THE IMPORTANCE OF ENSURING THE ZONAL COMPARABILITY OF MACROECONOMIC INDICATORS IN THE STUDY OF MASS SOCIO-ECONOMIC PHENOMENA

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Abstract   *With a view to the characterization of the mass phenomena, statics elaborates specific methods and techniques. Mass phenomena and processes have as primary ownership the individual forms of expression variability in time, in space and from an organizational point of view. The approach of these individual forms of manifestation finds necessary to develop a large number of statistical indicators. The statistical indicators carry information, have a real, objective content, and can be used either as a characterization of certain processes and/or phenomena from the quantitative and structural point of view, or as a system of indicators to study the same mass phenomena and processes in their mutual interdependence. Therefore, it is imperative to ensure the comparability of the macroeconomic indicators in time and space.*

1. Introduction

Zonal comparisons in certain areas play an important role in a country's official statistics. There are frequently compared the GDP growth, the inflation rate, the unemployment rate, GDP per capita, size indicators which allow feedback on the economic and social difficulties faced by some countries.

The most important zonal comparisons are found in the national statistics for the regional gaps calculation and in the international statistics with a view to the countries and gaps ranking. The international comparison of the national socio-economic indicators provides a more accurate assessment of the economic possibilities in different countries to substantiate some decisions for the economic aid as technical support.

The international comparison of macroeconomic indicators is hampered by some problems, such as: the different economic content of the indicators, their expression in the national currency and the different conditions of these indicators development.

2. Theoretical accounts on zonal comparability of macroeconomic indicators

The economic content is specified by the definitions and uniform concepts as an important source for the calculation of the synthesis indicators of the national economy. Some of them do not have the same content although they have the same name. Thus, before these international indicators are compared, it is imperative to have the same content.

Expressing indicators in national currency is a standard practice of all countries, irrespective of the system adopted. However, in order to compare the values of two or more countries, it is necessary to find a uniform standard: either the expression in the same currency or in the same price system (based on the system of territorial indices).

The different economic, social, cultural conditions for these indicators achievement is worth taking into account in international comparisons.In this respect, it is advisable to particularly compare those countries with the most similar economic, social and cultural conditions.

The macroeconomic indicators international comparisons can be made either between two countries or among several countries, such as the EU ones.Comparableindicators can be expressed either in relative or absolute sizes if they fulfil the comparability criterion.

Comparison of relative indicators refers to the relative sizes of the dynamic structure, for example: the GDP growth, branches or sectors contribution to GDP formation etc.In order tocheck the comparability indicators we can confine to the definitions and concepts identity, their expression in a single currency being therefore redundant.

The absolute indicators comparison is made in two or more countries.In this case, there are two issues: if absolute indicators are compared in two or more countries of the National Accounting system, differences in content are not taken into account because the basic concepts and definitions for the national calculations do not vary significantly;but if we compare the absolute indicators in two or more countries with different statistical systems, then the indicators contents differ and a common calculation methodology is necessary as well.

Regardless the statistical system used, the comparison of absolute indicators in two or more countries is made by converting the indicator value in the same currency.

In order to achieve this objective, in the international statistical practice, there are two methods:

a) exchange rate and b) purchasing power parity.

The exchange rate is the price to be paid on the transfer in foreign currency for national currency units. If in the case of fixed rates, the exchange rate is univocally decisive, in the case of flexible rates, the exchange rates are subject to daily changes and the recalculation will be made with the average exchange rate. Recalculation is performed by reporting the synthetic indicator, expressed in the national currency at the current exchange rate.

The exchange rate is determined by the supply and demand of foreign currencies, and these, in turn, are conditioned by limiting trade relations as commodities and therefore the exchange rate does not consider a large amount of the goods included in the GDP.Apart from these, certain speculations are present on the foreign exchange stock market and they will ultimately correct the exchange rate.

If we keep in mind that customs duties and trade restrictions, etc. also change the exchange rates trend, we can conclude that the average exchange rate is not an indicator that expresses the purchasing power.For this reason, in international comparisons, synthetic indicators recalculation on the basis of the exchange rate is used in order to get a relative information.

The most reliable results are obtained in the international comparisons of the synthetic indicators while using their purchasing powers.

The purchasing power parity expresses the number of national currency units necessary to buy abroad a certain amount of goods for which there is spent a certain amount of national currency units in the country. Depending on our purpose, we can calculate the overall parity, when comparing the global or specific parity indicators, when comparing less extended indicators (*private consumption, final consumption, gross fixed capital formation etc*.).

Purchasing power parity is achieved on the basis of goods and services comprised in the sample: the prices reflect the number of currency units to be paid for a particular good and the purchasing power shows the number of goods a monetary unit can buy .

In conclusion, the purchasing power parity expresses the number of units of foreign currency needed to get the same mass of goods abroad when they are produced in the country with a national currency unit. Zonal comparison on indices basis is similar to comparison in time. For the comparison in space (in an area) we should resort both to the price index and physical volume index.

The prices index emphasizes the prices change in two regions.In fact, an index of prices expresses the purchasing power parity, i.e., whenever the price level of the sample in the country A is higher or lower (*equivalent to the current period of the time comparisons*) than the one in the country B (*equivalent to the basic period*), and vice versa.

As for comparisons over time, issues arise with respect to: choosing the type of price index; the choice of comparison; setting up the sample of goods and services. For comparisons between country A and B there can be used a Paasche-type index, in which prices are weighted with the quantity of goods in the sample, i.e., an index of Laspeyres-type price.

As shown, the difference between the two indexes regards the weights used in the country A or B. As the country that provides the weights for building indices is preferred, Fisher's medium index is used as it eliminates the influence of weighing, so this type of index is the basis of purchasing power parity in bilateral relations.

We encounter the biggest difficulties when building the sample of goods and services for which prices are recorded in the two countries and on which the index is calculated.

The physical volume index is often used for bilateral international comparisons and it expresses how many times it was physically bigger or smaller, the comparative indicator in one country against another.

In international statistics, the most difficult problems arise in the comparisons among several countries, because we must choose the country regarded as the comp, the GDP expressed in the this country's currency is compared with the GDP in other countries and starting from the obtained results, there can be ranked the countries according to these indicators.

Another problem relates to the quantities of goods in each country chosen for the comparison and they are assessed acccording to the prices charged in the country taken as a comparison basis. Thus an absolute indicator is obtained further to the aggregation of all the items included in the sample.

This method is recommended only when the compared countries use similar methodologies, another process that starts from a hypothetical country, i.e. from an average basket of goods and services, based on samples of all countries.On this average basket account the parities are calculated for each country and there are taken into account the prices and tariffs systems of the respective country.

As for the comparisons carried out relying on absolute indicators, they present some shortcomings related to: the national data collection; the expression (recalculation) into a single currency; differences between the countries regarding the cycle phases which are compared; different public sector share in GDP etc.

All the above difficulties can become goals of the scientific research in this area and they are completed with improvement methodologies of calculation and analysis of macroeconomic indicators.

3. Conclusions

In conclusion, the statistic analysis of the socio-economic phenomena considers that the comparability in time and space of macroeconomic indicators is imperative in order to ensure the accuracy of statistical data. To ensure the comparability in space (in an area) of macroeconomic indicators, irrespective of the statistical system used in the practice of international statistics, the mostly used methods refer to the exchange rate process and to the purchasing power parity.

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