



The household surveys analysis aimed at
harmonization of household survey
questionnaires in countries of Eastern
Europe, Caucasus and Central Asia

Prepared for UNECE

by Rafkat Hasanov and Savia Hasanova

Contents

List of Tables	2
List of Figures	3
1 Introduction	4
2 Analysis of Household Budget Survey expenditure modules	5
2.1 Comparative analysis of the individual consumption classifiers of countries applying the COICOP classifier	5
2.2 Comparative analysis of the classifiers of countries not applying the COICOP classifier	8
2.3 Development of a questionnaire on expenditure of goods and services based on COICOP..	9
2.4 Durable goods	10
2.5 Consumption or expenditures?	12
3 Analysis of Household Budget Survey income modules	13
3.1 A unified approach to the classification of incomes	14
3.1.1 Primary incomes (incomes from factors of production).....	14
3.1.2 Incomes at the redistribution stage.....	16
3.1.3 Use of the accumulated incomes or changes of the financial status	18
4 Household Budget Survey assessment of deprivations	19
4.1 Comparison with EU-SILC deprivation-related variables	19
4.2 Additional questions on self-assessment of poverty	24
Conclusion	26
Annex 1. Analysis of COICOP by countries (excel file in Russian only)	27
Annex 2. List of income indicators by countries (excel file in Russian only) Error! Bookmark not defined.	
Annex 3. Comparison of deprivations related questions among questionnaires based on deprivations related variables requested by Eurostat 2017	28

List of Tables

Table 1	General description of the COICOP classifiers by countries	6
Table 2	Most common durable goods	11
Table 3	Classification of primary incomes on production factors	15
Table 4	Harmonization of primary incomes	15
Table 5	Harmonization of incomes at redistribution stage	17
Table 6	Harmonization of use of the accumulated incomes	18
Table 7	EU-SILC deprivations-related variables: Social exclusion.....	19
Table 8	EU-SILC deprivations-related variables: Material deprivation.....	20
Table 9	Additional variables.....	21
Table 10	Number of countries' questionnaires with questions on deprivations.....	23

List of Figures

Figure 1 Structure of COICOP-HH classifier code.....	6
Figure 2 Number of durable goods in sample lists	10
Figure 3 Number of deprivations related questions by countries' questionnaires.....	22

1 Introduction

1. This report contains an analysis of the questionnaires used in the Household Budget Surveys (HBS) in the countries of Eastern Europe, Caucasus and Central Asia. 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 EECCA questionnaires is feasible with the purpose of creating a unified questionnaire for all statistical offices of countries under study.

2. The analysis provided in the report is based on questionnaires, forms and diaries used for conducting sample surveys of household budgets in 11 countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Ukraine and Uzbekistan. We could not manage to obtain information on Turkmenistan.

3. The questionnaires are mainly a collection of forms and documents, consisting of questionnaires for a single household member, questionnaires for the entire household (filled out by the head of the household), diaries, expenses and income registers, household control cards as well as additional profiles, varying by country.

4. 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.

5. Questionnaires were analysed in accordance with the common poverty measurements – by consumption and expenditures, by income levels, and with respect to multidimensional poverty. This report consists of three substantive sections, based on the aforementioned approaches to poverty measurements: a) Analysis of HBS expenditure modules; b) Analysis of HBS income modules and c) HBS assessment of deprivations.

2 Analysis of Household Budget Survey expenditure modules

6. Most countries use an absolute measure of poverty based on: 1) Consumption of food, non-food products and services and/or 2) Expenditures on food and non-food products and services. Expenditures on goods and services are registered using both diaries and questionnaires. A sample list of goods and services is provided with the expenditure modules.

7. The analysis of the survey metadata showed that most countries, eight out of 12 countries, use the Classification of Individual Consumption on Purposes (COICOP). As a result, the sequence of sections in questionnaires on expenditures coincides in most cases. Almost all countries have modules for expenditures on food, non-food products and services. As a rule, there are expenditures modules for durable goods and agricultural activities. In many cases, there are expenditures modules food consumed outside home, expenses on taxes and mandatory payments, etc.

8. The following countries use COICOP classification: Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Republic of Moldova, Russian Federation and Ukraine. The authors did not receive the Georgian classifier; however, based on the information on the website of the Georgian National Statistics Office, it was concluded that the COICOP¹ 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.

9. The use of the COICOP classification by the majority of countries indicates the possibility of harmonization of questionnaires depending on the extent to which questions and analysis of the results are based on the sections of this classification. Furthermore, it also depends on the extent to which country classifiers (based on COICOP) are harmonized with each other.

2.1 Comparative analysis of the individual consumption classifiers of countries applying the COICOP classifier

10. Table 1 contains a comparative analysis of the COICOP classifiers across countries. The number of sections and groups coincides in almost all of the countries – 12 and 47 respectively, except for the Republic of Moldova that has 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 – from 173 to 301. A detailed analysis of the differences between countries COICOP at the level of sections, groups and classes is provided Annex 1.

¹ Description of Integrated Household Survey Database Variables, available at: http://www.geostat.ge/index.php?action=page&p_id=1250&lang=eng

Table 1
General description of the COICOP classifiers by countries

	Azerbaijan	Armenia	Belarus	Russian Federation	Kazakhstan	Ukraine	Republic of Moldova
Number of classification codes	5	5	5	5	3	4	5
Number of sections	12	12	12	12	12	12	12
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	Labelled list of products		400

11.

Figure 1 reflects the general structure of the COICOP classifier code of households' consumption (COICOP-HH)².

Figure 1
Structure of COICOP-HH classifier code

² Source: COICOP-HH, version 4, Rosstat, 2013

	x	x	x	x	x	x
Sections						
Groups						
Classes						
Categories						
Types						

12. The difference of the classification at higher levels can potentially create problems for harmonization of questionnaires. The most fundamental difference is the fewer number of groups in the Republic of 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.

13. The expenditures of groups 09.3 and 09.4 are accounted only within the framework of group 09.2, under which an appropriate class of expenditures is marked out. Groups 10.2-10.5 are included in expenditures of group 10.1, and group 12.2 is accounted as a group of expenditures under group 12.1. Group 04.2, i.e. a calculation of imputed rental payment, is almost not observed in the questionnaires. Apparently, due to the imperfect calculation method for imputed rents, the value of expenditures for this item is not substantial and in principle, this group could be neglected. In general, the classification of groups of the Moldovan classifier is close to the classifiers of other countries and, for full harmonization, it is necessary to make only a slight change at the group level by the National Bureau of Statistics of Republic of Moldova.

14. With respect to differences at the level of classes, there are two types of differences among country classifiers: a) exclusion of a number of classes from the list; b) addition of a number of classes into the list.

15. The Belarusian classifier misses the most number of classes, and therefore it is taken 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) Secondary vocational education (class 1)
- 7) Prostitution (class 1)
- 8) Other financial services of intermediaries (class 1)

16. Similarly to the Moldovan case with group 04.2, classes such as "other types of actual rental payment", "imputed rental payment" and "other financial services of intermediaries", were seemingly inconsiderable in size and could be neglected.

17. As for the classes on expenditures "Narcotic drugs" and "Prostitution", it is possible that not only methodological issues determine their exclusion. Nevertheless, accounting for these expenditures is possible under the condition that the expenditures are to be recorded at the level of the relevant product group category.

18. The missing classes "Detailing of the public utilities" and "Hot water costs", seem to be caused by an error in the classifier as the Belarusian questionnaire does include relevant questions for these expenditures.

19. The Belarusian COICOP does not record separately "Secondary vocational education", but includes it into another class named "Secondary, vocational, secondary special education". At the same time, this level of education is identified separately in the questionnaires. Therefore, this methodological shortcoming can be easily resolved.

20. The Moldovan classifier of classes is an example of a classifier that presents a more detailed list of classes. For example, the class "Clothing and footwear" is further broken down into male, female and child, "Treatment in a hospital" is broken down into three classes, etc. Such additional inclusion of classes generally does not significantly influence the aggregated expenditures.

21. Overall, the differences in the COICOP classifications do not create systemic distortion between the countries and in most cases these differences can be eliminated by making slight changes in the countries classifiers.

2.2 Comparative analysis of the classifiers of countries not applying the COICOP classifier

22. As mentioned, three countries – Kyrgyzstan, Tajikistan and Uzbekistan - apply their own classifiers for encoding goods and services. The classifier analysis is based on the list of codes by expenditure items obtained as part of UNECE materials.

23. **Uzbekistan.** Although in general the classification differs from the COICOP, there are 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 from a UNECE presentation³, the 1999 version of COICOP of Uzbekistan had to get under revision in 2014.

24. **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) (SSCP) of the Civil Code 017-2015.

25. The current codes and the COICOP codes for all goods and services differ. At the same time, COICOP is used in Kyrgyzstan, in particular for the calculation of the consumer price index. The current classification of food products can, in principle, be minimized to the COICOP by aggregating individual subgroups. Such aggregation, however, cannot be applied to non-food goods and services.

26. **Tajikistan.** When conducting the household budget survey, classifiers of goods and services are not used. In the questionnaires on household expenditures, the codes for food and non-food goods and services are based on 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 can be, in principle, minimized to the COICOP by aggregation.
- *Alcoholic beverages, tobacco products and drugs.* This section could be easily transferred to COICOP. The only difference in its current form is that the positions on tobacco and narcotic drugs are missing. These items are instead 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 non-food goods and their sequence are shown in Annex 2 to the Instruction.
- *Services.* The section "Money expenditures for the payment of personal and production services" includes nine service groups of individual consumption, which, in principle, can be minimised to COICOP by means of disaggregation and by a breakdown of consolidated groups and classes.

27. In conclusion, 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 could require more efforts. However, since Kyrgyzstan uses COICOP it should transfer its own household survey to the COICOP basis. Thus, it is possible to use a harmonized

³ UNECE presentation at the Workshop on international classifications, 9-21 March 2013, Kishinev, Republic of Moldova; Available in Russian at unstats.un.org/unsd/class/intercop/training/ece13/ac258-P1-r.PPT; Available in English at unstats.un.org/unsd/class/intercop/training/ece13/ac258-P1-e.PPT

questionnaire for these countries, although there may be technical differences in accounting for costs of goods and services at the level of categories.

2.3 Development of a questionnaire on expenditure of goods and services based on COICOP

28. Compliance of classifiers of individual consumption by purpose provides a solid basis for the development of uniform questionnaires. In general, the questionnaires could be fully based on the COICOP sections, however, further aggregation of the individual sections is recommended. Below, creation of questionnaires sections around nine modules of expenditures on goods and services is suggested, based on 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

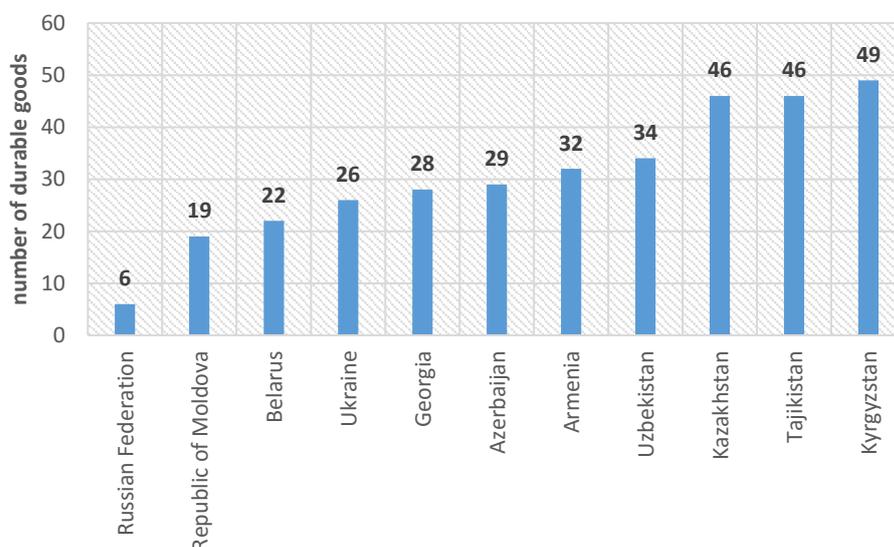
29. These modules should be complemented by modules on other expenses, such as:

- Module X. Other non-financial expenses
- Module XI. Taxes, dues and other charges
- Module XII. Capital investment
- Module XIII. Various financial expenses

2.4 Durable goods

30. All questionnaires contain separate modules for registering durable goods. The number of durable goods varies considerably across countries – from 6 in Russian Federation to 50 in Kyrgyzstan (see Figure 2).

Figure 2
Number of durable goods in sample lists



31. Two main reasons determine such a large variation:

- 1) **Different aggregation of durable goods.** In some countries, the object that has 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 “a single-chamber refrigerator” and “two-chamber refrigerator” in the Tajik list, while 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) **Span of durable goods varies.** Some countries use very broad list of durable goods, which include a large number of different types of furniture and even musical instruments.

32. 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.

33. Most countries (except Russian Federation) use questionnaires that include another 20 items in addition to the items described above. These goods are listed in Table 2.

Table 2
Most common durable goods

Durable goods	Variations
Music centre	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 ⁴	
Microwave	
Motorcycle	Scooter, moped,
Scooter	Motorized bicycle, snowmobile
Bicycle	
Laundry washer	Automatic laundry washer
TV set	Colour /black-and-white
PC computer	
Laptop	Laptop, Net-book, other mobile computers
Fixed location phone	
Mobile phone ⁵	
(Motor) car	

34. 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 names of goods that are inherent to 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 to 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, and others in their lists, related to the fact that many households are occupied in agricultural activity. Taking into account that all countries have a module on agriculture or household plot of land, it makes sense to move this issue there.

35. 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

⁴ Except Azerbaijan.

⁵ Republic of 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.

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.

2.5 Consumption or expenditures?

36. As mentioned above, most countries measure poverty using either consumption or expenditures approach. The major difference between the two approaches with respect to questionnaires is how the diaries (related to food products) are organized. Most of the countries' diaries contain either separate sections (Armenia, Belarus, Kyrgyzstan and Uzbekistan) or a question (Azerbaijan and Republic of Moldova) on the quantity of food (number of food products) consumed during a certain period. Some countries have questions only about expenses on food products without clarifying the consumed quantity (Georgia, Kazakhstan, Tajikistan and Ukraine), meanwhile asking about the purpose for which the product was purchased. The Russian questionnaire does not have diaries.

37. Creation of a unified methodology for defining poverty in all countries would require a separate study of questionnaires. For poverty assessment on consumption, it will be necessary to include questions on the number of food products at the beginning and at the end of the period. Another option is to include a separate section on the quantity of food products consumed during a certain period. We must note however that it requires an additional effort from both respondent and interviewer to monitor and assess this quantity in a reliable way.

3 Analysis of Household Budget Survey income modules

38. Analysis of the country households questionnaires showed that the number of major income items varies from 13 to 42 (approximately, since there are 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.

39. In questionnaires, incomes are recorded also in-kind. However, neither the cost assessment of this product nor its account in the total cost of product is specified very clearly. Some questionnaires are designed in such a way that the individual questionnaires are used to assess income (such as wages), while household questionnaires are in general used more in relation to social benefits.

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

41. 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.

- 1st level incomes -> Section
- 2nd level incomes -> Group

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

43. In the questionnaires, incomes from employment, property, sales, and various allowances and transfers are generally 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.

44. 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 a nature at this level. This pertains in principle to government transfers that are provided in rather aggregated form.

45. Some confusion of income types is also observed at section level. 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.

46. As for the second level, i.e. the level of groups, the problems are as follows:

1. The number of second level indicators on certain types of incomes is not enough. In some countries there is simply no sufficient number of indicators that would allow determining accurately the methodological features of specific indicators. For example, in Azerbaijan, the wages are not divided into groups. Here, one must instead 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.

47. In fact, one of the problems that affect the typology of incomes is the lack of a uniform classification based on selected criteria. Three possible approaches to the creation of such a classification are provided below.

3.1 A unified approach to the classification of incomes

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

49. First, a single classification should take into account all incomes and include at the section level:

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

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

3.1.1 Primary incomes (incomes from factors of production)

51. The factors of production include labour, land and capital, meaning that income from labour, land rent and 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 by production factor

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

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

Table 4
Harmonization of primary incomes

Section code	Name of incomes and group codes
1. Incomes from employment	1.01. Wages and other incomes from employment
2. Incomes from 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 activities	3.01. Income from agricultural activity

53. When harmonizing the income encodings, it is important to take the following into account. First, in 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. Most questionnaires also ask in 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, as most of the country questionnaires account for incomes from agriculture, which reflects the importance of this activity for the national economy, this section in the questionnaires is worth keeping. However, one should make sure to exclude the double reflection of these incomes in other sections. Finally, other activities (except agricultural) may also be noted in the country questionnaires. Accordingly, they have to get the encoding from 3.02 and onwards.

3.1.2 Incomes at the redistribution stage

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

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

1. **Pensions:** includes all pensions: labour, social, on merits (privileges).
2. **Social benefits:** includes all benefits related to social assistance to the poor and vulnerable households, such as:
 - a. unemployment (preservation of skills);
 - b. poverty (targeted benefits and reimbursements);
 - c. invalidity;
 - d. due to a breadwinner's death.
3. **Subsidies:** includes targeted subsidies on education, health and housing conditions. As a rule, the questionnaire should contain questions that allow for evaluation of the investments in human capital and of the housing conditions.
4. **Benefits:** represents an evaluation of the benefits received by households, depending on the categories of the population, merits and awards.
5. **Social rehabilitation:** contains all the additional funds received as a result of migration, reallocation, in the framework of refugee status, etc.

56. Depending on the status of the payer or recipient, the following criteria for classification can be identified:

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 of various types (medicines, vouchers, coal, etc.), sponsorships (e.g. for the talented), gifts, etc. Other households also provide material assistance of various types; provide remittances from abroad, pay alimony, etc.
2. **Recipients:** specific adult member of the household, the entire household, including children (e.g. payments for children). The division of recipients will allow distinction between the income of each individual household member and the incomes of the entire household, which will strengthen the analytical capacity of surveys.

57. Thus, the incomes received at the stage of redistribution 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 Table 5, an exemplary

classification of such incomes is given. It is based, for example, on the nature of purpose of allowance or payment and, as noted, on the payer or recipient of the income. Based on the complexity of the classification structure, it is necessary to provide a sufficiently 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 from the budget as well as from 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 also be stressed that these subsidies are 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 the state for certain services	7.01. The monetary value of benefits provided by the 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, payments to displaced due to a conflict persons, 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	The categories of transfers should be the same as in the case of transfers from the state.
10. Social transfers from households	10.01. Payments related to poverty 10.02. Payments for	The categories of transfers should be the same as in the case of transfers from the state.

	disability 10.03. Payments related to unemployment 10.04. Other benefits 10.05. Subsidies for payment of services 10.06. Remittances from abroad 10.06. Other subsidies	
--	--	--

58. This classification is a preliminary nature and needs further updating. For example, payers could be included not as separate sections, but allocate them at the group level, and then the poverty benefits can be divided into benefits from the state and benefits from organizations. Some further questions needs resolution. For example, if benefits are allocated to the poor, then in which of the indicated sections, 4 or 6, should it be included? In any case, the authors recommend conducting a discussion of this approach regarding this section in particular and carrying out an update in the light of the gained experience of the national statistical offices.

3.1.3 Use of the accumulated incomes or changes of the financial status

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

Table 6
Harmonization of use of the accumulated incomes

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

4 Household Budget Survey assessment of deprivations

60. This section provides analysis related to assessment of deprivations, which is one of the multidimensional poverty measurements. The purpose of the analysis is to understand the extent to which the countries' questionnaires contain questions on the number and type of deprivations faced by the household members. In previous sections, the Report discussed questions related to the composition of expenditures and income, based on which one can infer information about deprivations, while in this section the analysis covers questions that can measure the deprivations directly.

4.1 Comparison with EU-SILC deprivation-related variables

61. The Methodological guidelines and description of EU-SILC target variables (2017 operation)⁶ were used to provide a comparative analysis of questions related to deprivation. The document describes in detail all collected target variables in the framework of an EU-SILC survey. The variables are segmented into different modules, including social exclusion and material deprivation modules. Table 7 and Table 8 present the EU-SILC deprivations-related variables by modules.

Table 7
EU-SILC deprivations-related 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
Housing and non-housing related arrears

⁶ Methodological Guidelines and Description of EU-SILC Target Variables: 2017 operation (Version September 2016), - DocSILC065 (2017 operation), Eurostat, European Commission.

Arrears on mortgage or rental payments
Arrears on utility bills
Arrears on hire purchase instalments or other loan payments
Physical and social environment
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 (Version November 2016), [https://circabc.europa.eu/webdav/CircaBC/ESTAT/eusilc/Library/guidelines_questionnaire/2017%20Operation%20Guidelines/DOCSILC065%20operation%202017-%20NOV\(0\).pdf](https://circabc.europa.eu/webdav/CircaBC/ESTAT/eusilc/Library/guidelines_questionnaire/2017%20Operation%20Guidelines/DOCSILC065%20operation%202017-%20NOV(0).pdf)

Table 8

EU-SILC deprivations-related variables: Material deprivation

Financial stress
Replacing worn-out furniture
Basic needs
Replace worn-out clothes by some new (not second-hand) ones
Two pairs of properly fitting shoes (including a pair of all-weather shoes)
Leisure and social activities
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
Durables
Internet connection for personal use at home

Source: EU-SILC Methodological Guidelines and Target Variables, 2017 Operation (Version November 2016), [https://circabc.europa.eu/webdav/CircaBC/ESTAT/eusilc/Library/guidelines_questionnaire/2017%20Operation%20Guidelines/DOCSILC065%20operation%202017-%20NOV\(0\).pdf](https://circabc.europa.eu/webdav/CircaBC/ESTAT/eusilc/Library/guidelines_questionnaire/2017%20Operation%20Guidelines/DOCSILC065%20operation%202017-%20NOV(0).pdf)

62. When measuring deprivations, it is necessary to understand whether the household has an adequate access to basic services. This includes access to adequate healthcare and primary education. The same applies to the housing conditions, which include having access to clean water and sanitary means, ability to keep house adequately warm and ability to renovate dilapidated dwelling. We therefore include these variables as deprivation-related ones (see Table 9).

Table 9
Access to basic services

Housing conditions
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
Access to healthcare and adequate nutrition
Main reason for unmet need for medical examination or treatment
Frequency of eating fruit
Frequency of eating vegetables or salad
Access to education
Main reason for not studying/attending school if applicable

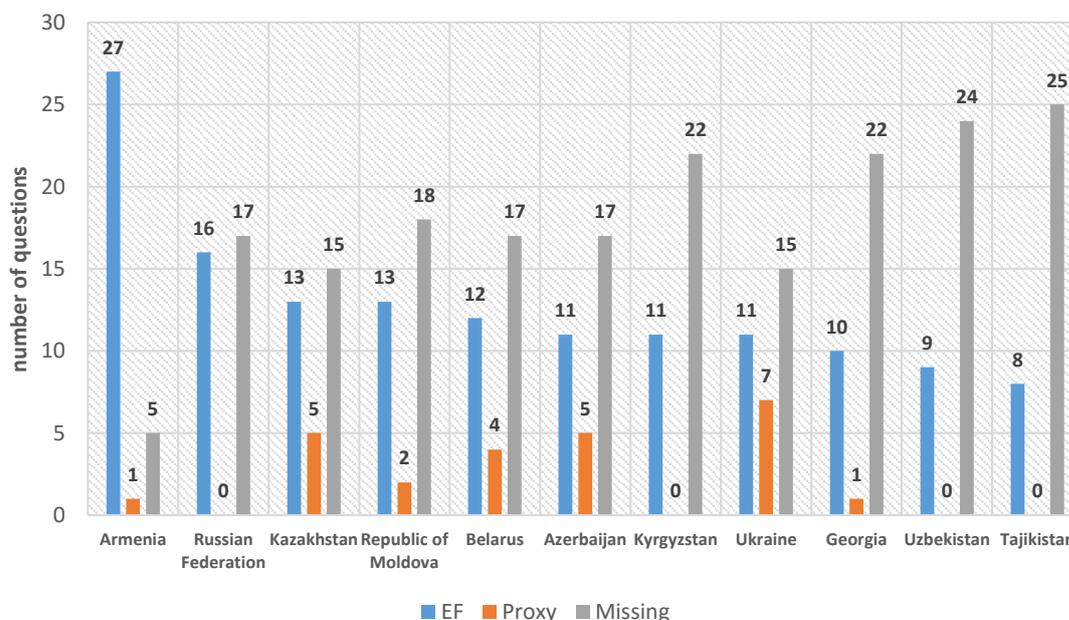
Source: HBS questionnaires.

63. In the analysis of the questionnaires, two groups of questions were considered:
- Questions that contain the exact formulation of the variable, and
 - Questions that contain a slightly different formulation of the variable, while having the same meaning
64. An example of exact formulation of the variable “Ability to make ends meet” was the question asked in the Russian Federation’s questionnaire: “Considering all incomes of the household members is your household able to make ends meet, i.e. pay for all daily needs?”
65. Examples of slightly different formulations, which were nevertheless considered applicable to this variable, were the following questions: “How would you describe the social status of your household?” (e.g., Ukraine, Belarus), “How would you describe the living conditions of your household?” (e.g., Azerbaijan and Republic of Moldova,). 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.
66. Another example of exact and different formulations would be with the variable “Capacity to face unexpected financial expenses”. While the Armenian questionnaire contains a question with the exact formulation of this variable, “Can your household afford an unexpected required expense of 45.000 dram and pay through its own resources?”, the Kazakhstani questionnaire asks whether “The household has savings”, which could be considered as a proxy for identifying the ability of a household to face unexpected expenses.
67. Finally, the third interesting example is associated with the access to healthcare, i.e. “Main reason for unmet need for medical examination or treatment”. Kyrgyzstan’s questionnaire asks: “Why did you refrain from obtaining medical services?”, which was

considered as the exact formulation. The Moldavian question “Provide a reason why you do not have a medical insurance” was considered as a question with approximate meaning.

68. Figure 3 shows a comparative analysis of deprivations-related questions among countries. “EF” indicates exact formulation, “Proxy” – approximate formulation, “Missing” means that no question related to the particular deprivation variable was found.

Figure 3
Number of deprivations related questions by countries’ questionnaires



Source: Own analysis based on HBS questionnaires.

Note: EF – exact formulation, Proxy – approximate formulation

69. An analysis of the formulations suggests that the Armenian questionnaire leads in number of exact formulations, describing the deprivations related EU-SILC variables – it contains 27 out of selected 33 deprivations. Azerbaijan, Belarus, Kazakhstan, Russian Federation, Republic of Moldova, and Ukraine also have relatively large number of questions on deprivations and social exclusion - 15-18 EFs and Proxies out of selected 33. Georgia, Kyrgyzstan, Tajikistan, and Uzbekistan have less developed modules on deprivations, with more than 22 variables missing in their questionnaires.

70. The comparisons across countries showed the following findings regarding the questions on deprivations (see Table 10 for details):

- All of the HBS questionnaires have lists of durable goods, and all of them contain five items that are used in the EU-SILC methodology (telephone, colour TV, computer, washing machine and car). They do not have separate questions on each item and they usually ask the respondent to tick a box with the corresponding durable item from the list.
- Nine out of 11 questionnaires (Russian Federation and Belarus being the exceptions) have questions on shower/bath and indoor flushing toilet facilities, as well as on the number of rooms available to household members.

- 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 inquire, to a certain extent, on access to healthcare and five ask about access to education.
- Six countries aim at identifying whether a household has an internet connection at home.
- Five countries try to identify whether respondents have experienced any payments in arrears on utility bills.
- Other questions, especially on material deprivations, are rarely asked in the questionnaires. There are at most four countries willing to assess other kinds of deprivations.

Table 10

Number of countries' questionnaires with questions on deprivations

Social exclusion	#	#	#
	EF	Proxy	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
Material deprivation	#	#	#

	EF	Proxy	Missing
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
Additional variables	# EF	# Proxy	# Missing
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 HBS questionnaires.

4.2 Additional questions on self-assessment of poverty

71. Several HBS questionnaires have modules on self-assessment of poverty, in particular:

- Armenia: Social exclusion module;
- Azerbaijan: Section on subjective evaluation;
- Belarus: Households living standards questionnaire;
- Georgia: Section on subjective evaluation of poverty;
- Kazakhstan: Questionnaire on living standards;
- Republic of Moldova: Section on living standards assessment;

- Ukraine: Self-assessment of incomes questionnaire;
- Russian Federation: Section on household's financial conditions.

72. Only Kyrgyzstan, Tajikistan and Uzbekistan do not have separate sections and/or questionnaires on self-assessment of poverty. More specifically, Tajikistan and Uzbekistan do not have any questions in this regard, while the Kyrgyz HBS questionnaire asks for the minimal income necessary to make ends meet.

73. The majority of questions on deprivations were extracted from the aforementioned self-assessment sections. However, there are a few remaining questions which were not categorized as deprivations-related, but that are still worth mentioning. For example, the questionnaires of Belarus, Kazakhstan and Ukraine contain a 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 and Ukraine asks about economic predictions. Almost all of the self-assessment sections have questions regarding today's living conditions compared to the previous year. They also ask for predictions of how the situation will change in the next period.

74. The current structure of HBS questionnaires in EECCA countries makes it difficult to create a complete unified questionnaire on deprivations. Two sections can certainly 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 questionnaire. In general, however, only few of the questionnaires are well developed, have a number of constructive deprivations-related questions and can become useful tools for measuring multidimensional poverty (e.g., the questionnaires of Armenia, Azerbaijan, and Kazakhstan). The majority of HBS questionnaires still lack questions on deprivations and social exclusion, especially those related to leisure, social activities and environment, as well as questions on basic needs (clothes and meals). These questions can be partially addressed by using data from expenditure modules, but they could not provide a clear picture on deprivations or a full reflection of the household's perception of deprivations.

Conclusion

75. Analysis shows that the HBS questionnaires in EECCA countries can be harmonized to some extent. The majority of countries use the COICOP classification for expenditures encoding, whereas many of the expenditures sections overlap with each other. Differences in countries' COICOP classifiers do not affect the encoding process up to the third level of codes. Countries that are not using COICOP classifiers have similarities in questionnaires' sections, which allows for possible harmonization in the future.

76. Twelve COICOP sections can be aggregated to lower the number of sections and determine the structure of a unified HBS questionnaire. It is proposed to use nine COICOP sections. It is also proposed that the unified questionnaire contains additional sections, such as expenditures on taxes, other mandatory payments and other financial expenses, etc. Currently, all countries' HBS questionnaires have these sections. It is only necessary to align the classifiers.

77. Absence of unified income classification poses certain problems for harmonization. Although countries try to structure income flows in certain ways one can say that differences among countries are observed for each category and subcategory. Adoption of a unified classification can address the problem of harmonization. It is possible to consider several approaches for a unified income classification, which should be further discussed with national statistics offices.

78. Although most of the HBS questionnaires attempt to assess different types of deprivations, the development of a unified questionnaire on deprivations is challenging. EU-SILC derivations-related questions could serve as a base for such a questionnaire, taking into account country-specific characteristics.

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)

Annex 3. Comparison of deprivations related questions among questionnaires based on deprivations related variables requested by Eurostat 2017

Eurostat Variable	Azerbaijan	Armenia	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Republic of Moldova	Russian Federation	Tajikistan	Ukraine	Uzbekistan
Social exclusion/Non-monetary household deprivation indicators											
Capacity to afford paying for one week annual holiday away from home		yes	yes				yes			Is your HH able to save money for vacation?	
Capacity to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day	Have you experienced any difficulties in covering: food, clothing, utility, health, loans?	yesat least once a week?					yes		How often your HH can afford hot meal? Are there situations when HH member does not eat at all during the day due to absence of money?	
Capacity to face unexpected financial expenses		yes	yes		Do you have savings?					Is your HH able to save money?	
Do you have a telephone (mobile phone)?	list of durable goods										
Do you have a color TV?											
Do you have a computer?											
Do you have a washing machine?											
Do you have a car?											

Eurostat Variable	Azerbaijan	Armenia	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Republic of Moldova	Russian Federation	Tajikistan	Ukraine	Uzbekistan
Ability to make ends meet	How would you describe the living conditions of your household?	yes	How would you describe the social status of your household?	Based on household income, how would you evaluate the economic state of your household? According to the household property, which of the below listed categories does your family belong?	How would you describe the social status of your household?		How would you describe the social status of your household?	yes		How would you describe the social status of your household?	
Lowest monthly income to make ends meet			yes	yes		yes	yes	yes		yes	
Material deprivation/Financial stress											
Replacing worn-out furniture		yes						yes			
Social exclusion/Housing and non-housing related arrears											
Arrears on mortgage or rental payments		yes						yes			
Arrears on utility bills	Does your HH have any unpaid bills for utility services?	yes	yes				yes	yes			
Arrears on hire purchase instalments or other loan payments	Have you experienced any difficulties in covering: food, clothing, utility, health, loans?	yes					yes				

Eurostat Variable	Azerbaijan	Armenia	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Republic of Moldova	Russian Federation	Tajikistan	Ukraine	Uzbekistan
Social exclusion/Physical and social environment											
Problems with the dwelling: too dark, not enough light		yes			yes						
Noise from neighbours or from the street		yes			yes						
Pollution, grime or other environment problems		yes			How satisfied are you with the environmental conditions of your neighbourhood?						
Crime, violence or vandalism in the area					How safe is your neighbourhood? Have any of your HH members suffered from crime, robbery etc.?						
Material deprivation/Basic needs											
Replace worn-out clothes by some new (not second-hand) ones		yes	yes					yes			
Two pairs of properly fitting shoes (including a pair of all-weather shoes)		yes	replace worn-out shoes					yes			

Eurostat Variable	Azerbaijan	Armenia	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Republic of Moldova	Russian Federation	Tajikistan	Ukraine	Uzbekistan
Material deprivation/Leisure and social activities											
Get-together with friends/family (relatives) for a drink/meal at least once a month		yes					yes	yes			
Regularly participate in a leisure activity		yes						yes			
Spend a small amount of money each week on yourself		yes						yes			
Material deprivation/Durables											
Internet connection for personal use at home	internet modem	yes		yes	yes					yes	yes
Additional deprivations											
Number of rooms available to the household	yes	yes	Does your HH lives in adequate dwelling?	yes	yes	yes	yes		yes	yes	yes
Leaking roof, damp walls/floors/foundation, or rot in window frames or floor		yes			If you are not satisfied with your housing conditions it is because: it has to be renovated						

Eurostat Variable	Azerbaijan	Armenia	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Republic of Moldova	Russian Federation	Tajikistan	Ukraine	Uzbekistan
Ability to keep home adequately warm	Which of the heating sources are used?	yes	yes		yes						
Bath or shower in dwelling	yes	yes		yes	yes	yes	yes		yes	yes	yes
Indoor flushing toilet for sole use of household	just toilet	yes		yes	yes	yes	yes		yes	yes	yes
Main reason for unmet need for medical examination or treatment	yes		Is your HH able to afford medicine?		yes	yes	Do you have medical insurance, and if not, why?			yes	
Frequency of eating fruit										Are there situations when you cannot give children fruits and vegetables due to lack of money?	
Frequency of eating vegetables or salad										Are there situations when you cannot give children fruits and vegetables due to lack of money?	

Eurostat Variable	Azerbaijan	Armenia	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Republic of Moldova	Russian Federation	Tajikistan	Ukraine	Uzbekistan
Access to education	yes	Does your child attend any pre-school institution (including a baby-sitter)? If not why what is the main reason for non-attendance?	yes			yes				Are there situations when you could not afford preschool education for kids?	

Note: “yes” means that questionnaire has question with an exact formulation related to a particular variable; blank cell indicates that corresponding question is missing. Any other text represent questions with different formulations, but related to particular deprivation variables.