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ESD/STAT/SERV(91)6/REV1

Or. Eng./Fr.

QUESTIONNAIRE ON THE MEASUREMENT OF VALUE ADDED AT
CONSTANT PRICES IN SERVICE ACTIVITIES/INDUSTRIES

This questionnaire is designed to identify measurement methods of value added at constant prices in services in OECD Countries. It is an amended version of the document discussed at the Meeting of Service Statistics Experts (Paris 8-10 July 1991) taking into account delegates' proposals. National Experts are requested to return the completed questionnaire form to the Head of the Service Statistics Section, ESNAD, by end December 1991.

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Questionnaire on the measurement of value added at constant prices in Services

INTRODUCTION

1. This document is a revised version of the Note by the Secretariat ESD/STAT/SERV(91)6 discussed at the Meeting of Service Statistics Experts (8-10 July 1991) and takes into account the comments made by Delegates. It is divided into two parts: Part I consists of the explanatory notes and Part II of the questionnaire form.

PART I : EXPLANATORY NOTES

2. The Questionnaire is designed to identify methods used presently by Member countries to estimate value added at constant prices for services and to update the results of the previous 1985 survey carried out by the Economic Statistics and National Accounts Division and published in [1]. It is felt that since then methods and/or data collection procedures may have been improved [2].

3. The present questionnaire differs from the one sent out in 1985 in that the number of different methods of measurement mentioned in it have been increased and that the classification of service industries refers to ISIC Revision 3 [4] (hereafter referred to as ISIC), on the grounds that it prepares more suitably for future developments.

4. It must nevertheless be stressed that ISIC should be taken as indicative only: when filling in the questionnaire, respondents should give priority to reporting measurement methods used for a given category of service activities even if there is not complete identity of item coverage. Space is provided elsewhere in the questionnaire to describe divergences between ISIC and national classifications.

5. Methods for measuring constant price value added have been defined by crossing four sets of criteria:

- a) the use of double or single indicators
- b) the use of output or input related indicators
- c) the use of deflation or extrapolation methods
- d) the kind of variable used to construct the indicators

This has led to identifying thirteen different approaches and to grouping in a fourteenth residual category any others which have not been singled out. An analysis and discussion of the reliability of these different measurement methods may be found in [3].

6. Double indicator methods present the characteristic of taking into account changes in both output and inputs, and derive value added by subtracting constant price estimates of the latter from the former. Three types of double indicator methods are identified according to whether price or volume indices are made use of.

7. In double deflation (column 3), current price series of gross output and of intermediate consumption are both deflated by price indices which measure the change in prices of output on the one hand and inputs on the other. Value added in constant prices is then derived by subtracting constant price intermediate consumption from constant price gross output.

8. In double extrapolation (column 4), base year values of gross output and of intermediate consumption are both extrapolated using appropriate volume index series for each flow, and deriving constant price value added by subtraction.

9. Extrapolation/deflation methods (column 5) consist in deriving constant price value added from an extrapolated series of base year estimates of gross output, using volume indices and a deflated series of current price intermediate consumption or vice versa.

10. Single indicator methods consist in estimating constant price value added on the basis of a series of one single variable, the movements of which are as highly correlated as possible to those of value added. Single indicator methods are classified according to whether the indicator is output- or input-related, to whether it leads to deflation or to extrapolation and according to the variable used as a proxy for measuring volume changes in value added.

11. Single output-related methods are classified into three variants :

- a) Single deflation of current price value added series by a gross output price index (column 6).
- b) Single extrapolation of base year estimates of value added using a gross output volume index (column 7). The latter may be obtained by deflating current price gross output or by extrapolating base year gross output using an output volume index series.
- c) Single extrapolation of base year value added using index series based on physical quantity output measures (column 8). This approach differs from (b) in that the basic data used to construct the extrapolator is expressed in physical units of output (e.g. tons-kilometres, number of medical consultations or number of pupils) and not in constant price monetary units.

12. Single input-related methods are classified into nine categories with respect to whether deflation or extrapolation is used and to which variable is taken as an indicator for volume changes in value added.

- a) Single deflation of current price value added by a price index of intermediate consumption (column 9).
- b) Single deflation of current price value added by a wage rate index (column 10).
- c) Single extrapolation of base year value added by a volume index of intermediate consumption (column 11).

- d) Single extrapolation of base year value added using an index series of deflated compensation of employees by a wage rate index (column 12).
- e) Single extrapolation of base year value added by an index series based on physical quantities of inputs other than labour (column 13).
- f) Single extrapolation of base year value added by an index series of numbers employed (column 14).
- f*) Single extrapolation of base year value added by index series of numbers employed adjusted for labour productivity change (column 14).
- g) Single extrapolation of base year value added by an index series of man hours worked (column 15).
- g*) Single extrapolation of base year value added by index series of man hours worked adjusted for change in labour productivity (column 15).

13. "Other Methods" (column 16) includes approaches to the measurement of constant price value added which do not fall into any of the above categories. For instance, the measurement of constant price value added may combine output and input indicators (e.g. the number of pupils and the number of teachers). Another example is the use of data concerning a different service activity than the one being measured, but closely related to it, for lack of any data whatsoever relating to the latter (e.g. data on transport may serve as a proxy indicator for storage when no information on storage is available).

14. The questionnaire form for any given service category is spread over two pages. On the first page, the ISIC [4] activity headings (column 2) and the corresponding group or class code number (column 1) are listed. The breakdown of transport (into passenger and freight) and of real estate activities are specific to the questionnaire. Non market services are separated from market services since methods used to measure value added in each case are generally different. In the following columns (3 to 16), measurement methods are mentioned under abridged names in the same order as they are reviewed in the previous paragraphs, and complete headings are spelt out in the annex. Respondents are requested to answer this part of the questionnaire by ticking the appropriate column for each activity.

15. If more than one measurement method is used within the same industry then more than one column should be ticked. If the breakdown of activities in the questionnaire is finer than the one actually used, those activities for which the same method is implemented may be bracketed together. If, on the other hand, greater detail is needed to report different methods used for different activities within a category, then additional items should be added to the list.

16. Columns 14 and 15, respectively "Numbers employed" and "Man hours worked", allow for two variants within each method : the first makes no adjustment for labour productivity change, the second, on the contrary, does. Should either one of these methods be used for a given activity, the answer in the column should be a double tick if adjustment is made to account for labour productivity change. If not, a single tick is required.

17. In column 17, respondents are requested to indicate classification differences between their national nomenclature and ISIC by giving the ISIC code number of the displaced item preceded by the indication "inc" if it is included in the national category (and excluded in ISIC), or by "exc" in the opposite case. For example, if "restaurants" are included in "retail trade" in the country's classification, one should read "inc.552" in column 17 on the line of retail trade and "exc.552" on the line of "hotels and restaurants" (552 being the ISIC code number of restaurants, bars and canteens).

18. In order to avoid an over-simplified description of the procedures followed additional information on the kind of price, volume or quantity index(indices) built for deflation or extrapolation is asked for in column 18. Respondents are requested to specify here which indicator is used, within the framework of the broad method indicated in columns 3 to 16. For example, the price index used for deflation may be an implicit price index, a producers' price index or a consumer price index.

18. In column 19, respondents are requested to identify the primary source data used for each activity group stating the variables they relate to. It would be helpful if respondents could also describe changes/improvements in estimation methods which may have occurred since the 1985 inquiry (e.g. an increase of the number of individual inputs taken into account in the construction of price indices, or the incorporation of import prices previously excluded). The information given in this column should complete and elaborate on the answer given in column 18.

19. Column 20 is a copy of column 1, providing the group or class code numbers of ISIC categories.

ANNEX

Unabridged names of methods given in columns 3 to 16 and 18 :

- column 3 : Double deflation of current price gross output and intermediate consumption by price indices
- column 4 : Double extrapolation of base year gross output and intermediate consumption by volume indices
- column 5 : Extrapolation of base year gross output by a volume index and deflation of current price intermediate consumption by a price index, or vice versa
- column 6 : Direct deflation of current price value added by a gross output price index
- column 7 : Extrapolation of base year value added by a gross output volume index (deflated gross output)
- column 8 : Extrapolation of base year value added by an output index based on physical quantity data
- column 9 : Deflation of current price value added by an intermediate consumption price index
- column 10 : Deflation of current price value added by a wage rate index
- column 11 : Extrapolation of base year value added by an intermediate consumption volume index
- column 12 : Extrapolation of base year value added by a deflated wage bill index
- column 13 : Extrapolation of base year value added by a physical quantity input index
- column 14 : Extrapolation of base year value added by an index series of numbers employed (the answer is a single tick) or by an index series of numbers employed adjusted for labour productivity change (the answer is a double tick)
- column 15 : Extrapolation of base year value added by an index series of number of hours worked (the answer is a single tick) or by an index series of the numbers of hours worked adjusted for labour productivity change (the answer then is a double tick)
- column 16 : Other methods

column 17 : Divergence between ISIC Rev.3 and national classifications, item code number in ISIC (the code number should be preceded by the indication "inc" or "exc" according to whether the item referred to is included or excluded in/from the closest corresponding item in the national classification)

Notes and References

1. OECD (1987), Measurement of Value Added at Constant Prices in Service activities, Sources and Methods, Paris.
2. The U.S. provide an example of recent improvement in methods and source data collection [cf. DE LEEUW F., M. MOHR and R.P. PARKER "Gross Product by Industry, 1977-1988", *A Progress Report on Improving the Estimates*, U.S. Department of Commerce, Survey of Current Business, January 1991].
3. HILL, T.P. (1971), The Measurement of Real Product, OECD, Paris.
4. UN (1990), International Standard Industrial Classification of All Economic Activities, Statistical Papers, Series M No.4, Revision 3, New York.

ORGANISATION FOR ECONOMIC
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DEPARTMENT

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QUESTIONNAIRE ON MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICE
IN SERVICE INDUSTRIES/ACTIVITIES

37718

FOR TECHNICAL REASONS, GRAPHS, TABLES & FACSIMILES ARE NOT AVAILABLE ON OLIS

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							16
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
G.	A. MARKET SERVICES														
	1. Wholesale and retail trade (including repair of motor vehicles, motorcycles and personal and household goods)														
	50 Sale, maintenance and repair of motor vehicles and motorcycles (including parts, accessories and fuel)														
	51 Wholesale trade (except of motor vehicles and motorcycles)														
52	Retail trade (except of motor vehicles and motorcycles, including repair of personal and household goods)														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			G.
			50
			51
			52

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related					Input related					16
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added			Deflated value added		Extrapolated base year value added				
					Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)	Hours worked (*)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
H.	2. Hotels and restaurants														
551	Hotels, camping sites and other short stay accommodation														
552	Restaurants, bars and canteens														
I.	3. Transport and storage														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			H.
			551
			552
			I.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related							16	
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14		Hours worked (*) 15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
601	Transport via railways :															
	- passengers															
	- freight															
602	Other land transport :															
	- passengers															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			601
			602

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	- freight														
603	Transport via pipelines														
611	Sea transport :														
	- passengers														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			603
			611

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14		Hours worked (*) 15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
612	- freight															
	inland water transport :															
	- passengers															
	- freight															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			612

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)		Hours worked (*)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
62	Air transport :															
	- passengers															
	- freight															
63	Supporting and auxiliary transport activities ; activities of travel agencies															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N°
			20
			62
			63

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							16
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
64	4. Post and Telecommunications														
641	Post and courier activities														
642	Telecommunications														
J.	5. Financial intermediation														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			64
			641
			642
			J.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14		Hours worked (*) 15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
651	Monetary intermediation															
659	Other financial intermediation															
6601	Life insurance															
6602- 6603	Other insurance (except compulsory social security)															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			651
			659
			6601
			6602- 6603

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							16
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
67	Activities auxiliary to financial intermediation														
70	6. Real estate activities														
	Owner-occupied dwellings														
	Rented dwellings														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class NP 20
			67
			70

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3.		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed		Hours worked
1	2	3	4	5	6	7	8	9	10	11	12	13	(*) 14	(*) 15	16	
	Other real estate activities															
71	7. Renting of machinery and equipment without operator and of personal and household goods															
711	Renting of transport equipment															
712	Renting of other machinery and equipment															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N°
			20
			71
			711
			712

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed		Hours worked
1	2	3	4	5	6	7	8	9	10	11	12	13	(*) 14	(*) 15	16	
713	Renting of personal and household goods															
72	8. Computer and related activities															
73	9. Research and development															
74	10. Other business services															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			713
			72
			73
			74

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14		Hours worked (*) 15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
7411	Legal activities															
7412	Accounting, book-keeping, auditing and tax consultancy															
7413	Market research and public opinion polling															
7414	Business and management consultancy															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			7411
			7412
			7413
			7414

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							16
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
742	Architectural, engineering and other technical activities														
743	Advertising														
749	Business activities n.e.c.														
M.	11. Education														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			742
			743
			749
			M.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)		Hours worked (*)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
801-802	Primary and secondary education															
803	Higher education															
809	Adult and other education															
	12. Health															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			801-802
			803
			809

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
851	Human health activities														
852	Veterinary activities														
90	Sewage and refuse disposal, sanitation and similar activities														
92	13. Recreational, cultural and sporting activities														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			851
			852
			90
			92

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14		Hours worked (*) 15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
921	Motion picture, radio, television and other entertainment															
9211	Motion picture and video production and distribution															
9212	Motion picture projection															
9213	Radio and television activities															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			921
			9211
			9212
			9213

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
					Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)	Hours worked (*)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
9214	Dramatic arts, music and other arts activities															
9219	Other entertainment activities n.e.c.															
922	News agency activities															
923	Library, archives, museums and other cultural activities															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			9214
			9219
			922
			923

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							16
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
924	Sporting and other recreational activities														
93	14. Other service activities														
L	B. NON MARKET SERVICES 1. Public Administration and Defence, compulsory social security														
751	Administration of the state and the economic and social policy of the community														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			924
			93
			L
			751

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)		Hours worked (*)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
752	Provision of services to the community as a whole															
7521	Foreign affairs															
7522	Defence activities															
7523	Public order and safety activities															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			752
			7521
			7522
			7523

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*)		Hours worked (*)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
753	Compulsory social security activities															
M.	2. Education															
801-802	Primary and secondary education															
803	Higher education															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			753
			M.
			801-802
			803

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14		Hours worked (*) 15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
809	Adult and other education															
73	3. Research and development															
	4. Health															
851	Human health activities															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N°
			20
			809
			73
			851

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
					Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	Hours worked (*) 15		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
852	Veterinary activities															
853	5. Social work activities															
90	6. Sewage and refuse disposal, sanitation and similar activities															
91	7. Activities of membership associations															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			852
			853
			90
			91

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other
Group/ class N°	Activity	Input/Output related			Output related			Input related							
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added					
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed (*) 14	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
911	Activities of business, employers and professional organisations														
912	Activities of trade unions														
919	Activities of other membership organisations														
92	8. Recreational, cultural and sporting activities														

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			911
			912
			919
			92

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

ISIC Revision 3		Double Indicators			Single indicators										Other	
Group/ class N°	Activity	Input/Output related			Output related			Input related								
		Double deflation	Double extrapolation	Extrapolation /deflation	Deflated value added	Extrapolated value added		Deflated value added		Extrapolated base year value added						
						Output price	Output volume	Output physical quantity	Intermediate consumption price	Wage rate	Intermediate consumption volume	Deflated wage bill	Input physical quantity	Numbers employed		Hours worked
1	2	3	4	5	6	7	8	9	10	11	12	13	(*) 14	(*) 15	16	
921	Motion picture, radio, television and other entertainment activities															
923	Library, archives, museums and other cultural activities															
924	Sporting and other recreational activities															
95	9. Private households with employed persons															

(*) Please answer using a double tick if the indicator is adjusted for labour productivity change.

MEASUREMENT METHODS OF VALUE ADDED AT CONSTANT PRICES IN SERVICE INDUSTRIES/ACTIVITIES

Divergence ISIC 3/ nat. classification item code number	Description of price/wage index used for deflation or volume/ physical quantity index used for extrapolation or other method	Identification of data sources used for the construction of output and/or input indicators	ISIC Revision 3
17	18	19	Group/ class N° 20
			921
			923
			924
			95