

The household surveys analysis aimed  
at harmonization of HHS questionnaires Rafkat  
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## Introduction

This report contains analysis of the questionnaires used under the Household Budget Surveys (HBS) in the CIS countries. The main objectives of the analysis are the following:

- To study questions aimed at poverty measurement assessment in countries,
- To compare the structure of questionnaires, composition and formulations of questions among countries in order to reveal differences and matches in approaches to information gathering for poverty assessment,
- To identify to what extent the objective of harmonization of CIS questionnaires is feasible with the purpose of creating a unified questionnaire for all statistical bodies of countries under study.

Analysis provided in the report is based on questionnaires, forms, diaries used for conducting sample surveys of household budgets in 11 countries, i.e. Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Uzbekistan and Ukraine. We could not manage to obtain information on Turkmenistan.

Mainly, the questionnaires is a collection of forms and documents, consisting of an individual questionnaire (for a single household member), the questionnaire for the entire household (it is filled by head of a household), diaries and the expenses and income registers, household control cards as well as additional profiles, varying by countries.

For comparability and comparative analysis of the questionnaires, we used checklists and encodings, including COICOP (Classification of Individual Consumption on Purposes) and SILC (Statistics on Income and Living Conditions) of Eurostat.

Questionnaires were analysed in accordance with the common poverty measurements – by consumption and expenditures, by income levels, and with respect to multidimensional. This report consists of three sections, based on the above approaches to poverty measurements.

## Section 1. Analysis of HBS expenditure modules

Most countries use an absolute measurement of poverty based on: 1) consumption of food, non-food products and services or/and 2) expenditures on food and non-food products and services.

Both diaries and questionnaires are used for registering expenditures on goods and services. At the same time, a sample list of goods and services is provided. Analysis showed that the sequence of sections in questionnaires on expenditures coincides in most countries.

Almost all countries have modules for expenditures on food, non-food products and services. As a rule, there are modules for durable goods and the expenditures on agricultural activities. In many cases, there are modules for expenditures regarding the farm operation, food consumed outside, expenses on taxes and mandatory payments etc.

In general, the coincidence of the sections is related to the fact that, as it has been revealed through the metadata analysis and survey of representatives of statistical bodies of the countries under analysis. At processing the survey results, 8 out of 12 countries use the Classification of Individual Consumption on Purposes (COICOP). The use of this classification by majority of countries indicates the possibility of harmonization of questionnaires to the effect that if questions and analysis of the results will be based on the sections of this classification.

According to our analysis the following countries use COICOP classification: Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Moldova, Russia and Ukraine. Out of the above eight countries, we did not receive the Georgian classifier. However, based on the information provided by web site of the Georgian National Statistics Office, we can conclude that the COICOP<sup>1</sup> is used in the country. Kyrgyzstan and Uzbekistan use different classifiers. Tajikistan's questionnaire has its own names of goods and services as listed in the questionnaires. Turkmenistan was excluded from this analysis due to limited data availability.

Accordingly, the possibility of harmonization of questionnaires depends on the extent to which country COICOP classifiers are harmonized with each other, where they are used, and how much they are different from the COICOP classifiers of other countries.

### ***Comparative analysis of the individual consumption classifiers on purposes***

Table 1 contains comparative analysis of the COICOP<sup>2</sup> classifiers. The number of sections and groups coincides in almost all of the countries – 12 and 57 respectively (except for Moldova – 41. The number of classes varies from 116 to 119 (with the exception of Belarus, where they are 106). The biggest differences are observed in the number of categories<sup>3</sup> – from 173 to 301 (for details see Annex 1).

**Table 1. General description of the COICOP classifiers by countries**

	Azerbaijan	Armenia	Belarus	Russia	Kazakhstan	Ukraine	Moldova
number of classification codes	5	5	5	5	3	4	5
number of sections	12	12	12	12	12	12	12

<sup>1</sup> Description of Integrated Household Survey Database Variables, [http://www.geostat.ge/index.php?action=page&p\\_id=1250&lang=eng](http://www.geostat.ge/index.php?action=page&p_id=1250&lang=eng)

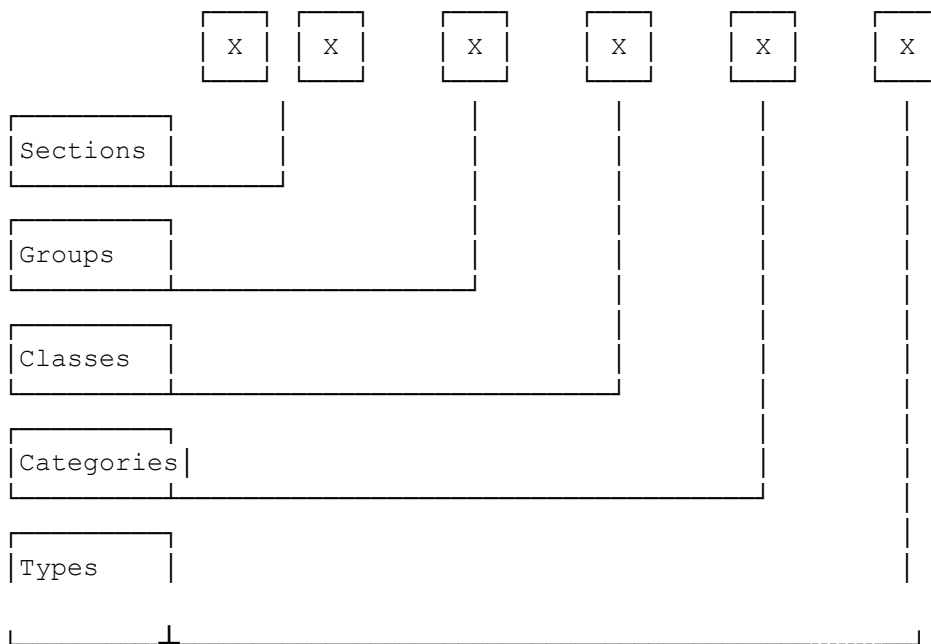
<sup>2</sup> See. Fig. 1 providing the COICOP code scheme

<sup>3</sup> A detailed analysis of the differences between country COICOP at the level of sections, groups and classes given in the electronic annex to this report

number of groups	47	47	47	47	47	47	41
number of classes	117	116	106	119	117	116	119
number of categories	189	301	173	185	293	198	220
encoding by products	yes	yes	yes	yes	no	no	yes
number of types	521	334	809	478	Labeled list of products		400

Figure 1 reflects general structure of the classifier code of households' consumption (COICOP-HH)<sup>4</sup>.

**Fig. 1. Structure of COICOP-HH classifier code.**



The difference of the classification at higher levels can potentially create problems for harmonization of questionnaires. The most fundamental difference is the smaller number of groups in Moldova's classification. The following groups are absent:

- 04.2 Imputed rental payment for housing services,
- 09.3 Other goods and equipment for recreation, gardens and domestic animals,
- 09.4 Services on the organization of leisure, cultural activities,
- 10.2-10.5 Education by levels,
- 12.2 Prostitution.
- In addition, a separate group is added: 12.7 Pocket money.

However, it should be noted that the expenditures of groups 09.3 and 09.4 are accounted only within the framework of the group 09.2, under which an appropriate class of expenditures is marked out. The same can be stated about the group 10.2-10.5, they are included in expenditures on the group 10.1, and the group 12.2 is accounted as a group of expenditures under group 12.1. As for the group 04.2, i.e. a calculation of imputed rental payment, this group of expenditures is almost not observed in the questionnaires. Apparently, due to fact that the calculation method is imperfect, the value of expenditures for this item is not considerable and generally, this group can be neglected. Therefore, it

<sup>4</sup> Source: COICOP-HH, version 4, Rosstat, 2013

may be noted that the classification of groups of Moldovan classifier is close to the classifiers of other countries. In general, for full harmonization, it is necessary to make slight changes at the group level for the Moldovan statistics agency.

With respect to differences at the level of classes, there are two types of differences among country classifiers: 1) exclusion of a number of classes from the list; 2) addition of a number of classes into the list. Taking into consideration that the largest number of classes does not exist in the Belarusian classifier, the missing classes can be provided as an illustrative example. The following classes are missing in the Belarusian COICOP:

1. Narcotic drugs (class 1)
2. Other types of actual rental payment (class 1)
3. Imputed rental payment (class 2)
4. Detailing of public utilities (class 3)
5. Hot water supply (class 1)
6. One level of education (class 1)
7. Prostitution (class 1)
8. Other financial services of intermediaries (class 1)

In respect of such classes as "other types of actual rental payment", "imputed rental payment" and "other financial services of intermediaries", these classes, as it has already been noted on the "imputed rental payment" apparently, were inconsiderable in size and could be neglected.

As for the classes on expenditures "narcotic drugs" and "prostitution", it is possible that not only methodological issues dictate their exclusion. However, accounting of these expenditures at their fixation is possible under the condition that the expenditures will be taken into account at the level of the relevant product groups by country.

With regard to the lack of detailing of the public utilities and hot water costs, apparently, caused by an error in the classifier, because the Belarusian questionnaire asks a relevant question for these expenditures.

Lack of one level of education is due to the fact that the Belarusian COICOP does not mark out separately "secondary vocational education", but includes it into a class "Secondary, vocational, secondary special education". At the same time, it should be noted that this level of education is marked out separately in the questionnaires. Accordingly, this methodological shortcoming can be easily rectified.

An update of the list of classes can be illustrated by an example of the Moldovan classifier of classes. For example, clothing and footwear are broken down further into a male, female and child and treatment in a hospital is broken down into three classes, etc. This additional inclusion of classes is a detailing of services or goods, and generally cannot significantly influence aggregated expenditures.

Overall, the above-mentioned analysis means that differences in the COICOP classifications does not create systemic distortion in the countries. These differences can be eliminated by making a slight change in country COICOPs.

#### ***Comparative analysis of the classifiers of countries not applying the COICOP***

As it has already been mentioned, three countries - Uzbekistan, Kyrgyzstan and Tajikistan - apply their own classifiers for encoding goods and services.

**Uzbekistan.** The classifier analysis is based on an analysis of the list of codes by expenditure items, which has been obtained as part of UNECE materials. Although in general this classification differs from the COICOP, but there is many overlaps with COICOP. The names of individual sections and groups

coincide with the names of similar groups in COICOP. At the same time, according to the information<sup>5</sup>, shown on the website of United Nations Statistics Division, 1999 COICOP of Uzbekistan had to get under revision in 2014.

**Kyrgyzstan.** COICOP is not applicable. The codes of food and non-food goods and services in the questionnaires of the household expenditure surveys are based on the State statistical classifier of products (goods and services) of the Civil Code 017-2015 (SSCP).

It must be emphasized that the current codes and the COICOP codes for all goods and services do not match at all. At the same time, COICOP is used in Kyrgyzstan anyway, in particular for the calculation of the consumer price index. The current classification of food products, in principle, can be minimized to the COICOP by aggregating individual subgroups that cannot be stated with regard to non-food goods and services. We can assume that the classifications used in the country are dual coding, as noted in the same study of United Nations Statistics Division. Although it cannot be stated with regard to harmonization of COICOP and SSCP. In any case, such encoding may generate errors.

**Tajikistan.** At conducting the household budget survey, classifiers of goods and services are not used. In the questionnaires of household expenditure survey, codes of food and non-food goods and services are based on the form #1 "Money incomes and expenditures of the household". Current codes and COICOP codes do not match; the categories of goods and services are combined into sections, which are, in principle, similar to the COICOP.

*Foods* The list of categories of food products, which numbers 66 items, in principle, can be minimized to the COICOP by aggregation.

*Alcoholic beverages, tobacco products and drugs.* This section without efforts can be transferred to COICOP; but in its current form the positions on tobacco and narcotic drugs are missing. These items are in the list of non-food goods.

*Non-food goods.* The following sections are marked out in the current classification: "Purchase of clothing, hosiery, textiles and footwear", "Purchase of furniture and objects of cultural and community purpose", "Purchase of soaps, synthetic detergents, small wares, perfumes, cosmetics, medicines, sanitary and hygiene items, tobacco goods, building materials and fuel". The list of non-food goods and their sequence are shown in Annex 2 to the Instruction.

*Services.* Section "Money expenditures for the payment of personal and production services" includes 9 service groups of individual consumption, which, in principle, can be minimised to COICOP by means of disaggregation and a breakdown of consolidated groups and classes.

As it follows from the above mentioned, in the case of Tajikistan and Uzbekistan, their classifiers can be modified and brought to the standard form of COICOP. With respect to Kyrgyzstan, it is more problematic, perhaps the country should simply transfer to COICOP for its application at household budget survey or develop (specify) a compliance table of SSCP and COICOP codes. However, it is possible to use a single questionnaire for these countries, although there may be technical differences in accounting of costs of goods and services at the level of categories.

### ***Create a questionnaire on expenditure of goods and services based on COICOP***

As it follows from the above-mentioned analysis, compliance of classifiers of individual consumption on purposes forms a solid basis for the creation of uniform questionnaires. In general, the questionnaires could be fully based on the COICOP sections, but, apparently, it is preferable further aggregation of the individual sections. Below, it is suggested to create sections of questionnaires around

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<sup>5</sup> [unstats.un.org/unsd/class/intercop/training/ece13/ac258-P1-r.PPT](http://unstats.un.org/unsd/class/intercop/training/ece13/ac258-P1-r.PPT)

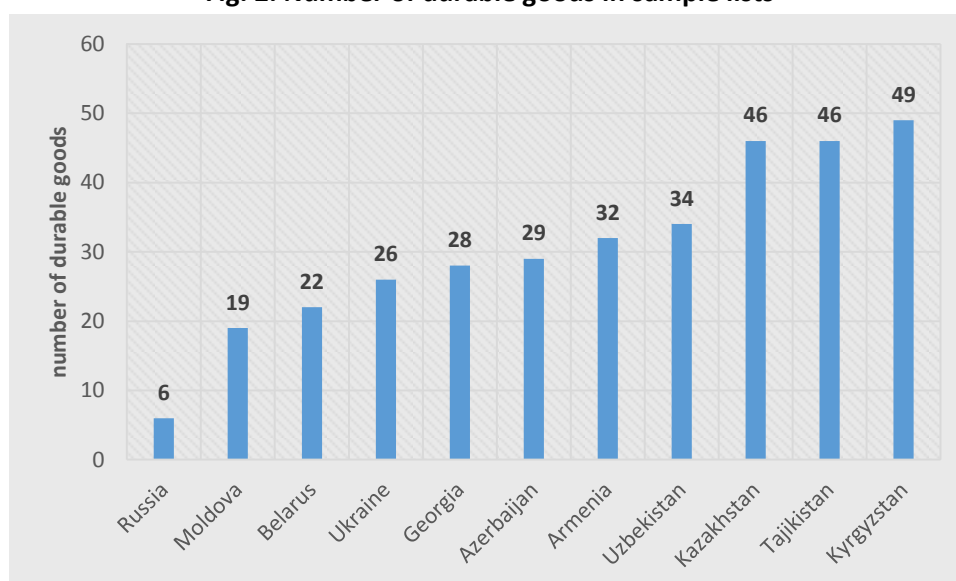
9 modules of expenditures on goods and services, which are formed by aggregation on a functional basis.

- Module I. Food, non-alcoholic and alcoholic beverages, tobacco, narcotic drugs
  - Module II. Clothing, textiles and footwear
  - Module III. Housewares, daily housekeeping, furniture and household appliances
  - Module IV. Housing and public utilities
  - Module V. Health
  - Module VI. Education
  - Module VII. Services related to organization of leisure and social and cultural activities
  - Module VIII. Transportation services
  - Module IX. Other services
- These modules should be complemented by modules on other expenses, such as:
- Module X. Other expenses
  - Module XI. Taxes, dues and other charges
  - Module. XII. Capital investment
  - Module XII. Various financial expenses

### **Durable goods**

All questionnaires contain separate modules for registering durable goods. The number of durable goods varies considerably across countries – from 6 (Russia) to 50 (Kyrgyzstan).

**Fig. 2. Number of durable goods in sample lists**



Two main reasons determine such a large discrepancy:

1. Different aggregation of durable goods. In some countries, the same object having the same function, but different characteristics is listed in more than one position. For example, “refrigerator” is just a “refrigerator” in Ukraine’s list, but in the Tajik list it is “a single-chamber refrigerator” and “two-chamber refrigerator”, in the Kazakh list both “refrigerator” and “freezing chamber” are marked out separately. The same situation is observed with the colour/black-and-white TV, mobile/fixed location phone, etc.



2. Some countries use very broad list of durable goods, which include a large number of different types of furniture and even musical instruments.

If we talk about the list used in the Russian questionnaire, all goods specified therein find their reflection in other countries, namely: 1) Colour TV, 2) phone (including a mobile phone), 3) Computer 4) Refrigerator, 5) Washing machine, and 6) (motor) car. It is a main list of durable goods used in the Eurostat methodology.

In addition to the list the above items, 20 more are encountered in almost all of the questionnaires (except Russia). These goods include the following (see table 2):

**Table 2. Most common durable goods**

Durable goods	Variations
Music center	Tape recorder, musical player
Video tape recorder, video player, DVD-player	
Video camera	
Digital camera	Camera device
Refrigerator	Single –chamber, 2-3 chamber
Freezer	Freezing chamber
Vacuum-sweeper <sup>6</sup>	
Microwave	
Motorcycle	Scooter, moped,
Scooter	Motorized bicycle, snowmobile
Bicycle	
Laundry washer	Automatic laundry washer
TV set	Color /black-and-white
PC computer	
Laptop	Laptop, Net-book, other mobile computers
Fixed location phone	
Mobile phone <sup>7</sup>	
(Motor) car	

During our analysis, we identified the following shortcomings of the durable goods lists:

- Some names of goods cannot objectively reflect the real deprivation. For example, tape recorders, cassette players, radios, black and white TV sets are mostly outdated and simply not used.
- Some countries include in their lists of names inherent in specific activities that also cannot be an assessment of the household poverty. Thus, Tajikistan, Kyrgyzstan and Kazakhstan have a great number of names of musical instruments. Many countries include sewing and knitting machines in the list, which are also inherent in a particular type of activity and are not subject to the obligatory presence in the household.
- Most countries (Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) included trucks, tractors, mini-tractors, etc. in their lists, which is connected with the occupation

<sup>6</sup> Except Azerbaijan.

<sup>7</sup> Moldova is the only country in which a phone is not included in the list. The question of the availability and use of the phone is asked separately in the module about the housing conditions.

of the household in agricultural activity. Taking into account the fact that all countries have the module on agriculture / household plot, it makes sense to move this issue there.

Thus, we can say that with respect to 20 items of durable goods, the lists may be synchronized even now (except the Russian list). At the same time, it is important to note that it is necessary to revise the lists in terms of their relevance now. Many of the positions can be easily eliminated, while some other names, on the contrary, must be added. These include (in some countries, they are already included): air conditioning, electro/water heater, smartphone, internet modems and internet connection, a limited number of pieces of furniture and kitchen utensils.

### **Consumption or expenditures?**

As it was mentioned above, most countries use the methodology for determining poverty by expenditures or consumption. Creation of a unified methodology for poverty determination for all countries will require a separate harmonization of methods and study of questionnaires. The easiest way is to assess household expenditures based on the current questionnaires. For poverty assessment on consumption, it will be necessary to include questions on the number of food products by the beginning and the remainder at the end of the period.

## **Section 2: Analysis of HBS income modules**

Analysis of the country households questionnaires showed that the number of major income items varies from 13 to 42 (approximately, since there are an additional specifying sub items). Income variables of country questionnaires are provided in Annex 2. As a rule, additional income indicators are related to the reflection of the country's social policy. However, there are noticeable differences on the other profitable units as well.

In questionnaires, incomes are recorded also in-kind. However, cost assessment of this product is not specified very clearly as well as its account in the total cost of product. Some questionnaires are designed in such a way that the individual questionnaires are used to assess the factor income (such as wages), and household surveys in general, in relation to social benefits.

Some countries apply their own classification of incomes (through encoding or numbering the questions), but in most cases it is simply given a list of income indicators.

The authors use the same structure of income codes (embedding levels) to assess the comparability of various questionnaires on incomes that are used in the encoding of expenditures for goods and services.

1. 1<sup>st</sup> level incomes -> Section

2. 2<sup>nd</sup> level incomes -> Group

As a rule, in the questionnaires, more in depth levels of income investment are not applied.

Mostly, in the questionnaires, incomes from employment, property, sales, and various allowances and transfers are marked out on the first level as the sections. Usually, the structure of sections is as follows:

- Incomes from employment
- Remittances,
- Property incomes
- Incomes from sales,
- State transfers
- Other incomes.

An aggregated structure of incomes is largely comparable among countries. However, it should be noted that there are certain questions related to the fact that some areas have too aggregated nature at this level and, foremost, it is related to government transfers that are provided in rather aggregated form.

At the level of sections, it is also observed some confusion of income types. For example, almost all the questionnaires mark out incomes from agriculture, and in the Moldovan questionnaire, the trading activities are marked out separately. Incomes from any activities are related to the primary ones and formally, there is a violation of the principles of classification at the section level.

As for the second level, i.e. the level of groups, so there are following problems here:

1. The number of the second level indicators on certain types of incomes is small. There is simply no sufficient number of indicators in some countries, which would allow to determine accurately the methodological features of specific indicators. For example, in Azerbaijan, the wages are not divided into groups. While here one can take into account the wages from a second employment, and separate fees associated with this source of income (e.g., bonuses).

2. There are incorrect classification definitions of a number of incomes. They are included in inappropriate income sections. For example, in some cases, compensation payments related to the income from employment are included in the income from labour. In other cases, they are included in the social payments.

In fact, one of the problems that affect the typology of incomes is the lack of a uniform classification, which would be based on certain criteria for its creation. Approaches to its creation are given below.

**A unified approach to the classification of incomes**

The harmonization of country questionnaires will be possible only in the case if it is developed a common approach to the classification of incomes and their encodings. The following are suggestions on creating a single classification of incomes at two levels: at the level of sections and groups.

First, a single classification should take into account all incomes and include at the level of sections:

1. Primary incomes, i.e. income from factors of production;
2. Incomes at the redistribution stage;
3. The use of previously accumulated incomes.

This approach provides accounting of all income flows and eliminates the intersection of incomes in different categories.

**1. Primary incomes (incomes from factors of production)**

As the factors of production include labour, land and capital, therefore, an income from labour, land rent, incomes from capital in its various forms (including incomes in the form of a profit) are incomes from the production factors (see Table 3).

**Table 3: Classification of primary incomes on production factors**

Factors	Name of incomes
Work	Wages and other income from employment
Land and capital	Rental incomes Property incomes Incomes from entrepreneurship

Based on the above- stated, questionnaires on incomes are able to harmonize at the level of sections. This classification will be comparable, under the condition of making minor changes to the questionnaires (see Table 4).

**Table 4. Harmonization of primary incomes**

<b>Section code</b>	<b>Name of incomes and group codes</b>
1. Incomes form employment	1.01. Wages and other incomes from employment
2. Incomes form property (land and capital)	2.01. Incomes from tangible assets (rental of land and production equipment)
	2.02. Incomes from financial assets (interests on bank deposits, incomes from securities, etc.)
	2.03. incomes from entrepreneurship
3. Incomes from certain types of aactivities	3.01. Income from agricultural activity

At harmonization of the income encodings, it is important to take into account the following. First, at the assessment of the incomes from employment, it is necessary to consider the incomes from main as well as additional employment. Secondly, in all questionnaires the incomes from agricultural activities are marked out. In terms of the economic activity, this activity is not different from other economic activities. For example, in the Moldovan questionnaires, trading activity is marked out along with the agricultural activities. Under the most questionnaires, it is also asked a question on what type of activities incomes were obtained. Therefore, in the ideal case, the incomes from agricultural activities must be reflected through the overall classification of incomes at the level of section. However, considering the fact that most of the country questionnaires take into account incomes from this activity, by reflecting the importance of this activity for the national economy, apparently, it worthy to keep this section in the questionnaires. However, a care should be taken to exclude the double reflection of these incomes in other sections. Finally, it may be marked out other activities (except agricultural) in the country questionnaires. Accordingly, they have to get the encoding from 3.02 and onwards.

## **2. Incomes at the redistribution stage**

While using the classification at the redistribution stage, it is necessary to consider the area of social policy, as well as payers and recipients of incomes. The inclusion of payers and recipients of incomes will allow differentiating the budget payments from payments of enterprises, organizations and other households. The combination of these criteria will allow specifying the classification and encoding of incomes.

Based on the structure of the questionnaires, it can be singled out five **main areas** of social policy:

1. Pensions. This includes all pensions: labour, social, on merits (privileges)

2. **Social benefits.** All issues related to social assistance to the poor and vulnerable households. These are such benefits as:
  - unemployment (preservation of skills)
  - poverty (targeted benefits and reimbursements)
  - invalidity
  - due to a breadwinner's death,
3. **Subsidies.** Questions that allow to assess investments in human capital, housing. As a rule, these are targeted subsidies on education, health and housing conditions.
4. **Benefits.** Evaluation of the benefits received by households, depending on the categories of the population, merits and awards.
5. **Social rehabilitation.** All the additional funds received at migration, relocation, refugee status, etc.

Depending on the status of the payer or recipient, it can be marked out the following criteria for classification:

1. **Payers:** the state (different budget levels), enterprises and organizations (trade unions), other households (including remittances from abroad).

As a rule, companies and organizations provide material assistance in any types (medicines, vouchers, coal, etc.), sponsorship (e.g. for the talented), making gifts, etc.

Other households also provide material assistance in any type; provide remittances from abroad, pay alimony, etc.

2. **Recipients:** specific adult member of the household, the entire household, including children (for children).

The division of recipients will allow to separate incomes of the individual household members from the incomes of the entire household, which will strengthen the analytical capacity of surveys.

Thus, the incomes received at the redistribution stage, take into account all kinds of social policy, as well as payers and recipients of the incomes. Here, one of the problems is the fact that the coding of incomes depends on the classification of types of social payments. Therefore, the countries apply their classification, which in turn depend on the characteristics of the social policy of a particular country. Below in the Table 5, it is given an exemplary classification of such incomes. It is based, for example, on the nature of purpose of allowance or payment and, as noted, the payer or recipient of the income. Based on the complexity of the classification structure, it is necessary to provide a sufficient aggregated structure of incomes with the clarification of the content of included incomes.

**Table 5. Harmonization of incomes at redistribution stage**

Section code	Name of incomes and group codes	Description
4. Pensions	4.01. Labour pensions 4.02. Social pensions 4.03. Pensions on merits	All types of pensions

5. Benefits	5.01. Poverty Benefits	This group of incomes are associated with deprivation compensation from the state. It should be emphasized that it includes payments both from the budget as well as the state social insurance
	5.02. Disability benefits	
	5.03. Unemployment benefit	
	5.04. Other benefits	
6. Subsidy	6.01. Subsidies for payment of services	This group of incomes are associated with the purpose of full or partial payment of social services provided by the state. It should be also stressed that these subsidies are in any way related to the improvement of a capital (human: education, health or physical (accommodation))
	6.02. Subsidies for payment of education services	
	6.03. Accommodation allowances	
	6.04. Other subsidies	
7. Social benefits provided by state for certain services	7.01. The monetary value of benefits provided by state for certain services	These are benefits to different categories of citizens, for certain merits. They can be provided either in money or in kind
8. Social rehabilitation	8.01. Social rehabilitation benefits	This includes all payments associated with social rehabilitation, for example, displaced persons due to a conflict, compensation costs associated with emergency situations, etc.
9. Social transfers from enterprises and organizations	9.01. Payments related to poverty 9.02. Payments for disability 9.03. Payments related to unemployment 9.04. Other benefits 9.05. Subsidies for payment of services 9.06. Subsidies on transport 9.07. Other subsidies	Here, it is specified the same directions of payments, that come from the state
10. Social transfers from households	10.01. Payments related to poverty 10.02. Payments for disability 10.03. Payments related to unemployment 10.04. Other benefits 10.05. Subsidies for payment of services 10.06. Remittances from	Here, it is specified the same directions of payments, that come from the state

	abroad 10.06. Other subsidies	
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This classification has a nature of an initial proposal and needs a further updating. For example, the payers can be not included as separate sections, and mark them out at the level of groups. In this case, the benefits can be broken down into benefits from the state as well as from organizations. A number of other questions may arise, for example, if, benefits are allocated to the poor, then in what of these indicated sections 4 or 6 it should be included. In any case, the authors recommend to conduct a discussion of this approach regarding this section in particular and carry out an update in the light of the gained experience of the national statistical offices.

### 3. Use of the accumulated incomes or changes of the financial status

This accounting is associated with a change in the financial status of household members and a household as a whole. As a rule, it is a property sale or a loan. While the latter is not formally considered as incomes, but their accounting is necessary from the point of view of liquidity accounting of all resources. Here, incomes from insurance are also included (see Table 6).

**Table 6. Harmonisation of use of the accumulated incomes**

Section code	Name of incomes and group codes
<b>11. Use of the accumulated incomes</b>	11.01. Property sale
	11.02. Loans
	11.03. Use of the bank deposits
12	12.01. Other incomes

## Section 3. HBS assessment of deprivations

Current section provides analysis of questions aimed to assess deprivations as one of the multidimensional poverty measurements. The purpose of this analysis is to understand to what extent countries' questionnaires contain questions, which directly measure the number of deprivations faced by members of households. In previous sections, we discussed the composition of expenditures and incomes related questions, from which one can infer information about deprivations, but cannot measure them directly.

Analysed HBS questionnaires contain set of questions that can be defined as deprivations related. To provide comparative analysis of deprivations related questions we use the Methodological guidelines and description of EU-SILC target variables, 2017 operation. This document describes in detail all target variables to be collected in frame of the EU-SILC survey. The variables are segmented in different modules, including social exclusion and material deprivation modules. Table 7 and 8 contains SILC deprivations related variables by modules.

**Table 7. Deprivations related SILC variables: Social exclusion**

Non-monetary household deprivation indicators
Capacity to afford paying for one week annual holiday away from home
Capacity to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day

Capacity to face unexpected financial expenses
Do you have a telephone (including mobile phone)?
Do you have a colour TV?
Do you have a computer?
Do you have a washing machine?
Do you have a car?
Ability to make ends meet
Lowest monthly income to make ends meet
<b>Housing and non-housing related arrears</b>
Arrears on mortgage or rental payments
Arrears on utility bills
Arrears on hire purchase instalments or other loan payments
<b>Physical and social environment</b>
Problems with the dwelling: too dark, not enough light
Noise from neighbours or from the street
Pollution, grime or other environment problems
Crime, violence or vandalism in the area

**Source:** EU-SILC Methodological Guidelines and Target Variables, 2017 Operation

**Table 8. Deprivations related SILC variables: Material deprivation**

<b>Financial stress</b>
Replacing worn-out furniture
<b>Basic needs</b>
Replace worn-out clothes by some new (not second-hand) ones
Two pairs of properly fitting shoes (including a pair of all-weather shoes)
<b>Leisure and social activities</b>
Get-together with friends/family (relatives) for a drink/meal at least once a month
Regularly participate in a leisure activity
Spend a small amount of money each week on yourself
<b>Durables</b>
Internet connection for personal use at home

**Source:** EU-SILC Methodological Guidelines and Target Variables, 2017 Operation

Two most important components of deprivations are missing – access to services and housing conditions. When measuring deprivations caused by poverty it is necessary to understand how household is deprived from adequate healthcare and qualitative education. The same applies to the housing conditions – poverty restricts people from having an access to clean water and sanitary means, ability to keep house adequately warm and ability to renovate dilapidated dwelling. Therefore, we included a number of variables describing the above deprivations into our list (see table 9).

**Table 9. Additional variables**

<b>Housing conditions</b>
Number of rooms available to the household or squared area per habitant
Leaking roof, damp walls/floors/foundation, or rot in window frames or floor
Ability to keep home adequately warm
Bath or shower in dwelling



Indoor flushing toilet for sole use of household
<b>Access to healthcare and adequate nutrition</b>
Main reason for unmet need for medical examination or treatment
Frequency of eating fruit
Frequency of eating vegetables or salad
<b>Access to education</b>
Main reason for not studying/attending school if applicable

**Source: HBS questionnaires**

When analysing questionnaires we considered the following:

- Whether questions contain the exact formulation of the variable or
- It has a slightly different formulation, but implies the same meaning as expressed by the variable.

If we take, for example, the variable “Ability to make ends meet”. The exact formulation would be the one asked in Russian questionnaires: Considering all incomes of the HH members is your HH able to make ends meet, i.e. pay for all daily needs?.

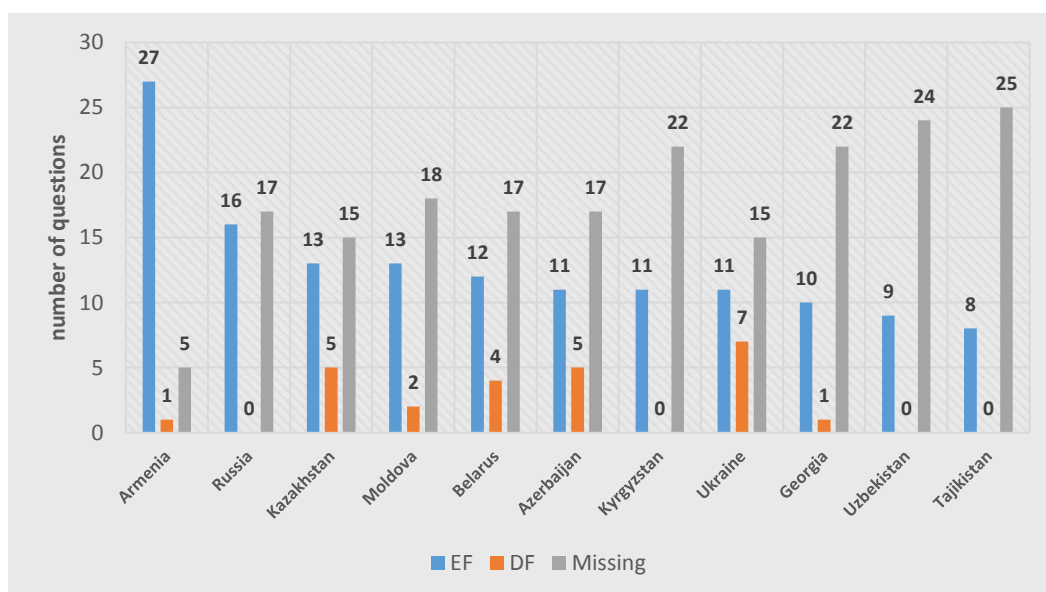
The different formulation, we considered applicable to this variable, was “How would you describe the social status of your household?”, “How would you describe the living conditions of your household?” The proposed answers to these questions included “Above average--daily needs are fully covered”, “Average--our needs are partly covered” or “poor”, “above average”, “rich” etc.

Another example of exact and different formulations would be with variable “Capacity to face unexpected financial expenses”. While Armenian questionnaire contains question with the exact formulation on this variable (“Can your household afford an unexpected required expense of 45.000 dram and pay through its own resources?”), Kazakhstani questionnaire asks whether “a household has savings”, which can be a good proxy for identifying the ability of a household to face unexpected expenses.

Finally, the third worth mentioning example is associated with the access to healthcare, or “Main reason for unmet need for medical examination or treatment”. Kyrgyzstan’s questionnaire asks, “Why did you refrain from obtaining medical services?” which is considered as the exact formulation. At the same time Moldavian question on that variable would be “provide a reason why you do not have a medical insurance”, which we consider as a question on a related issue.

Figure 3 shows comparative analysis of deprivations related questions among countries. “EF” indicates the exact formulation, “DF” – different formulation, “missing” means that we were unable to find any question related to a particular deprivation variable.

**Fig. 3. Number of deprivations related questions by countries’ questionnaires**



**Source: own analysis based on HBS questionnaires**

**Note: EF – exact formulation, DF – different formulation**

Analysis of formulations suggests that Armenia’s questionnaire is a leader in number of exact questions, describing the deprivations related SILC variables (**27 out of selected 33**). Azerbaijan, Kazakhstan, Ukraine, Russia, Belarus and Moldova also have relatively large number of questions on deprivations and social exclusion (**15-18 EFs and DFs** out of selected 33). Georgia, Kyrgyzstan, Uzbekistan and Tajikistan’ questionnaires have least developed modules on deprivations with more than **22 variables missing** in their questionnaires.

Regarding the mode questions, or the most popular questions among countries on deprivations, we have identified the following (please see the table 10 for details):

- All of HBS questionnaires have lists of durable goods, and all of them contain five items used in SILC methodology (telephone, colour TV, computer, washing machine and car). Although they do not have separate questions on each item, they usually ask a respondent to tick a box with the corresponding durable item from the list.
- Nine out of eleven questionnaires have questions on shower/bath and indoor flushing toilet facilities, as well as on number of rooms available to household members (except for Russia and Belarus).
- Eight questionnaires ask respondents in different ways about their abilities to make ends meet, and six questionnaires ask respondents to estimate the lowest income they need.
- Six questionnaires more or less have questions on access to healthcare, five – on education access.
- Six countries aim at identifying whether a household has an internet connection at home.
- Five countries try to identify whether respondents have experienced any arrears on paying the utility bills.
- Other questions, especially on material deprivations, are rarely asked in questionnaires. There are at most from two to four countries willing to assess other kinds of deprivations.

**Table 10. Number of countries’ questionnaires with questions on deprivations**

Social exclusion	#	#	#
	EF	DF	Missing
Capacity to afford paying for one week annual holiday away from home	3	1	7
Capacity to afford a meal with meat, chicken, fish every second day	2	3	6

Capacity to face unexpected financial expenses	2	2	7
Do you have a telephone (including mobile phone)?	11	0	0
Do you have a colour TV?	11	0	0
Do you have a computer?	11	0	0
Do you have a washing machine?	11	0	0
Do you have a car?	11	0	0
Ability to make ends meet	2	6	3
Lowest monthly income to make ends meet	6	0	5
Arrears on mortgage or rental payments	2	0	9
Arrears on utility bills	5	0	6
Arrears on hire purchase instalments or other loan payments	2	1	8
Problems with the dwelling: too dark, not enough light	2	0	9
Noise from neighbours or from the street	2	0	9
Pollution, grime or other environment problems	1	1	9
Crime, violence or vandalism in the area	0	1	10
<b>Material deprivation</b>	<b>#</b>	<b>#</b>	<b>#</b>
	<b>EF</b>	<b>DF</b>	<b>Missing</b>
Replacing worn-out furniture	2	0	9
Replace worn-out clothes by some new (not second-hand) ones	3	0	8
Two pairs of properly fitting shoes (including a pair of all-weather shoes)	2	1	8
Get-together with friends/family (relatives) for a drink/meal at least once a month	3	0	8
Regularly participate in a leisure activity	2	0	9
Spend a small amount of money each week on yourself	2	0	9
Internet connection for personal use at home	5	1	5
<b>Additional variables</b>	<b>#</b>	<b>#</b>	<b>#</b>
	<b>EF</b>	<b>DF</b>	<b>Missing</b>
Number of rooms available to the household	9	0	2
Leaking roof, damp walls/floors/foundation, or rot in window frames or floor	1	1	9
Ability to keep home adequately warm	3	1	7
Bath or shower in dwelling	9	0	2
Indoor flushing toilet for sole use of household	9	0	2
Main reason for unmet need for medical examination or treatment	4	2	5
Frequency of eating fruit	0	1	10
Frequency of eating vegetables or salad	0	1	10
Access to education	3	2	6

**Source: own analysis based on CIS HBS questionnaires**

#### ***Additional questions on self-assessment of poverty***

Several HBS questionnaires have modules on self-assessment of poverty, including:

- Armenian Social exclusion module,
- Azerbaijan's section on Subjective evaluation,
- Belarusian Households living standards questionnaire,
- Georgia's section on Subjective evaluation of poverty
- Kazakhstan's questionnaire of Living standards,
- Moldova's section on Living standards assessment,

- Ukraine's Self-assessment of incomes questionnaire,
- Russian section on Household's financial conditions.

Only Kyrgyzstan, Tajikistan and Uzbekistan do not have separate sections and/or questionnaires of self-assessment of poverty. With that, Tajikistan and Uzbekistan do not even have questions in this regard, while Kyrgyz HBS questionnaire asks for a minimal income necessary to make ends meet.

The majority of questions on deprivations were extracted from described self-assessment sections. However, there are a few questions left, which we did not categorize as deprivations related, but they are still worth mentioning.

For example, Belarus, Kazakhstan and Ukraine questionnaires have question regarding the economic situation of the country as a whole. Belarus has a section on expected inflation, Kazakhstan attempts to assess the symptoms of economic crisis, Ukraine asks about economic predictions. Almost all of the self-assessment sections have questions regarding the today's living conditions compared to the previous year. They also ask to predict how the situation will change in the next period.

Unfortunately, the current structure of CIS HBS questionnaires makes it hard to create a sophisticated unified questionnaire on deprivations. Some of the questionnaires are well developed, have number of good deprivations related questions and can become useful tools for measuring multidimensional poverty (e.g. Armenia, Azerbaijan, Kazakhstan). Nevertheless, these are few questionnaires. The majority of HBS questionnaires still lack questions on deprivations and social exclusion, especially those of leisure, social activities and environment, and basic needs (clothes and meal). These questions can be partially addressed by using data from expenditures modules, but neither have they provided a clear view on deprivations nor they give a perception of deprivations by households.

As a concluding remark, two sections definitely can be included in a unified questionnaire – durable goods and access to sanitary means and clean water. This information can be obtained from almost every country's questionnaire.

## Conclusion

Analysis shows that CIS HBS questionnaires can be harmonized to some extent. The majority of countries use the COICOP classification for expenditures encoding and many of expenditures sections overlap with each other. Differences in countries' COICOP classifiers do not affect encoding process up to the third level of codes. With that, there is a harmonization possibility for countries not using COICOP classifiers, mainly because of the similarities in questionnaires' sections.

Twelve COICOP sections can be aggregated to lower the number of sections and determine the structure of a unified HBS questionnaire. We propose to use nine COICOP sections. At the same time the unified questionnaire should contain other sections, such as expenditures on taxes and other mandatory payments, financial expenses etc. Each of the HBS questionnaires now have these sections. It is only necessary to align the classifiers.

Absence of income classification creates certain problems for harmonization. Differences among countries are observed at each stage of classification. Adoption of a unified classification can address the problem of harmonization. We consider several approaches for a unified income classification, which should be further discussed with national statistics offices.

Most of the HBS questionnaires attempt at assessing different types of deprivations. However to create a unified questionnaire on deprivations is challenging. EU-SILC derivations related questions could serve as a base for such questionnaire, taking into account countries specific differences.

[Annex 1. Analysis of COICOP by countries \(excel file in Russian only\)](#)

[Annex 2. List of income indicators by countries \(excel file in Russian only\)](#)