Harmonised Labour Cost Index

Methodology

Madrid, June 2020

Index

INE. National Statistics Institute

1   Introduction

The Harmonised Labour Cost Index (HLCI) is a quarterly continuous statistical transaction whose main object is to provide a common and comparable measure of the laboral costs for the whole of the European Union, which allows for a follow-up of the evolution of said laboral costs.

The legal basis for the process of the harmonisation of the Labour Cost Index (HLCI) is European Parliament and Council Regulation 450/2003 of 27 February 2003, that establishes a common framework for the compilation, transmission and assessment of comparable labour costs indices.

The harmonised labour cost index is a Laspeyres Index of the labour cost per hour worked, linked annually and based on a fixed structure of the economic activity broken down by sections of the CNAE-09.

It is calculated from the results of the Quarterly Labour Costs Survey (QLCS) and DARETRI file (which provides the remuneration of the public administration personnel).

The base period is 2020.

The delay in publishing is 70 days after the reference quarter.

2   Scope, coverage and reference period

The population scope is formed by all local units, irrespective of their size, whose economic activity is classified in Sections B to S of the CNAE-09. It excludes agricultural, livestock and fishing activities, Public Administration, Defence and compulsory Social Security, domestic personnel and extraterritorial bodies

The geographical scope of the study encompasses the entire country.

For the temporal scope, the reference period is the calendar quarter.

3   Definitions[1]

LABOUR COST

The Labour cost is the total quarterly cost incurred by the employer for using the work factor.

The cost should be measured in net terms for the employer, in other words, deducting the different subsidies received.

---

1 For futher information see Quarterly Labour Cost Survey Methodology

The Labour Cost comprises a large set of items that the survey includes in two main blocks: Cost of Wages and Other Costs.

The total wage cost comprises all remunerations, both in cash and in kind, made to workers for the performance of their work services for others, whether it rewards effective work, whatever the method of remuneration, or the rest periods accounted for as work.

Consequently, the Wage Cost includes the base wage, wage supplements, overtime payments, bonuses and delayed payments.

All these components are considered in gross terms, i.e. before deductions or payments to Social Security on behalf of the employee.

Other Costs include Non-Wage Payments and obligatory Social Security Contributions;

Non-Wage Payments are remunerations received by the employees not for their work activity, but rather as compensation for expenses resulting from carrying out their work or to cover needs or situations of inactivity not attributable to the worker. They include direct corporate contributions (payments for temporary incapacity, unemployment, indemnities for dismissal etc.), compensation payments (currency devaluation, wear and tear of tools, acquisition of work clothes, distance and urban transport allowance, relocation indemnities, contract termination indemnities etc.) and other non-wage payments.

Obligatory Social Security Contributions are legally established contributions that employers make to the Social Security System in favour of their employees to cover the benefits set up by the system and which are those derived from illness, maternity, work accident, disability, retirement, family, survival, unemployment, vocational training, wage guarantee or any other contingency covered by the Social Security System.

EFFECTIVE HOURS OF WORK

These are the hours that were actually worked, during both normal working hours and overtime hours, including the periods of time which have not been completed but are considered effective time in virtue of the valid regulations.

They are obtained as the sum of agreed hours, plus overtime and/or complementary hours, minus hours not worked, from which are excluded hours lost in the workplace, since they are considered working hours.

4   Sources of information

The source of information for compiling the HLCI for all sections of the CNAE-09 except O (Public Administration, Defence and Social Security), are the provisional results of the Quarterly Labour Cost Survey (QLCS). The cost per hour worked in

the different sections is obtained by taking the aforementioned survey, as are the annual weightings necessary for calculating the Laspeyres index.

In Regulation no. 224/2007 of the Commission, approved on 1 March 2007, incorporation into the index of economic activities Public Administrations, Education, Health and Personal Services must be established by taking the data referring to the first quarter of 2009, and at least starting from the first quarter of 2007.

For Spain it implies the inclusion of Public Administrations (P.A., section O). Spanish public sector workers are grouped under different social protection systems: the General Social Security System and the Special Retirement Scheme for Civil Servants, as well as the Government Insurance system. Therefore, starting with the first quarter of 2009 and from the first quarter of 2006 onwards, the following sources of information have been used:

– The QLCS includes in its scope P.A. workers affiliated to the General Social Security Scheme since the first quarter of 2006.

– The DARETRI System: its creation is approved in Order PRE/390/2002 of 22 February. Its aim is obtain data on remuneration of effectives at the service of the state public service sector. The purpose of the aforementioned system is the automated capture of remuneration data covered in articles 11 to 15 of chapter I of the General State Budgets Expenses Budget.

  From this source are obtained the number and salary costs of State effectives affiliated to the Special retirement scheme for civil servants.

– The regulations in force each quarter and the effectives obtained from DARETRI for estimating the effective contributions from this group.

– The General State Intervention Carrying out of the Budget statistics for obtaining Special retirement scheme for civil servants contributions for estimating the Imputed corporate contributions.

– The Economically Active Population Survey for obtaining the hours worked per worker in the P.A

Two labour cost subindices are compiled using these sources of information:

– The first of these includes workers covered by the General Social Security Regime using the QLCS as in other economic activities.

– The second comprises public employees subject to the Special retirement scheme for civil servants using the other sources mentioned.

Lastly, both subindices are aggregated in a single weighted index using the number of workers in each one as a weighting variable.

5   Formulae employed

The following formulae are defined:

w^{tj}_i = labour cost per hour worked by the employees performing activity i during quarter t in year j.

ω_i^k = labour cost per hour worked by the employees performing activity i during year k.

h_i^k = hours worked by employees performing activity i in year k.

$W_i^k = \omega_i^k * h_i^k$ = labour cost for employees performing activity i in year k.

The basic Laspeyres formula used to calculate the HLCI during quarter t of year j, for base year k, for combinations of sections of the CNAE-09, results from the following expressions:

$$\text{LCI}_{tj(k)} = \frac{\sum_i w^{tj}_i h_i^k}{\sum_i \omega_i^k h_i^k} = \frac{\sum_i (w^{tj}_i / \omega_i^k) \omega_i^k h_i^k}{\sum_i W_i^k} = \frac{\sum_i (w^{tj}_i / \omega_i^k) W_i^k}{\sum_i W_i^k}$$

where $\dfrac{W_i^k}{\sum_i W_i^k}$ are the weights to calculate the index and where (w^{tj}_i / ω_i^k) are the simple or elemental indices in a specific k section.

The following coefficient is defined to link year l and year l+1:

$$L_{l,l+1} = \frac{\sum_i \omega_i^{l+1} h_i^l}{\sum_i \omega_i^l h_i^l} \quad \text{where } 0 \leq l < l+1 < j$$

Therefore, the formula for the **chained laspeyres index** for quarter t, in year j and with reference to base year k=0, being m the required interval to process and use the necessary annual weights, where $1 \leq m \leq 2$, are definited as:

$\text{LCI}_{tj(0)} = 100. (L_{0,1}). (L_{1,2}) ..... (L_{J-2,J-1}). \text{LCI}_{tj(j-1)}$ where $1 \leq m \leq 2$

6 Results obtained

The labour cost indices corresponding to the following labour cost categories are provided separately:

Total labour cost per effective hour of work

Defined as the quotient of the total labour cost between the number of hours actually worked.

Total Wage Cost per effective hour of work

This is the result of dividing the total wage cost by the number of hours actually worked.

Other costs per effective hour of work

Defined as the quotient of other costs between the number of hours actually worked.

Labour cost excluding extraordinary payments and delays per effective hour of work.

This results from dividing the total labour cost minus bonuses and delayed payments by the number of hours actually worked.

7 Series adjustment

In order to perform a comprehensive interpretation of the results, the series of indices are obtained as follows:

a) Gross series: the original series, without adjustments.

b) Series corrected for calendar effects: series adjusted by working days (including the Easter effect)

c) Series seasonally adjusted and corrected for calendar effects: series corrected both for calendar effects and for periodical or seasonal effects (bonuses, holidays,...).

The seasonal adjustement of these indicators has been realised according the INE standard for the correction of seasonal and calendar effects on short-term series that is available in Methods and Standards section of the INE website.

This standard is the result of the INE Seasonal Adjustment Work Group, which was created by the Board of Management of the INE in May 2012, and follows the recommendations of the European Union provided for in ESS guidelines on seasonal adjustment.