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Directorate C: National Accounts, Prices and Key Indicators
Unit C-4: Price statistics; Purchasing Power Parities; Housing Statistics



HICP COMPLIANCE MONITORING

INFORMATION NOTE ON THE HARMONISED INDICES OF CONSUMER PRICES FOR LITHUANIA

March 2014

In the context of compliance monitoring and quality assurance, Eurostat reviewed the HICP for Lithuania. The statistical practices used to compile the HICP for Lithuania have been reviewed against HICP methodology and other guidelines and good practices in the field of consumer price indices.

This report takes account of publicly available information on the CPI and HICP for Lithuania and additional information collected by Eurostat prior to, during and after a visit to the Lithuanian Department of Statistics (Statistics Lithuania) on 12 March 2013.

1. INTRODUCTION

HICP compliance for Lithuania was assessed positively by Eurostat in 2006. In 2013, in the context of compliance monitoring and quality assurance, Eurostat reviewed again the statistical practices used to compile the HICP in Lithuania against the HICP methodology and other guidelines and good practices in the field of consumer price indices. In addition to general compliance with HICP regulations and, in particular, with regulations adopted since 2006, the focus of Eurostat's assessment was on the follow-up of Eurostat's recommendations from the previous compliance report, on monitoring of changes in administered prices, taxation and excise duties, in particular for energy, and the sampling of medical products.

Eurostat had also a first discussion on the plans for the euro changeover foreseen for January 2015.

HICPs/CPIs are regularly disseminated by Statistics Lithuania in a press release (also in English) and HICP data with 2 decimal places/CPI data with 4 decimal places in the dissemination database (Lithuanian Database of Indicators). They release also information on price changes for regularly purchased products and have made available a personal inflation calculator on their web site.

2. DATA COLLECTION AND VALIDATION

2.1. Organisation

In Lithuania, prices are collected de-centrally by price collectors in shops using handheld computers, as well as centrally by statisticians at the headquarters from official records of central government and national supervisory authorities, from the Official Gazette 'Valstybes zinios', via internet or via telephone enquiries. Local authorities forward the information on prices and tariffs for goods and services falling within their regulatory power to price collectors or price collectors themselves collect prices from the official records of local authorities. Price collectors forward information about legal acts issued by local authorities to the Price Statistics Division of Statistics Lithuania. Prices collected on the internet are used as estimates for prices paid in physical outlets. Eurostat welcomes the efforts of Statistics Lithuania to investigate the possibilities of using scanner data.

The list of items for which prices are collected has both loose and tight product descriptions. Each item is described by its basic technical and qualitative characteristics. Specific varieties are selected by the price collectors who are instructed to select the most popular product variety on the basis of stable and significant sales. Price collectors also mark additional characteristics of the specific varieties.

Lithuania is divided into 18 territorial units. Price collection is carried out in the capital city, 4 major cities, 8 medium-sized cities, and 5 small towns. Each territorial unit is represented.

2.2. Frequency

All prices are collected monthly except for higher education, for which prices are set and collected once per year at the beginning of the academic year. Prices are collected twice per month for fresh fruit and vegetables and for fuel.

The Lithuanian price collection practice is in line with HICP requirements as regards its frequency.

2.3. Data validation

Data validation is based on a multi-stage system. In the first stage, the program of the price collectors' handheld computers gives automatic warnings in case of price variations beyond a predefined threshold. The price collectors have to check the correctness of the prices with warning or give an explanation. The program gives also a warning if there are double entries or missing items. The price data are transmitted to the central database electronically. Additionally, the centrally collected internet prices are regularly validated by contacting (e.g. visiting or phoning) the physical outlet.

In the second stage, the staff in the central statistical office checks the received price data for errors and mistakes. A specific IT tool has been developed for these checks. In addition to the basic data treatment, the central office staff makes periodical visits to the field, analyses the general market situation and contacts outlets or domestic producers and suppliers to verify the correctness of data in cases where price developments look implausible.

The central statistical office organises annual price collectors meetings and workshops to discuss practical issues of price collection. The staff in the central office has been trained on statistical principles.

The production process is well documented. Statistics Lithuania obtained the certification of conformity with the requirements of the Quality Management System of the ISO 9001 standard in 2007. The certification was renewed in 2010 and 2013.

3. PRICES

For most products prices actually paid (transaction prices) are collected, in line with HICP requirements. However, for some products transaction price developments are estimated using catalogue prices and price lists, in particular for furniture and major household appliances sold in the outlets by order, new cars and some services. Price collectors carry out quarterly checks whether the goods and services in question are actually sold and if actual prices correspond to those indicated in catalogues and price lists.

Reduced prices enter into the index calculation if they are available to all potential consumers. Special sales stock prices are not collected. Discounts for owners of fidelity cards are not taken into account.

For prices linked to income from social protection services only the observation of the base pension is relevant. Changes in these prices are reflected in the index only in case of changes of the base pension.

In case a product disappears during the year, standard replacement procedures are applied. Missing prices are imputed for one month if temporarily unavailable. In the second month they are replaced.

4. PRICE ADMINISTRATION AND TAXES

Lithuania regularly transmits to Eurostat a list of prices that are fully or partially administered for the calculation of the HICP Administered Prices (HICP-AP). Prices of a wide range of products are either directly set or significantly influenced by the government: e.g. energy, rentals of municipal dwellings, services related to the dwelling, education, social protection, passenger transport and communication services. In Lithuania there are plans to free the electricity markets from price administration in 2015; no other changes were known in March 2013.

Statistics Lithuania transmits to Eurostat HICPs at constant tax rates according to the requirements. Tax changes used to enter into the index in the month when the changes come into effect. This practice was not fully compliant with the methodology referred to in the Commission Regulation (EU) No 119/2013, which recommends that changes in tax rates that enter into force at a later date during the month shall be reflected in the compilation of the indices for the following month. Since January 2014, the requirements have been fully implemented.

5. WEIGHTS

The main source for the item weights has been the Household Budget Survey (HBS), which used to be a continuous throughout the year. However, this practice was stopped after 2008. The results of the most recent HBS referring to the year 2012 have only become available most recently (end of 2013). The reference period of weights between 2009 and 2013 remained 2008, price-updated to the previous year's December. In order to have weights that reflect up-to-date consumption patterns, critical weights are reviewed and adjusted on the basis of the most recent branch statistics and administrative as well as other sufficiently reliable sources.

This approach was not fully in line with Commission Regulation (EU) No 1114/2010. Eurostat welcomes that Statistics Lithuania has changed the main weight source to National Accounts and started reviewing the item weights annually taking into account National Accounts data. These changes have been implemented since the beginning of 2014.

Statistics Lithuania annually reviews the weights up to the lowest aggregation levels, which is beyond the minimum requirements as set out by the regulation.

Regional expenditure weights are not used. Price observations are aggregated to the national level using as weights population shares of the 18 territorial units based on census data. Outlet weights are not used.

6. SAMPLE DESIGN

6.1. Product sample

The products are selected using purposive sampling. The main criteria to determine the set of products in the basket are the comparative weight of a product in the total consumption expenditure, continued availability on the market and high demand among consumers. The sampled products are further divided into consumption segments, which are groups of items

that serve a given consumption purpose and include products which are perceived by consumers as substitutes. Replacements of products that disappear during the year are chosen from same consumption segments.

In line with the legal requirements, all COICOP classes with a share in total expenditure of at least one part of a thousand are covered in the Lithuanian HICP. COICOP classes that are excluded have a weight of less than one part of a thousand in total expenditure.

The list of representative items is revised annually, and outdated products are replaced with new ones. The price collectors are asked for input for the revision and on the basis of their proposals and information on market developments, the central statistical office updates the target sample. Price collectors review the product list selected for the price survey in the outlets, and start collecting the prices based on the updated list in December each year.

Thus, new goods and services, if estimated to be significant, are observed but actually included in the index during the annual review, which may deviate from the rule that newly significant products have to be included in the index within 12 months.

6.2. Outlet sample

The outlets are selected by the price collectors using purposive sampling. Outlets are selected at the level of territorial units and are chosen to properly represent the existing trade and service network. The selection criteria are: retail turnover, popularity among consumers, specialisation, assortment of products and geographical location. The sample of outlets is renewed at yearly frequency.

Internet purchases are currently not included in the index. Eurostat welcomes Statistics Lithuania's study on the possibilities of including them in future.

7. INDEX STRUCTURE AND AGGREGATION METHOD

The list of products for which prices are collected has both loose and tight product descriptions. The products are further divided into consumption segments, defined at the level of elementary aggregates. Each segment can include two or more representative items. Bundled products are treated in line with the HICP guidelines.

The elementary aggregates are calculated using arithmetic means. There is no legal requirement to change this practice. Following Eurostat's recommendation, Statistics Lithuania has been exploring the possibility of using geometric means. Tests show the impact to be insignificant at the all items level, but pronounced at the more detailed level.

8. QUALITY ADJUSTMENT

Quality adjustment is usually done for prices of food and beverages, clothing and footwear, furnishings, household equipment, new cars, equipment for the reception, recording and reproduction of sound and picture, personal computers, and books. Where there are agreed European standards, methods that can be classified as B-methods or A-methods (in accordance with Article 5 of Regulation no 1334/2007) are applied.

Option pricing is applied for new cars. Prices of used cars are compared directly. For minor quality differences for clothing, direct comparison is used, while for substantial quality

differences, expert judgement or bridged overlaps are applied. Hedonic regressions are applied for top-ten fiction books. In other cases bridged overlap, quantity adjustment, judgemental (expert) adjustment, option pricing and, in most cases, direct comparison (equivalent replacement) is applied.

9. TREATMENT OF SPECIAL PRODUCT GROUPS

9.1. Seasonal items

Lithuania implemented the new standards on the treatment of seasonal items in 2011. The changes were introduced both to the price used to calculate the index in the first out-of-season month and to the estimation method of the price development, starting with the second out-of-season month. Previously, the last observed price was carried forward until the price could be observed again. Presently, the price in the first out-of-season month is calculated as the average price of the last in-season period. Starting with the second out-of-season month, the price development is estimated using counter-seasonal estimation or all-seasonal estimation, if the counter-seasonal estimation is not feasible.

9.2. Cars

The sample includes both new and used cars. The sample is divided into consumption segments according to size (compact, small, medium and large). All segments are represented by a large number of primary models, which are weighed together according to their share within the consumption segment. The sample for used cars is further stratified according to age.

9.3. Telecommunications

Prices are collected separately for fixed and mobile phone equipment, fixed and mobile phones, internet and cable-television services via internet. Weights are derived from data from the Communications Regulatory Authority. Separate sub-indices are calculated for fixed phones, mobile phones, and internet services following the unit-value approach. The calculation of the index is based on data from one provider covering around 90 per cent of the fixed telephone market, 3 providers covering around 98 per cent of the mobile telephone market, and 7 providers of internet services.

The coverage of the telecommunication services appears appropriate. Eurostat recommends that Statistics Lithuania follows future methodological developments in the field in order to eventually implement a consumer profile approach.

9.4. Medical products, appliances and equipment

Prices are those actually paid by consumers, i.e. net of reimbursements. Reimbursement rates applied to the reference (cheapest) price of medicine are based on the severity of disease and social reasons. The actual price paid by the consumer depends on the retail price, reference price, and reimbursement rate. Both reimbursed and non-reimbursed as well as both prescription and non-prescription medicines are included into the sample.

The representativity of the sample is ensured by using the information from a top-list of medical products. The sample is updated every 3 years.

Eurostat recommends exploring data sources that allow for an annual update of the sample.

10. PLANNED CHANGES

The Lithuanian currency is part of the European Exchange Rate Mechanism and Lithuania is targeting to adopt the euro in 2015. Statistics Lithuania has delegated experts to two working groups (out of eight working groups) and one commission dealing with issues related to euro adoption. An observatory of prices has not yet been set up.

Statistics Lithuania had informed Eurostat about plans to change the main data source used for the calculation of expenditure weights from the HBS to National Accounts and to ensure annual reviews of HICP weights in future.

Lithuania is currently studying the possibility to include internet purchases. Statistics Lithuania will implement Eurostat recommendations on the treatment of internet purchases (as soon as they are formally agreed).

Statistics Lithuania is planning to introduce the COICOP level 5 in accordance with the roadmap agreed at EU level.

Statistics Lithuania is investigating the possibilities for implementing a new elementary aggregation formula.

11. OVERALL ASSESSMENT

Eurostat considers that the methods used for producing the Lithuanian HICP are of a good standard. Eurostat's recommendations in the previous reports have been followed, and the quality of the consumer price statistics has improved during recent years. The representativity of the Lithuanian HICP is generally appropriate.

Lithuanian data pass all standard HICP validation tests – they are internally consistent. Identified instances of non-compliance with the HICP methodology are not likely to have a significant impact on the all items inflation rate. Lithuanian HICP data should therefore be considered comparable to the HICPs of other EU countries.

While the representativity of the HICP is generally appropriate, the Lithuanian HICP would benefit from further improvement work.

Eurostat recommends that:

- Statistics Lithuania reviews the method applied to income-dependent prices.
- Statistics Lithuania elaborates on the treatment of telecom services with focus on possible implementation of a consumer profile approach.
- Statistics Lithuania conducts research in order to ensure that newly significant products be included into the sample within 12 months.
- Statistics Lithuania continues to discuss impact and timetable of a change of the elementary aggregation formula with Eurostat.