## tepav

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## ON MARCH INFLATION RATES

March inflation rate which was announced recently has aroused indignation due to the change made in the calculation of Consumer Price Index (CPI) by Turkish Statistical Institute (TURKSTAT). In its announcement, the Central Bank, even in partly, used this change to account for the gap between the expectations figured by using the data for February at the beginning of March and the realization. Yet, this conduct was interpreted as a "trick" on the press. The main point is that we are confused about why and how the index is calculated. Therefore, there is need for a short explanation to understand what has happened last month even a bit better.

Firstly, we have to consider what would have happened if TURKSTAT hadn't made such a change. In order to make this calculation, we have to know the weights of the goods in the basket in detail. Unfortunately, we don't have this information as they are classified. However, we are able to derive some information from the announcements by TURKSTAT. Share of the Communication Main Group, in which the change is made, in the whole basket is 4.41%. Postal Services, Telephone and Telefax Equipments, and Telephone and Telefax Services are included in this group. We don't know the weights of these sub-groups. On the other hand, we learnt that prices in Postal Services group remained constant; yet, prices in Telephone and Telefax Equipment sub-group decreased by 5.4%. The main point is that Telephone and Telefax Services, this time, have been detailed, and that some prices in this detail have increased while some others have decreased.

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Previously, only local calls from permanent line were included in the index. These prices increased by 28.57%. The subsequently added long-distance, international calls from permanent line, and mobile phone calls decreased. As a result, prices in Communication group decreased by 0.5% in total. There lies the problem. If new goods hadn't been added, this increase would have been higher; because, the newly added goods are the goods becoming cheaper.

What would happen if we made a rough estimation using the information we have, and if we disregard all the positive developments as an extreme approach; namely, if we took the weight of Postal Services and Equipment as zero, and if we disregard the new goods totally; in other words, what would happen if we attributed the whole 4.4% share of communication to Telephone and Telefax Services whose prices increased by 28.57%? The announced March inflation rate is 0.92%. This figure goes up to 1.06% with a rough estimation. That is, the difference, even in case of the worst scenario, is about 0.15%.

Is this difference significant? The answer to this question alters depending on what question is asked. Yet, the more important is the question "Does TURKSTAT has the liberty to make such a change? Because, what make sense are the principles. Then, what principles does TURKSTAT work with, and to what extent are those principles infringed, if that is the case?

In order to answer this question, firstly, it is necessary to understand the theoretical framework and to know how this is reflected in implementation. CPI, also sometimes called the Cost of Living Index, serves to calculate how much an *average* consumer *ideally* has to spend in order to attain the *benefits* again in the next month (call it *happiness* if you don't like this word) attained from the expenditures made in a month. Two terms are important. Firstly, CPI is an index for the *average consumer*, not a personal index for individuals. So, saying "prices are said to decrease, but the prices of the goods I buy always increase" means that you are not average, not that the index is wrong. Secondly, it is not possible to calculate this index *ideally*, because *benefit* (*happiness*) cannot be calculated directly.

Thus, the index calculated by TURKSTAT (or the German, British, American Statistical Institutes, etc.) is a convergence to this ideal index.

TURKSTAT has calculated and published Harmonized Price Index since 2003. This method is a common method adopted by the member states of the European Union. The essence of the index is based on calculating how much a benefit in a given period costs in later years, or months by taking a period of time (year) as the base. Therefore, goods used by the average consumer are determined by applying comprehensive questionnaires in a selected year. (TURKSTAT did this in 2003 and has repeated since then. Details can be found on TURKSTAT web site.) Since 2003, weights of goods included in the Harmonized index every year are reviewed similar to the EU as of the month of December in the previous year. TURKSTAT has disclosed that there would be a change in weights with a 'revision announcement' in January this year. So, the change in weights is a known, and consequently an expected situation. There is not a problem stemming from this.

However, the fact that fixed basket, and fixed weights had been used before 2003 leads this innovation to confusion. This change is necessary, because the theory of economy tells us that fixed basket, which is called as the Laspeyres index, always shows real changes as more than they are. The reason for this is that consumers change the basket of goods depending on the fluctuations in (relative) prices. That is, when the price of a good decreases, the consumer starts to use this good more and the other goods less. The consumer adjusts this change so that it doesn't change the overall benefit. This is called the "substitution effect" in economics literature. However, in this case, as the consumer uses cheaper goods, more money is saved although the nominal income doesn't change. In such case, the consumer increases the attained benefit by means of increasing the consumption of all or some of the goods according to his/her preferences. And, this is called the 'income effect'. However, when fixed basket is taken as base, the effect of the decrease in the price of a good on the cost of overall benefit is calculated incompletely as the substitution effect is disregarded. So, changing the weights of the goods in the basket periodically serves for acquiring an index closer to the ideal calculation.

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Such changes are made in the EU countries, too. It was made in the USA in the past, and significant changes were observed in the index. Consequently, as there is not a disadvantage of changing the weights, TURKSTAT didn't act erroneously in this case neither.

The only 'fault' of TURKSTAT within this frame is that it added some products which previously weren't included in the index, namely long distance and international calls over permanent line and mobile phone calls. What is more important is why this detail hasn't been considered in advance. It could have foreseen that mobile phone calls had a significant importance in communication in 2003 and this importance would increase, and long distance, even international calls would have an increased share.

Is there a way out of this "fault"? Certainly! Former calculations may be reviewed by getting detailed information regarding the past from relevant institutions; and, everything will appear more clearly as a result. But, can TURKSTAT do that? There is no doubt that it can by means of capability. However, one must doubt that TURKSTAT will be willingful for this task and carry it out as it is not so easy to say "we are mistaken, we apologize, this is the truth" according to our culture. However, similar cases are at issue in all developed countries and no institution refrains from doing this. Moreover, 'honesty' increases the credit of institutions. "No institution is perfect!"