# 6.5. Employment Cost Index (ECI)<sup>1</sup>

The Employment Cost Index, or ECI for short, is a measure for the change in labor costs, an important short-term indicator of wage-inflation and thereby indicating also gains or losses in competitiveness. Furthermore the ECI is a useful tool for economic forecasting and making price adjustments. In what follows we are first going to introduce the ECI, its history, methodology, advantages and disadvantages, and then trying to examine the process of integrating the ECI into the European index system.

#### a) The history and purpose of the US - ECI

The USA is so far the only country in which a ECI is compiled on a regular basis. The US - ECI was first developed in 1970 by the Bureau of Labor Statistics, BLS, because policy makers were in need of a reliable indicator for changes in labor costs, insensitive to employment shifts among industries and occupations.<sup>2</sup> However publication of the ECI did not start before the year 1975, and since then the ECI has undergone several changes:

- The *scope* of the ECI was initially limited to the private industry only, and later in June 1981 it was widened to cover the State and Local Government (SLG) sector as well.
- The target concept of the index viz. "labor costs" was also changed in that certain benefits, such as paid leave, supplemental pay, life insurance etc. were included. Separate estimates for those items in the private sector were added in 1979 (the same took place for the SLG sector in 1989) in order to provide an extended *coverage* of the index.
- The fact that quite a number of series were added to the ECI created a problem regarding the base year, which originally was the year1981. Therefore a rebasing to the new base year 1989 took place in March 1990.<sup>3</sup> Besides from time to time the weights used in calculating the ECI have been changed even without introducing a new base year in order to account for regular employment shifts.
- Finally, in 1990 the publication of a series of seasonally adjusted data started using the Censu X11 (and later the X12 version) -ARIMA method of seasonal adjustment<sup>4</sup>.

While in the beginning only some market economists and labor analysts were interested in the ECI publishings, things changed drastically in July 1996 when Fed Chairman Alan Greenspan first mentioned the importance of the ECI as compared with the Average Hourly Earnings Survey (AHES). The AHES is conducted basically for the same purpose as the ECI, however, in contrast to the ECI the AHES is

• focusing on the "direct costs" ("straight-time wages") that is that part of the compensation of employees which is a remuneration for hours actually worked, without also covering "other" benefits as done in the ECI, and

<sup>&</sup>lt;sup>1</sup> The following text had originally been drafted by Nina Schlotter.

<sup>&</sup>lt;sup>2</sup> The Federal Reserve Bank of Cleveland even states: "The ECI is the best measure of compensation (wages and benefits) growth available." <u>http://www.briefing.com/FreeServices/Education/glossary/g eci.htm</u>

<sup>&</sup>lt;sup>3</sup> Prior to this rebasing only quarterly and annual percentage changes were published since they are considered to be independent of the base year.

<sup>&</sup>lt;sup>4</sup> It should be borne in mind that seasonally adjusted estimates have a broader margin of possible errors than the original data from which they are derived on the basis of a model describing the seasonal pattern. Detecting this pattern by making use of past experience possibly gives rise to errors.

• providing a summary measure more or less of the unit value type rather than a true price index (aimed at in the case of the ECI) which is independent of structural changes.

Greenspan therefore rightly declared the ECI superior to the AHES.

### b) Data collection, scope and coverage of the ECI, classifications

The data needed for compilation of the ECI is as follows: compensations of employees related to occupations collected in units such as establishments and "State and Local Government operations" (SLC). Three separate series, the BLS now wants to integrate into only one<sup>5</sup>, the National Compensation Survey (NCS)<sup>6</sup>, viz. the Employee Benefits Survey (EBS), the ECI and the Employment Costs for Employee Compensation series, which constitute the (now combined) data source referred to as NCS.

The NCS is an area based, cross-industry sample, which means that an area sample (first stage) is drawn and within the selected areas establishments and SLCs are selected randomly (the second stage).

- 1. Sampling of **areas**: For this purpose the United States is divided into primary sampling units (PSUs) consisting of a county or a number of contiguous counties. In general, areas should be represented according to their size (employment), with the exception of 33 areas which are selected with certainty.
- 2. **Establishments** and SLC units are sampled within the selected PSUs using the well known method of Probability Proportional to Size (PPS), where "size" is to be understood as number of employees<sup>7</sup>.

To start with the ECI a 'BLS data collector' comes into play. A visit is paid to every single (selected) establishment, the so called *initiation*, and an interview is conducted to collect a complete list of employees (grouped by occupations). From this list a number of employees is chosen (at random, again trying to use the PPS pattern of sampling) where each employee represents one occupation within the establishment, and the occupations are represented according to their frequency (= "size")<sup>8</sup>.

During the 'initiation' in all sample units the BLS representative is also required for the (initial) collection data on wages and salaries as well as benefits. Hence all sorts of compensations and benefits have to be collected for certain employees representative of the structure of occupations in the unit.

After the 'initiation' a continuous information on wages and benefits is gained from *regular reports of changes*, usually by mail or telefone.

Concerning the wages and salaries data, the average hourly straight-time wage rate<sup>9</sup> for each occupation or for workers who are not paid on an hourly basis is determined. Straight-time

<sup>&</sup>lt;sup>5</sup> Unfortunately no information could be found on how far the integration concerning the ECI has progressed. What we know for sure, however, is that the replacement groups (occupations) of the ECI are now drawn from the NCS.

<sup>&</sup>lt;sup>6</sup> A two stage area sample with five equal replacement groups allowing for a "rotation". The NCS has replaced the Occupational Compensation Survey (OCSP).

<sup>&</sup>lt;sup>7</sup> This means that the greater the number of employees within an establishment the greater the chance of the establishment of being selected. Roughly the same holds for the areas.

 $<sup>^{8}</sup>$  The principle is again, as stated above: the more people work in a certain occupation the greater the chance of being selected. But that does not mean small establishments and infrequent jobs have no chance at all of being included in the sample.

<sup>&</sup>lt;sup>9</sup> Straight-time earnings are being divided by the hours worked.

wages are earnings *before* payroll deductions and excluding premium pay for overtime and for work on weekends and the like. As for the benefits, they are converted to hourly numbers by dividing the yearly benefit costs by the total hours worked during the corresponding year.<sup>10</sup>

Occupations are classified into 10 major occupational groups, as shown in **tab. 6.5.1**. It should be noted that occupations are defined narrowly in order to ensure that (preferably the same) *homogeneous* groups of employees are studied.

The establishments (and SLCs) chosen for computing the ECI are classified with the help of the Standard Industrial Classification Manual (SIC) by the Office of Management and Budget. The industry (activity) categories of the private and public sector according to this manual are given in **tab. 6.5.2**. In a similar vein areas need to be classified (see **tab. 6.5.3**)<sup>11</sup>, and finally the same is true for "benefits". As shown in **tab. 6.5.4** a distinction is made between altogether 20 types of benefits. They are grouped into six major categories as there are:

- 1. Paid leave;
- 2. Other supplemental cash payments;
- 3. Insurance benefits;
- 4. Retirement and savings benefits;
- 5. Legally required benefits (social security, unemployment insurance etc.);
- 6. "Other benefits" like severance pay for example.<sup>12</sup>

Since June 2000 the ECI has also covered hiring bonuses, but it still excludes stock options, though this topic is being discussed.

#### c) Index compilation

Considering all classifications applied, a total of 910 cells are created, over which the ECI needs to be aggregated to one single index. Aggregation is done in mainly two steps<sup>13</sup>

- 1. estimation of the mean change in compensation costs for each industry-occupation cell (reference period pay as compared with base period pay, taking into account, however, that the samples are changing due to replacement of establishments [and SLCs] and changes in the distribution of occupations)<sup>14</sup>
- 2. aggregation of the cell's by taking averages across cells (occupations, types of establishments, areas etc) in order to obtain the overall ECI of the USA.

First the mean change in a cell's compensation cost between the base period (0) and reference period (t) is estimated by calculating the ratio of the average compensation for the i-th cell's jobs in period t to that in the base period 0, that is  $M_{it} = M_{i,t-1}(\overline{p}_{it}/\overline{p}_{i,t-1})$ , the cumulative average wage change in the i-th cell from time 0 to time t.

<sup>&</sup>lt;sup>10</sup> The annual cost is divided by the annual hours worked to yield the cost per hour worked for each benefit.

<sup>&</sup>lt;sup>11</sup> The four regions into which the USA is subdivided in ECI publications are the same as the census regions.

<sup>&</sup>lt;sup>12</sup> compare: John W. Ruser, 2001, The Employment Cost Index: what is it?, Monthly Labor Review, September 2001, Vol. 124, No. 9, pp.3-16, p.4

<sup>&</sup>lt;sup>13</sup> The description of the two steps follows John W. Ruser, 2001, pp.7-8.

<sup>&</sup>lt;sup>14</sup> Of course if one were to compare the base period to the reference period compensations and other benefits of employees where two different samples of establishments are involved this would lead to false results in that they are also reflecting structural changes (concerning the frequency of jobs in the establishments). In order to account for the changing samples only those jobs that occur in the samples of *both* periods are used in the calculation.

The average compensation costs ( $\overline{p}_t$  and  $\overline{p}_0$  respectively) for a job is estimated as the weighted arithmetic average over all jobs in a cell. The weights are approximately equal to the inverse of the probability of being selected for the sample. As the same is done for any two adjacent periods the change in mean compensation from the base to the reference period for a given industry-occupation cell is gained by chainlinking. This means that the factor  $M_{it}$  needed in order to update (with respect to prices) the base period "wage bill" (an expenditure, i.e. price times quantity)  $W_{i0}$  to get  $W_{it}$  is given as the product of the individual period changes, that is  $\overline{p}_{i1}/\overline{p}_{i0}$ ,  $\overline{p}_{i2}/\overline{p}_{i1}$  ... and so on.

1. Professional specialty	4. Sales occupations	Metalworking, plastic working, and
occupations	Sales workers Sales representatives	woodworking machine operators
Engineers, architects, and surveyors	Cashiers	Printing machine operators
Mathematical and computer	5. Administrative support	Textile, apparel, and finishing
scientists	including clerical	machine operators
Natural scientists	Computer equipment operators	Machine operators, other materials
Health diagnosing occupations, i.e.	Secretaries, stenographers, and	Fabricators, assemblers, and hand
physicians, dentists, etc.	typists, Information clerks	working occupations
Health assessment and treating	Records processing clerks	Production inspectors, testers,
occupations, i.e. registered nurses,	Duplicating, mail and other office	samplers, and weighers
pharmacists, physical therapists,	machine operators	8. Transportation and material
etc.	Material recording, scheduling, and	moving occupations
Teachers	distribution clerks	Motor vehicle operators
Librarians, archivists, and curators	Adjusters and investigators	Railroad and water transportation
Social Scientists and urban	6. Precision production, craft,	operators
planners	and repair occupations	Moving equip operators
Social, recreation, and religious	Mechanics and repairers	9. Handlers, equipment
workers	Construction trades occupations	cleaners, helpers, and laborers
Lawyers and judges	Extractive occupations	10. Service occupations
Writers, authors, entertainers, and	Precision metalworking,	Protective service occupations
athletes	woodworking, textile, apparel, and	Food service occupations
2. Technical occupations	other materials occupations	Health service occupations, i.e.
Health technologists and	Precision inspectors, testers, and	health aides and nursing aides
technicians	related occupations	Cleaning and building service
Engineering and related	Plant and system operators	occupations
technologists and technicians	7. Machine operators,	Personal service occupations, e.g.
Science technicians	assemblers, and inspectors	barbers, hairdressers, and ushers
Miscellaneous technicians	assertations, and inspectors	
3. Executive, administrative,		
and managerial occupations		

 Tab. 6.5.1: Occupational groups according to the Standard Occupational Classification

 System used in the 1980 Census<sup>15</sup>

A distinction was made between occupational groups as follows



\* a) State and local goverment, b) Private industry

<sup>&</sup>lt;sup>15</sup> Initially the ECI was based on the occupational classification system used in the 1970 Census of Population. From June 1986 on the system of tab. 6.5.1 was taken for the classification of occupations.

Tab. 6.5.2: Industry (activity) groups according to the Standard Industrial Classification (SIC)

Civilian (SIC 10 – 94)	Non-durables (SIC 20 – 23, 26 – 31)
State and local governments (SIC 10 – 94)	Service-producing industries (SIC 40 – 89)
Private Industry (SIC 10 – 89)	Transportation and public utilities (SIC 40 – 49)
Goods-producing industries (SIC 10 – 39)	Wholesale and retail trade (SIC 50 – 59)
Construction (SIC 15 – 17)	Finance, insurance and real estate (SIC $60 - 67$ )
Manufacturing (SIC 20 – 39)	Service industries (SIC 70 – 89)
Durables (SIC 24, 25, 32 – 39)	Public administration (SIC 90 – 95)



Tab. 6.5.3: Geographic areas

Northeast	South	Midwest	West
Connecticut,	Alabama, Arkansas, Dela-	Illinois, Indiana,	Alaska, Arizona,
Maine, Massa-	ware, District of Columbia,	Iowa, Kansas,	California, Colorado,
chusetts, New	Florida, Georgia, Kentucky,	Michigan,	Hawaii, Idaho, Mon-
Hampshire, New	Louisiana, Maryland,	Minnesota,	tana, Nevada, New
Jersey,	Mississippi, North Carolina,	Missouri, Ne-	Mexico, Oregon,
Pennsylvania,	South Carolina, Oklahoma,	braska, North	Utah, Washington,
Rhode Island,	Tennessee, Texas, Virginia,	Dakota, Wis-	Wyoming
Vermont	West Virginia	consin	

Tab. 6.5.4: Benefits of employees (in addition to wages) covered in the U.S.- ECI

1. Paid leave	3. Insurance benefits	5. Legally required benefits
Vacations	Health insurance	Social security
Holidays	Life insurance	Federal and State unemployment
Sick leave, and other paid leave	Short- and long-term disability	insurance
	insurance	Worker's compensation
2. Supplemental Pay		Other benefits required by law such
Premium pay for overtime and	4. Retirement and savings	as State disability insurance
work on weekends and holidays	benefits	6. Other benefits
Shift differentials	Defined benefit plans	Severance pay
Non-production bonuses*	Defined contribution plans	Supplemental unemployment plans

\* i.e. lump-sum payments provided instead of wage increase

Note that each ratio  $\overline{p}_{i2}/\overline{p}_{i1}$  of t-th quarter change as compared with the prior - quarter weights average wage is calculated using *matched establishment/occupation wage quotations*, that is each link can be viewed as a true Laspeyres Index. The resulting chained index then is

(6.5.1) 
$$P_{0t}^{ECI} = \frac{\sum_{i} W_{i0} M_{i0}}{\sum_{i} W_{i0}}.$$

Not surprisingly the index formula of the ECI is currently under discussion (Ruser, 2001). The Laspeyres formula still in use is said to overestimate employers' labor costs in the reference period due to the fact that it does not allow for the substitution effect (by virtue of which employers will reduce / increase employment of those employees who are getting increasingly costly / or less expensive respectively). By the same token a Paasche ECI using reference period weights is supposed to underestimate the rise in employment costs. Some kind of average of the Laspeyres and Paasche index, as e.g. the "ideal index" of Fisher, therefore is considered to be a sensible compromise in this situation. The Törnquist index is another formula which came to the fore in this context.

Contrary to a popular expectation in the case of labor costs empirical studies revealed that the Laspeyres formula did not in general end up with higher figures than the Paasche index formula. This is possibly due to the fact that

- quick subsitutions in response to changes in the structure of labor costs were not feasible or at least unlikely to happen, and therefore
- changes in the employment structure (weighting schemes) happened to be rather small, basically too small to affect significantly the ECI statistics

such that as a consequence different index formulas could nonetheless yield quite similar results in this case. Although under such conditions the Laspeyres index should be the preferred index<sup>16</sup> due to an increasing public interest in these formula aspects the BLS found itself urged to consider the publishing of a variety of ECI- indices in addition to the Laspeyres index formula.

## d) The ECI compared with the Average Hourly Earnings (AHE)

The ECI is not the only wage cost growth indicator. Another related measure is the Average Hourly Earnings or AHE. Even though both measures are continually observed by the Federal Reserve Board, the bank definitely prefers the ECI over the AHE by a number of reasons as listed in table 6.5.5. Perhaps the most important shortcoming of the AHE as compared with the ECI is that the AHE is a sort of unit value index rather than a true price index.

The ECI covers all occupations within the private economy (that is 83% of the total working population; and about 27,100 occupations within 6,300 establishments) - excluding, however, farms, private households, and the self employed persons (4% altogether) - and the public sector (i.e. State and Local Government [SLG]<sup>17</sup> with some 4,000 occupations in nearly 800 SLG units).

<sup>&</sup>lt;sup>16</sup> not only because of being in line with the idea of "pure" price comparison but also due to the fact that the formula is fairly easy to calculate and requires less data than for example the Paasche index.

<sup>&</sup>lt;sup>17</sup> With the Federal Government excluded, however.

	ECI	AHE
published	quarterly (with a one month delay)	monthly (thus very timely)
scope, target	broader concept, including not only	in the main restricted to wages and
concept	wages and salaries but also benefits	salaries
price index	satisfying the principle of pure price	influenced by various factors which
vs. unit value	comparison; independent from changes	are not reflecting "inflation", or a
index	in the structure of employment	"pure" price movement
used for	pay adjustments, forecasts etc.	short term analysis of business cycles

Tab. 6.5.5: Comparison of ECI and AHE

Most important, the ECI is independent from shifts in the composition of employment between low- and high-wage industries and between low- and high wage occupations within industries. Therefore, the ECI measures costs for the same jobs over time (insensitive to structural changes), whereas the AHE tends to rise whenever more high-skilled workers are employed who are better paid than lower-skilled workers and not because of a raise in wages for a particular job. On top of that, a temporary increase in wages for example due to overtime work which is normally better paid than regular working hours will lead to an increase in the AHE, but again not of the ECI.

As the ECI is measuring the "pure" price movement and thus a more reliable inflation indicator than the AHE, it is also avery important indicator for the financial market especially due to its correlation with interest rates or stock prices.<sup>18</sup> Moreover the ECI data can be very useful when determining Federal white-collar pay adjustments under the Federal Employees Pay Comparability Act, for making economic forecasts or price adjustments. The data is also used for making adjustments to Medicare reimbursements for hospitals, physicians etc. or for determining prices in long term purchase contracts.<sup>19</sup>

A major shortcoming of the ECI, on the other hand, is that it is unlike the AHE only published quarterly and does not cover all employees and employers and also excludes some activities such as farms and others (see fig.6.5.5), but it still covers a very wide range.

Since the ECI is a sample it is subject to sampling errors (S.E. or standard deviation  $\sigma$ ) in addition to the usual non-sampling errors. The S.E. is reflecting the fact that the results obtained with the ECI may differ from those calculated with all the establishments and that different samples may lead to different results. As to the sampling error (or more precisely the S.E.) the BLS gives the following estimates (as well known from the normal distribution):

with probability 68% the S.E. is less than  $\sigma$ , and with  $\approx 90\%$  less than 1.6 $\sigma$ .

Of course the ECI is also subject to nonsampling errors, which also arise in the case of a total enumeration as opposed to a sample. Such errors can be due to non-response, or data collecting and processing errors, i.e. incorrect information delivered by the respondent or maybe even errors in recording the data collected.<sup>20</sup>

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<sup>19</sup> <u>http://www.bls.gov/ncs/usage.htm</u>
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<sup>&</sup>lt;sup>18</sup> To name just two of the possible impacts the outcome of the ECI has on the financial market: it is often maintained that for example an increase in the ECI which is considered inflationary will lead to rising interest rates or will affect possible profits at the bond market negatively.

<sup>&</sup>lt;sup>20</sup> The only way to handle nonsampling errors is to try to minimize them by improving the data collection procedure. Therefore quality assurance programs have been implemented into the ECI to reduce those kinds of errors. These programs include re-interviewing or systematic professional review on reports and help to discover the primary sources of errors, the main premise for avoiding them in the future. Furthermore the field workers have to undergo intensive training in how to collect the data to maintain high standards.

A method called 'balanced repeated replication' is used to measure the variance of the estimates for the 12 month *percent change* of the ECI as an indicator of the *reliability* of the results. Let  $R_{s,0}$  denote the 12-month percent change for characteristic 's' calculated using the full sample and  $R_{s,i}$  correspondingly the percentage change using the ith balanced half-sample<sup>21</sup>

(i = 1, ..., 128) then, the variance<sup>22</sup> is given by 
$$\frac{1}{128} \sum_{i=1}^{128} (R_{s,i} - R_{s,o})^2$$
.

### e) The European Labour Cost Index (LCI), a "work in progress"

Eurostat started a new program of wage and labor statistics in 1991 in the framework of which also the integration of a European Employment Cost Index (EECI) which is comparable to the US-ECI was intended<sup>23</sup>. Originally, it was envisioned that if all member states agree the integration should be completed by 2002 or 2003. However, things turned out much more difficult than expected such that by 1996/97 it became apparent that especially the integration of the EECI did not go according to plan and doubts arose whether the project could and should be realized at all. The most important reason for the hesitant acceptance of the new index were the high costs and so the claim for a more cost efficient solution came up. As a result new pilot projects were set up to test new ideas.<sup>24</sup>

When Eurostat started the above mentioned program, the idea was to start with carrying out a number of pilot surveys in certain EU Member States in order to test the usefulness, advantages and disadvantages of such a European ECI index. That was done in countries such as Germany, France, the Netherlands, the United Kingdom, Portugal, Greece and Denmark. In 1997 Spain<sup>25</sup> also started these surveys, called Structure of Earnings Survey (SES)<sup>26</sup>.

In a decision dating back to 1997 the Statistical Programme Commission (SPC) of Eurostat the desire was expressed to implement a *true price index* of the factor "labour". It soon became apparent, however, that such an index would be too costly and ambitious, and the project therefore had been "downsized" to a simple "Labour Cost Index" (LCI) resembling more a unit value index rather than a true price index.

The European LCI thus will in several aspects lag behind the more advanced methodology of the US-ECI example, it originally wanted to follow. Thus the LCI will provide only some rough and global information as regards the movement of wages and other (supplementary) benefits.

<sup>&</sup>lt;sup>21</sup> For clarification each sample is divided into a number of variance strata which are then in turn divided in halves. The percentage change estimates are replicated 128 times using only the half-samples.

<sup>&</sup>lt;sup>22</sup> The standard error (- deviation) is, as usual, the square root of the variance.

<sup>&</sup>lt;sup>23</sup> Like the US-ECI, the EECI is understood as a price index (with labor costs of various occupations as "prices") compiled according to the Laspeyres formula; cf. Mguel A. De Castro, in: Proceedings of the second CEIES Seminar, p.18.

<sup>&</sup>lt;sup>24</sup> Unfortunately we were unable to find more information on these projects, but tt seems that the integration has still not been accomplished.

<sup>&</sup>lt;sup>25</sup> which will be used as a model country in this part of the paper

<sup>&</sup>lt;sup>26</sup> We already had some similiar SES-type surveys in a number of EU Member States in the 70'ies but most of them were discontinued due to the immense workload for both, the Statistical Institutes and the respondents (employers), as these statistics consist of reporting a great number of data of the *individual employees*, such as wages and all sorts of benefits, occupation, the number of years worked for the company, the level of education and the like, to name only some of the items. The Spanish survey covered 150 establishments in the autonomous community of Madrid, but four economic activities only. After the full integration of the EECI the sample should have grown to a size of approximately 5000 establishments.

In a Regulation of the European Parliament and Council (Nr. 450/2003) of Febr. 2002<sup>27</sup> the obligatory submission of the necessary data for a European LCI to Eurostat was implemented according to which Member States (MS) are excepted to deliver data as of 2007 referring to the private enterprise economy (exclusive of agriculture) with the perspective of other sectors, as e.g. government, and more service providers, being included in the near future.

The notion of labour cost (see **fig. 6.5.1**) resembles the broad concept of the AHE statistics in the USA, i.e. comprising all sorts of benefits. The definition of labour cost is comprehensive in that it comprises all sorts of employers' social contributions<sup>28</sup> plus taxes less subsidies in addition to wages and salaries.



Whenever possible MS are encouraged to make use of administrative records instead of carrying out special surveys, or even sending interviews into establishments. Data on earnings have to be combined with various estimates of numbers of employers and hours worked, although the LCI will not keep constant this structure of "quantities" in a satisfactory manner as done for example in the US-ECI.

As to the structure of the labour force to which the LCI applies a distinction will be made along the following characteristics

- ? economic activity defined by NACE sections (2 digit level), and
- ? a rough breakdown into categories of qualification and level within a hierarchy (unlike the US-ECI a breakdown into occupations is not intended).

The index will be compiled quarterly, preferably on the basis of existing data collections and administrative sources in order to minimise the response burden of employers. The index series will be delivered in each of the following ways, unadjusted, working- day adjusted and/or seasonally adjusted. Successive values of the index will be gained by chaining (chainlinking).

<sup>&</sup>lt;sup>27</sup> As well as a Commission Regulation Nr. 1215/2003/July2003.

 $<sup>^{28}</sup>$  with the exception of components which may legitimately be viewed as intermediate consumption.

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The MS are bound to submit feasibility studies by the end of 2005 (to find rational methods of data collection) such that actual index compilation on a representative basis will not start before 2006 or 2007. In order to reduce the high costs of data collection involved in the European LCI project (in fact one of the main reasons for reservations made by some Member Countries) more efficient survey methods and in particular the feasibility of making better use of already existing (administrative) data is presently discussed.

Notwithstanding the importance and usefulness of the new (forthcoming) LCI index is not called in question, if only a reasonable proportion between legitimate users' needs on the one hand and a tolerable response burden<sup>29</sup> on the other hand can be found.

### Some references

http://www.bls.gov/ncs/summary.htm , http://www.bls.gov/ncs/usage.htm ,

http://www.bls.gov/ncs/methodology.htm , http://www.bls.gov/ncs/ect/sp/ecbl.0012.pdf (= Employment Cost Indexes 1975-1998); Michael K. Lettau, Mark A. Loewenstein and Aaron Cushner, Is the ECI sensitive to the method of aggregation?, Monthly Labor Review, Vol. 120, No. 6, June 1997; John W. Ruser, The Employment Cost Index: what is it?, Monthly Labor Review, September 2001, Vol. 124, No. 9, pp.3-16; Proceedings of the second CEIES Seminar, Employment and Labour Cost Statistics in the EMU Perspective, London, May 1997

 $<sup>^{29}</sup>$  Respondents reportedly sometimes do not see why they should put so much work in gathering data and at the same time putting off work which is directly connected to the business' profits. Therefore it happens that no data will be delivered at all or that if data is delivered the quality is very low, because not much effort was put into the data collection process. So a compromise must be found that meets both parties needs, which will definitely entail a reduction of the requested data to what is essential.