

Comparison of real development levels of countries – genesis and perspectives

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Summary: Comparison of levels of development among countries is usually done by reducing values in national currencies with a common denominator, using the official exchange rate. Because of its unreality, the values calculated in this way do not illustrate real relations between compared countries. That brings about the launching of the UN International Comparison Project (latter Programme) with two fold aims: developing a method for international comparison of real domestic product which could be applied to a number of very heterogenous countries, and the comparison of growing number of very different countries. Until now six phases of comparisons are finished. Taking into consideration problems that appeared in the realization of the VI ICP phase as well as quality improvement proposals, a decision has been made to launch a new, global round for 2003-2006. Comparison will cover 150 countries (the widest coverage ever). This will give global character to the comparison, which was the end cause of the ICP.

Key words: Comparison, Real GDP, Purchasing power parity, ICP

JEL: E01, F01, I30

Introduction

The beginning of the 21st century features fast development of the world economy and the only permanent characteristics probably are changes, mostly for the better. Despite of that, a significant part of the world lacks education, and primary health care, coupled with hunger and poverty. If the world is to face problems of growth and development, especially those related to poverty reduction, it is necessary precisely to define its current level, as well as to monitor progress and changes induced by the actions to improve quality of life in the world. Exact economic information build up the basis to conduct a successful policy and the information collection from different countries allows construction of a relative and global picture on the level of living standards, wealth and poverty.

Determination and comparison of levels of development among countries is usually done by reducing values in national currencies with a common denominator (most often the US dollar), using the official exchange rate – al-

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though its objectivity is being questioned, particularly under the conditions of its frequent changes. Namely, as it does not reflect the purchasing parity of national currencies, neither the values calculated in this way illustrate real relations between countries under comparison. It is particularly inadequate to use this rate when the structure of Gross Domestic Product (GDP) is to be compared. This has motivated a number of individuals and organizations (national, regional and international ones) to develop new methods of comparison, in order to achieve a more realistic picture of the development levels of the countries concerned.

In 1688, *Gregory King* made a pioneering work in the area of international comparisons, when he compared income per capita for England, Holland and France. Nevertheless, more serious investigations have started in the 20th century and most often they were financed and supported by interested organizations and institutions, such as the UK Ministry of Trade (which did a comparison among Great Britain, Germany, Belgium and the US, for the period 1907-1911), then the *International Labour Organization – ILO*, etc. (I. Kravis (1984), pp. 1-39).

It was the period of the 1950s that marked the beginning of a new approach to the comparison of countries, exemplified by the work of Colin Clark *Conditions of Economic Progress* (1940). The origins of international price comparisons can be found in an experimental comparison conducted by the *Organization for European Economic Cooperation – OEEC*, in the 1950s. The comparison covered France, Germany, Italy, Great Britain and the US, while Belgium, Denmark, Holland and Norway were included later. A comparison was also done between Great Britain and the US. In addition, the *Council for Mutual Economic Assistance – COMECON* made significant efforts to conduct a bilateral comparison among the Soviet Union and various countries from the eastern Europe, in the beginning of the 1960s. The experience economists and statisticians, such as Bodan Szulc, Giorgi Syallagi, Laslo Drechsler, Zoltan Kenessey, had gained in this project were also used in research that followed. Knowledge acquired through those projects formed the basis to initiate the UN *International Comparison Project – ICP*. In 1989, the Project was renamed to *International Comparison Programme*. The Project focused on multilateral comparisons of total GDP price and quantity, as well as its main components, keeping in mind that comparisons relied on prices of products of the same quality. Namely, the *UN System of National Accounts – SNA*¹ provides data with detailed descriptions of economic conditions in individual countries at certain point of time and thus allow their comparison in different time periods. The data however do not provide a basis for an efficient comparison between countries as they are expressed in national currencies. As already pointed out, using a common denominator for national currencies had proved to be inaccurate and imprecise.

¹ The first versions of the SNA were formulated in 1953 and 1968, and they were used in the ICP. A new version, permanently under revision, was published in 1993, as a joint effort of the UN, the EU Commission, IMF, OECD and the World Bank.

Such an empirically proved inadequacy of using official exchange rate in international comparisons (Z. Prekajac, 1989) has induced numerous efforts to devise a new methodology for comparisons between countries. The research conducted before the UN project was initiated in 1968 were characterised by the coverage of a relatively homogenous group of countries, so what was missing was a general method to include comparisons of extremely heterogeneous countries. The missing dimension was exactly the goal of experts involved in the ICP – the goal that was successfully achieved. The International Comparison Programme is considered the most complex and comprehensive statistical project that today requires harmonization of the applied methodologies, concepts and definitions in data collection, verification and compilation, as well as an efficient co-ordination and management on national, regional and international level (S. Ahmed 2003.).

The aim of the paper is to present the methodology development, comparison results and the problems which appeared, while attempting to offer solutions to overcome the problems within the present round of the ICP.

1. The ICP initiation and results

The initial phases of the ICP

The problems detected in international comparison of countries, primarily those related to the inadequacy of applying official exchange rates in converting national-currency values into a common denominator (most often the US dollar), had led to the initiation of a UN project on international comparisons in 1967. The project had a two fold aim. *Firstly*, it aimed at developing a method for international comparison of real domestic product, which could be applied to all countries or most of them. Previously used methods mostly covered homogenous groups of countries and it was necessary to create a method that could be applied to countries with very different levels of income, population, natural resources, degree of dependence vis-à-vis other countries or group of countries, etc. *Secondly*, using the developed method, the project aimed to conduct the comparison among a number of very different countries.

The first goal was achieved during the first three initial phases of the ICP, i.e. a method of multilateral comparison was developed and improved. The results were published in the following publications: I. Kravis, Z. Kenessey, A. Heston, R. Summers (1975), *A System of International Comparisons of Gross Product and Purchasing Power*, Baltimore: John Hopkins University Press – the first phase; I. Kravis, A. Heston, R. Summers (1978), *International Comparisons of Real Product and Purchasing Power*, Baltimore: John Hopkins University Press – the second phase; and I. Kravis, A. Heston, R. Summers (1982), *World Product and Income : International Comparisons of Real Gross Product*, Baltimore: John Hopkins University Press – the third phase. In the beginning, the

comparison among countries featured the so-called universal principle which disregards the regional determination and treats all countries in the same way. The detailed comparison covered 10 countries in 1970, within the first phase, 16 countries in the second phase and 34 countries in the third phase of the Project.

The initial phases of the ICP were particularly important because of the necessity to resolve numerous methodological issues that could influence the Project future activities and the comparison results. It was accepted that GDP should be divided into three basic components: household consumption, gross capital formation and government consumption. Such a division very much corresponded to the concept and definitions in the UN System of National Accounts, wherein GDP was divided into private expenditures for final consumption, government expenditures for final consumption and gross investments. Those elements were mostly accepted in the ICP as well, apart from certain changes introduced in the first and the second component while the third one remained the same as in the SNA (except that in the ICP it also includes changes in inventories and net exports). The first component has been termed household consumption, the second one government consumption and the term for third one remained gross capital formation. The components were then divided into subcategories – 36 summary categories and 153 detailed categories: household consumption included 110 detailed categories, gross capital formation 38 detailed categories and government consumption 5 detailed categories. Classification of categories was done according the purpose.

Each detailed category featured a list of individual products for which prices had to be determined in all the countries included in the comparison. Such a specification provided detail description of products, inclusive of their physical characteristics, quality and measurement units. The ICP had chosen the direct price comparison which required average prices for each detailed category of GDP to be determined. This could be done only by selecting adequate number of representative products in each category, thus conditioning the indirect quantitative comparison where the quantitative relation for each category was calculated by dividing the expenditure relation with the price relation. (For details on the applied methodology, see the publications of the results of the first, second and third ICP phase, and a short review in Z. Prekajac, 1989). So, the basis included data on prices of one or several products within a detailed category, as well as data on expenditures for each of the detailed GDP categories.

The multilateral comparison in the initial phases of the ICP had two stages, due to the character of data. In the first stage, aggregation of price relations was done for the selected products in order to determine an average price relation for each detailed category and upon this corresponding quantitative relations were determined. The second stage included aggregation of price (quantities) indices defined at the level of a detailed category, in order to calculate price (quantities) indices for various aggregation levels up to the level of GDP.

The long term goal of the UN Project, started in 1968, was to allow comparisons among the majority of countries, at least at the level of GDP and its main components: household consumption, gross capital formation and government consumption. It was, nevertheless, certain that the goal could not be reached by conducting annual comparisons at the scale used in the first three ICP phases, i.e. in 1970, 1973 and 1975. It was unrealistic to expect that all countries would be ready to provide abundant data for each year, which was necessary for the ICP method to be applied. In addition, some countries would not be able to supply adequate data due to their underdeveloped statistical bureaux. Therefore, it became clear that a new method should be developed to allow comparison of countries previously not included in the project. Further more, it was necessary to extrapolate data for the countries already in the project for the years when the complete comparison had not been conducted. It was assumed that the comparisons done during the first three phases could be repeated every five years for the countries in the Project, while for the other countries and for the years lacking detailed data the comparison would be done applying a newly-developed abridged method. It was also pointed out that the results gained should be taken with some reservation due to embedded errors but despite of that they would be more reliable than the results achieved with official exchange rates (Z. Prekajac, 1991, pp. 64-66).

The multilateral comparison results from the first three ICP phases have proved the inadequacy of applying official exchange rate in international comparisons and the need to take a different approach which could allow a real GDP to be determined on the basis of purchasing power parity of national currencies. The relationship between real GDP per capita (calculated in the ICP) and nominal GDP per capita (calculated with official exchange rate) highlighted the undervaluation of the second one in comparison to the first, especially in the countries with lower GDP where the real GDP was 3.2 times higher than the nominal one. Certainly, smaller differences in the levels of real GDP between the developed countries and the developing ones, than those when their nominal GDP is compared, cannot be attributed to their lesser underdevelopment but to a more realistic view of their development prospects. (For the factors influencing the differences between nominal and real GDP per capita, see Z. Prekajac 1989, p. 108-110).

The initial and development phase of ICP analyses was concluded with the end of the third phase. It resulted in a new method of international comparison of real GDP and the purchasing power parity which can be applied to numerous and heterogeneous countries. At the same time, a comparison among certain number of countries was done using the new method. Research within the ICP was continued after the end of this phase but with some alterations. The basic change was to use the regional approach instead of the universal one, which can also be explained by the changes in the ICP financing: upon the completion of the third phase, the co-operation between the UN Statistical Office and the University of Pennsylvania ceased to exist, coupled with the ending of the

World Bank financial support, so that the UN Statistical Office had no external funds and as the internal funding was reduced, the ICP lost its priority status. Changes resulted also from frequent requests of some countries (e.g. from Europe) that comparisons should be first done within regions and only later among regions. The dilemma to accept the universal or regional approach was present already in the third phase of the project, as a consequence of the increasing number of very heterogeneous countries under coverage (34 in comparison to 10, in the first phase and 16 in the second phase). In the third phase, the ICP selected an approach which was basically universal but the regional approach was applied for comparisons of detailed categories GDP was divided into, so the advantages of both approaches to international comparisons were used. In addition, with a rising number of countries covered, the Project management was becoming increasingly difficult. Comparing geographically very remote countries, as well as those with a varying degree of economic development, was becoming very complicated because it was difficult to define product groups which were representative for all countries and globally comparable at same time.

The continuance of work on the UN International Comparison Project

The mentioned approach was used for the first time in the fourth phase of the ICP. There were 60 countries under coverage, divided in several regional groups. The European countries were grouped as follows: *Europe Group 1* included the EEC members – Belgium, Denmark, France, Holland, Greece, Ireland, Italy, Luxembourg, Germany, Portugal, Spain, Great Britain; *Europe Group 2* included Austria, Finland, Hungary, Poland and Yugoslavia. Through the OECD, the following countries were added to the project: Canada, Japan, Norway and the US. The African countries (15 of them) formed a separate group and their comparison was conducted by the EEC Statistical Office (EUROSTAT), with the assistance of the UN Economic Commission for Africa (ECA). Sixteen countries from the Latin America were covered with the assistance of the UN Economic Commission for Latin America and the Caribbean, while seven countries from Asia were added on an individual basis. The comparison was done for 1980.

The fourth ICP phase of international comparison was conducted in two stages. The first one featured country comparisons within regions or groups of countries. The methodology applied was the one developed within the ICP, with certain differences present due to regional particularities. The differences related to data bases organization, number of detailed GDP categories², selection of a comparison method to be used within regions (as mentioned, the first stage was to determine average price parities (PPP) for each detailed category, while the second stage was to aggregate price (quantity) indices at the detailed category

² For example, with the group of the EEC, GDP had 328 detailed categories, Europe Group 2 had 234 detailed categories for which all the countries supplied data, while the ICP itself accepted 151 detailed GDP categories.

level in order to calculate price (quantity) indices for higher aggregation levels – differences were present in comparisons at the first stage, where country groups were applying different comparison methods), etc. Following intraregional comparisons, the second stage included the comparisons among regions. Selecting a method to connect country groups became an issue, because no such need existed with the previously used (in the first three ICP phases) universal approach to international comparison. The fourth ICP phase made a selection of 20 so-called core countries, including representatives of all mentioned country groups. Those countries served as a basis for calculating purchasing power parities for all detailed categories, for all 60 countries under coverage. (Details on the applied method and the results of the fourth ICP phases are available from: UN Commission of the European Communities *World Comparisons of Purchasing Power and Real Products for 1980. – Phase IV of International Comparison Project*, Part two: *Detailed Results for 60 countries*, United Nations, New York, 1987.)

International comparisons of real GDP and purchasing power was continued in the fifth ICP phase, including 64 countries. Although the number of countries under coverage has significantly increased since the ICP inception, it is still far from being universal. It has to be mentioned that in comparison to the previous phase, there is only a slight increase in number of countries included. Multiple reasons lay behind the decisions of some countries to abstain or withdraw from the Project. Having in mind that comparison for the basis years is a highly complex task, a number of less developed countries cannot participate without external assistance, i.e. adequate financing that were not available in the fifth ICP phase. A number of countries had different priorities assigned to their national statistical bureaux, surpassing the importance of participating in the project. The reasons are certainly complex but the fact is that the fifth phase missed to include many countries from Latin America and West Asia (most of which did participate in the previous phases), which affects the results validity to a certain extent.

The comparison was done for 1985. As in the previous phase, the regional approach was applied, so the comparison was firstly done for the regions (or country groups), while the global comparison was realized connecting the data acquired in the first stage. Six regional comparisons were done during the fifth phase: the EC members, the OECD members, East Europe (European Group 2 including Hungary, Poland and Yugoslavia), African countries, Asia and the Pacific, and the Caribbean countries. Comparison approach was the same for all the regions, while some differences arose due to regional particularities. The number of detailed GDP categories varied from 163 (Asia and the Pacific) to 288 (European Group 2).

Following the regional comparisons, the interregional comparison was conducted (stage 2). There were 56 countries included in the comparison. The comparison results for seven Caribbean countries have not been integrated in the

global comparison because the countries concerned had not confirmed them. At the regional level, the comparison for Nepal was carried out for one GDP category only (consumption) so this country was also left out of the global comparison. Connecting the results from the regional comparisons, in order to get a global one in the fifth ICP phase, was done using the method of representative countries (*core country method*), as it was done in the previous ICP phase. The core comparison is either a bilateral comparison among countries belonging to different regions or it comes as a result of a country's participation in two regional comparisons at the same time. The essence of the method was to select one or several core countries from each region, wherein prices were established for products representative both for that region and for another region. The selection of core countries can significantly influence results of the global comparison and it is very important to produce a sufficient number of representative comparisons. One of the key problems the fifth ICP phase encountered was exactly the lack of sufficient number of representative comparisons. Although it had been planned to have 20 representative comparison at the inception of the fifth phase, at the end it came out to only three of them: a bilateral comparison of Great Britain and Kenya, and two additional ones because Austria and Japan simultaneously took part in two regional comparisons. Austria participated in the Group 2 comparison (Hungary, Poland and Yugoslavia), as well as in the comparison among Finland, Norway, Sweden and Turkey. Japan was included in the regional comparison among Canada, the US, Australia and New Zealand, as well as in the one among Bangladesh, Hong Kong, India, Korea, Pakistan, Philippines, Sri Lanka and Thailand. (UN and EUROSTAT, 1994, according to Z. Prekajac, 1995).

The comparison results from the fifth ICP phase confirmed the conclusions from previous research: the differences between levels of real GDP per capita are much narrower than the results gained through comparisons of nominal values, meaning that GDP is undervalued when the official exchange rate is used in comparisons – the lower the income level, the higher the degree of undervaluation. One of the possible explanations for such a relation is provided by the *productivity differential model* which proceeds from the differences in productivity levels among countries and differences in international tradability of certain product groups. Namely, it takes into the account the impact prices of internationally traded goods have on exchange rate, while the PPP level is formed under the additional influence of nontradable goods which are not (or rarely) subject of international trade due to their specific characteristics. This is the cause of the difference between the nominal and real GDP. The discrepancy is larger in countries with lower pre capita income because internationally nontradable goods are much cheaper than internationally tradable goods of the country. That is not the case in countries with higher income. Using the official exchange rate (formed under the price influence of internationally tradable goods only) produces a larger undervaluation effect on products for international trade

in low-income countries than the one in countries with higher per capita income. Nevertheless, a smaller gap between those two groups of countries does not mean that developing countries face less hunger and underdevelopment, but it provides a more realistic picture of development opportunities of developing countries (I. Kravis 1984).

Once the fifth ICP phase was completed, further ICP activities faced problems. In 1990, the comparison was conducted only for 30 European countries –*European Comparison Programme*, because the activities in developing countries were lacking funds and had to be postponed. The following sixth phase was realised in the period 1993-1996 and covered 117 countries (initially 118 countries, but Guyana did not allow its data to be included in the final calculation, although it had participated in the comparison for the Caribbean countries), the largest coverage ever. The year 1993 was selected as the base year. Despite of that, significant problems continued to challenge the project. The collection and compilation of data were realised between 1993 and 1996. In many countries, data were collected in major or larger cities which significantly impaired their representative value. Some countries provided data for 1993 while others did that for 1996, so the extrapolation had to be done for the 1993 level. All countries were classified in 8 groups³ and firstly the regional comparison was done, with each region having a *bridge or core country*, i.e. the one to connect the regions. As already pointed out, a representative comparison is either a bilateral comparison of countries belonging to different regions or it is the result of one country participating in two regional comparisons at the same time. One of the more significant problems that occurred in this phase was the fact that there were no representative countries to include regional comparisons for Africa, Middle East and the Caribbean into the general comparison of all countries. The solution was find with the US being the representative country for all the mentioned regions.

³ The following groups were formed: African countries (25), Asian countries (17), Europe I (12 EU countries, 7 non-european countries and 5 non-european OECD countries), Europe II (Austria and 15 countries of central and East Europe, as well as of the Commonwealth of Independent States - CIS), Europe III (11 countries in total – Turkey and CIS), the Caribbean (13), Latin America (10) and Middle East (11). See: Sultan Ahmad (2003).

Table 1. ICP comparison from 1970 to 1993 (number of countries covered by regions)

Region	Phase I 1970	Phase II 1973	Phase III 1975	Phase IV 1980	Phase V 1985	Phase VI 1993
Africa	1	1	3	15	22	22
Middle East	-	-	1	-	-	8
Asia and Oceania	2	6	9	8	13	16
North America	1	1	1	2	2	2
Central and South America	1	1	5	16	7	-
Europe	5	7	15	19	20	35
Total	10	16	34	60	64	83
Published in	1975	1978	1982	1986/7	1994	-

Source: Eurostat-OECD (2006), *PPP Methodological Manual*, p.148.

As obvious from the short review of the sixth ICP phase, the programme realisation encountered numerous problems which seriously affected the quality and reliability of the results gained. The overall results were not published except for some regions (Africa, Middle East, Asia and Europe). When the phase was completed, three independent evaluations of the ICP were done: the first focused the 1993 comparison of African countries (done by Raimundo Fombelida and Seppo Varjonen in 1996), the second evaluation paid more attention to the European countries (financed by the OECD and published by Ian Castles). The third one was done by Jacob Ryten and covered all regional comparisons (in March 1999, it was accepted at the 13th session of the UN Statistical Committee, together with its recommendations). This evaluation was co-funded by the World Bank, the IMF and the UN Department of Statistics (UNSD). All the reports underscored the importance of results the ICP has produced but, having in mind the problems in the last ICP phase, they put suggestions and proposals for its improvement:

- The situation was characterized by the absence of time table follow-up, discontinuity of work, inconsistency and unreliability of data, which had to be corrected if the programme was to be continued;
- The previous ICP rounds were lacking finance, considering the goals and programme coverage. Improvement in data quality cannot be achieved without a significant increase in funding. This was particularly the case in the last ICP round, i.e. the comparison done for 1993;
- It was necessary to introduce major and swift changes in the overall organizational structure of the Project;
- Bearing in mind that the most important users of PPP data were primarily international institutions and organizations, they must provide adequate funding for the ICP;
- The programme should promote the use of data also at the national level, thus gaining the support from that level as well;

- The programme should take a key role in the work of national statistical bureaux, through its integration in their own programmes⁴.

Once the reports had been accepted, it was decided that in order to solve the problems important activities had to be taken before a new round of the international comparison would begin.

2. The most recent research within the ICP

A decision has been made to launch a new, global round of the international comparison for 2003-2006, taking into consideration the importance of real GDP comparison (initiated back in 1968), problems that appeared in the last round (1993-1996), as well as the reports and quality improvement proposals set out in the mentioned reports. The preparations have started in 2001 and it is expected that the final results will be available in 2007. The Project covers 107 countries from Africa, Asia, the Pacific, Latin America, CIS and West Asia, while the OECD and Eurostat co-ordinate the activities related to comparisons of their own members (43 countries). In total, 150 countries would be covered, representing the widest ever coverage. Special management bodies of the Project have been set up because that was lacking in the previous phases. The highest body is the ICP Executive Board, comprising 16 prominent experts (statisticians, economists) from all over the world, which is responsible for the project realisation. The Global Office co-ordinates the programme at regional levels and countries, except those under the Eurostat-OECD programme. Regional Coordinating Offices have been formed and they cover Africa, Asia and the Pacific, West Asia, CIS and Latin America. The bodies work in co-ordination with national offices to ensure data compatibility. A Technical Advisory Group is in charge of supplying advice on the use of methodology and technical issues related to the Project and data.

Although the applied methodology has remained basically the same, significant changes have been introduced, primarily in the area of data collection and processing. The ICP Handbook gives all the details on this, while an integrated software (*ICP Tool Pack*) provides standardized ways of data collection, verification and processing. The analyses conducted in previous phases relied on the price comparison of products not truly representative for the countries concerned and not identical in different countries, which significantly affected quality of the results. In order to avoid these problems, a different approach to identifying products for comparisons was applied, i.e. a list of products with their basic features was created (Structured Product Description – SPD). The goal was to facilitate price comparisons among countries and to compare different coun-

⁴ According to: *A New ICP Framework*, <http://web.worldbank.org>

tries' products that were in fact the same⁵. Special attention was paid to the creation of the list of products and services, and the list came as a result of intensive co-operation of national statistical offices, regional and global coordinators. This ICP phase saw GDP being divided into 155 detailed categories for all countries, in contrast to the previous phases when the number of detailed categories varied among the regions.

This ICP round will also have two stages: firstly, the comparison of countries will be done with the defined regions, followed by their linking in order to conduct the global comparison. The *ring comparison* method was applied for the first time. As noted, the first three ICP phases featured the universal approach to comparisons, i.e. all countries were compared to each other. Since the fourth ICP phase, application of the regional approach has been introduced, where countries are first compared within the region on the basis of a basket of products and services characteristic to that region. The regional PPP was expressed in one of the currencies of the region. The second stage featured linking of the regions via a bridge country. It was either a bilateral comparison of two countries or it came as a result of one country's participation in two regional comparisons. The evaluation of all ICP rounds pointed out that the bridge country method could not provide adequate results, so a decision was made to apply a multilateral method⁶ termed the ring. The primary goal of that method is to provide a multilateral set of regional PPPs that would link the regional results. Essentially, representative countries within each region would provide not only price setting for products characteristic for that region but also prices for a defined, joint list of basic products. A list of regional products is defined independently for each region, bearing in mind regional particularities. The list of products, prices of which are determined in the countries belonging to the same ring, includes regionally representative products and products of a universal character. In this way, the list actually reflects the world and not a specific region. Creation of a product list for the ring comparison was a very demanding process. The catalogue of products has been prepared to facilitate data collection in the countries covered by ring comparisons in different regions. The catalogue contains a description and picture of each product or service prices of which have to be determined. In total, about 1000 products are included (Yonas Biru, 2006).

The countries which belong to a ring serve as a small sample of all countries in the region. It is therefore important for them to represent the region but also to have a wide range of products and services which characterize countries outside the region as well. In the round 2003-2006, 19 countries have been se-

⁵ The classification of products and their descriptions are presented in the *ICP Handbook, Chapter 5: Product lists, specifications and Pre-Survey*.

⁶ A multilateral comparison is often done on the basis of results from comparing two countries. That is exactly the case when the bridge country method is applied. The essence is that the relation between two countries, for example country m and country n , is defined through their individual relations to country x (the bridge country between m and n).

lected to serve as ring-countries: in Africa – Cameroon, Egypt, Kenya, Senegal and South Africa; in CIS – Kazakhstan and the Russian Federation; in Latin America – Chile and Brazil; in West Asia – Jordan and Oman; for the Eurostat and OECD area – Estonia, Japan, Slovenia and Great Britain. The selection criteria included:

- The possibility to cover a significant number of products and services, also available in other countries from the ring and in other regions as well;
- The participation in the full GDP comparison (a number of countries participated only in the comparison of a part of GDP, i.e. household consumption category);
- The availability of reliable data on prices and expenditures;
- The country's capacity to determine annual average prices at the national level; and
- Readiness of the country to accept the role of a ring.

So, the final goal of the current ICP round has remained the same: to allow the comparison of real GDP of countries, as many as possible of them, in order to get an objective assessment of their position in the world economy. An additional feature of the current round is that special emphasis is being laid on the calculations of purchasing power parities, as a measure of poverty in the selected countries. The following table gives details on the regional distribution of countries in the current round, the number of countries wherein the full GDP comparison is done, as well as those where only a partial comparison was done (related to consumption).

Table 2. ICP 2005 (number of countries per region)

Region	Full comparison	Partial comparison	Total
Africa	34	15	49
Middle East	11	1	12
Asia and Oceania	22	5	27
North America	2	-	2
Central and South America	11	-	11
Europe	45	3	48
Total	125	24	149
Published in			2007

Source: Eurostat-OECD (2006), *PPP Methodological Manual*, p.149.

Conclusion

The initiation of the UN programme (later: Project) on international comparison, at the end of the 1960s, represents a very important undertaking, not only in the domain of statistics. This is reaffirmed as it has continued to the present, with a continuous advance and efforts to overcome problems defined in a previous phase, as well as to increase the country coverage. The Project was actually set

in motion as a response to the shortcomings related to the application of official exchange rate as a conversion factor in the GDP comparison of countries. Following the initial phase, when the international method of comparing real GDP was developed and later improved to accommodate an increase in the country coverage, the programme has continued its operations to the present day.

The Project milestone was the previous, sixth phase for which 1993 was the basis year. As the phase encountered numerous obstacles, the overall results have never been published. Keeping in mind the importance of real GDP comparison at international level, incepted in 1968 under the UN project on international comparison, as well as the problems during its implementation and the evaluation results of the sixth phase, a decision has been made to launch a new global round of comparisons for 2003-2006. The country coverage has risen to 150 (the widest coverage ever) and this should be another milestone in the future of the UN programme on international comparison. This round will resolve a number of problems (financial, methodological, organizational) which have threatened to end further research.

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Komparacija realnog nivoa razvijenosti zemalja – geneza i perspektive

Rezime: Poređenje nivoa razvijenosti zemalja se obično vrši svođenjem vrednosti izraženih u nacionalnim valutama na zajednički imenitelj, najčešće SAD dolar, i to korišćenjem zvaničnog deviznog kursa kao faktora konverzije. Imajući u vidu njegovu uočenu nerealnost, dobijene vrednosti ne daju realne odnose zemalja koje se porede. To je uslovalo pokretanje Projekta (kasnije Programa) UN o međunarodnoj komparaciji krajem 60-tih godina prošlog veka sa dva osnovna zadatka: razvijanje metoda međunarodne komparacije realnog domaćeg proizvoda kojim može biti obuhvaćen veliki broj veoma heterogenih zemalja, kao i komparacija što većeg broja zemalja koje se međusobno značajno razlikuju. Do sada su izvršene komparacije u okviru šest faza Programa UN. Nakon problema sa kojima je bila suočena realizacija VI faze ICP Programa i predloga za njihovo otklanjanje, pokrenuta je nova, globalna runda komparacije za period 2003-2006. godina u kojoj će biti obuhvaćeno 150 zemalja (najviše do sada) čime komparacija zaista dobija globalni karakter što je i bio konačni cilj.

Ključne reči: Komparacija, Realan GDP, Paritet kupovne snage, ICP

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