Foreign Experience on Inflation Methodology

"There are doubts on inflation rate even in the US therefore studying of the inflation methodology is always very crucial"- said Gregory Jedrzejczak, World Bank's Counter Manager for Azerbaijan, in the meeting with inflation research team of Economic Research Center (ERC). It again corroborates the studying of foreign experience on inflation is not only important in developing countries, but also in the developed countries. Consumer price indices (CPI) are seen as one of the key indicators of price changes and are often used as the measure of inflation in each country. In recent years, countries have started to place more emphasis on presenting a variety of price measures that are available and explaining how they can be used for different purposes.

USA is more attractive case in developed countries in terms of applying inflation methodology. Prices are collected in 87 urban areas across the country from approximately 23 000 retail establishments prior the 18th business day of the month in the US. Data on rent and owners' equivalent rent are collected from 20 000 tenants. The seasonal trends from the underlying change in prices are removed. The population covers all urban households and excludes people living in rural non-metropolitan areas, farm families, military and persons in institutions. The area sample reflects the population distribution from 1990. The current CPI market basket of good and services is derived from the consumer expenditure survey over the years 1998 to 2000, involving a national sample of almost 36 000 families. Elementary indexes by item and area are aggregated using expenditure weights derived from the consumer expenditure survey conducted every two years. The indexes are calculated using the Laspeyres formula with reference period 1982-84=100. The index measures the average change in prices of a fixed basket of goods and services. All taxes directly associated with the purchase and use of items are included in the price. Owner-occupied housing is included.

In New Zealand prices are collected weekly, monthly, quarterly or annually depending on the expected frequency of price changes exhibited by the good or service. They are collected in 15 urban/suburban areas for 352 items. Owner-occupied housing is measured using changes in house prices under an acquisitions approach. The indices are calculated using the Laspeyres formula with expenditure weights derived from the 2006/07 Household Economic Survey (HES). Most significant changes in the 1999 Rebased CPI: Interest is excluded from the official CPI since 1999. Residential sections have been excluded from the CPI. Internet charges and cell phone charges have been included in the CPI. An index which includes interest (CPI All Groups

plus Interest) will continue to be calculated. 15 areas - Whangarei, Auckland, Hamilton, Tauranga, Rotorua, Napier-Hastings, New Plymouth, Wanganui, Palmerston North, Wellington, Nelson, Christchurch, Timaru, Dunedin and Invercargill.

Both CPI and RPI are compiled using a sample of around 120000 prices representing around 650 individual goods for which price movements are regularly measured in about 20000 outlets in around 150 randomly selected areas throughout the United Kingdom. Most prices are collected monthly but some quarterly. The selection of goods and services is reviewed annually (in January). The reference populations is all private UK resident households excluding pensioner households dependant in which three quarters or more of incomes comes from state sources and high-income households with in the top 4%. The indices (known locally as the Retail Prices Index or RPI) measure the monthly average of change in prices of goods and services that households acquire for consumption. The RPI excludes gambling and illegal activities but includes owner-occupied housing costs, mortgage interest payments and depreciation costs, own-produced goods (valued at market prices). The prices are cash prices with unconditional subsidies and discounts, VAT, duties and other indirect taxes taken into account. Weights are revised at the beginning of each year to incorporate the results of the UK Expenditure and Food Survey (EFS). Market share information is used to weight prices from shops who supply price data centrally to the ONS. If prices are temporarily unavailable, the base price is removed from index calculation so that weight for that product is redistributed among other products. If prices are permanently unavailable a replacement is selected.

In the case of France, the global index is set up taking into account the decomposition defined by COICOP. Prices for public transport services, tobacco products, cars, electricity, gas, pharmaceutical products and medical services, postal and telecommunication etc. are collected centrally at the time of a price change. Price data on rented accommodation are derived from a survey of tenants. The remaining goods and services are surveyed through agent visits to 30 000 sales outlets in about 100 urban units, generating nearly 160 000 price quotations. The index measures changes in the price of a fixed basket of 303 categories of goods and services. Prices surveyed are those at which goods and services are offered to the public. Sale prices of clothing, promotions, etc. are included if they are generally available and last for more than 24 hours. INSEE calculates and publishes two indices corresponding to "All items": the first which takes account of tobacco and a second index which does not. The series published in MEI includes tobacco and excludes imputed rent and own-account consumption. The index is a Laspeyres

chain-linked index with weights revised at the beginning of each year. Weights are recalculated at the beginning of each year with respect to the National Accounts of the year n-2.

Inflation is one of the key issues of macroeconomic stability in transition countries, as it has a strong influence on many economic indicators such as the state budget, exchange rate, interest rate, wages, and level of poverty. Moreover, high inflation undermines the general trust in the political and economic system, impacting the inflow of direct investments. The success and efficiency of monetary policy in terms of inflation stability depends on whether inflation measure reflects long-term price movements or includes short-term structural shocks as well. The common inflation measure in transition economies is the consumer price index (CPI). It is identified as the average weighted price level of a set of selected goods and services that are included in a consumer basket. Such an inflation measure is impacted by both monetary and non-monetary factors.

Mismeasurement of inflation is likely to be more severe in a transition economy than in a more stable environment. Comparisons of self-reported changes in economic welfare with changes in incomes suggest that official Romanian inflation measures may be overstated by between 100 and 300 percent at a reported annual inflation rate of 40 per cent

It is generally believed that biases in traditional measures of consumer prices may be especially great in transition economies (see Filer and Hanousek, 2000). All the well-understood reasons why conventional indices may overstate inflation should be exacerbated in the transition. Among these are massive changes in relative prices leading to consumer substitutions, substantial improvements in quality in even the most mundane goods, and the rapid proliferation of new, low cost distribution channels.

In the Slovak Republic prices of 836 selected goods and services were observed between 1991-1996. In 1997 the structure of the index was revised. It now includes 708 representative items and about 90 000 price quotations from 8500 retail outlets. December 2000 = 100 is the national base period. The consumer price index (CPI) reflects the price movements of food products, industrial goods, catering and other services bought by the population. It includes VAT. The index is of Laspeyres type of base year December 2000=100. Weights are derived form the 2000 Household budget survey adjusted for the results of 2000 national account data.

Prices are collected once a month between 1st and 20th calendar day in Czech Republic. Collection takes place in 41 districts and in Prague. In total, 90000 price quotations from 10000 outlets in 194 locations covering some 775 representative items are collected. Centrally surveyed prices are collected from variety of sources, mainly administrative. Adjustments for quality changes are made by imputing price changes from price changes of similar products. For missing prices, a price can be carried forward for one month, then a replacement price is sought. New items are introduced once a year. For seasonal items, the transaction price is taken for representative items for fresh fruit and vegetables sold throughout the year, other seasonal items carry forward the latest recorded prices unchanged. Apartment owners' imputed rent is based on prices for non-regulated, non-subsidised co-operative housing. The CPI measures pure price changes of a basket of goods and services paid for by the population. Prices are transaction prices. Taxes and sales prices are included, other types of discounts are ignored. Owner-occupied housing is included from January 1995. Lowest level indices are calculated as relatives of average prices. Price relatives are constructed between the current period and the price reference period of December 1999. Domestic average prices are derived from average regional prices weighted by average regional population in 1999. Indices are aggregated using a modified Laspeyres formula and fixed weights (weight reference period 1999). The weights are taken from the 1999 Household Budget Survey's family expenditure statistics classified according to the COICOP classification.

Data are calculated from quotations on goods and services in 309 districts in Poland. About 500000 price quotes are collected each month. The prices are surveyed between the first and the 26th day of each month. Food (including the catering industry), alcoholic beverages and tobacco products are priced three times a month in about 28000 outlets. Data are calculated using the Laspeyres formula. Weights are derived from the Household Budget survey and revised every year.

In Hungary prices are collected for approximately 1 100 representative items. Over 90 000 price quotations are obtained per month (between 30-150 quotations per commodity). The index measures changes in the price of a basket of goods and services purchased by households. Imputed rent for owner-occupied dwellings is included. Consumption in kind from own account production of goods and services received free of charge, passenger car licences, consumer credit charges, life insurance, direct taxes, free health services and second-hand transactions (with the exception of second-hand cars) are excluded. The index is a Laspeyres index based in 2000 =100

with weights of selected items derived from the results of the Household Expenditure Survey conducted 2 years earlier. Weights change each year.

The HBS is a sample survey that employs both diary (for a two-week period) and annual expenditure questionnaire approaches in Russia. Prices are recorded in 266 cities. Consumer price surveys are performed in all of the constituent territories of the Russian Federation. Price information is collected in all of the capitals of the republics (comprising the Russian Federation), in the kray, oblast, and autonomous district centers, in federally designated cities, and on a sample basis, in rayon centers (cities and urban-type settlements) selected in light of their representative nature in reflecting the socioeconomic and geographical status of regions and the degree to which the consumer market is saturated with goods and services. Cities and urban-type settlements are selected for price surveys using the targeted sample method. Approximately 50,000 commercial organizations and organizations in the service sector participate in the survey, and more than 560,000 price quotations are recorded for products of specific brands and grades. Price data are collected through personal visits to commercial organizations and organizations in the service sector by employees of statistical authorities and through the recording of prices using mini-computers, and using paper forms. Collectors visit the representative sampled outlets, which include both fixed premises and mobile trade (stalls, kiosks, booths, etc.), to obtain prices actually charged to consumers for the selected goods and services.

References

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