hours and overtime, which have been compensated during the reference period.
- Any hours paid to the employees with a low rate, even if the difference has been settled with payments from the social security fund.
- Hours not worked during the reference period and paid despite of that (annual leaves, medical leaves, official vacations, or paid hours for medical examination).

However, due to the difficulty of collecting such variables directly by enterprises, the recommendation from the European Guide of labour cost statistics put forward the following questions to be met by the enterprises:

C1 : Normal working hours paid during the reference period (annual) for the full-time employees

C2 : Average of working days for annual leave and official holidays for each employee during the year

C3 : Average of working days for each employee for short periods of absence during the year (such as the period of moving to a new house, marriage of the employee, giving birth by the employee's wife, death of one of the employee's relatives, and others).

C4 : Total number of overtime hours during the year

C5 : Total number of working days for a short time

C6 : Total number of medical and maternity vacation days

C7 : Other absence days

D: Variables related to Labour Cost : (employment total costs)³

Employment / Labour total costs: they are put according to the **International Standard Classification of Labour Cost** issued by the International Labour Organization in 1966. This is in addition to what is mentioned in the "concepts and terms" chapter, and for further clarification, below is the list of the variables that constitute labour cost.

D: Labour costs = D.5-D.4+D.3+D.2+D.1

D.1: Compensations for salaried employees

D.11: Wages and salaries

D.111 : Wages and salaries (interns not included)

D.1111: Direct bonuses, gratuities and allowances

D.11111: Direct bonuses, gratuities and allowances paid with every payment period

D.11112 : Direct bonuses, gratuities and allowances not paid with every payment period

D.1112 : Payments for employees provision programs

³ EUROPEAN COMMISSION, EUROSTAT, 2012. **Labour Cost Survey 2012. Eurostat's arrangements for implementing the Council Regulation 530/1999 and the Commission Regulation 1737/2005. Page 5**

D.1113 : Payments for days not worked such as paid vacations
D.1114 : Wages and salaries in kind
D.11141 : Products of the company
D.11142 : Sheltering the employees
D.11143 : Cars of the company
D.11144 : Stock options and plan for purchasing a share
D.11145: Other than that
D.112 : Wages and salaries for interns
D.12 : Social contribution of the employers
D.121 :Actual social contribution of the employers (does not include interns)
D.1211 : Social security contributions according to the law
D.1212 : Contractual, voluntary and collectively contracted social security contributions
D.122 : Social contributions attributed to the employers
D.1221: Guaranteed bonuses/compensations in case of sickness
D.1222 : Social contributions attributed to the employers for health care and retirement
D.1223 :Payments for the employees leaving the institution
D.1224 : Other social contributions attributed to the employers
D.123 : Social contributions of the employers for the interns
D.2 : Vocational training costs
D.3 : Any other expenses paid by the employers
D.4 : Taxes
D.5 : Aids done by the employer

Examples: the following are some examples of the classification of some cases for each case/question:

Example of a case	Manner of addressing and settling them according to the question
Payments covering the journey from home to the usual workplace	If the payments are in the form of cash transfers paid every payment period (weekly/monthly and so on), they are classified within item D.11111, other than that they are classified within item D.11112. If the cost is directly borne by the employer (no cash transfers, such as free public transportation tickets with prior coordination), they are classified within item D.11145
Free travel/flight for the family members to join the employee in a business trip	It is classified within the item D.11141 or D.11145 according to the case. If the employee, for example, works with an airline company, then it is classified within item D.11145
Use of private car for work purposes	Not included

In addition, in order to make a link between the labour cost variables, we clarify the following relations:

D1 = D11+D12
D11 = D111+D112
D111 = D1111+D1112+D1113+D1114
D1111 = D11111+D11112
D1114 = D11141+D11142+D11143+D11144+D11145
D12 = D121+D122+D123
D121 = D1211+D1212
D122 = D1221+D1222+D1223+D1224

Example: employees compensations = wages and salaries + social contribution of the employers

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4.7 Data processing and calculation of indicators:

To be able to come up with results that are comparable at the international level and to facilitate the process of calculating the indicators, the content of the European Union guide has been adopted. It is totally in line with the ILO resolution, but with a broader and more comprehensive perspective. We would like to emphasize that it is important to adjust the weights of data to fit into the sample design, and this requires sampling experts. The following table shows the calculation of indicators⁴:

Variable name	Calculation mechanism	Variable
Total number of employees (interns not included)	A11+A12	EMPL_TOT
Total number of employees in the full-time unit	A11+A121	EMPL_FTU
Total number of hours actually worked (interns not included)	B11+B12	HW_TOT
Average of hours actually worked by full-time employees for each year	B11/A11	HW_FT
Average of hours actually worked by part-time employees for each year	B12/A12	HW_PT
Average of hours actually worked by full-time units for each year	HW_TOT / EMPL_FTU	HW_FTU
Average of hours actually worked by interns for each year	B13/A13	HW_APP
Average of hours actually worked by interns in the full-time unit for each year	B13/A131	HW_APP_FTU
Total of cost with interns	D1+D2+D3+D4-D5	COST1_TOT
Total of cost without interns	D111+D121+D122+D2+D3+D4-D5	COST2_TOT
Annual cost for each employee in full-time unit without interns	COST2_TOT / EMPL_FTU	COST_YEAR
Monthly cost without interns	COST_YEAR / 12	COST_MTH
Hourly cost without interns	COST2_TOT / HW_TOT	COST_HOUR
Hourly cost with interns	COST1_TOT / (B11 + B12 + B13)	COST_SAL_H
Annual direct cost without interns	D111 / EMPL_FTU	DIRC_YEAR
Monthly direct cost without interns	DIRC_YEAR / 12	DIRC_MTH
Hourly direct cost without interns	D111 / HW_TOT	DIRC_HOUR
Annual direct compensations and allowances without interns	D1111 / EMPL_FTU	WAG_YEAR
Monthly direct compensations and allowances without interns	WAG_YEAR / 12	WAG_MTH
Hourly direct compensations and allowances without interns	D1111 / HW_TOT	WAG_HOUR
Interns costs	D112 + D123	COSTA_TOT
Annual cost for the intern	COSTA_TOT / A131	COSTA_YEAR
Monthly cost for the intern	COSTA_YEAR / 12	COSTA_MTH
Hourly cost for the intern	COSTA_TOT / B13	COSTA_HOUR

⁴ EUROPEAN COMMISSION, EUROSTAT, 2012. **Labour Cost Survey 2012. Eurostat's arrangements for implementing the Council Regulation 530/1999 and the Commission Regulation 1737/2005. Page 22**

Annual bonus for the intern	$D112 / A131$	WAGA_YEAR
Monthly bonus for the intern	$WAGA_YEAR / 12$	WAGA_MTH
Hourly bonus for the intern	$D112 / B13$	WAGA_HOUR
The relative distribution of labour cost items on the total labour/employment cost		
Ratio of salaried employees compensations from the total cost	$D1 / COST1_TOT * 100$	STR_D1
Ratio of wages and salaries from the total cost	$D11 / COST1_TOT * 100$	STR_D11
Ratio of wages and salaries (interns not included) from the total cost	$D111 / COST1_TOT * 100$	STR_D111
Ration of direct bonuses, gratuities and allowances from the total cost	$D1111 / COST1_TOT * 100$	STR_D1111
Percentage of the “variable D1112” from the total cost	$D1112 / COST1_TOT * 100$	STR_D1112
Percentage of the “variable D1113” from the total cost	$D1113 / COST1_TOT * 100$	STR_D1113
Percentage of the “variable D1114” from the total cost	$D1114 / COST1_TOT * 100$	STR_D1114
Percentage of the “variable D112” from the total cost	$D112 / COST1_TOT * 100$	STR_D112
Percentage of the “variable D12” from the total cost	$D12 / COST1_TOT * 100$	STR_D12
Percentage of the “variable D121” from the total cost	$D121 / COST1_TOT * 100$	STR_D121
Percentage of the “variable D122” from the total cost	$D122 / COST1_TOT * 100$	STR_D122
Percentage of the “variable D123” from the total cost	$D123 / COST1_TOT * 100$	STR_D123
Percentage of the “variable D2” from the total cost	$D2 / COST1_TOT * 100$	STR_D2
Percentage of the “variable D3” from the total cost	$D3 / COST1_TOT * 100$	STR_D3
Percentage of the “variable D4” from the total cost	$D4 / COST1_TOT * 100$	STR_D4
Percentage of the “variable D5” from the total cost	$D5 / COST1_TOT * 100$	STR_D5
Total of paid hours (without interns)	$C11+C12$	HP_TOT
Average of paid hours for full-time employees for each year	$C11/A11$	HP_FT
Average of paid hours for part-time employees for each year	$C12/A12$	HP_PT
Average of paid hours for full-time units in a year	$HP_TOT / EMPL_FTU$	HP_FTU
Average of paid hours for interns in a year	$C13/A13$	HP_APP
Average of paid hours for interns in full-time units in a year	$C13/A131$	HP_APP_FTU
Average of paid hours for the hours actually worked	HP_FTU/HW_FTU	HP_FTU_DIV_HW_FTU
Hours actually paid but not worked	HP_FTU-HW_FTU	HP_FTU_HW_FTU

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