THEORETICAL-PRACTICAL ARGUMENTS REGARDING THE SELECTION OF THE OPTIMAL METHOD OF DETERMINING THE EXCHANGE RATE

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Abstract: *The exchange rate is one of the indicators of the state of the national economy. It reflects not only confidence in the national currency, but also the development of the country's economy. A state with a strong economy is usually characterized by a stable currency, and strong fluctuations in the exchange rate and its constant weakening usually indicate the instability of the economy or its poor development.*
The relevance of the study is determined by the fact that today there are many theories and methods of determining the exchange rate. In this study we will analyze these theories and methods in detail and consider whether their application in practice is possible.

Keywords: *exchange rate, nominal exchange rate (NEER), real exchange rate (REER).*

JEL Classification: *F31, F37, E52.*

INTRODUCTION

The determination of the exchange rate is an important topic in the economic and financial policy of each country. The exchange rate plays a crucial role in balance of payments balance, external competitiveness of the economy, inflation management and macroeconomic stability.

The selection of the optimal method of determining the real exchange rate (REER) is essential for analyzing the external competitiveness of an economy, for managing economic risks and for establishing effective economic policies. The real exchange rate is important for assessing purchasing power and economic competitiveness in an international context, as it considers not only the nominal exchange rate (NEER), but also inflation differences between the country in question and its trading partners.

The use of deflators to calculate the REER is a standardized method in modern economies to adjust the nominal exchange rate for differences in inflation between a country and its trading partners. Thus, deflators are essential to obtain a more accurate indicator of economic competitiveness, which reflects not only changes in the nominal exchange rate (NEER), but also differences in purchasing power between countries.

Deflators are indices that measure changes in prices to adjust the value of an economic indicator (eg GDP, exports, imports) to constant prices to remove the effects of inflation. Deflators are used to calculate realized economic indicators (eg real GDP, real exports) by adjusting nominal values to price conditions.

BASIC RESEARCH

So, as mentioned, several deflators are used to determine the real exchange rate. International experience offers as methods of determination several indices for the price P0 and P1 - the consumer price index (CPI), the gross domestic product deflator (DGDP), the unit labor cost (ULC) or others such as the index of industrial production prices (IPP), world industrial product price index (WPI), price of exported products (PX), price of imported products (PM).

DGDP is a deflator that signifies the country's economic growth and provides strengths such as:

- includes the prices of all products sold;
- includes the prices of non-marketed products.

But, with all its advantages, in this case differences between prices can be observed, as well as differences in productivity. Thus, DGDP represents a big deviation from the real situation, as revenues from commercial activity are very low. So, the disadvantages in using the deflator are as follows:

- large differences between values from one country to another;
- the high value does not mean a high standard of living for each citizen;
- prices for goods differ, depending on the country.

For many developing countries, including the Republic of Moldova, this indicator has no relevance, because the GDP value is very small. But for highly developed countries like USA, China, Japan this deflator would be welcome.

CPI is more advantageous than DGDP because almost all countries use the same method of calculating this deflator. Thus, the advantages of using the consumer price index are:

- similar determination method;
- includes the prices of a wide range of products;
- international practices provide credible results.

At the same time, there are weak points of this method that prevent the analysis of the real situation on the market, such as:

- the equilibrium price of the traded products cannot be accurately estimated;
- inflation fluctuations may often not reflect the real market situation, such as improving competitiveness and reducing marginal profit, respectively;
- excessive price control;
- the impact of import and export prices on competitiveness.

In many countries, a different sample of products in the minimum consumption basket – 45 - 700 products – is used to calculate inflation. These differences greatly influence the result obtained.

Using unit labor cost (ULC) to determine REER is an important method for assessing an economy's external competitiveness because unit labor cost reflects production costs in an economy, and these costs are critical to export competitiveness. Combined with the nominal exchange rate (NEER) and inflation differentials, unit labor cost is a key factor in the REER calculation.

Another deflator used to calculate the real exchange rate is the ULC which is the ratio of unit labor cost to unit output. Thus, using labor cost as a deflator has its advantages, such as:

- attention returns to a basic element of competitiveness for traded goods and the direction is directed towards cost;
- there is no risk of internalization of the CPI of prices for import and export products;
- ULC is less affected than CPI by the exchange rate.

At the same time, the labor cost also provides certain disadvantages, such as the following:

- unavailability of statistical data on the salaries of the population;
- the data do not include the costs of services, but these are an important element in trade;
- the existence of business cycles that affect the reality of the data;
- not considering costs such as intermediate goods or the cost of capital;
- the dynamics of the cost of labor can represent the substitution factor of the ratio between capital and labor.

An increase in the wage index or an increase in the nominal exchange rate favors the appreciation of the national currency. Unit labor cost is a measure of competitiveness. However, the ULC deflator is influenced by the cyclicality of productivity changes. The IMF proposes to eliminate

these influences by using normalized indices. Statistical data are limited, and the ratio of capital to labor predicts time differences and different results depending on the country. In this case, the cost of labor is questionable as a measure of a country's external competitiveness.

ULC however is a more advantageous method for highly developed countries. For the Republic of Moldova, the use of the ULC deflator would represent a great deviation from reality. It is known, for example, in the Republic of Moldova, that imports far outweigh exports, thus, the REER dynamics reflect the incorrect situation because the cost of labor has a much lower weight than the cost of labor of commercial partners in total costs. Moldova is a country that relies on remittances from abroad.

The relative unit value of export or import prices has the advantage of excluding non-tradable goods, but it has other shortcomings, such as:

- are strongly influenced by short-term market fluctuations and are not exogenous to the exchange rate;
- they can be strongly affected by the share of prices of primary products;
- they may fail to present the effects of international competitiveness on the structure of goods
- marketable imported or exported;
- they are average values and not observed prices.

The advantage of each deflator manifests itself from one country to another. Thus, if the gross domestic product deflator is an optimal method for Japan, it does not mean that the situation is the same for the rest of the countries. In general, each country, following various researches carried out, chooses its own method of calculation, as well as the monetary authority of the Republic of Moldova has selected, taking as a basis for determining the real effective exchange rate CPI.

Table 1 shows the deflators used by various countries, depending on the degree of development and the most successful method obtained.

Table 1. Deflators used by various countries

Country	The deflator used
SUA	(IPPI) industrial production price indices
China	(PPI) production price indices
EU	(PPI) production price indices
South Korea	(PPI) production price indices
Taiwan	(PPI) production price indices
Hong Kong	(PPI) production price indices
Thailand	(PPI) production price indices
Singapore	(CPI) consumer price index
Great Britain	(PPI) production price indices
Malaysia	(CPI) consumer price index
Australia	(IPP) industrial production price indices
Indonesia	(IPR) import, export price indices
Philippines	(IPR) import, export price indices
Mexico City	(IPR) import, export price indices
Canada	(PPI) production price indices

Source: developed by the author based on, World Statistical Review[online].[accessed September 10,2024] Available:http://www.tradingeconomics.com/

According to table 1, we observe that countries that enjoy a rich industry with high productivity choose the producer price index as a deflator that provides control of the national currency and manipulation of the effective nominal exchange rate in the necessary direction.

The producer price index is offered as one of the best deflators for determining the effective real exchange rate. Thus, using it as a basis for calculation, we aim for the following advantages:

- includes the prices of the goods produced on the markets;
- includes all spheres of production;
- optimal for presenting competitiveness.

However, IPP also includes disadvantages that differ depending on the country, so some of them are:

- large differences in productivity;
- differences between the number and type of industrial activities;
- price difference in different markets.

CONCLUSIONS

In general, the PPI deflator is used as a calculation index by OECD countries because only industrially developed countries are able to determine the REER according to this method. In the Republic of Moldova with a less developed economy, it is not advantageous to use the PPI when determining the REER. The GDP deflator is advantageous for countries that are not part of the EU, but also have a high level of economic growth. The IMF recommends using the consumer price index to determine the REER.

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