## An alternative approach to the inflation calculation in Azerbaijan Article I

Why alternative approach? This question was answered in early 2000 by local research center working in Poland; in order to maintain the macroeconomic equilibrium. This is important not only for having the credible rate of inflation in the society, but also for adjusting the social and economic policy of the government. This research firstly started by the Polish Center for Social and Economic Research in Central and Eastern Europe was continued with studies held by Ukrainian experts of Association for Economic Education and Research. Finally, this issue was raised in Azerbaijan by the Economic Research Center with funding support from USAID.

The justification of the actuality and importance of the project was not that hard for the experts of the Economic Research Center when the project took a start. The views of various experts concerning about the inadequacy of the official inflation rate in Azerbaijan were found their basis in the analyses by various economists and were publicized via the mass media. The importance of inflation in Azerbaijan was justified due to the physiological effects driven from the expected adjustments to the Tax Code and menace driven from the last decision of Tariff Council. Local experts have recently started to emphasize and discuss the problems related not only with inflation, but also its social and economic impacts on living standards of the population. Hence, an accurate measure of inflation in the country requires an adequate estimation of living standards and real trends in the economic development.

On the other hand, the role of the inflation on forecasting is crucial. Moreover, we should not forget about the correlation between current economic performance which is based on processing of natural resources and subsequent development of the economy. The effect of huge oil revenues on inflation must be under consideration too.

It is important to take into account all inflationary issues in order to estimate and analyze the living standards of households. It is obvious that the population with lower level of living standards requires the implementation of expensive economic reforms. If this is the case, defining accurate policy needs wide, deeper and adequate analysis. Likewise, these analyses must not be implemented by single state agency and study.

In order to contribute to the solution of raised problems and clarify the debates concerning about the real inflation rate, the Economic Research Center has started to conduct quite a new project on "Alternative inflation methodology development in Azerbaijan" which is financed by USAID. Under the project, it is envisaged (i) to get a deeper insight into the Consumer Price Index estimation methodology used in Azerbaijan and identify the shortages with it, (ii) to learn the world's most progressive practices of CPI calculation methodology and

assess the applicability potential of these practices in Azerbaijan and finally (iii) put into practice an alternative price observation in the Republic of Azerbaijan via the alternative methodology and then take actions to calculate the alternative CPI for the country.

The research team formed within the framework of the project identified the following objectives which they considered pivotal:

- Work out an alternative way for changing the inflation level in Azerbaijan into a comparative indicator;
- Increase the reality of the anti-inflation policy of the Government and propose the corrections to the existent policy;
- Assess more accurately the monetary aspects of oil revenues by establishing real inflation rate;
- Establish the real underpinnings for developing preventive actions so as to prevent macroeconomic, financial and social threats with possible inflation implications in advance:

A number of experts and representatives of international agencies repeatedly emphasized that the inflation calculation by State Statistical Committee comes in compliance with international standards. Of course, we also maintain that like in almost all countries of the world, Consumer Prices Index characterizing the inflation level is calculated, in our country, by means of Lasperyes method and the project intend to use that method calculating the data obtained by statistical observation of the prices, since the extensive world practice shows that Lasperyes formula appears to be the most progressive method for inflation estimation. Therefore, in Azerbaijan, like in many countries, the inflation rate calculation based on the same methodology is estimated by dividing current period (month, quarter and year) prices of the same consumption basket to the consumption basket prices of the previous period of time.

In order to answer the logically validated question "if the same formula is to be applied, then where can we see that alternative nature?", we want you to focus on the below mentioned ideas.

First, do not forget that Lasperyes method is very generalized and final formula of inflation calculation. Rather, depending on the methodologies used prior to and after this calculation, the results characterizing the inflation level can drastically differ from each other.

Second, the goal is not only to search for the alternative method to Lasperyes, but also find an alternative to the current the methodology in our country. So our stance is strengthened via quotation by a well-known economist Scott Roger which says that "while calculating the inflation, the challenge is not which methodology to apply, but how to apply it", because the root of most problems is concerned with its application. Ultimately, such an integrated approach may

lead to obtaining inflation indicators not similar to each other. The issue that we should focus on is the similarity of the methodology applied not only in the developed, but also in developing countries. However, not in all countries, the inflation level is accepted unambiguously. For instance, there are still doubts over this issue in Bulgaria, which used Western countries' methodology, though in recent years, the government has started to intensify its calls for cooperation with independent experts in order to eradicate these suspicions. So the research team decided to investigate the methodology and its application issues used in Azerbaijan in an integrated way. The issue of applying the current methodology is one of the main directions of the research conducted within the project.

Taking all these into account and simultaneously, resting on the world practice, the research team has started implementing an alternative approach concerning the inflation measurement in Azerbaijan in two major directions.

First alternative approach deals with observation method of the prices for goods and services selected (observed) to measure inflation and selection of the regions in which the observations will be conducted and finally, the rule of Consumer Prices Index estimated for the country. A major goal in this approach is to identify how and in which places price observation of the goods and services included in consumption basket will be conducted. On the other hand, the alternative methods of selecting geographical locations where the registration of the prices for goods and services will be done are of the main elements of this approach. Furthermore, in the world practice, the regions where price observation will be done are identified on the basis of two criteria – a) the share of a region's population in country's population and b) the share of region's retail turnover on goods in country's overall retail turnover on goods. At present, when State Statistical Committee calculates Consumer Price Index, the first criterion is used.

Therefore, the main tenet of proposed methodology is not to select the regions using the number of population. That is, we have selected the regions for price observation based on retail turnover of certain regions. This approach is what IMF and ILO proposed to several countries. Let's clarify on this approach a little bit. So, according to the official statistics, the number of population in the capital city of Baku is about 2 million and in this way the weight of the capital in CPI is becoming smaller. However, the main part of the retail turnover belongs to the capital. This, in its turn, leads to the reduction of the impact of the main region that has higher prices and broader goods turnover on the overall indicator. Otherwise, the region where the population is bigger, but has a lower price level, gets a bigger share and this causes the overall index to decrease. The approach applied by Center's research team rests on the goods turnover registered with the prices existent in the region, irrespective of the number of the population living there, and it enables to obtain the outcomes closer to the reality.

The second alternative deals with reflecting the compiled prices in Consumer Price Index (CPI) and in general, the interpretation of the index. In terms of the mentioned approach, the problem of the alternative methodology for Consumer Price Index is also important. Thus in the real life, some non-monetary shocks can be the case which also, in its turn, are reflected in the calculated inflation indicator. We can mention the following among these possible shocks: the changes in the prices for some goods and services that occurred because of the seasonal impacts, and the changes in the prices of energy products. Given the fact that the mentioned factors have higher hesitation and are of short-term character, like in every country, it is necessary to apply fixing inflation indicator in Azerbaijan. We should mention that at present, National Bank of the Azerbaijan Republic calculates the mentioned indicator for internal use only.

World practice proves that the prices for certain group of goods and services in the consumption basket remain stable over medium and long-term period and when calculating the inflation, the stable prices of those goods and services make a softening impact on the inflation level. Using this practice, we also plan to calculate CPI by removing the goods and services with price stability out of consumption basket in Azerbaijan.

In general, the major objective in all the mentioned issues concerning the second approach does deal with estimating pure inflation in the country. That is, pure inflation indicator calculated on the basis of the rest of components remaining after excluding some components (the prices exposed to shocks more often are mainly set on the basis of non-economic factors) used in estimating Consumer Price Index helps establish the anti-inflation policy of the country's Central Bank and identify which part of the rise in prices is attributable to the monetary factors. In a word, the major objective of estimating pure inflation in the country is to obtain a sustainable inflation indicator.

Besides both of the alternative scientific-methodological approaches mentioned above, under the Project, the research team has put forward a set of alternative and practical positions for getting more realistic inflation indicator in Azerbaijan. Rather, in the view of the research team, both of the major reasons why the official inflation level announced in the country does not reflect the reality are (i) the improper implementation of the price observation by the state and (ii) erroneous calculation of the compiled prices. Both of the problems may occur both intentionally and unintentionally. We should note there is no need to dramatize the mistakes unintentionally made by the state or a government agency. Even in the most developed countries of the world, it is possible to encounter such type of mistakes caused by government agencies' incompetence and lack of concentration. For instance, recently, Canadian State Statistical Agency has officially announced that the indicators announced on Price Index of services for the last five years are incorrect. The agency gave the following explanation: There is an error in the

formula inserted to the computers to calculate price index of the services. And in reality, Price Index of the services should have been at least 1 per cent higher than officially announced figures.

The mistakes made intentionally in the observations and calculations are the problem that preoccupies the research team much more. From our perspective, we can not justify such an approach.

Under the project implemented by the research team, one of the main targets of the price observations to be conducted in the capital city and regions is to identify the main causes of the distortions (if such distortions are really the case) disclosed via the comparison of the estimated alternative consumption prices with the officially announced inflation.

And all in all we should also note that the research team tries to adapt the actions taken under the project to the current methodology. Here the main goal serves to make both results reach the competitive form.

As a result of the expected implementation of Project's action plan, the research team intends to obtain the following outcomes:

- Increased responsibility of the government by providing real inflation level obtained through an alternative approach and by doing this, make a positive impact on the conformity of the alternative inflation indicator with its actual level;
- Establishing the basis for implementing economic policy that rests on actual inflation level in order to preserve macroeconomic stability;
- Regulate properly the foreign exchange pressure of oil incomes on the domestic market and ultimately, increase the management efficiency of oil incomes;
- Find arguments to adopt timely and rational decisions for business institutions, banks, insurance and credit entities;
- Establish alternative reference points for policy-makers and researchers.

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