METHODOLOGICAL GUIDELINES RETAIL TRADE TURNOVER INDEX
Short-term statistics

Retail trade turnover index

BASIC INFORMATION

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ABBREVIATIONS

APIF	Agency for mediation, IT and financial services
BHAS	Agency for Statistics of Bosnia and Herzegovina
COICOP	Classification of Individual Consumption by Purpose
CPA	European Classification of Products by Activities
CPC	United Nation's Central Product Classification
CPI	Consumer Price Index
CV	Coefficient of variation
ESS	European Statistical System
EUROSTAT	Statistical Office of the European Communities
FIA	Financial and IT Agency
FIS	Federal Institute of Statistics of the Federation of Bosnia and Herzegovina
ISIC	United Nation's International Standard Industrial Classification of all Economic Activities
KD BiH 2010	Classification of Activities of Bosnia and Herzegovina 2010
KPPD BiH 2010	Classification of Products by Activities of BiH 2010
NACE Rev.2	European Classification of Economic Activities
VAT	Value Added Tax
PEEI	Principal European Economic Indicators
RSIS	Republika Srpska Institute of Statistics
RTI	Retail Trade Turnover Index
SA	Seasonal adjustment
SE	Standard deviation (standard error)
SBR	Statistical Business Register
STS	Short Term Statistics
V	Variance
WDA	Working-day adjustment

1. INTRODUCTION

This research is part of a comprehensive statistical study of short-term business statistics which are successively developed under a unified methodological framework for all sectors of business economics in accordance with the "Methodological framework for the development of short-term business statistics in BiH".

Through the common project of the three statistical institutions in BiH existing methodological provisions are harmonized and based on a common questionnaire (M KPS TRG 01) as well as common directions for filling in, since January 2013 the redesigned monthly survey on retail trade have been conducted. The aim of conducting modified retail trade survey is to harmonize the production of monthly statistics on retail trade in BiH with EU STS regulation.

The methodological framework for the compilation of the retail trade turnover index and other indicators in this area are set out in Annex C of Council Regulation (EC) No. 1165/98 concerning short-term statistics from 1998, as well as its subsequent amendments (hereinafter EU STS regulation). The retail trade turnover index is a part of the action plan of Eurostat intended for the development statistical system in the area of short-term statistics.

About the significance of retail trade turnover index is the fact that it is one of the main European economic indicators (**PEEI** - Principal European Economic Indicators), with the purpose to provide timeliness information to the European Central Bank (ECB) and the growing importance and use of official statistical data, primarily as support to economic and social reforms.

The statistical institutions in BiH are making great efforts in order to develop modern statistical system. Of course, it is necessary to point out the contribution of representatives of the statistical institutions of EU member states on projects that are being implemented in BiH with the aim of strengthening the statistical system in BiH and its fully compliance with EU methodologies and regulations.

This publication is intended for all users who are interested in the way of conducting retail trade survey on the territory of Bosnia and Herzegovina. This primarily refers to the domestic institutions and users of statistical data, such as decision-makers in our country, business entities, research institutions and the general public, as well as key members of the EU and other international organizations. In addition, this methodological document is intended for people directly involved in the process of conducting the survey, or employees in the statistical institutions of BiH, as well as reporting units.

2. CONCEPTUAL FRAMEWORK

2.1.   Objective

One of the main goals of Retail Trade Turnover Index compilation is to describe the changes in the level of turnover (in nominal and real terms) and other relevant indicators from the retail trade area. The retail trade turnover index is a key indicator of economic activity of the country, which helps government bodies and companies from the private sector in the decision-making process. It is applied for the assessment of the results of the retail sector, household consumption, as well as the calculation of national accounts. It can play a significant role in assessing the competitiveness of various sectors of retail trade.

2.2.   Purpose

The purpose of this statistical survey is to obtain information on the movement of retail trade turnover on the monthly basis, i.e., to determine the turnover. As with other short-term statistics, absolute value is not the best indicator of changes in activities, however, through monitoring of the phenomena movement dynamics, some conclusions can be drawn, as well as projections for the future. If other monthly/quarterly indices from other activities of short-term business statistics are available, it is possible to identify turning points in the economic cycles.

2.3.   Classifications

The structure of the retail trade turnover index (*English acronym RTI - Retail Trade Index*) is determined by the classification of the country activities, taking into account sector characteristics and the need for an adequate index, whose comparison is possible not only on the national but also on the international level.

In the calculation of the index, the Classification of Products by Activities of Bosnia and Herzegovina **KPPD 2010** has been used. KPPD BH 2010 is the standard for product classification in accordance with the product economic origin criteria, according to the Classification of Activities.

Classification is fully harmonized with the European Classification of economic Activities **NACE Rev. 2**, Classification of Products by Activities in the European Union (**CPA** - European Classification of Products by Activities). NACE Rev. 2 is derived from the International Classification of Activities of the United Nations (**ISIC** - United Nation's International Standard Industrial Classification of all Economic Activities), while CPA is derived from the CPC Central Product Classification (**CPC** - United Nation's Central Product Classification). Due to this fact, Classification of Activities of BiH is harmonized with international and global classifications and statistical systems.

2.4.   Legal basis

The following legislation represents the legal basis for conducting survey on Retail Trade Turnover Index:

- Law on Statistics of Bosnia and Herzegovina („Official Gazette of BiH" No 26/04 and 42/04);
- Law on Statistics of Federation of Bosnia and Herzegovina („Official Gazette of the Federation BiH" No 63/03 and 9/09) and
- Law on Statistics of the Republka Srpska („Official Gazette of Republika Srpska" No 85/03).

In addition to these laws, the survey is subject to other guidelines and instructions contained in: Mid-term statistical program of Bosnia and Herzegovina for period 2013-2016, the corresponding programs on the entity level and annual statistical plans. The above mentioned programs and plans contain detailed information on the content of surveys, responsibilities, deadlines and results. Survey methodology is harmonized with the EUROSTAT's regulations for short-term statistics. All EU countries follow these regulations as well as those countries which seek to become a part of that system in the future. In order to achieve that goal, it is necessary to harmonize all national regulations and methodologies with those in force in EU.

Regulations relating to the segment of short-term business statistics are:

- Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term business statistics[1];
- Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98 concerning short-term statistics;
- Commission Regulation (EC) No 1503/2006 and 1893/2006 amending Council Regulation (EC) No 1165/98 concerning short-term statistics as regards definitions of variables, list of variables and frequency of data compilation.
- Commission Regulation (EC) No. 1178/2008 and 329/2009 and Regulation of the European Parliament and of the Council No 596/2009.

2.5.   Statistical institutions in BiH

In accordance with Administrative constitution and regulations it is determined that there are three government statistical institutions on the territory of Bosnia and Herzegovina:

- Agency for Statistics of BiH (BHAS), headquartered in Sarajevo - responsible for the production of statistics on BiH level;
- Federal Institute of Statistics of the Federation of BiH (FIS), headquartered in Sarajevo - responsible for producing statistics on the level of Federation of Bosnia and Herzegovina;
- Republika Srpska Institute of Statistics (RSIS) headquartered in Banja Luka - responsible for the production of statistics on the level of Republika Srpska.
- Branch office of the Agency for statistics of BiH in the Brčko District, responsible for the production of statistics at the District level.

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[1] For translation of the Regulation, please see the end of the publication

3. SURVEY METHODOLOGY

3.1. Definitions

Trade represents a set of activities regarding sale of goods and/or provision of services in order to earn profits or obtain other socio-economic benefits.

Trade activity (section G) of KD BiH 2010 consists of following divisions:

     45 - Wholesale and retail trade of motor vehicles, motorcycles, and repair of motor vehicles and motorcycles;
     46 - Wholesale, except sale of motor vehicles and motorcycles;
     47 - Retail trade, except sale of motor vehicles and motorcycles.

Retail trade activity includes activities of selling new and used goods to final consumers for personal or household consumption, which is carried out in stores, department stores, stalls, by postal services and e-mail, street vendors, selling door to door, through consumer cooperatives, in auction houses, etc.

Turnover comprises the total invoices charged by the enterprise, observation unit, during the reference period and this corresponds to market sales of goods or services supplied to third parties.

Realized turnover also includes all other charges related to sales (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice. Value added tax (VAT) and other similar deductible taxes directly linked to turnover as well as all duties and taxes on the goods or services invoiced by the unit are excluded from turnover. Reduction in prices, rebates and discounts as well as the value of returnable packaging must be deducted. Price reductions, rebates and bonuses conceded later to clients (for example at the end of the year) are not taken into account.

According to this definition, the items included are:

- Sales of manufactured products,
- Sales of products manufactured by subcontractors,
- Sales of goods purchased for resale in the same condition as received,
- Invoiced services provided,
- Invoiced charges for packaging and transport,
- Hours worked invoiced to third parties for labour - subcontracting only,
- Invoiced montage, installations and repairs,
- Invoiced instalments (stage payments),
- Subsidies on products [2]

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[2] Subsidies on products are difficult to calculate, therefore they are excluded for the purposes of the index calculation through time.

Income classified as other operating income, financial income and extraordinary income in company accounts are excluded from realised turnover.

This group includes:

- VAT and other deductible taxes directly similar and related to turnover and all customs and taxes on goods and services invoiced per unit
- Commissions,
- Leases and rentals,
- Leases for own production units and machines if used by third parties,
- Leases of company-owned dwellings,
- Receipts for license-fees,
- Receipts from staff facilities (for example from a factory canteen),
- The supply of products and services within the observation unit,
- Sales of own land and fixed assets,
- Sales or leases of own properties,
- Sales of shares,
- Interest receipts and dividends,
- Other extraordinary income.

The above items can be included in turnover if it is generated within the basic activity of reporting unit.

3.2. Statistical population

3.2.1 Observation unit

The survey comprises business entities/legal units which are, by the main activity, registered within retail trade, except retail trade of motor vehicles and motorcycles (division 47 - KD BiH 2010), and businesses which are, according to their main activity, classified in other activities, but also performing retail trade.

3.2.2 Reporting unit

- Businesses entities/legal units which are, by the main activity in the Statistical Business Register registered in retail trade - division 47, section G, KD BiH 2010[3] and
- Businesses entities/legal units which are, by the main activity registered in other activities (outside the division 47), but realize a significant turnover in retail trade. The entrepreneurs are not covered by the survey.

3.2.3 Geographical Scope

The survey covers business entities/legal units which perform retail trade, except of motor vehicles and motorcycles on the territory of Bosnia and Herzegovina.

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[3] Extract from Classification of activities KD BiH 2010 section G (division 47)- Retail trade, except sale of motor vehicles and motocicles, available in Appendix 2 of publication

3.3.   Sample frame

For determination of the sample frame Statistical Business Register - SBR[4] is used. Statistical Business Register is a unique framework of all administrative business registers and is used in conducting statistical surveys in BiH.
The main sources of SBR data are administrative business registers managed by entity statistical institutes together with the relevant tax authorities - Federal Institute of Statistics with the Tax Authorities of FBiH, Republika Srpska Institute of Statistics with the Tax Authorities of the RS and the Branch office of the Agency of Statistics of the Brčko District and the Tax Authorities DBBiH. Data on operating income and number of persons employed in the Federation of BiH are obtained through the Financial Information Agency (FIA) on the basis of the Statistical Annex of the annual financial statements, while in the Republika Srpska data are obtained through the Agency for Intermediary, IT and financial services (APIF) based on the annual financial statements.

One of the sources of data for the SBR is information obtained from regular statistical surveys: monthly survey on Retail trade (Form M KPS TRG 01) and quarterly survey on Distributive trade (Form K KPS TRG 02). Information about the main activities of business entities in the SBR is continuously updated throughout the year and they are taken into consideration when creating the sample frame for the coming year.

Since the sample for the monthly survey is necessary to be chosen before the end of the calendar year, it was decided that, as the base for making frame, state of SBR on the 30.11. is used, in which, among others, are the data from the final accounts for the previous year. This means that the sampling units are active businesses entities/legal units that have data from the annual accounts for the previous year (number of persons employed and financial information) and which are, by main activity, registered within the division 47- KD BiH 2010.

Prior to the design and sample selection, detailed analysis of available data from SBR was carried out. Since the survey collects data on turnover, methodologists have decided that primary stratification variable is the financial information from the sample frame and as second stratification variable the number of persons employed is used. Therefore, it was decided that business entities/legal units with annual financial data less than 100,000 KM should be excluded from the sample frame because they have insignificant participation in total turnover of retail trade.

For selected enterprises/legal units, following conditions have to be met:
- to be active (data are filled in from the annual financial statement for 2011);
- to be legal entities - enterprises (entrepreneurs are not included);
- to perform retail trade as main activity.

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[4] SBR is jointly managed and updated by all three statistical institutions in BiH

3.4. Stratification

In order to ensure representativeness of the sample and reduce sample errors stratification is done according to pre-defined criteria. Stratification is the process of forming strata, smaller groups that are internally homogeneous and heterogeneous among themselves. This is followed by the sampling process.

Stratification of the target population for this survey is done according to the financial class (financial report for the previous year) and activity of enterprise within retail trade. As an extra stratification variable number of persons employed is used.

Marks of stratum in this survey are introduced in the following form:

Entity Mark_3 or 4 digit Nace Rev2_Class of financial data_Census mark for financial class_Outlier Condition

- *Entity mark* has the following values: 1- Republika Srpska, 2- Federation of BIH, 3- Brčko District BiH
- *3 or 4 digit Nace Rev2*- Due to a large number of activity classes of KD 2010 and for easier data processing, some classes are merged on group level (47.2, 47.3, 47.8) or a derived class:

    - 47.71 and 47.72 are merged in derived class 47.03
    - 47.73 and 47.74 are merged in derived class 47.07
    - 47.54 and 47.59 are merged in derived class 47.55
    - 47.61 and 47.62 are merged in derived class 47.66

- *Class of financial data* - size of the enterprise according to the total annual turnover, has the following values:

Class of financial data	Realized annual turnover of the enterprise
1	0 - 99. 999 KM
2	100.000 - 499.999 KM
3	500.000 - 1.999.999 KM
4	2.000.000 KM and more

- *Census mark* has the following values:
    1- if enterprise belongs to financial class 4
    0- if enterprise belongs to financial class 2 or 3
- *Outlier condition* has the following values:
    1- if one of the 2 criterias are fulfilled:

    - number of employees is 20 or more
    - number of enterprises in stratum is 10 or less

    0- in other cases

For non-census strata, it is necessary to perform identification of outliers, according to following criteria:

1. number of persons employed is 20 and more,
2. number of enterprises in stratum is less or equal 10.

In order to properly classify enterprises that meet specified criteria in the appropriate strata following rules are used:

a) Enterprises that meet criteria 1, should be transferred to the appropriate stratum of class 4 (if that class exists for the same activity). If there is no class 4 of same activity, it is necessary to test the rule b) which relates to the second criteria. In the cases that rule b) is not satisfied, the enterprise will remain in the corresponding (outlier) stratum.

b) For stratum that meet criteria 2 and in which the number of units is less or equal 5, at least in one of these strata with the same activity, it is necessary to join the enterprise from the class 2 (outlier) to appropriate stratum of class 3 (if that class exists for the same activity). If there is no (outlier) stratum of class 3 for the same activity, then the enterprise will remain in the corresponding (outlier) stratum of class 2.

Note: First it's examined criteria 1 and the corresponding rule a) for enterprises that are not in full coverage. After that, the temporary stratum is formed for which criteria 2 and the corresponding rule b) is tested.

These rules are not referred to the Brčko District, for which full coverage for all classes is used.

Table 3.4.1: Final sample frame in 2014

	Number of units in frame
Bosnia and Herzegovina	**2883**
Federation of Bosnia and Herzegovina	1952
Republika Srpska	818
Brčko District of Bosnia and Herzegovina	113

Table 3.4.2: Sample frame according to activities and classes of finacial data on BiH level

Activity by KD BIH 2010	Classs of financial data			TOTAL
	2	3	4	
47.11	230	123	129	482
47.19	152	76	76	304
47.2	62	35	25	122
47.3	32	116	186	334
47.41	42	22	3	67
47.42	1	0	1	2
47.43	0	7	0	7
47.51	29	12	8	49
47.52	155	126	78	359
47.53	11	9	1	21
47.54 + 47.59 → 47.55	82	57	26	165
47.61 + 47.62 → 47.66	36	23	6	65
47.63	0	0	0	0
47.64	12	4	1	17
47.65	1	4	1	6
47.71 + 47.72 → 47.03	144	38	30	212
47.73 + 47.74 → 47.07	125	135	64	324
47.75	8	16	6	30
47.76	107	42	19	168
47.77	0	12	2	14
47.78	45	27	8	80
47.79	0	12	0	12
47.8	2	0	0	2
47.91	0	7	0	7
47.99	8	19	7	34
TOTAL	1284	922	677	2883

3.5. Sample selection

For collecting and processing the data, the combined method of sample and full coverage is used depending on size of the enterprise (financial class). The sample is representative part of statistical set, which is basis for estimation of entire observed population, by statistical inference. Final allocation, distribution of the sample by strata is done on merged data from the entity, while for BD full coverage is applied.

The allocation is made as follows:

- According to the Neyman using financial data
  Neyman's (optimal) allocation is calculated by the following formula:

$$n_h = n \frac{N_h S_h}{\sum_{h=1}^{H} N_h S_h}$$

Where:
n - number of units in sample
H - number of strata
N_h - number of units within stratum h ($h = 1 ... H$)
S_h - standard deviation of financial information on the level of stratum h

- According to the proportions
  Proportional allocation is calculated by the following formula:

$$n_h = n\frac{N_h}{N}$$

Where:

n - number of units in sample
N - number of units in frame
N_h - number of units within stratum h ($h = 1... H$)
H - number of strata

- Average of Neyman's and proportional allocation
- Maximum between Neyman's allocation and the average value of Neyman's and proportional allocation is taken
- Rule applied to the sample is at least 8 units in the stratum, as well as the rule of 15% coverage by the number of enterprises per stratum, which leads to an increase in sample size. The reasons for the application of these rules are reducing the small number of allocated units within strata, as well as minimizing the appearance of empty strata, which occur due to the inability to collect data, and represent a problem in the further processing of the data.
- It was decided to take the allocation for which total sample size at the state level would be about 20% of the total frame size (non census part)

The final sample was performed using the package "sampling" of software application "R".

Table 3.5.1: Final sample in 2014

	Number of units in sample
Bosnia i Herzegovina	**1368**
Federation of Bosnia and Herzegovina	813
Republika Srpska	442
Brčko District of Bosnia and Herzegovina	113

Selected sample for retail trade survey in 2014 is representative at the level of Bosnia and Herzegovina as well as on the level of the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District of BiH.

Table 3.5.2: Final sample by activities and classes of financial data for BiH

Activity by KD BIH 2010	Class of financial data			TOTAL
	2	3	4	
47.11	41	24	129	194
47.19	34	18	76	128
47.2	18	21	25	64
47.3	18	21	186	225
47.41	10	22	3	35
47.42	1	0	1	2
47.43	0	7	0	7
47.51	17	12	8	37
47.52	34	26	78	138
47.53	11	9	1	21
47.54 + 47.59 → 47.55	21	18	26	65
47.61 + 47.62 → 47.66	9	20	6	35
47.63	0	0	0	0
47.64	8	4	1	13
47.65	1	4	1	6
47.71 + 47.72 → 47.03	39	20	30	89
47.73 + 47.74 → 47.07	24	25	64	113
47.75	8	16	6	30
47.76	21	16	19	56
47.77	0	12	2	14
47.78	9	24	8	41
47.79	0	12	0	12
47.8	2	0	0	2
47.91	0	7	0	7
47.99	8	19	7	34
TOTAL	334	357	677	1368

3.6. Non-response treatment

Despite the continuous efforts of the statistical institutions to maximize the number of responding units, there are still a certain number of them which are in non-response. If a unit doesn't deliver a filled form M KPS TRG 01, it is treated as a non-response. Also, if the unit deliver partially completed form, or it is determined that the information supplied is not accurate, it is treated as a non-response. Only those units which deliver a fully completed form in a predetermined deadline will be considered as a response units.

If the enterprise does not submit a report within a predefined deadline, it is contacted again by relevant statistical institution in accordance with established procedures.

Non-response of the unit has two impacts on the data: first affects the accuracy of the estimates, especially when the characteristics of respondents and non-respondents are different, and secondly, it contributes to increasing of sample variance estimates, because then the sample is smaller than that initially sought.

Non-response unit is treated in one of the following ways:

- *Imputation of missing data* - based on historical data. Depending on availability of historical data (previous month, the same month of previous year, average of previous period), additional information and referent month, the best imputation method will be defined. Imputation will be done for all enterprises in financial class IV and for strata from classes II and III with low response rate.
  In retail trade survey following methods of imputation are used:

  a) Imputation is performed by using data from the enterprise (non-response units), for the same month of previous year, adjusted for the growth rate. It is a convenient way of imputation for large enterprises, which have their own matrix of seasonal effects. It avoids possible errors and outliers of other enterprises in the response.

  Formula: $T_t = T_{t-1} \cdot \dfrac{T_{t-12}}{T_{t-13}}$

  Main disadvantages of this method are: previous period data must be available, trend component among similar enterprises is not taken into consideration, method is not applicable for moving holidays, structural changes, etc.

  b) During the imputation process, growth rate of similar enterprises is used (the same strata), which were in response for the reference month. If the enterprise data for the previous year are not available, this method is very useful. It can be used for the months with moving holidays, in case of structural changes during the previous year.

  Formula: $T_t = T_{t-1} \cdot \dfrac{\sum\limits_{i \in M} T_t^{\,i}}{\sum\limits_{i \in M} T_{t-1}^{\,i}}$;

  where M is size of the matched part of the sample.
  The main disadvantages of this method are: it does not take into account the enterprise's seasonal component, mistakes and outliers of similar enterprises in response are incorporated, etc.

  c) For imputation it is used average data for previous three months of similar enterprises (the same stratum), adjusted for non-response. This method applies only if it is not possible to use first two methods.

  Formula: $T_t = \dfrac{T_{t-1} + T_{t-2} + T_{t-3}}{3}$

  In some cases it is possible to combine the previously mentioned methods in order to obtain the best possible estimates.

- *correction of weights* - for enterprises for which the data imputation was not performed it is necessary to correct the initial weights for stratum which the enterprise belongs to;
- *in special cases* - if the enterprise has not started with business, currently does not perform operations, is in the liquidation process, or the enterprise activity is misclassified, the imputation of zero value will be done for all items (regarding financial data in form). Therefore, for these enterprises correction of weights correction will not be performed, and they will be treated as enterprises in response.

3.7. Other inclusions or exclusions

Entrepreneurs registered within retail trade activities are not included in the survey. Statistical Business Register is still not updated regularly, thus in some cases it is difficult to confirm the activity/inactivity of registered business entities. Also, all statistical units of the population, which are classified in financial class I are excluded (annual turnover less than 100,000 KM).

3.8. Reliability of estimates

In conducting retail trade survey the combined method of full coverage and stratified random sampling is used. As a consequence arise sampling errors that can not be avoided. Among the most important factors that have influence on the size of sampling errors are sample size, sample design and data variability.

Since the characteristics of the population are estimated based on sample, different samples chosen from the same population frame gives different estimation values. Of course, during the survey process it has to be considered that the sample should be as credible as the population from which it's chosen, in order to get estimated values of the characteristic as correct as they can be. In order to determine the representativeness of the sample, as well as the accuracy of the results, various statistical indicators are used. The most important ones are the standard deviation and coefficient of variation.

Standard deviation (σ) is an absolute measure of dispersion and shows dispersion of the estimated results with respect to the actual value, and it also shows the characteristics of the population. It is also called the standard error. The aim is to minimize standard deviation value as much as possible, because it means that the characteristics are estimated correctly.

The standard error (SE) is calculated as the square root of the variance.

At the level of the stratum variance is calculated as:

$$\hat{V}_h = \sum_{h=1}^{H} N_h^{\;2} \frac{1-f_h}{m_{rh}} S_{yh}^{\;2}$$

Where:

$$f_h = \frac{n_h}{N_h} \;\;; \;\; S_{yh}^{\;2} = \frac{1}{m_{rh}-1}\sum_{j=1}^{m_{rh}}\left(y_j - \bar{y}_h\right)^2 \;\;; \;\; \bar{y}_h = \frac{1}{m_{rh}}\sum_{j=1}^{m_{rh}} y_j$$

f_h - fraction of the sample in stratum h ($h = 1...$ H)
n_h - number of units in the sample stratum h
N_h - number of units within stratum h
m_{rh} - the number of responding units in stratum h
$\bar{y}_h$ - average financial data y_i at the level of stratum h

$S_h^{\;2}$ - squared standard deviation of financial information on the level of stratum h

The total variance is the sum of the calculated variance at the level of each stratum:

$$\hat{V} = \sum_{h=1}^{H} \hat{V}_h$$

The coefficient of variation (CV) is a relative measure of reliability of estimates and it shows ratio between the standard error and the arithmetic mean. It is shown as a percentage value. If the estimation accuracy is small, it is necessary to indicate that matter, and if it is determined that the estimation is not precise enough, it may not be published.

$$CV = \frac{SE}{\bar{y}} \cdot 100, \;\; \text{gdje je } \bar{y} \neq 0$$

Coefficient of variation values, and actions taken:

CV	Precision
CV < 0.15	Precise estimations, to be published
0.15 ≤ CV < 0.30	Less precise estimations, to be entered in brackets
CV ≥ 0.30	Estimations unprecised, will not be published. Dot is entered (.)

4. SURVEY ORGANISATION

4.1. Jurisdiction of statistical institutions

The official statistical institutions in BiH are involved in process of conducting the monthly survey on retail trade. Based on harmonized statistical standards and instruments for conducting survey Agency for Statistics of BiH processes publishes and disseminates the results to users. The Entity institutes and Branch Office in the Brčko District perform preparatory work necessary for the successful survey implementation: printing of questionnaires and their delivery to regional/cantonal offices, providing instructions for filling in the questionnaires, collection of the completed questionnaires, performing data controls (completeness, logical and computational accuracy of the data filled in the questionnaires), preparing the reports for processing, entering the data up to a certain deadline and deliver them to the Agency for statistics of BiH.

4.2. Data source

The data source for filling in the form M KPS TRG 01[5] is accounting or other relevant documentation. If the reporting unit does not have available precise accounting data, it is necessary to make the best possible estimation.

The main observed variable is monthly turnover of enterprise registered in division 47- retail trade activities, excluding VAT. In accordance with EU- STS regulations VAT is calculated and shown separately. Data on the form M KPS TRG 01 relates to the previous month.

Data on turnover is collected at the level of enterprise. If the enterprise has business units in other entity and/or Brčko District, it is necessary to breakdown turnover related to these units.

For reporting units that are, by main activity registered in division 47 - KD BiH 2010 data on form (M KPS TRG 01) refer to total turnover, which means that it includes turnover from retail trade as well as turnover from secondary activities, if the enterprise perform them. Enterprises whose main activity is registered outside division 47 - KD BiH 2010 on form disclose only turnover from retail trade.

4.3. Data collection method

The survey is conducted by reporting method, which means that the enterprise submits the filled questionnaire (within a certain deadline) to cantonal statistical office of Federal Institute of Statistics of the Federation of BiH, regional statistical office of the Republika Srpska Institute for Statistics, or to the branch office of the Agency for Statistics in Brčko District. At the beginning of the year 12 sets of questionnaires are sent to all reporting units, with the aim to get necessary information on monthly basis.

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[5] Questionnaire is attached at the end of this publication, in part Appendices.

Deadlines for conducting Retail trade survey:

1. Deadline for submission of questionnaire for reporting units is 10 days from the end of reference period (t + 10);

2. Deadline for submission of data for regional/cantonal offices to entity statistical institutions is 20 days from the end of reference month (t+20);

3. Deadline for submission of data for entity statistical institutions to Agency for statistics of BiH is 25 days from the end of reference period (t+25);

4. Deadline for publication of data by statistical institutions is 28 days from end of reference period (t+28).

Participation in the survey is mandatory. The response rate (response of reporting units) is slightly different per entities. In total, i.e. on the level of BiH, response rate ranges from 90% to 99%.

4.4. Data processing

Data collected from the reporting units which are involved in the survey are the basis for data estimation for the entire population. Based on micro data on reporting unit's turnover, total turnover is aggregated at the strata level (KD BiH 2010). Turnover aggregation on higher levels (groups, divisions, special aggregates) of activity is carried out before index compilation.

The Retail trade turnover index calculation, for the level of BiH, can be presented in few steps:

1) The basis for calculation is individual turnover data per enterprise (X_i - administrative financial data). Weighting is performed due to different inclusion probability of unit in sample. Calculation of weights is performed at strata level.

2) Strata (h) are defined at the class and group level (KD BiH 2010) and by enterprise size (financial classes II-IV). Initial weights represent reciprocal probability of choosing units in the sample. It is calculated as quotient of number of units in the frame and number of units in the sample.

3) However, in cases of non-response, corrections of weights are necessary. If the data imputation has not been performed for reporting unit in non-response, then the weight correction is performed for stratum in which the non-response enterprise belongs. The weight corrected for non-response is calculated as quotient of number of units in the frame of stratum h and number of responding units in stratum h.

$$\text{Formula: } w_i = \frac{N_h}{m_{rh}}$$

Where:

w_i - unit weight i, i=1…n (final w_i is calculated on the stratum level according to the above formula, and is joint to each unit i from stratum h)

N_h - number of units in stratum frame h, h=1…H

m_{rh} - number of response population units of stratum h

4) *In order to calculate totals of enterprises per strata, ratio estimator r_h is used for final correction. It represents the quotient between administrative financial data (enterprise's annual financial data from SBR) and estimated financial data of responding units which has to be joined to each unit **i** from stratum h.*

$$\text{Formula: } r_h = \frac{t_h}{\hat{t}_h}$$

4.1) *Administrative financial data is calculated only for units from the frame (i=1…n) on the level of stratum h as a sum of unit's administrative financial data X_i for each stratum.*

$$\text{Formula: } t_h = \sum_{i=1}^{N_n} x_i$$

4.2) Estimated financial data is calculated by using only the responding units *(i=1…m)* on the level of stratum as a sum of product $w_i x_i$.

$$\text{Formula: } \hat{t}_h = \sum_{i=1}^{m_{rh}} w_i x_i$$

5) Total estimated turnover on each unit **i** level is product ($y_i w_i r_h$) of realised turnover y_i for unit *i*; weight of such unit w_i; and ratio r_h for stratum to which unit *i* belongs. Total estimated turnover is sum of all individual turnovers for each responding unit.

4.5.   Index compilation

Process of index compilation for the level of BiH can be presented, as follows:

1. First step is to calculate retail trade turnover at the strata level for Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District;

2. Data on turnover on state level is calculated by combining data from entities and BD;

3. Turnover totals on strata level are summed, and aggregated on higher levels of KD BiH 2010 (group, division, special aggregates);

4. Indices are calculated as quotient of current period turnover (for different level of activities) and turnover realised in the base year (2010) or for other period.

4.1 Base indices - show relative changes of rates in the current period (y_t) in comparison with average of base year (y_b= 2010).

Formula: $i_t = \dfrac{y_t}{y_b} \cdot 100$

4.2 Chain indices - represent percentage change of turnover between current and previous period. There are two types of chain indices calculated in Retail trade:

4.2.1 Chain index (same period of last year): quotient of turnover from current period (y_t) and turnover from the same period of last year (y_{t-12})

Formula: $i_{t-12} = \dfrac{y_t}{y_{t-12}} \cdot 100$

4.2.2 Chain index (previous period): quotient of turnover from current period (yt) and turnover from previous period (y_{t-1})

Formula: $i_{t-1} = \dfrac{y_t}{y_{t-1}} \cdot 100$

Therefore, indices are primarily compiled in accordance with classification levels of KD BiH 2010. However, common practice is that they are compiled and presented according to following commodity groups:

- Retail trade, except of motor vehicles and motorcycles (division 47 excluding 47.3),
- Retail trade of consumables (47.11+47.2),
- Retail trade of durables (47.19+47.4 till 47.9),
- Retail trade of automotive fuel in specialised stores (47.3).

Also, indices can be presented according to special aggregates, as defined in paragraphs 2 and 3 of Annex C of Council Regulation (EC) no. 1165/98 including its subsequent amendments.

As previously mentioned, survey results can be presented in the form of growth rates. Growth rates represent change rates in the level of turnover in the current period as compared to the previous period.

Monthly growth rates are calculated by the formula: $s_t = \dfrac{\Delta y_t}{y_{t-1}} \cdot 100 = \dfrac{y_t - y_{t-1}}{y_{t-1}} \cdot 100$

Annual growth rates represent quotient of turnover from the current period and turnover from the same period of previous year.

It is calculated

by the formula: $s_t = \dfrac{\Delta y_t}{y_{t-12}} \cdot 100 = \dfrac{y_t - y_{t-12}}{y_{t-12}} \cdot 100$

4.5.1. „Backcasting"

With the aim of developing a statistical system of Bosnia and Herzegovina, supported through IPA 2008 Twinning project, all three statistical institutions in BiH since January 2013 have conducted redesigned monthly survey on retail trade on the basis of a unified methodology harmonized with the EU regulations for short-term business statistics.

In process of index calculation, especially when the data are obtained from sample based survey, major changes in methodology (switch on the sample based survey, changes in classification used, estimation method, etc.) can cause large variations in data and visible breaks in data series (level shift). However, these changes do not reflect real changes in the observed population, but they are result of various factors (estimation methods used, sample design, coverage, etc).

In case of such significant changes in methodology that cause large deviations of estimated totals, there is a need for "backcasting" - recalculation of historical data series in order to avoid disruption and maintain consistency and continuity of the available data series. One way to solve this problem is to reestimate data for previous period. Recalculation can be done using „**overlapping**" or "**matched sampling**" method.

First step is recalculation of historical data series according to new Classification of Economic Activities - KD BiH 2010, using correlation tables between KD BiH 2006 and KD BIH 2010. Then the data aggregation at specified levels of strata is done, and monthly growth rates for the period January 2006 - December 2012 are calculated.

Method of "**overlapping**" consider that turnover data for December 2012 are collected from those enterprises that were in sample in 2013. In this way data estimation for December 2012 by using weights from the new sample (2013) can be performed so that the new estimates for December 2012 is comparable with the data obtained in January 2013.

If overlapping method cannot be used, another way to recalculate data series is to use "**matched sampling**" which implies that first data estimation for January 2013 has to be done (at the level of required aggregates), and then to identify responding enterprises in both observed periods, i.e. in December 2012 and January 2013.

On the basis of matched units new weights are calculated at strata level and estimation is done for both periods so data are comparable. The obtained values are underestimated, but in the same way, so the effect on calculated growth rates is almost negligible. Estimated data for December 2012 we get by applying new growth rates on the total estimated value for January 2013.

Backcasting process is conducted as follows:

1. Historical data series is recalculated according to new classification of activities- KD BiH 2010;
2. Realized turnover is shown at the strata level as defined by sample for retail trade in 2013;
3. Growth rates are calculated for period January 2006 - December 2012;
4. The new data serie was obtained using "overlapping" or "matched sampling" methods.

4.5.2. Nominal and real indices

Indices can be expressed in nominal or real values, depending whether or not they are adjusted for price change.

Nominal index (value) shows a ratio of turnover in current period and turnover in the base year. It is expressed in current prices, unadjusted for price effect.

The nominal value of turnover depends on change in quantity and change in price of sold goods. In order to adjust value for price changes effect and provide insight in development of real values, deflation is carried out. Deflation is the process of eliminating effects of price changes of value expressed phenomena. It is carried out by dividing the nominal values with corresponding price index. Such aggregated index is called deflator. In principle, price index representative for a particular class of activity or price index of sold goods is used as sales deflator.

In this case, *Consumer Price Index* -**CPI** is used. In Bosnia and Herzegovina CPI is calculated on the basis of the representative list of products (consisted of 599 products in 2013). Each month, around 21,000 prices are collected based on pre-defined sample in twelve geographical locations.

For the purpose of CPI calculation, the Classification of Individual Consumption by Purpose-**COICOP** is used, which classifies expenditures into twelve basic groups of products and services for which the indices are calculated. Based on links between COICOP and CPA[6], indices are matched with classes of activities of KD BiH 2010 and deflation is carried out. In this way, ***real indices*** (volume) are calculated, expressed in constant prices. They represent basis for analysis and comparisons, and provide clear vision on changes and movement in retail trade activities.

Deflation is performed in following steps:

1. Turnover by classes of KD BiH 2010 is deflated;
2. Necessary totals are calculated, i.e. data are being aggregated on higher levels;
3. Finally, indices (base, chain) are calculated according to above explained method.

Index weighting is avoided using this procedure.

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[6] Relation between CPA and KD BiH 2010 is explained in subheading *Classifications*

4.5.3. Calendar and seasonal adjustment of gross indices

Retail trade indices are shown in three different series which comply with Eurostat requirements. Other countries have harmonized their methodologies, concepts, definitions and classifications, as well as the manners of index presentation, therefore international comparability is enabled.

Statistical institutions in BiH, taking into account the way of data dissemination in the EU, indices publish in following forms:

- original (unadjusted) indices,
- seasonally adjusted indices - SA and
- working-day adjusted indices - WDA

Base indices are published in gross, non-adjusted form as well as seasonally adjusted indices.

Retail trade turnover index is calculated in relation to the same month of previous year (working-day adjustment). Data that are compared to the same period of last year are presented and interpreted in working-day adjusted form.

Data compared with the same period of previous year are presented and interpreted in the calendar adjusted form. This means that data is adjusted for the number of working days during the reference month, the impact of leap years, holiday impact (state and religious), etc. If these effects significantly influence the observed time series, then it is necessary to eliminate them.

Data compared with the one from previous month are presented and interpreted in seasonally adjusted form. Basically this means that the series is broken down into three components: trend, seasonal and irregular component. Series are adjusted for effects of different number of calendar days and seasonal influence.

Calendar and seasonal adjustment is performed in Demetra application (version 2.2) using the TRAMO-SEATS method in monthly data series in accordance with the ESS guidelines (European Statistical System). Adding new monthly observations in the series lead to certain changes in indices for the previous period.

4.5.4. Seasonally- adjustment methods

EU legislation in the area of short-term business statistics requires that beside to the gross (unadjusted) series, also submit working-day adjusted series to Eurostat. Seasonal adjustment of the data series is not necessary and it is carried out on a voluntary basis, but Eurostat prefers that seasonal adjustment is performed by national statistical institutions.

In BiH, seasonal and working-day adjustment is done by combining direct and indirect method for entity and BiH level, by using Demetra 2.2 application. Direct method imply that seasonal adjustment is performed on aggregated series, while in indirect method each component of the series is seasonally adjusted separately, and then aggregated on higher level. For data series without calendar effects, unadjusted series are submitted as they are working-day adjusted.

Whenever possible, it is recommended to use the indirect method. This means that data series consisted of at least two other series indirectly adjusted (if the defined aggregation level of the series consists of more components). All other series will be directly adjusted as the adjustment

is performed on the aggregated level, and not for the individual components. At the state level adjustment for all series is made by an indirect method, summarizing the prior seasonally and working-day adjusted series for the level of entities and Brčko District.

Table contains aggregation levels of data used for adjustment, and transmission to Eurostat:

Agregation level	Entity level, Brčko District	Indirect method components	BiH level	Indirect method components
47	Indirect	47.11, 47.19, 47.2, 47.3, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9	Indirect	Sum SA/WDA series of entities and Brčko District
47.11	Direct		-"-	-"-
47.2	Direct		-"-	-"-
47.11+ 47.2	Indirect	47.11, 47.2	-"-	-"-
47.19	Direct		-"-	-"-
47.4	Direct		-"-	-"-
47.5	Direct		-"-	-"-
47.6	Direct		-"-	-"-
47.7	Direct		-"-	-"-
47.8	Direct		-"-	-"-
47.9	Direct		-"-	-"-
47.4 + 47.5 + 47.6 + 47.7 + 47.8 + 47.9 + 47.19	Indirect	47.19, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9	-"-	-"-
47.73 + 47.74 + 47.75	Direct		-"-	-"-
47.51 + 47.71 + 47.72	Direct		-"-	-"-
47.43 + 47.52 + 47.54 + 47.59 + 47.63	Direct		-"-	-"-
47.41 + 47.42 + 47.53 + 47.61 + 47.62 + 47.64 + 47.65	Direct		-"-	-"-
47.3	Direct		-"-	-"-
47 - 47.3	Indirect	47.11, 47.19, 47.2, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9	-"-	-"-

4.6.   Periodicity

Retail trade survey is conducted on regular monthly basis in accordance with the requirements of EU-STS regulations. Results of the survey are published after the end of reference period, in accordance with pre-defined publishing calendar. Deadline for data submission to Eurostat is 30 days (t +30) from the end of reference period at the level of detail defined in paragraph 3 of Annex C, EU-STS regulation, and deadline for data submission at the level of detail defined in paragraph 2 is 60 days (t+60) after the end of the reference period.

4.7.   Data dissemination

Results on retail trade survey are presented as indices or growth rates on a regular monthly basis, in the form of press releases on official website of Agency for Statistics of BiH (www.bhas.ba) and websites of the entity Institutes (www.fzs.ba, www.rzs.rs.ba). In the past, the practice was to collect and disseminate data as absolute values.
It is planned to make data available through online database in the form of predefined tables which would give an overview of short-term indicators on retail trade statistics.

4.8.   Planned changes in method of indicator calculation

In effort to simplify as much as possible, process of data collection, processing and publishing, various activities are planned. First of all, development of IT platform that would enable reporting units to fill in forms M KPS TRG 01 electronically (CAWI), which would facilitate the process of data collection.

Besides that, further development of IT application is planned, especially in segment of data control and data editing that would enable more efficient insight in data and their processing at the level of primary variables (micro-editing) and derived variables at different levels of aggregation (macro-editing). This would reduce the number of errors incurred during data entry, and pointed out to possible inconsistencies in analysis of results. In addition, it is planned to improve the timeliness of SPR, as well as the quality of the records, particularly in the following segments: main activity of enterprise and information on secondary activities, updating the available data, inclusion of data on entrepreneurs, etc.

The common goal of statistical institutions in BiH is to fulfil all EUROSTAT's requirements, so that BiH could become a full member of European Statistical System.

4.9.   Data revision

Press releases on retail trade are published on monthly basis and contain preliminary data related to the previous month. First regular data revision implies that in publication of data for next month, already published preliminary data for the previous month (t-1) are revised in accordance with the information provided by the reporting units. It is possible that data published after revision differs from previously published, preliminary data. In press release is clearly stated which data it contains so that users of statistical data can properly interpret them.

Second regular revision of previously published data is annual revision, which includes all changes in data submitted after the first revision in order to ensure the accuracy of published data.

If new statistical standards and concepts are introduced, major changes in survey methodology are made which may affect the quality of results obtained, it is necessary to revise data. This ensures consistency and comparability between earlier historical data serie and new data serie based on implementation of new standards and methodologies.

Information on changes in data and reasons for doing so, users will get in an appropriate and transparent manner in regular monthly press releases and other publications for public, as well as on websites of the Agency and entity statistical institutions.

4.10. Data protection

Individual data represent confidential business information and is used only for statistical purposes. While performing their duties statistical institutions in BiH operate in accordance with the following legal requirements:

- o Law on statistics of Bosnia and Herzegovina („Official Gazette BiH" No 26/04 and 42/04);
- o Law on the protection of Personal Data ("Official Gazette of BiH" No 32/01);
- o Law on statistics of Federation of Bosnia and Herzegovina („Official Gazette of Federation of BiH" No 63/03 and 9/09);
- o Law on free access to information in Federation of Bosnia and Herzegovina ("Official Gazette of Federation of BiH" No 32/01);
- o Law on statistics of Republika Srpska („Official Gazette of Republika Srpska" No 85/03);
- o Law on free access to information in Republika Srpska (" Official Gazette of Republika Srpska", No 20/01).

Legislation in BiH is harmonized regarding protection of confidential information. Several articles of Law on Statistics of BiH are given below:

Article 19.

Confidential data collected for statistical purposes must not be used for any other purpose, unless otherwise is provided by this law.

Article 23.

Data collected, processed and stored for the production of statistics of Bosnia and Herzegovina shall be considered as confidential when such data can be used to identify statistical units directly or indirectly, thereby disclosing individual information.

- The statistical unit is directly identified by name and address, or by an officially allocated and judicially noticed identification number.

- Indirect identification is the possibility of determining the identity of a statistical unit by deduction on the basis of the information mentioned in paragraph 2 of this Article. In order to determine whether a statistical unit is indirectly identifiable, all measures that might reasonably be used to identify statistical unit shall be taken into account.

Article 26.

Statistical data of Bosnia and Herzegovina must not be disseminated to users if they contain or disclose confidential information. Groups are composed of at least three units and the share of one unit in the group shall not exceed 85%.

4.11. International comparability of data

Thanks to harmonization of basic STS variables and methodology used in RT survey with Eurostat's regulations, comparability of data with the one from EU is enabled. By applying new classification of activities KD BiH 2010, harmonization process is continued but national needs and limitations are respected regarding data collection, processing and publication. Regular monthly transmission of retail trade indicators to Eurostat is planned from 2014.

APPENDICIES

Appendix 1 - Form M KPS TRG 01[7]

**BOSNA I HERCEGOVINA
AGENCIJA ZA STATISTIKU
BOSNE I HERCEGOVINE
PODRUŽNICA/EKSPOZITURA BRČKO**

**БОСНА И ХЕРЦЕГОВИНА
АГЕНЦИЈА ЗА СТАТИСТИКУ
БОСНЕ И ХЕРЦЕГОВИНЕ
ЕКСПОЗИТУРА БРЧКО**

Form M KPS TRG 01

Low on statistics of BiH
Official Gazette of BiH" No. 26/04 and 42/0

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MONTHLY RETAIL TRADE SURVEY

For the month _____ **2013.**

The obligation of enterprises to provide the data to statistical institutions is based on article 8. paragraph 2. e) of the Law on Statistics of BiH "Official Gazette of BiH" No 26/04 and 42/04.
The obligation of the statistical institutions on protection of the delivered confidential data is based on article 19, paragraphs 3 and 6 of the Law on Statistics. It means that, data collected for the statistical purposes, cannot be used for other purposes or published as individual by responsible statistical institutions.

IDENTIFICATION DATA

1.) Enterprise name _____

2.) ID number _____ | | | | | | | | | | | | | | | |

Address _____   Phone _____ | | | | | |
(Municipality code)

3.) Main Activity (by KD BiH 2010) _____ | | | | |
(Activity code)

Please, read Instructions before filling the form

Table 1. Turnover and VAT data

S1	Reporting month		Total value in KM, excluding VAT	VAT, in KM
1	Retail trade turnover[1]			
2	Out of which: (part of item 1)	in Federation of BiH		
3		in Republika Srpska		
4	Turnover of other activities			

[1] In Table 2 sign with "x" only one group of products from which enterprise released its greatest share of turnover in reporting month

Deadline for delivery of the report to Brach office Brčko: the 10th of current month

IF YOU DON'T HAVE EXACT DATA, PLEASE PROVIDE YOUR BEST ESTIMATION

Comments (Please provide explanations for any unusual changes in the data compared to the previous period):

Form completed by:

_____
(Name and surname)

Date: _____

Tel./Fax: _____   L.S.   Report approved by person responsible

E-mail: _____   _____

---

[7] RSIS form contains a fields of realized turnover for pre-reporting month in Table 1 and does not contain Table 2.

Table 2. Realized turnover in Retail trade by branches

Sign with "x" only one group of products from which enterprise released its greatest share of turnover:

☐ 11	Non-specialized stores of food	☐ 63	Retail trade of music and video recordings
☐ 19	Other non-specialized stores of food	☐ 64	Retail trade of sporting equipment
☐ 21	Fruit and vegatables	☐ 65	Retail sale of games and toys
☐ 22	Meat and meat products	☐ 71	Clothes
☐ 23	Fish and sea food	☐ 72	Footwear and leather products
☐ 24	Bread, cakes, pasta, candies and sweets	☐ 73	Pharmacies
☐ 25	Alcoholic and other beverages	☐ 74	Medicines
☐ 26	Tobacco products	☐ 75	Toalet - cosmetic products
☐ 29	Food in specialised stores	☐ 76	Retail sale of flowers, plants, seeds, fertilisers pet animals and pet food in specialised stores
☐ 30	Automotive fuel		
☐ 41	Retail trade of comp, peripheral units and software	☐ 77	Retail sale of watches and jewellery
☐ 42	Retail sale of telecommunication equipment	☐ 78	Other retail sale of new goods in specialized stores
☐ 43	Retail trade of audio and video equipment	☐ 79	Retail trade services of second-hand goods in stores
☐ 51	Textiles	☐ 81	Retail sale via stalls and markets of foods, beverages and tobacco products
☐ 52	Basic metal goods, products for construction, glass		
☐ 53	Retail sale of carpets, rugs, floor coverings	☐ 82	Retail sale via stalls and markets of textiles, clothing and footwear
☐ 54	Electricity appliances for household, radio and TV		
☐ 59	Furniture, lighting and goods for household	☐ 89	Retail sale via stalls and markets of other goods
☐ 61	Books	☐ 91	Trade by post, cataloques, internet and TV
☐ 62	Newspapers, journals, other printed products	☐ 99	Other retail sale not in stores, stalls and markets

INSTRUCTIONS FOR FILLING THE FORM

Monthly survey on **Retail trade** is conducted based on Law on statistics of BiH ("Official Gazette of BiH". No. 26/04 and 42/04).

Obligation of submitting report is based on the Program of statistical surveys of BiH of special interest for Brčko District of BiH.

The report on monthly retail trade are obligated to submit all selected enterprises which are by main activity registered in retail trade (division 47- KD BiH 2010), as well as, those enterprises whose main activity are other than trade but perform aforementioned activities. Entrepreneurs are not cover by this survey.

All figures are entered as an integer, without decimals in KM

Retail trade turnover (excluding VAT) – includes activities of seling new and used goods to final consumers, that means to population for personal consumption or for using in household.

Turnover of other kind of activities – includes a total value of all other goods sold and services provided on the market (from wholesale trade, wholesale on a fee or contract basis, repaires, hotels and restaurantes and other activities).

Value added tax (VAT) – the final tax on added value calculated to final customer.

Enterprises/ trade companies whose main (prevailing) activity is retail trade, group of activities 47.1 - 47.9 of Classification of Activities (KD BiH 2010) shows turnover of retail trade and turnover of other activities. Enterprises that are classified in other activities report only the retail trade turnover.

Appendix 2: Extract from Classification of activities KD BiH 2010 (division 47)

Code	Activity KD BiH 2010
47	**Retail trade, except of motor vehicles and motorcycles**
47.11	Retail sale in non-specialised stores with food, beverages or tobacco predominating
47.19	Other retail sale in non-specialised stores
47.2	**Retail sale of food, beverages and tobacco in specialised stores**
47.21	Retail sale of fruit and vegetables in specialised stores
47.22	Retail sale of meat and meat products in specialised stores
47.23	Retail sale of fish, crustaceans and molluscs in specialised stores
47.24	Retail sale of bread, cakes, flour confectionery and sugar confectionery in specialised stores
47.25	Retail sale of beverages in specialised stores
47.26	Retail sale of tobacco products in specialised stores
47.29	Other retail sale of food in specialised stores
47.3	**Retail sale of automotive fuel in specialised stores**
47.30	Retail sale of automotive fuel in specialised stores
47.4	**Retail sale of information and communication equipment in specialised stores**
47.41	Retail sale of computers, peripheral units and software in specialised stores
47.42	Retail sale of telecommunications equipment in specialised stores
47.43	Retail sale of audio and video equipment in specialised stores
47.5	**Retail sale of other household equipment in specialised stores**
47.51	Retail sale of textiles in specialised stores
47.52	Retail sale of hardware, paints and glass in specialised stores
47.53	Retail sale of carpets, rugs, wall and floor coverings in specialised stores
47.54	Retail sale of electrical household appliances in specialised stores
47.59	Retail sale of furniture, lighting equipment and other household articles in specialised stores

47.6	**Retail sale of cultural and recreation goods in specialised stores**
47.61	Retail sale of books in specialised stores
47.62	Retail sale of newspapers and stationery in specialised stores
47.63	Retail sale of music and video recordings in specialised stores
47.64	Retail sale of sporting equipment in specialised stores
47.65	Retail sale of games and toys in specialised stores
47.7	**Retail sale of other goods in specialised stores**
47.71	Retail sale of clothing in specialised stores
47.72	Retail sale of footwear and leather goods in specialised stores
47.73	Dispensing chemist in specialised stores
47.74	Retail sale of medical and orthopaedic goods in specialised stores
47.75	Retail sale of cosmetic and toilet articles in specialised stores
47.76	Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores
47.77	Retail sale of watches and jewellery in specialised stores
47.78	Other retail sale of new goods in specialised stores
47.79	Retail sale of second-hand goods in stores
47.8	**Retail sale via stalls and markets**
47.81	Retail sale via stalls and markets of food, beverages and tobacco products
47.82	Retail sale via stalls and markets of textiles, clothing and footwear via stalls and markets
47.9	**Retail trade not in stores, stalls or markets**
47.91	Retail sale via mail order houses or via Internet
47.99	Other retail sale not in stores, stalls or markets

Appendix 3: Annex C (retail trade and repair) of Council Regulation (EC) on short-term business statistics No. 1165/98[8]

ANNEX C
RETAIL TRADE AND REPAIR

(a) Scope

This Annex applies to the activities listed in Division 47 of NACE Rev. 2.

(b) Observation unit

1. The observation unit for all variables in this Annex is the enterprise.

2. The use of other observation units may be decided by the Commission. Those measures, designed to amend non/essential elements of this regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18 (3).

(c) List of variables

The statistics in this Annex comprise the following variables:

Variable	Name
120	Turnover
210	Number of persons employed
220	Hours worked
230	Gross wages and salaries
330	Deflator of sales

1. The information on the volume of sales (No 123) may be produced instead of the deflator of sales (No 330).

2. Starting from the beginning of the first reference period the information on persons employed (No 210) may be approximated by the number of employees (No 211). This approximation is permitted for a period of five years from the date of entry into force of the Regulation. This period shall be extended for up to five years more unless decided differently by the Commission. Those measures, designed to amend non/essential elements of this regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18 (3).

3. Member States shall carry out studies instituted by the Commission and set up in consultation with the Member States. The studies shall be carried out taking into account

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[8] Regulation is changed and amended in accordance with regulations: 1158/2005 of European Council (EC) and European Parliament, 1503/2006 (EC) and 1893/2006 (EC)

the benefits of collecting the data in relation to the cost of collection and burden on business, in order to:

a) assess the feasibility of transmitting a quarterly variable of hours worked (No 220) for retail trade;

b) assess the feasibility of transmitting a quarterly variable of gross wages and salaries (No 230) for retail trade;

c) define a suitable methodology for data collection and index calculation.

Member States shall submit a report on the results of the studies to the Commission no later than 11 August 2007.

The Commission shall decide no later than 11 August 2008 whether to invoke Article 17(b) so as to include the variable hours worked (No 220) and the variable gross wages and salaries (No 230) with effect from the base year 2010. Those measures, designed to amend non-essential elements of this Regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18 (3).

(d) Form

1. All of the variables are to be transmitted in an unadjusted form, if available.

2. The turnover variable (No 120) and the volume of sales variable (No 123) are also to be transmitted in a working-day adjusted form. Wherever other variables show working-day effects, Member States may also transmit those variables in working-day adjusted form. The list of variables to be transmitted in working-day adjusted form may be supplemented and amended by the Commission. Those measures, designed to amend non/essential elements of this regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18 (3).

3. In addition Member States may transmit the variables seasonally adjusted and may also transmit the variables in the form of trend-cycles. Only if data are not transmitted in these forms, then Commission (Eurostat) may produce seasonally adjusted and trend-cycle series for these variables.

4. All variables are to be transmitted either as an index or as absolute figures.

(e) Reference period

The following reference periods shall apply:

Variable	Reference period
120	month
210	quarter
220	quarter
230	quarter
330	month

(f) Level of detail

1. The turnover variable (No 120) and the deflator of sales/volume (No 330/123) are to be transmitted according to the levels of detail defined in paragraphs 2 and 3. The number of persons employed variable (No 210) is to be transmitted according to the levels of detail defined in paragraph 4. The hours worked variable (No 220) and the gross wages and salaries variable (No 230) are to be transmitted according to Division 47 of NACE Rev 2.

2. Detailed level regrouping NACE Rev. 2 classes and groups:

    Class 47.11
    Class 47.19
    Group 47.2
    Group 47.3
    Sum of Classes (47.73, 47.74 and 47.75)
    Sum of Classes (47.51, 47.71 and 47.72)
    Sum of Classes (47.43, 47.52, 47.54, 47.59 and 47.63)
    Sum of Classes (47.41, 47.42, 47.53, 47.61, 47.62, 47.64, 47.65, 47.76, 47.77 and 47.78)
    Class 47.91

3. Aggregate levels regrouping NACE Rev. 2 classes and groups:

    Sum of Class and Group (47.11 and 47.2)
    Sum of Classes and Groups (47.19, 47.4, 47.5, 47.6, 47.7, 47.8 and 47.9)
    Division 47
    Division 47, without 47.3

4. Division 47
    Division 47, without 47.3

5. Those Member States whose turnover in Division 47 of NACE Rev. 2 in a given base year represents less than 1 % of the European Community total, need only transmit the turnover variable (No 120) and the deflator of sales/volume of sales variables (No 330/123) according to the levels of detail defined in paragraph 3.

(g) Deadlines for data transmission

1. The variables shall be transmitted for turnover (No 120) and the deflator of sales/volume of sales (No 330/123) within two months at the levels of detail specified in paragraph 2 under heading (f) of this Annex. The deadline may be up to 15 days longer for those Member States whose turnover in Division 47 of NACE Rev. 2 in a given base year represents less than 3 % of the European Community total.

2. The variables shall be transmitted for turnover (No 120) and the deflator of sales/volume of sales (No 330/123) within one month for the level of detail specified in paragraph 3 under heading (f) of this Annex. Member States may choose to participate for the turnover and deflator of sales/ volume of sales variables No 120 and 330/123 with contributions according to the allocation of a European sample scheme as defined in point (d) of the first subparagraph of Article 4(2). The terms of the allocation are to be determined by the Commission. Those measures, designed to amend non/essential elements of this

regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18 (3).

3. The number of persons employed variable (No 210) shall be transmitted within two months of the end of the reference period. The deadline may be up to 15 days longer for Member States whose turnover in Division 47 of NACE Rev 2. in a given base year represents less than 3 % of the European Community total. The hours worked variable (No 220) and the gross wages and salaries variable (No 230) shall be transmitted within three months of the end of the reference period.

(h) Pilot studies

The priorities for the pilot studies are as follows:

1. provide a more detailed activity breakdown;
2. collect information on the number of employees;
3. use the kind-of-activity unit as observation unit;
4. collect short-term information on the births and deaths of enterprises.

(i) First reference year

The first reference period for which all variables are to be transmitted is January 1998 for monthly data and the first quarter 1998 for quarterly data.

The first reference period for which all variables are to be transmitted in NACE Rev. 2 is January 2009 for monthly data and the first quarter 2009 for quarterly data.

The first reference period for the hours worked variable (No 220) and the gross wages and salaries variable (No 230) is not later than the first quarter of 2010 with effect from the introduction of base year 2010 in 2013.

(j) Transition period

1. For the persons employed variable (No 210) a transition period of no longer than three years may be conceded. This transition period may be extended by a further two years in accordance with the procedure laid down in Article 18 (2). This transition period may be extended by a further two years in accordance with the procedure laid down in Article 18(2).

2. For the turnover variable (No 120) at the levels of detail specified in paragraph 3 of Section F a transition period of no longer than two years may be conceded in accordance with procedures laid down in Article 18 (2).

3. For the turnover variable (No 120) at the level of detail specified in paragraphs 2 and 4 of Section F and the deflator of sales/volume of sales (No 330/123) a transition period of no longer than five years may be conceded from the date of entry into force of the Regulation in accordance with the procedure laid down in Article 18 (2).

4. A transition period ending no later than 11 August 2006 may be granted for the changing of the deadlines for data transmission of the variable 210 in accordance with the procedure laid down in Article 18 (2).