## STATISTICAL METHODS OF INFLATION PROCESSES RATING IN RUSSIAN ECONOMICS

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*Keywords*: inflation processes in world and national economics, index system, inflation measure, macroeconomic instability, a model of antiinflation program, significance rating of price and index level, individual segments of economics, inflation under stable or shaky economics, aggregated inflation index, particular characteristic of inflation.

Inflation processes influence greatly the world and national economics development. Basic method of inflation analysis is the so-called index method which helps to perform the economic interpretation of the results obtained. The expansion of an index system by introducting an aggregated inflation index into it allows us to measure the inflation in the situation of shaky economics. Aggregated inflation indices (2000-2007) let us mount the inflation process development in national economy.

Inflation processes influence greatly the world economics development. The problem of inflation process is related to devaluation and develops in a total boost in prices at goods (and services) and the break of money circulation. With the help of price statistics index we are able to study an operation of market mechanism. In our country various governmental institutes prognosticate inflation: Economic Development department, Central Bank of Russian Federation, Office for Statistics and industry associations. According to statistical data of the Ministry for Economic Development in 2008 inflation was 13, 5% in Russia. This caused the lag in income growth rates in comparison to price growth rates (table 1).

In general, one can observe a slowing-down process in income growth rates with the identical intensity in Russia and Samara region, a facor which shows macroeconomic instability. The model of antiinflation program in its Russian variant consists of two parts. The first part includes economic factors: creating an effective investment plan, formation of steady macroeconomic market structure aimed at equalizing manufacturing disproportions, mobilization of accessory investment into production environment. The second part forms financial orientation: identification of taxes' facility in production environment, reduction of excessive money emission, active income policy assuming the reconciliation of salary, income and price growth rates under the Government control.

One of the main principles of analyzing inflation is the index method. The advantage of such method is firstly in its consistency and the possibility of economic interpretation of the results obtained. The disadvantage is the absence of an aggregated index describing inflation processes in economics.

The system of index includes: consumer price index (CPI), manufacturer price index (MPI) and index-deflator of gross domestic product (DGDP). Consumer price index appears to be the main indicator of inflation in Russia. It describes price changes being as a consequence rather "narrow" indicator.

Index-deflator of gross domestic product can not estimate inflation processes in national economy adequately in condition of production structure changing.

Apart from above-mentioned indicators one can use the norm of inflation to study the problem of inflation. In order to calculate it they use Consumer Price Index of current and preceding periods having a different 1% accretion. Abovementioned indices describe price dynamics in different segments of economy. Each of them

Table 1

The correlation between income and price growth rates in Russia, %

Region	2000	2002	2004	2006	2007
Russia	94,3	96,3	99,1	103,7	99,2
Samara region	87,9	94,9	97,0	103,7	99,1

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## Table 2

Coefficient matrix of a correlation between price Indices

Indices	CPI	MPI	MPIS
CPI	1,000	0,755	0,788
MPI	0,755	1,000	0,564
MPIS	0,788	0,564	1,000

Table 3

## **Price index weight**

Indices	CPI	MPI	MPIS
Calculated weight	0,35	0,32	0,33

Table 4

The aggregated inflation index in Russian Federation in 2000-2007

Region	2000	2001	2002	2003	2004	2006	2007
Russian Federation	1,292	1,183	1,118	1,112	1,224	108,5	114,1
Samara region	1,284	1,229	1,132	1,108	1,137	108,7	113,3

can measure inflation in the situation of steady economy, while Russian economy depending on the economic situation of world markets is not steady at all.

The expansion of index system by introducing an aggregated inflation index into it allows us to get more information to analyze inflation processes in economics.

The best method is the principle of calculating of an aggregated index of inflation as a mean quantity among price indices. Though we are to answer a number of questions: price index assortment for identifying an aggregated index, the choice of a mean quantity defining the weight.

Consumer price index and manufacturer price of industrial and agricultural products can adequately describe inflation process development which takes place in different sectors.

In order to calculate the aggregated inflation index we will use a coefficient matrix of a double correlation between three indices (table 2). The aggregated inflation index is defined by using a simple mean method based on the principle of a correlator-regression analysis in order to identify the weight (table 3).

The calculated weight makes it possible to identify the aggregated inflation index for 2000-2007 period. The usage of annual aggregated inflation index reflects the processes of inflation in national economy.

These time sets meet the main demand their levels are comparable in time and space.

The value of the aggregated inflation index let us mount the specific character of inflation process development in national economy, describe inflation process development and exercise control over them.

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