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Regional indicators for the allocation of the Structural Funds Objective 1 regions

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REGIONAL INDICATORS FOR THE ALLOCATION OF THE STRUCTURAL FUNDS
OBJECTIVE 1 REGIONS

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REGIONAL INDICATORS FOR THE ALLOCATION OF THE STRUCTURAL FUNDS OBJECTIVE 1 REGIONS

1. Introduction

This article has been written in response to a demand for clarification of the statistical concepts used for the allocation of the Structural Funds Objective 1 regions. At present regional gross domestic product (GDP) per head in purchasing power parities (PPP) is the leading indicator for this allocation. However, this indicator is not indisputable. This article will try to set out the pros and cons of regional GDP and will discuss the alternatives for regional GDP: regional net or gross primary income and disposable income of households. These indicators will also be examined.

We start with an explanation of the legal basis of the statistical information in Section 2. Section 3 discusses the availability of the data, Section 4 the various concepts and Section 5 the pros and cons of these concepts. Section 6 concludes with a clarification of the most recent data as published by Eurostat.

2. Legal basis

The legal basis for the indicators used can be found in Council Regulation No 1260/1999[2], which gives precise criteria for the eligibility of the so-called Objective 1 regions. The Regulation states:

"The regions covered by Objective 1 shall be regions corresponding to level II of the Nomenclature of Territorial Statistical Units (NUTS level II[3]) whose per capita gross domestic product (GDP), measured in purchasing power parities (PPP) and calculated on the basis of Community figures for the last three years available on 26 March 1999, is less than 75% of the Community average."

The concept of GDP is taken from ESA 1995[4], which has its legal basis in the Council Regulation No 2223/1996[5], also known as the ESA-Regulation. Regulations are in preparation for the concepts of NUTS and PPP, and expected to come into force next year.

The ESA-Regulation also lays down the rules[6] for the compulsory and voluntary provision of data at national and regional levels as well as the time limits within which the data have to be provided to Eurostat.

Among other things, the ESA-95 Questionnaire (tables 1000, 1200 and 1300) makes clear which data have to be provided to Eurostat. The table below gives an overview of these data:

Type of indicator	Availability in number of months after reporting period	Regional level	Compulsory or voluntary
Total gross value added, first estimate	T+18	NUTS II	Compulsory
Gross value added, at detail of 17 industries	T+24	NUTS II	Compulsory
Total employment, at detail of 17 industries	T+24	NUTS II	Compulsory
Employees, at detail of 17 industries	T+24	NUTS II	Compulsory
Gross domestic product	T+18	NUTS II	Voluntary[7]
Gross value added, at detail of 3 industries	T+24	NUTS III	Compulsory
Total employment, at detail of 3 industries	T+18	NUTS III	Compulsory
Employees, at detail of 3 industries	T+18	NUTS III	Compulsory
Gross domestic product	T+24	NUTS III	Voluntary[7]
Balance of primary income of households, net	T+24	NUTS II	Compulsory
Disposable income of households, net	T+24	NUTS II	Compulsory

3. Availability of data

The regional gross domestic product is available for most of the EU member states and the candidate countries.

The new regional variables, balance of primary income and disposable income of households are available for the EU member states, at present with the exception of Austria, Belgium, Portugal, Italy, Denmark and Luxembourg. With respect to the latter six countries, Italy's data are already available, but not yet incorporated in NewCronos[8]; the data for Belgium and Portugal will be available by the end of 2002; Austria has a derogation until 2005, but Eurostat is negotiating a quicker provision of the data.; both Denmark and Luxembourg do not have a regional classification below the national level. Thus, Austria is the only impediment to a complete overview of the data of the EU member states by the end of this year.

For the candidate countries, the availability regarding primary income and disposable income of households is the following:

Poland and Rumania have provided data.

Estonia, Latvia, Lithuania, Slovenia, Malta and Cyprus only provide data at the national level, because for these countries the NUTS-II region coincides with the national level.

The Czech Republic, Hungary and Slovakia intend to provide data by the end of this year.

No data will be available for Bulgaria in the short run.

4. Clarification of some concepts

As all EU member states and the candidate countries use the national and regional accounts concepts for gross domestic product, national income and disposable income, data based on the national and regional accounts are basically comparable for all these countries. One of the underlying principles of these accounts is that regional totals add up to national totals.

For the EU member states, data compilation methodologies are available for both national and regional accounts.

With regard to the main relevant concepts, below we discuss gross domestic product (GDP), gross national income (GNI), gross disposable income (GDI) and purchasing power parities (PPP's).

GDP

GDP is basically the total value added generated by resident producers in a country or region, where “resident” refers to the workplace of the producer. GDP therefore indicates the ability of resident producers to generate value added.

Eurostat interprets the GDP concept as follows[9] “GDP, and thus per capita GDP, are indicators of a country's or region's output and are thus a way of measuring and comparing the degree of economic development of countries or regions. It should be borne in mind that GDP is not synonymous with the income ultimately available to private households resident in a country or region. GDP or per capita GDP cannot therefore be used to make statements such as ‘Region A is more prosperous than region B’”. This statement is based on phenomena like the extraction of gas in Groningen and the fact that several metropolitan regions like London, Ile de France and Amsterdam, have many productive activities which can only be sustained by workers from other regions.

In addition, in its *Sixth Periodic Report*[10] the Commission gives an explanation for the use of GDP as an income measure. The report states “GDP is designed to measure total output in a particular area, including services. However, it is also a measure of income, the main components being wages and salaries, profits and rent, though it excludes transfers of income, from individuals and companies (which might transfer part of their profits elsewhere) as well as from government, in the form, for example, of social benefits. This leads to a problem concerning the

use of GDP as a measure of income in some regions, such as city regions, where commuting by people resident in other regions adds to the local work force and GDP. Income per head of the people living in the city is, therefore, overstated while that of neighbouring regions is understated. This, however, is not a major problem for most regions, especially the poorer regions which are the main focus of this report." One may conclude that the Commission considers GDP mainly as an income measure, not an output measure. Without empirical data about disposable income of the regions, one could have doubts about the pronouncement of the Commission on GDP as an indicator to determine poor regions.

GNI

GNI is basically the income generated by the resident sectors (households, corporations and government) in a country or region. This concept differs from GDP in that its basic principle is the allocation of income to the place of living, regardless of where the income is generated. This implies, for example, that if GNI is used, the salary of somebody living in Flevoland and working in North-Holland will be allocated to Flevoland, whereas under the GDP concept, the salary (as part of GDP) would be allocated to North-Holland.

So, the difference between the GDP and the GNI concept for countries or regions is the net primary income from the rest of the world and/or the rest of the regions. Net primary income flows to and from the rest of the world and/or regions consist of flows of compensation of employees, property income and some taxes and subsidies on production and imports. The most important flow at the national level for the Netherlands is property income. At the regional level interregional flows of compensation of employees become more important because of commuting.

It may be concluded then that GNI reflects the capacity of resident sectors to generate income on the basis of their production factors (labour, capital and entrepreneurship).

GDI

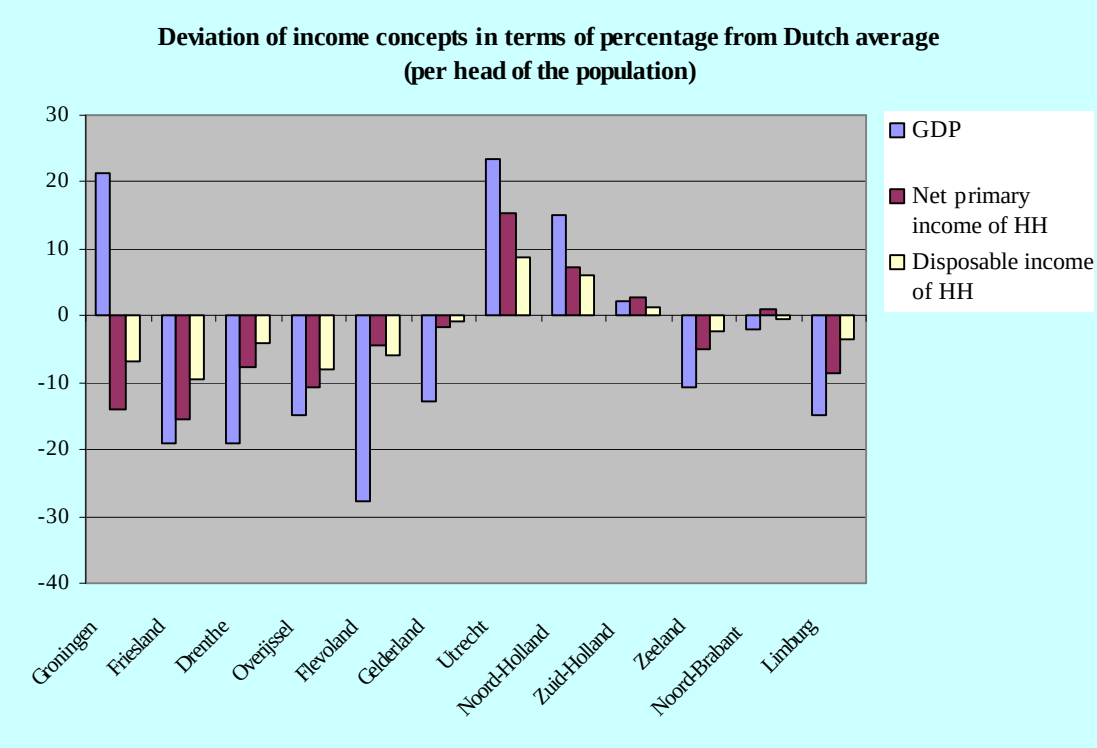
GDI is basically gross disposable income received by the resident sectors in a country or region. The difference between GNI and GDI will be built up by the net income transfers to and from the rest of the world and/or regions, mainly taxes on income and wealth, social contributions, social benefits and other current transfers. At the national level these flows will include contributions to and benefits from the EU, but also for instance expenses for development aid. Examples of interregional income transfers are social contributions, income taxes and social benefits like unemployment benefits and benefits for the elderly.

At the national level, differences in outcome between the concepts of GDP, GNI and GDI are in principle limited (see Annex I: Table 1). Ireland is an extreme exception: its GNI per capita in PPP is about 15% below the level of GDP per capita in PPP. This is caused by among other

things large net transfers of the profits of resident daughter corporations with a foreign mother. At the regional level, the differences between the concepts GDP, GNI and GDI may be larger because of inter-regional commuting, regional differences in unemployment, regional unbalances in the composition of the population, net transfers of the profits of resident corporations, etc., which effect the regional distribution of income.

Figure 1 illustrates the effects of distribution and redistribution by comparing the Dutch provincial GDP per capita with the primary and disposable income per capita of households[11] for 1997.

Figure 1



The light grey bar indicates the difference of the outcome for a province compared with the national average as a percentage of the GDP per capita. The dark grey bar shows this figure for net primary income of households per capita, and the white bar represents the disposable income of households per capita. GDP per capita for Groningen is above the national average because of the gas extraction in Slochteren. Primary income of this province is clearly below the national average, while disposable income is close to this average. This implies that the process of distribution and redistribution of income tends towards a more equal income distribution. There is empirical evidence that this observation for the Netherlands is also true for other European countries.

Figure 1 may give a somewhat biased view, as it compares GDP of all sectors with the results of only part of the total economy, namely the sector households.

In interpreting the results it is relevant that general government and corporations have different shares in regional GDI in the different member states, as Table 2 illustrates (see Annex I)[12]. This means that the level of disposable income of households per capita is not completely comparable because they may have a different share in the disposable income of all sectors. So in principle, to give the best possible description of the relative welfare position of the regions within the EU or the enlarged EU, disposable income of general government and corporations should be taken into account as well as disposable income of households.

One may conclude that gross or net disposable income reflects the capacity of the residents (households, general government and corporations) to purchase consumer goods and services and investment goods. It is an approximation of the concept of welfare, in terms of the purchasing power of the resident actors in the regions.

The income measures still have to be corrected for the different price levels for the same goods and services in the various EU member states and candidate countries[13].

Purchasing power parities

Below we outline the concept and the use of Purchasing Power Parities (PPP's) as spatial deflators for economic indicators. At present, only national PPP's are computed which means that only information about price differences at national level is available.

National PPP's are the averages of the price ratios between countries for a certain basket of goods and services. For example, the PPP between the Netherlands and Germany shows us how many euro we need in Germany to purchase the same quantity of goods and services costing one euro in the Netherlands. In other words, PPP’s represent the differences in price levels between countries and are therefore used as spatial deflators for economic comparisons between countries. Note that for countries with different currency units, exchange rate differences are also incorporated in the PPP's.

The calculation of PPP's in Europe is part of the worldwide *International Comparison Programme* (ICP) co-ordinated by the OECD. Eurostat is responsible for the European part of this programme, the *European Comparison Programme* (ECP), in which the EU member states, the candidate countries and the EFTA[14] countries participate.

As mentioned above the PPP’s serve primarily as base figures for the GDP. The GDP is divided into several uses (as distinguished in the National Accounts). The calculation of PPP is divided accordingly, namely (1) household final consumption expenditure, (2) final consumption expenditure of private non-profit institutions, (3) government final consumption expenditure, (4)

gross fixed capital formation, (5) changes in stocks, and (6) balance of external trade. (See Annex II for a more detailed clarification)

Some years ago, several reports were written about the quality of the PPP's (Castles 1997 and Ryten 1998[15]). In short, these reports found that there were serious doubts about the reliability of the PPP's at lower aggregate levels, mainly because of a lack of control on data collection. This lack of control results in differing methods of data collection between countries and a difference in products measured. However, it is probable that very high levels of aggregation such as total GDP give a credible result based on the law of large numbers.

As a result of these studies Eurostat and the OECD have taken a number of measures to improve the quality of the PPP's. First of all Eurostat reorganised the ECP, dividing Europe into three smaller groups, each with its own leader. This facilitates the communication between the countries and lends structure to the conferences. Furthermore, the information in the handbook has been improved and a Regulation is forthcoming to make participation in the ECP a legal obligation, paying special attention to quality assurance. A number of reforms have been introduced, such as the improvement of product descriptions with the aid of illustrations, etc. All these measures have already had a positive effect on the quality of the PPP's, although the work on quality improvement must be continued in the coming years.

As we have seen, at the moment the ECP only provides PPP's at a national level, so when economic comparisons are made at a regional level, no adequate PPP's are available as deflators for the price differences between regions. The absence of regional PPP's is caused by the fact that the compilation process of PPP's is not designed for the construction of regional PPP's, which would require new information on weights at a regional level as well as information on the representativeness of products for regions, and so on. Although the availability of regional PPP's would be an improvement, a compilation of such regional indicators is not foreseen in the near future. For, the compilation of regional PPP's will involve a large amount of work on methodological and organisational issues. Although Eurostat has now hired research capacity to develop methodology for the composition of regional PPP's, the entire operation will probably be very costly. Furthermore there is a consensus among European national statistical institutes to give priority to improving the quality of the national PPP's before starting to calculate regional ones.

Table 3 (see Annex I) gives the preliminary Price Level Indices per country for 2000. The EU15 is set at 100, which means that the average price level of the fifteen EU member countries serves as the base.

The price level indices are calculated as the ratio between the PPP's and the exchange rate. So the index expresses the relative position of price levels in respect of the EU15 average. For example, the index for the total GDP of Denmark is 120. This is much higher than 100, so Denmark can be

said to be a relatively expensive country compared with the EU15 average. On the other hand, Portugal is a relatively cheap country with a GDP price level index of 69. It should be noted that the table can only be read horizontally. So comparing the indices within a country, for example Health and Transport, is meaningless.

5. The best concept?

In this paragraph we will assess the pros and cons of the different concepts in terms of availability, comparability and usefulness.

GDP per capita

Regional GDP per capita is an indicator with some shortcomings that basically cannot be solved. It may not be interpreted as a welfare indicator, while as an output indicator it may be distorted by multi-regional enterprises. The advantage of this variable is its availability for all EU member states and candidate countries.

Balance of primary income of households per capita

An alternative for regional GDP could be the balance of primary income of households per capita. This concept reflects the earning capacity of the households resident in a region. The advantage of this income concept is that the problem of commuting is not included in this concept. That implies for instance that using this income concept, Flevoland would have a higher ranking than in case of the GDP concept. The income indicator will be available for all EU member states (except Austria) by the end of this year. These data will also be available for the candidate countries within the foreseeable future. However, as institutional differences between countries may distort the ranking of regions within the EU according to this income concept, this indicator is not completely indisputable. Comparability may be improved if data could be corrected for the balance of primary income of corporations and general government, although it is not yet clear how this might influence the relative position of regions.

Disposable income of households per capita

For the purpose of comparing welfare of EU regions, regional disposable income of households per capita is supposed to be a basically better indicator than regional GDP per capita. This indicator will be available for all EU member states (except Austria) by the end of this year. These data will also be available for the candidate countries within the foreseeable future.

Here, too, institutional differences between countries may distort the ranking of regions, rendering the indicator not without dispute. However, as we saw above, this is also true for the GDP per head indicator.

One may conclude that although regional disposable income of households is not yet a perfect indicator, it is after all the best possible alternative to indicate regional welfare compared with

regional GDP. Comparability may be improved if data could be corrected for the disposable income of corporations and general government, although it is not yet clear how this might influence the relative position of regions.

Indicator	Pros	Cons
GDP per capita	• Available for the member states and candidate countries. • Available at NUTS-III level. • Concept covers all resident producing units. • Is an indicator of the ability to generate value added by the resident producers.	• Not a clear indicator of regional welfare. • GDP is related to producing units and population is related to the resident citizens (the commuting problem). This gives a distortion of the per capita GDP data. • Multi-regional enterprises obscure the real performance of establishments in terms of value added.
PPP's	• Gives a correction for differences in national price levels between countries.	• No PPP's available at regional level. It is conceivable that regional differences in purchasing power exist within bigger countries, although there are no statistical data to support or reject this .
Balance of primary income of households per capita	• A clear concept. No problems with commuting, multi-regional enterprises. Concept of per capita income is basically the same as the residence of households. • Available at NUTS-II level. • Within countries, gives a good indication of differences between regions in the capacity of households to generate income.	• Not yet available for all member states and candidate countries. • Primary income of corporations and general government is not involved. • Regional differences in the level of primary income per capita in PPP of households of the EU countries and candidate countries may be partly caused by institutional differences.
Disposable income of households per capita.	• A clear concept (see balance of primary income). • Available at NUTS-II level. • Within countries, gives a good indication of regional differences in welfare of households.	• Not yet available for all member states and candidate countries. • Disposable income of corporations and general government is not involved. • Regional differences in the level of disposable income per capita in PPP of the households of the EU countries and candidate countries may be partly caused by institutional differences (See Annex: Table 2).

6. Some concluding remarks

Although it has not explicitly said so, the Commission seems to be in favour of an income measure to indicate "poor" regions. The Commission is aware that GDP is not an ideal income measure, but has used it in the absence of other proper data. The best measure would be disposable income of the total economy of the regions; but these data are not available. A good proxy could be the regional disposable income of households. With the exemption of Austria, these data will be available by the end of this year.

In course of this year first results regarding regional disposable income have become available in *Statistics in focus*[16] (see Annex III). The averages in this table are limited to the available information of the EU member states and the candidate countries. Thus, the EU15 average or that of the candidate countries are not given, and the data cannot be interpreted as giving a ranking against the EU15 average. When analysing the data, one should keep the following considerations in mind.

The ranking of regional GDP or regional GDI for all sectors basically depends on three factors:

1. the average of the GDP or GDI per capita for a nation as a whole;
2. the regional deviation of these variables from the national average; and
3. the purchasing power parities for the different countries.

Because of the availability of only GDI per capita for households, we have to introduce new data for corporations and general government or a fourth (correction) factor for the existence of institutional differences between countries.

We have seen that the GDP data for Greece and Portugal for 2000 (see Annex I, Table 1) are below the 75% EU15 criterion. With an average of about 80%, Spain is just above that criterion. All the other EU15 countries are close to or above the EU average. Except for Cyprus, all the candidate countries are below the 75% EU15 threshold. Because of substantial aberration of regional GDP per capita in PPP's from the national average[17], regions in the Federal Republic of Germany, Spain, France, Italy, Austria and United Kingdom are also below the 75% EU15 criterion. For the candidate countries only the regions Prague and Bratislava are above the designated level (see Annex III)[18]. These deviations are caused by the effects of commuting (for instance Flevoland), special circumstances like the gas extraction in Groningen and, of course, lower production levels.

Except for Ireland, national gross disposable income (GDI) for 2000 gives about the same absolute level as we have seen for GDP. Because of regional redistribution of income, which is part of basic social policy in all European countries, one may expect regional deviations from the national averages to shrink. This may mean that countries with a national average close to the

EU15 average will have fewer regions below the 75% threshold. However, we do not have empirical data to illustrate this.

Recent data on regional disposable income of households (see Annex III) show that regional deviations from the national average become smaller. Bearing this in mind, one may conclude that disposable income leads to a different regional distribution than regional GDP. For instance, the first page of *Statistics in focus*, 4-2002, states: "In comparison to the lowest 30 regions by GDP, there are fewer Greek (and no German or British) regions in the lowest 30 by disposable income alone". On page 2 of the article, Eurostat states: "GDP yields a different picture than disposable income. The nine EU countries whose data are available for 1999 represented 138 regions. The 30 last EU regions in terms of per capita GDP in PPP will be compared to the 30 last regions in terms of disposable income in PPCS[19] per capita. In this context, the 30 last regions in terms of disposable income comprised 18 regions that qualify under both criteria". In other words, twelve did not qualify. In fact these data illustrate the effects of the distribution and redistribution of income that influence the allocation of income to regions and thus the welfare position of regions.

One of the findings was also that these data are not yet completely comparable because of institutional differences. So corrections still have to be made to get completely comparable data. This issue has to be discussed in the Eurostat regional accounts working party.

Table 1[20] Annex I

NewCronos release date : Wed, 25 Sep 02 11:34:54

Main aggregates in PPS per inhabitant in 2000

	Euro			EU-15 = 100		
	GDP	**GNI**	**GDI**	**GDP**	**GNI**	**GDI**
EU15 European Union (15 countries)	22580	22520	22380	100,0	100,0	100,0
BE Belgium	24180	24780	24520	107,1	110,0	109,6
DK Denmark	26920	26460	25760	119,2	117,5	115,1
DE Federal Republic of Germany[1)]	23810	23710	23460	105,4	105,3	104,8
GR Greece	15310	15340	15800	67,8	68,1	70,6
ES Spain	18450	18250	18240	81,7	81,0	81,5
FR France	22700	22850	22670	100,5	101,5	101,3
IE Ireland	26220	22310	22330	116,1	99,1	99,8
IT Italy	23580	23400	23310	104,4	103,9	104,2
LU Luxembourg	43760	39480	39450	193,8	175,3	176,3
NL Netherlands	25560	25830	25600	113,2	114,7	114,4
AT Austria	25440	25090	24970	112,7	111,4	111,6
PT Portugal	16550	16220	16720	73,3	72,0	74,7
FI Finland	23500	23210	23050	104,1	103,1	103,0
SE Sweden	22800	22620	22400	101,0	100,4	100,1
UK United Kingdom	22540	22680	22520	99,8	100,7	100,6
BG Bulgaria	5990	:		26,5	:	
CY Cyprus	17590	:		77,9	:	
CZ Czech Republic	12620	12280		55,9	54,5	
EE Estonia	9150	8780		40,5	39,0	
HU Hungary	11430	10530		50,6	46,8	
LT Lithuania	8080	7940		35,8	35,3	
LV Latvia	6990	7020		31,0	31,2	
MT Malta	:	:		:	:	
PL Poland	8950	8870		39,6	39,4	
RO Romania	5460	:		24,2	:	
SI Slovenia	15250	15200		67,5	67,5	
SK Slovak Republic	10480	:		46,4	:	
TR Turkey	5620	5660		24,9	25,1	

1) (including ex-GDR from 1991)

Table 2 **Annex 1**

Share in 2000 of the institutional sectors in net disposable income in the Member States

	Total economy	Corpo-rations	General govern-ment	House-holds and NPI's
BE Belgium	100	4,6	26,0	69,4
DK Denmark	100	9,7	34,2	:
DE Federal Republic of Germany[1)]	100	0,8	22,5	:
GR Greece	100	2,2	19,1	78,7
ES Spain	100	5,8	22,7	71,5
FR France	100	1,8	27,3	71,0
IT Italy	100	1,8	21,5	76,7
LU Luxembourg	:	:	:	:
NL Netherlands	100	12,9	29,2	57,8
AT Austria	100	3,6	23,5	:
PT Portugal	:	:	:	:
FI Finland	100	4,6	33,9	61,5
SE Sweden	100	:	36,2	:
UK United Kingdom	100	4,9	23,4	:

1) Including ex-GDR from 1991

Table 3: Price Level Indices, year 2000 (EU15 = 100) [21] **Annex 1**

	DE	BE	DK	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK		BG	CY	CZ	EE	HU	LV	LT	MA	PO	RO	SK	SI	TR
FINAL CONSUMPTION EXPENDITURE BY HH	100	100	121	79	83	107	108	85	95	98	97	72	116	128	118		31	83	47	46	46	54	47	72	54	38	40	66	70
Food and non-alcoholic beverages	98	102	128	88	84	111	101	96	106	92	103	85	112	121	108		41	86	50	61	55	74	65	91	61	49	53	92	73
Alcoholic beverages, tobacco, narcotics	84	91	124	70	61	106	148	86	73	88	88	64	141	146	178		32	99	58	60	55	84	65	132	66	43	46	58	76
Clothing and footwear	106	109	112	106	101	92	92	96	116	103	111	79	108	118	99		53	103	70	77	62	75	77	86	77	41	62	90	86
Housing, water, electricity, fuel	116	101	128	71	78	118	126	67	112	106	87	42	113	119	113		21	77	31	22	26	16	19	25	29	24	20	49	48
Furnishing, household equipment & operation	98	96	115	85	83	109	101	91	97	110	98	74	96	110	122		48	91	65	66	65	78	71	87	63	40	59	67	73
Health	102	92	126	61	104	101	104	103	110	74	118	101	134	166	106		65	95	29	42	28	36	34	56	66	33	25	52	95
Transport	95	99	130	70	87	99	105	86	81	104	102	92	121	112	127		37	85	57	59	73	74	61	98	72	48	48	76	86
Communication	102	146	105	63	84	63	101	98	70	139	121	86	147	141	158		15	25	100	70	83	249	56	76	83	49	61	44	67
Recreation & culture	94	102	116	83	88	107	97	92	92	94	98	84	117	126	110		28	96	54	64	50	71	62	85	67	53	46	77	87
Education	133	109	107	62	73	117	87	84	155	91	111	57	112	127	126		15	86	20	29	20	33	29	48	30	25	16	56	30
Restaurants and hotels	86	100	108	99	86	102	110	92	94	81	90	76	114	193	134		28	96	45	57	46	69	51	73	64	49	41	60	80
Miscellaneous goods and services	95	97	116	81	82	116	98	87	78	96	98	66	119	132	112		37	71	48	52	45	60	57	75	56	36	42	70	85
Net purchases abroad	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		100	100	100	100	100	100	100	100	100	100	100	100	100
FINAL CONS. EXPENDITURE of NPISH'S	106	97	116	58	74	97	95	83	134	79	100	57	102	113	107		14	81	21	19	21	17	18	36	26	14	19	49	30
FINAL CONS. EXPENDITURE of GEN GOV	111	101	122	63	78	104	94	88	141	90	104	59	106	122	109		16	84	26	25	26	23	22	52	31	16	23	53	33
GROSS FIXED CAPITAL FORMATION	105	98	120	81	87	103	104	84	105	110	100	77	89	112	116		42	72	57	77	69	73	74	74	62	45	61	70	65
Machinery and equipment	104	98	118	103	85	100	106	89	94	100	92	97	102	92	116		67	92	71	85	86	86	84	95	77	73	81	77	101
Construction	111	100	133	71	86	100	106	75	118	126	108	64	84	143	119		26	57	45	72	54	62	66	54	49	29	43	65	43
Other products	83	86	92	77	91	120	87	101	96	89	92	71	76	100	105		47	80	69	70	98	72	75	73	76	39	85	75	65
Changes in inventory and valuables	100	101	150	93	84	107	111	92	96	102	98	90	106	110	114		50	96	67	71	71	83	75	92	73	54	67	82	87
BALANCE of IMPORTS & EXPORTS	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		100	100	100	100	100	100	100	100	100	100	100	100	100
GROSS DOMESTIC PRODUCT	103	100	120	76	83	105	104	85	106	99	99	69	107	122	116		28	81	43	44	45	47	43	67	49	33	39	64	59

Annex II

Detailed clarification of the PPP's

1. Household final consumption expenditure

This aggregate is broken down into eight groups, which in their turn are broken down into subgroups. Subsequently these subgroups are broken down into even more detailed groups until the most detailed level of the classification, named the Basic Heading. A Basic Heading is the smallest possible group of fairly homogeneous products for which reliable weights can be found. Every Basic Heading will be represented by a well-chosen sample of products, which all together are called a basket of goods and services. It is very important to select a basket of goods and services, which is representative, comparable, and equi-characteristic. Representative means that the sample of products for which prices will be collected is representative for that specific Basic Heading. So we have to select a product for the Basic Heading Furniture which represents this Basic Heading well, for example: a couch. Comparable means that the products must be defined in such a way that every country will collect prices of identical products. So the couch has to be described in such a way that all the countries observe practically the same couch, preventing that, for example, Germany observes prices for a two seat leather couch and France for a three seat cloth couch. Equi-characteristic means that a Basic Heading should be composed of a sample of products that is equally characteristic for all countries involved. In order to ensure this, every country must include at least one product per Basic Heading characteristic of its own consumption.

The prices for the basket of goods and services are collected in the countries' capital by the National Statistical Institutes. In the Netherlands, prices are collected in the four major cities (Amsterdam, Rotterdam, Utrecht, and The Hague). Exception is made for the rent parities, which are based on national average rents. To construct national parities, all countries have to provide so-called spatial coefficients to account for possible price differences between the capital and the rest of the country.

The number of prices collected for one product depends on the degree of price dispersion and the degree of availability of the product. Usually between one and fifteen prices per product will be sufficient. It is not necessary to provide prices for all the products in the sample; in fact this is probably not even possible. The most important aspect of the comparisons is that countries observe prices of at least one characteristic product for each Basic Heading. Expenditure data from the national accounts is used to aggregate the parities to higher levels.

The NSI's select the outlets where the prices are to be collected. Eurostat, however, has set a list of outlet types divided into different categories (department stores, supermarkets, service enterprises in the private sector, traditional shops, etc) in order to help NSI's select a representative sample of outlets. Lastly, the prices are collected in the course of three years. Every year two price surveys are carried out. The basket of goods and services is spread over these surveys according to category.

2. Final consumption expenditure of private non-profit institutions serving households (NPISH's)

This aggregate is broken down into six Basic Headings, namely housing, health, recreation and culture, education, social protection and other services (political parties, labour organisations, etc). For all these Basic Headings no actual prices are collected. Instead reference (proxy) PPP's are used to estimate the particular parities.

3. Government final consumption expenditure

For government consumption expenditure, a distinction is made between services provided by the government which households consume collectively (like defence, housing, community development services) and services that households consume individually. The first type of services is treated as a single category; the second as separate categories of expenditure, i.e. housing, education, health, recreation and culture, social protection.

Reference PPP's are used for most government services. Data are only collected for part of the collective consumption expenditure by government, which means that gross salaries are collected for government employees as well as compensations paid like employer's contributions to social security, pension, etc.

Individual consumption expenditure by government is usually grouped together with the final consumption expenditure of NPISH's and household final consumption expenditure. The sum of these three aggregates is called the Actual Individual Consumption.

4. Gross fixed capital formation

This aggregate is broken down by type of product into 32 Basic Headings. The Basic Headings are dispersed over four groups, namely (1) products of agriculture, forestry, fisheries & aquaculture, (2) equipment goods, (3) construction & civil engineering, and (4) other products (e.g. software). In order to be able to collect prices for this aggregate, very specific descriptions of the technical and additional characteristics of capital goods are used, as well as very detailed bills for fictive construction projects. Usually independent experts do the pricing of the products.

5. Changes in stocks and external trade

Eurostat collects information about these aggregates for the EU member states, the EFTA countries and the candidate countries. The OECD collects the prices for the rest of the world. They are derived from economic publications.

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[2] Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds, Official Journal L 161, 26/06/1999 P. 0001 - 0042. See Section 3.

[3] In the Netherlands: the provincial level. The NUTS-III level is for the Netherlands the Corop level.

[4] *European system of accounts*, ESA 1995 (1996), Office for Official Publications of the European Communities.

[5] Council Regulation (EC) No 2223/1996 of 25 June 1996 concerning the European system of national and regional accounts in the Community.

[6] Questionnaire ESA 95, Eurostat (1998). Adopted by the National Accounts Working party of 20 October 1998. Regular updates of the questionnaire are available.

[7] For reasons of comparability Eurostat compiles regional gross domestic product on the basis of gross value added.

[8] NewCronos is Eurostat's database.

[9] See *Statistics in focus*, general statistics, theme 1-1/2002. Regional gross Domestic Product in the European Union 1999.

[10] *Sixth Periodic Report on the Social and Economic Development of the Regions of the European Union*, page 19. European Commission, 1999.

[11] This figure does not give the whole picture, because primary and disposable income of the sector households are only part of GNI and GDI.

[12] Source: NewCronos, Monday 30 September 2002.

[13] See *Statistics in focus*, economy and finance, theme 2-32/2002. Purchasing Power parities and related economic indicators for EU, EFTA and Candidate Countries.

[14] The European Free Trade Association (EFTA) is an international organisation of four countries, Iceland, Lichtenstein, Norway and Switzerland. The association regulates the (economic) relations between the member states themselves as well as the (economic) relations with a large number of non-EU countries and, through the Agreement on the European Economic Area (EEA), with the EU itself. Countries participating in the ECP programme are Iceland, Norway, and Switzerland.

[15] Castles, I. *Review of the OECD-Eurostat PPP Program*. 1997 and Ryten, J. *The evaluation of the International Comparison Project (ICP).* September 1998.

[16] See *Statistics in focus*, General statistics, theme 1 - 4/2002. Regional Household Accounts in the European Union and Candidate Countries 1999 the European Union 1999.

[17] See *Statistics in focus*, General statistics, theme 1 - 1/2002. Regional gross domestic product in the European Union 1999.

[18] See *Statistics in focus*, general statistics, theme 1 - 2/2000. Regional Gross domestic product in Central European Candidate Countries. The data concerns the average for 1995-1997.

[19] PPCS is: purchasing power consumption standard.

[20] PPS (purchasing power standard) may be interpreted as PPP.

[21] Stapel, S. Purchasing Power Parities and related economic indicators for EU, EFTA and Candidate Countries. Preliminary results for 2000. In : *Statistics in focus*, theme 2 – 32/2002.