

EFIN Research  
Working Group on Over-Indebtedness

## Indicators to monitor over-indebtedness



European Financial Inclusion Network

**EFIN Working Group on Over-Indebtedness - Indicators to monitor over-indebtedness** - December 2016

# Table of Contents

- Why does household debt matter?.....3
- Why do we need indicators?.....3
- What do we need to know about indebtedness?.....3
- How can the questions about indebtedness be answered?.....5
  - What is the level of indebtedness?.....5
  - What are the symptoms of over-indebtedness?.....5
  - What are the products/services which drive financial difficulties? .....6
  - What are the companies that generate the higher level of financial difficulties ?.....6
- Potential data sources for monitoring indebtedness .....6
  - Administrative data.....7
  - Population survey data.....9
- Ways forward.....9
- Annex 1 - Methodology and analysis of EU SILC 2008 Module.....11
- Annex 2: Recommendations to the Eurostat SILC module.....27

Participants<sup>1</sup>: Justyna Pytkowska (coordinator – Microfinance Centre), Olivier Jérusalmy (EFIN), Andrea Falanga (EFIN), Beata Świecka (Szczecin University)

## Why does household debt matter?

Indebtedness is a complex social and economic phenomenon which affects a large number of people and has impacts on the private life of individuals, on their well-being and their ability to contribute to society.

Debt can be both beneficial and harmful for the households - it can lead to improvements related to consumption smoothing and resource allocation, but can also be the reason of poverty and social exclusion, it can adversely impact mental and physical condition, and also disrupt family life.

The complexity of over-indebtedness makes it hard to define, approach and measure. This initial difficulty is sometimes aggravated, at a second stage, by individual psychological strategies (often non conscious) that make people hide and bear the related stress.


Besides the challenges that individual households face, and consequently the policy issues that governments, which are called upon to resolve these issues, have to handle, household debt matters for also in relation to national macroeconomic performance. For instance, rising levels of consumption expenditure by households generally stimulate the economy, whereas slower growth or declines in aggregate consumption expenditure by households have a dampening effect on economic growth.

Therefore, we need to draw attention to overhang debt at a macro level, in terms of financial burden at an individual level and also as an important variable in determining the contemporary human condition.

## Why do we need indicators?

Indicators are needed to monitor debt levels and inform the policy makers in the process of developing policies to prevent over-indebtedness (ex-ante measures), but also to support already over-indebted households in resolving their problems (ex-post). The indicators are also needed by a variety of institutions (public, non-governmental and private) to design programs and interventions protecting the most vulnerable social groups.

---

<sup>1</sup>  The work on this publication has received financial support from the European Union Programme for Employment and Social Innovation "EaSI" (2014-2020). For further information please consult: <http://ec.europa.eu/social/easi>. The information contained in this publication does not necessarily reflect the position or opinion of the European Commission.

In order to reduce the scale of over-indebtedness and protect households and individuals from becoming over-indebted in the future, it is important to well identify the causal drivers of over-indebtedness and understand the process of falling into debt-related problems. Over-indebtedness affects unevenly different social groups, is more severe in particular countries and regions, and among users of different types of products; it is important to well understand these difference in order to design the most appropriate solutions.

## **What do we need to know about indebtedness?**

There are many questions the answers to which will help to diagnose the problems and also see the symptoms of the upcoming difficulties.

The four major questions include:

- **What is the indebtedness level?**

The answer to this question is crucial for assessing the scale of the problem in the population. What is the debt load of the consumers in terms of the number and value of credits, what types of loans and credits are most often used, what is the scale of arrears - these types of data are needed for the assessment of the scale of credit use, debt levels and over-indebtedness.

- **What are the symptoms of over-indebtedness?**

Households react to the over-indebtedness problems in many different ways. While delays in loan repayment seem the most obvious one, many more over-indebted households in fact are on time with the repayment schedules while falling behind on other payments. The arrears on rent or bills may indicate that the household is short of money but takes priority in repaying credit engagement over other commitments. There are also households which make other sacrifices, be it reduced food consumption.

- **What are the products/services which drive financial difficulties?**

In the fight against OI, it will be very useful to identify the products and services that cause a higher than market average level of arrears and defaults.

Identification of such products can be an effective tool for understanding the marketing approaches, distribution techniques, the terms and conditions related to such products and services that are not understood by the clients, or that are not adapted to their needs. This should be an essential tool for improving and adjusting appropriately the market conduct.

When analyzing the products and services that are more likely to generate financial difficulties, it's important not to focus only on arrears on credit, but also on arrears linked to other forms of contract (e.g. utility bills) . This dimension might be very helpful to better understand what are the existing arrears and debts in the “non-credit” industries. This is an important information considering the financial and economic crisis that has had a very bad impact on the purchasing power of many EU citizens<sup>2</sup>.

- **What are the companies that generate the higher level of financial difficulties ?**

This question is complementary to the previous one as it brings another very useful information. Once the products and services that generate higher than average level of arrears and defaults are identified the issuers of these products should also be made known.

## **How can the questions about indebtedness be answered?**

Taking into account the above considerations and find answers to the four main questions. we propose to use a set of core indicators monitored on a regular basis and additional indicators monitored every few years.

The set of core indicators should contain a limited number of ratios in order to follow the trends in credit use and in order to assess the scale of over-indebtedness as well as to detect the symptoms of the problem. We propose the following set of the core indicators:

### ***What is the level of indebtedness?***

Indicator	Explanation
<b>Presence of credit:</b>	
Share of population with credit	% of adults with at least one loan or credit from a financial institution
Number of loans/credits per borrower	Number of loans/credits per borrower
Share of population with each type of credit	% adults with each type of credit (mortgage for main dwelling, for other than major dwelling, non-mortgage credit, overdraft, credit card, hire-purchase, other

2 Eurostat - GDP per capita in PPS, data available :

<http://ec.europa.eu/eurostat/web/purchasing-power-parities/data/main-tables>

**EFIN Working Group on Over-Indebtedness - Indicators to monitor over-indebtedness** - December 2016

	loans)
<b>Value of loan/credit:</b>	
Value of all credits per borrower	Value of the sum of outstanding amounts of all loans and credits
Debt service to income ratio	Value of monthly loan/credit repayments to monthly gross income

### ***What are the symptoms of over-indebtedness?***

Indicator	Explanation
<b>Presence of arrears:</b>	
Share of population with credit arrears	% adults with unpaid balance on any type of loan/credit
Share of population with arrears on non-credit payments	% adults with unpaid balance on non-credit commitments (rent, utilities, other bills)
<b>Value of arrears:</b>	
Value of arrears on loans/credit repayments to income	Value of unpaid balance on loans/credits to monthly gross income
Value of arrears on non-credit debts to income	Value of unpaid balance on non-credit commitments (rent, utilities, other bills) to monthly gross income
<b>Length of arrears:</b>	
Length of arrears on credit payments	Number of days behind the repayment schedule on the most overdue credit commitment
Length of arrears on bills and other non-credit payments	Number of days behind the deadline on the most overdue commitment
<b>Financial difficulties:</b>	
Share of the population unable to make ends meet	% of adults with sufficient financial resources to cover living expenses and meet current financial obligations
Share of the population feeling at	% of adults who feel at risk of being

risk of over-indebtedness	over-indebted
---------------------------	---------------

***What are the products/services which drive financial difficulties?***

Indicator	Explanation
<b>Arrears:</b>	
Share of population with arrears on different types of loans/credits	% adults with unpaid balance on each type of loan/credit: mortgage for main dwelling, for other than major dwelling, non-mortgage credit, overdraft, credit card, hire-purchase, other loans
Value of arrears on different types of loans	Value of unpaid balance on: mortgage for main dwelling, for other than major dwelling, non-mortgage credit, overdraft, credit card, hire-purchase, other loans

***What are the companies that generate the higher level of financial difficulties ?***

Indicator	Explanation
<b>Arrears:</b>	
Share of population with arrears on loans/credits from different providers	% adults with unpaid balance on loans/credits issued by different providers ( by provider name)
Value of arrears on loans/credits from different providers	Value of unpaid balance on loans and credits from different providers (by provider name)

**Potential data sources for monitoring indebtedness**

Data on various aspects of indebtedness in the EU countries exist on the national level as well as on the EU level. Two major types of information sources can be distinguished:

- administrative data

**EFIN Working Group on Over-Indebtedness - Indicators to monitor over-indebtedness** - December 2016

- population survey data

### **Administrative data**

In every country institutions operating in the financial markets - banks and non-bank financial institutions - possess administrative data about loans and credits issued to their clients and these data are further compiled by credit registers/bureaus which put together credit histories for each user of financial services.

Using administrative data can be a very effective way to monitor the level of credit use and measure financial difficulties from the public and private sectors perspective. These data are efficient to answer some of the essential questions, and to give instruments not only to the regulators but also to the industry to improve their practices in a sustainable way. The advantage of the administrative data is in their potential to provide accurate and reliable information as opposed to the survey data which provide self-reported information and thus are likely to underestimate the scale of the phenomenon.<sup>3</sup>

---

3 Brown, Meta, Andrew Haughwout, Donghoon Lee, and Wilbert van der Klaauw. 2011. "Do We Know What We Owe? A Comparison of Borrower- and Lender-Reported Consumer Debt." Federal Reserve Bank of New York, Staff Report no. 523.



Sources of administrative data:

- Public credit bureaus
- Private credit bureaus
- Databases of financial institutions
- Registers of debt recovery companies
- Tax administration records

### **The importance of good quality data from the administrative sources**

The limitation to the administrative data use in assessing over-indebtedness levels is the fragmentation of data. Each credit provider possesses only data concerning its clients. Such data are further compiled by credit bureaus, however, in most countries credit bureaus also fail to provide full coverage of credit engagements in financial institutions as well as the incidence of debts to service providers. Private credit bureaus have better coverage of different types of financial institutions (banks, non-banks) and sometimes also service providers while public credit bureaus are most often limited to financial institutions authorized to grant credit<sup>4</sup>.

Additionally, administrative data also do not provide information about borrowers financial or economic status - in case of most of the countries it is not possible, using only administrative data, to assess the borrowers debt load in relation to income or wealth.

Another issue is access to the administrative data. While public credit bureaus generally exercise a public function by furthering the general stability of the banking and payment system, their scope also covers monitoring and preventing over-indebtedness, private credit bureaus are neither controlled nor monitored by public bodies and are also not accountable to the financial service regulators, central banks or other state institutions.

Moreover, different countries use different definitions which makes the administrative data difficult to compare on the EU level. For example the arrears can be defined as unpaid dues after one day or 30 days or even 60 or more days after the repayment day.

---

4 Public credit bureaus typically collect information from regulated financial institutions providing credit while private credit bureaus tend to have wider coverage of different types of financial institutions but often times the reporting to them is on voluntary basis (Feretti F. "Credit Bureaus Between Risk-Management, Creditworthiness Assessment and Prudential Supervision" EUI Working Papers LAW 2015/20)  
**EFIN Working Group on Over-Indebtedness - Indicators to monitor over-indebtedness** - December 2016

The efforts to harmonize the format of credit data have materialized in the project of the European Central Bank called "AnaCredit"<sup>5</sup> - Analytical Credit Dataset implemented in the countries of the Euro area. The ECB drafted a road map of how to develop a central credit register for all member states in the euro area to collect information on credit above the threshold of 25,000 Euro issued to legal entities and individuals (only mortgage credit). Once the system becomes operational, credit bureaus reporting to it will use the same set of indicators and will use uniform definitions allowing for the international comparisons of the level of indebtedness. Even though the coverage of AnaCredit does not allow for a complete analysis of the indebtedness of individuals because of the reporting thresholds it introduces the reporting standards that credit bureaus in the Euro area will be obliged to follow.

### **Population survey data**

A lot of information related to indebtedness is collected regularly through population surveys in the EU countries and compiled at the EU level. Many other surveys are also conducted on the country level at an ad-hoc basis.

The most important databases which include survey data relating to indebtedness include:

- Eurostat SILC module annually collects information on financial difficulties, including arrears, perception of financial difficulties, while the ad-hoc module (2008) on over-indebtedness provided information about the particulars of credit use and arrears.
- European Central Bank, through its bi-annual Household Finance and Consumption Survey collects information in Euro area countries about types of credits used, debt load and repayment burden in relation to income and assets.
- Eurobarometer provides some information on the perception of risk of falling into over-indebtedness.

### **The importance of good quality data from surveys**

There are issues relating to the precision of the estimation of the self-reported data by survey respondents, especially when it comes to the numerical data. The reliability of the objective indicators such as value of credit or income collected through a survey is often questionable, as people tend to underestimate their debt engagements and often tend to hide real income levels.

On the other hand, surveys are invaluable for collecting subjective information on practices, habits, attitudes, views, perceptions, etc. Such information gives

---

<sup>5</sup> more information about the implementation of AnCredit project can be found at: <https://www.bankinghub.eu/banking/finance-risk/analytical-credit-dataset-of-the-ecb-anacredit>

**EFIN Working Group on Over-Indebtedness - Indicators to monitor over-indebtedness** - December 2016

context and understanding that allows for appropriate interpretation of the hard data.

Broadly speaking, when analysing an economic issue with the aim of eventually influencing policies according to the information collected, the quality and reliability of data used is paramount to achieve a good knowledge of the situation and propose appropriate policy measures. This problem features a particular intensity in the case of surveys focusing on a very specific topic, which requires some sort of technical knowledge (e.g. indebtedness and over-indebtedness) and whose respondents are representative of the population in general and may lack the necessary bases (e.g. in terms of financial literacy) to provide significant and correct answers. The EU SILC ad-hoc module on over-indebtedness, in particular, had to face the further challenge of reaching households in all the countries of the EU and adapt the survey questions to the different languages used.

The analysis made by Eurostat in 2010 to assess the research on over-indebtedness, related to the EU SILC ad-hoc module carried out two years before, lists a series of issues that significantly affected the reliability of the survey itself and the cross-country comparability of its outcomes. In some instances the definitions of essential notions for the purpose of the study were difficult to interpret or biased by divergences in national economies and jurisdictions (e.g. “overdraft” may not be associated to the same legal meaning and practical perception in all the EU countries). Moreover, some of the questions of the survey were different from country to country, increasing the difficulties in providing a “fair view” of the situation across geographical areas.

Should the EU SILC ad-hoc module be launched again in the following years, it would be very important that a particular attention and some substantial improvements are introduced in terms of wording of the questions. In particular as many plain and simple notions should be used, giving preference to those which reasonably have a good and easy translation in most EU languages. Moreover, the level of national discretion in determining the questions actually asked should be brought to a minimum, in order to guarantee the maximum possible level of comparability of data collected. More detailed assessment of the EU SILC over-indebtedness module is presented in Annex 1.

Similarly, the regular SILC module of Eurostat which collects information on financial difficulties and arrears would benefit from further refinement. In order to better analyse the situation of the individuals who use loans and credits we propose to include the indicators on the incidence of credit use and to refine the existing indicators so that they provide more information about the payment timeliness of different types of liabilities. More detailed information about proposed amendments to the regular Eurostat SILC module is presented in Annex 2.

## Ways forward

In the absence of one source of good quality and complete set of data to monitor the indebtedness levels we propose a phased approach that will allow for adjusting current data sources to better respond to the questions and gradually introducing new data sources.

### Short-term solutions

The immediate action that will bring an improved thus more informative set of indicators will be the adjustment of a few indicators in the Eurostat's SILC module. A few adjustments of the indicators already collected by the regular SILC survey and the additional few new ones will allow for monitoring most of the indicators in the core set presented above.

### Mid-term solutions

The mid-term solution is the in-depth survey carried out periodically which will analyse the complex aspects of credit use, the repayment performance, financial performance including timely meeting all financial obligations, financial inclusion. The study, similar to the Eurostat SILC module on over-indebtedness should be conducted every 3 to 5 years to confirm or reject the assumptions on the scale of over-indebtedness and the risk made on the basis of the regular monitoring of the indebtedness indicators in the annual SILC module.

### Long-term solutions

In the long-term data from administrative sources should be made available for monitoring over-indebtedness. As the system of collecting credit data across the EU countries is currently being developed (AnaCredit) we propose to extend its coverage on individuals with all types of loans and lower the reporting threshold to below currently planned 25,000 Euro for individual loans.

We also propose to extend the geographic coverage on the EU countries from outside the eurozone.

# Annex 1 - Methodology and analysis of EU SILC 2008 Module

autors: Nadzeya Sasnouskaya and Olivier Jérusalmy (EFIN)

EU SILC 2008 was designed as an attempt to identify households which are over-indebted by collecting data on the different forms of credit which they have outstanding, the extent to which they are in arrears in meeting the servicing costs of these and whether or not the arrears in questions are due to the financial difficulties of meeting these costs.

Although this was the aim of the module, however, differences between countries:

- in the form in which the questions were asked in practice;
- in the way financial service providers market differ;
- in the way financial services products and use differ;

result in serious difficulties in comparing the results between them.

In this study we aim to answer for each question in the EU-SILC 2008 module the following questions:

Generally the distinction is made between the :

- Validity (is measured what is meant) : it refers to the questions primary understanding of respondent;
- Reliability (how reliable (consistent over time and within the population) the measurement is) : the question might have different meanings, refers to different realities so the answers might not be comparable
- Non-response

Moreover, the difficulty with subjective indicators is that they inevitably depend on individual interpretation of terms such as 'difficulty', which is likely to vary both between households within countries and, perhaps even more, between those in different countries, where attitudes and norms can vary. The difficulties of making cross-country comparisons are compounded by the fact that not all Member States chose to follow the suggested form of the questions in conducting the survey.

## **MI010 : Household has a bank current account**

Household has a bank current account - relevant, significant and clear

- the explanation of the "bank current account" is defined as a deposit account offering day-to-day money management facilities such as various flexible payment methods to allow customers to distribute money directly to others. Altogether, this variable has been considered clear and not controversial because a bank current account is a product globally well understood by EU citizens.
- Missing value : the percentage of missing value is very low, less than 1% in all countries (with the exception of Malta and UK) that is why we may consider it to be clear and not ambiguous (should not generate answers that refer to different realities)
- The sample of the filled answers in all countries is higher than 94%, we consider it to be consistent and representative.

**Conclusion: we consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

#### **MI020:Household is overdrawn on one of its bank accounts**

- the definition of the assessment report of the word 'overdrawn = " to maintain a negative balance on one of the bank accounts because of financial difficulties". We consider this explanation to be clear, but it may have a restrictive meaning, because of the mention of 'financial difficulties'. The bank account may be overdrawn because of other reasons, a person may use this tool to manage his finances in absence of financial difficulties. So the respondents may have a negative answer, because they consider themselves not to be in financial difficulty. Therefore, the answers might not allow a perfect comparison.
- Missing Value may give us a measure of clarity of the question, in this case the missing value has a low level less than 1%, that's why we may consider it to be clear ("clear" does not mean "not ambiguous")
- The sample of the filled answers in all countries is higher than 74%, except Bulgaria 20%, Greece 27% and Romania 13% where the not applicable value is rather low and varies from 0.2% to 29.97% in all countries (three exceptions Bulgaria 87% ,Greece 73% and Romania 80%) because of the absence of the bank account.

**Conclusion : we recommend to become a two-step approach. Asking whether person is overdrawn. How often/for how long (=more objective formulation) or reason for being overdrawn (more subjective formulation)**

#### **MI025: Estimated total amount unbalanced on household's banks accounts in classes**

- the formulation causes problems to understand what percentage is meant and provides unreliable estimates. From the comments of the countries, Malta pointed out "the difficulty to quantify the amount".
- Missing plus non applicable value is high-above 85% (exceptions Germany 77% and Slovenia 76%), the reasons that caused such a relevant value: there is no overdraft on one of the bank accounts and the difficulty in understanding the question
- The sample of the filled answers is relatively low, it varies from 0.3% to 14.7%, is not representative of the whole population and it doesn't permit to make a solid and relevant conclusion about the estimated total amount unbalanced on household's banks accounts in EU countries plus Iceland and Norway.

**Conclusion: We consider this variable useful and meaningful but we consider the survey approach not appropriate to collect it in a proper way. We recommend to develop for this type of data an administrative approach. In Belgium, via the public "credit database", it is possible to organise research that cross credit data and tax information via a public data-bank, which guarantees the data protection and privacy.**

#### **MI030: Household has credit card and /or store card(s)**

- the definition given of the assessment report is rather detailed but very long and not easily comprehensible and may lead to confusion, because of the difficulty in understanding of these financial terms or because these financial products are not widely used, as noted by Estonia.
- The number of missing values is very low: the range varies from 0.02% to 6.19% with the distribution of the majority of countries closer to 0.02% -1%
- The response rate is in all countries higher than 94% which is representative for the population

**Conclusion: We consider this variable is interesting, but there is scope for improvement in the wording of the question:**

**on the one hand, the answers look solid and coherent, but it is unclear, because of the complexity of the concepts presented, and the capacity for the respondent to get a clear view in a very short moment, within a rather long questionnaire. Because of these doubts, we are wondering if other wording should have provided stronger results, depending the information really expected : do we want to know if respondents are using "plastic cards", whatever type of uses they have? Do we want to know if they use plastic card for "delayed payment: reported to the next month", or do we want to know if people use plastic card in a "real credit" way, with monthly instalments, or do we want to know if they use credit with variable "monthly**

**instalment / variable amount / variable duration"... Because of these remarks, we recommend to define more precisely the information requested and adjust the wording in the right way.**

**MI040: Household has credit card and /or store card(s) with un-cleared balances**

- The word combination un-cleared balances may be unknown to the respondents, the definition given of the assessment report: 'Un-cleared balance means that the household has not paid in full at the "end of the month" the amount spent or owed with credit/store cards for at least the last 3 months because of financial difficulties" is clear and comprehensible, but the word combination "financial difficulties" should be better defined;
- The number of missing values is close to zero, but the share of respondents declaring that the question is non applicable ranges from 13% to 92%. This percentage seems to be very high if it refers to persons having no credit cards/store cards;
- In the majority of the countries the share of respondents that filled in the answers is relatively low (less than 50%), that doesn't permit to make a meaningful and relevant conclusion about the MEAN value.

**Conclusion: Same remark as for the previous variable: we should clarify what we are looking for: financial difficulties ? Type of use of plastic card "delayed payment or monthly instalment". Because of these issues, we don't consider this variable as relevant and meaningful via this data collection approach. We recommend to check if clear and unambiguous wording are possible to use in the survey OR we recommend to collect this data via an administrative way.**

**MI045: Estimated total amount unbalanced at the last monthly statement on household credit/store cards in classes**

- The formulation causes problems to understand what percentage is meant and provides unreliable estimates. Within the comments of the countries, Malta pointed out 'the difficulty to quantify the amount'.
- The share of missing values is close to zero, the share of non-applicable responses is high- above 90% (exceptions Greece 86%, UK 82% and Iceland 88%), the reasons that caused such a relevant value: the majority has no unbalanced credit/store card so this question was not applicable. For the respondent who gave an amount, there is no guarantee that the answer is of good quality;
- The sample of the filled answers is relatively low, it varies from 0.26% to 9.33%, it is not representative for the total population and this implies that it doesn't permit to make a solid and relevant conclusion about this issue.



**Conclusion: We consider this variable should not be collected via a survey, but via administrative data.**

### **Source of credit and loans**

#### **MI050: Household has credits or loans (other than mortgage for the main dwelling)**

- The definition is clear and comprehensible 'Credit and loans encompasses any commercial credit or loans with planned and scheduled repayments, except mortgage loans for the main dwelling', but " commercial credit" is money issued by a bank to a company and this should be better defined in the given definition. It also excludes credits and loans provided by non-commercial providers, such as public institutions, NGOs, or microfinance institutions.
- The share of missing values ranges from 0 to 5.63 %. This share is low and has no significant impact on the total valuation of the sample;
- The sample of the filled answers in all countries is higher than 94% that is representative of the population

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey, with an adjustment in the wording.**

#### **MI051: Household has mortgage for other than the main dwelling**

- The word 'other' may cause confusion, but from the given definition the meaning becomes clearer 'dwelling which is not the main dwelling (holiday residence, second dwelling...)', more examples might be given of what is a non-main dwelling;
- The share of missing values is very low, namely 0-0.24 %, so the question was clear. The response of the sample ranges among countries from 10.72% to 38.71% (exception Island 70%). The relatively low value may be explained by the presence of high level of not applicability of the question because of the absence of credit or loan except mortgage for main dwelling.

**Conclusion: we consider this variable as relevant and meaningful, but probably not a top priority. If a second wave of this survey is made, to maintain or not this question should be challenged with the legitimate will to make the questionnaire shorter and easier.**

### **MI052: Household has hire purchase instalments (e.g. leasing, car, technical equipment)**

- Hire purchase instalments are understood as loans for specific technical equipment (e.g. cars, motorbikes or other equipment) - the definition is clear, comprehensible and causes no ambiguity;
- The share of missing values is very low, it varies among countries from 0 to 0.09%;
- The sample of the filled answers in all countries is between 10.72% and 41.94% equally distributed among the countries, relatively low range may be explained by the high level of non applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

### **MI053: Household has home-related credit/loans (inventory, domestic appliances, repairs)**

- Home-related credit/loans (inventory, domestic appliances, repairs) are understood as covering inventory type good (equipment for the house, decoration), domestic appliances, minor repairs (major repairs would be included in credit and loan for the main or other dwelling- the definition is clear, comprehensible and causes no ambiguity
- Missing Value is very low, the range varies from 0 to 0.38% with the distribution of the majority of countries closer to 0
- The sample of the filled answers in all countries is between 12.88% and 48.9% equally distributed among the countries, relatively low range may be explained by the high level of non applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: we consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

### **MI054: Household has credit/loans to pay for holidays/leisure**

- Credit/loans to pay for holidays/leisure should be understood usually as means of financing holidays excluding the buying of a second residence (time sharing would however be included here). The definition is clear, comprehensible and causes no ambiguity;

- Missing Value is very low, the range varies from 0 to 0.09% with the distribution of the majority of countries closer to 0;
- The sample of the filled answers in all countries is between 12.88% and 48.9% equally distributed among the countries (with two exceptions Island 70% and Malta 10.72%), relatively low range may be explained by the high level of non-applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: we consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

#### **MI055: Household has credit/loans to pay for education or childcare**

- "Credit/loans to pay for education or child care are usually covering expenses for children studies" the definition is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- The sample of the filled answers in all countries is between 13% and 48.9% equally distributed among the countries (with two exceptions Island 70% and Malta 10.72%), relatively low range may be explained by the high level of non-applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: we consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

#### **MI056: Household has credit/loans to pay for health issues**

- The definition is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- The sample of the filled answers in all countries is between 15.33% and 48.9% equally distributed among the countries (with two exceptions Island 70% and Malta 10.72%), relatively low range may be explained by the high level of non-applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: we consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

### **MI057: Household has credit/loans for investment or business start-up**

- We know that investment is an asset or item that is purchased with the hope that it will generate income or appreciate in the future. We consider that the word 'investment' in the assessment report is too general, we don't know whether they speak about economic or financial investment, as a result it may provide non-precise and unreliable data;
- Missing Value is very low close to 0 in all countries;
- The sample of the filled answers in all countries is between 12.88% and 48.9% equally distributed among the countries (with two exceptions Island 70% and Malta 10.72%), relatively low range may be explained by the high level of non-applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: We consider this variable should be kept with a non-ambiguous wording (credit not dedicated to private use / credit dedicated for more 50 % to professional activities).**

### **MI058: Household has other cash loans (debt conversion, to cover overdraft, credit card and other bills, etc.)**

- 'Cash loans (debt conversion, to cover overdraft, credit card and other bills, etc.) are meant to cover loans for day to day consumption or for the repayment of other debts' - the definition given is a mix of clear and unclear concepts – from a country to another, such cash facilities might be unknown by the respondent.. We are wondering what is the real information studied? It covers also partially other variable already studied (credit card & store card) and therefore might create doubt and confusion for the respondent. Moreover, we consider that it is better not to use words like 'other' and 'etc' and try to give a more precise and vast classification;
- Missing Value is very low close to 0 in all countries
- The sample of the filled answers in all countries is between 12.88% and 48.9% equally distributed among the countries (with two exceptions Island 70% and Malta 10.72%), relatively low range may be explained by the high level of non-applicability of the question to the respondents who don't have the credit or loan except for the main dwelling.

**Conclusion: We consider this variable should benefit from a clearer wording.**

### **MI060: Arrears on other non-housing household bills**

- Household has arrears if an amount owed (bills, rent, credit/mortgage repayment, etc.) was not paid on schedule any time during the last 12 months for financial reasons-general definition, that falls into two distinct categories: non -housing bills and housing-related bills.

### ***Other non-housing household bills***

Other non-housing household bills include bills related to education, health and any other bills not covered by housing-related bills, such as telephone, internet connection or television.

### ***Housing-related bills or payments***

Housing-related bills/payments refer to rent and mortgage repayment for the main dwelling and utility bills for the main dwelling (water, electricity, gas, heating, etc.).

- The definition given is rather long and may lead to confusion. For this reason, we recommend to include a list of different types of bills in the questionnaire of all countries. Moreover, as it was pointed out by Finland : "Our main concern are questions about monetary amounts in arrears, especially what it comes to the data collection unit. Arrears may compose of common household or very personal arrears (e.g. arrears from credits used for personal purchases), and for the latter reason received information cannot be accurate. Dropping these questions or substituting them by ones which are more suitable to a household respondent should be considered;
- Missing Value is very low close to 0 almost in all countries, the percentage of 'not applicable' is quite low varies in range from 0 to 5.89% (the distribution closer to zero), exceptions are : Bulgaria (63%), greece 16.96%, Hungary (79%), Sweden (96%) and Norway (72%);
- As a result, the sample of the filled answers in all countries is high, with the percentage over 83, with the majority of countries concentrated around the value of 88-89%, with the above-written exceptions.

**Conclusion: We recommend to change the wording and propose a large list of type of arrears in a forthcoming EU survey.**

### **MI065: Estimated total amount currently in arrears for other non-housing household bills in classes**

- We consider that these type of information is better to collect from other more reliable sources. Remarks of Slovenia, Slovakia, Finland and Malta ('questions were slightly complicated and respondents found it difficult to quantify the amount in arrears in this way', problems to understand what percentage was meant, 'were regarded as the most sensitive questions) give us the proof of the complexity of the question and the unreliability of the data collected;

- The percentage of 'missing' plus 'not applicable' is quite high above 90% (in Denmark nearly 0%), reason is the non-applicability of the question to the respondents who don't have arrears or no housing bills;
- As a result, the sample of the filled answers in all countries is too low to make any conclusion.

**Conclusions: We don't consider this variable as relevant and meaningful, and recommend not to keep it for a forthcoming EU survey.**

**MI075: Estimated total amount currently in arrears for household housing bills/repayments in classes**

- We consider that these type of information is better to collect from other more reliable sources. Remarks of Slovenia, Slovakia, Finland and Malta ('questions were slightly complicated and respondents found it difficult to quantify the amount in arrears in this way', problems to understand what percentage was meant, 'were regarded as the most sensitive questions) give us the proof of complexity of the question and unreliability of the data collected;
- The percentage of 'missing' plus 'not applicable' is quite high above 90%, reason is the non applicability of the question to the respondents who don't have arrears or no housing bills;
- As a result, the sample of the filled answers in all countries is too low (less than 8%) to make any attendible conclusion.

**Conclusion: We don't consider this variable as relevant and meaningful, and recommend not to keep it for a forthcoming EU survey**

**MI085: Estimated total amount currently in arrears for household other loans and credit repayment in classes**

- As in above questions, here also we encounter the problem of the quantification of the amount of arrears. Moreover 'other loans and credit repayment' may cause difficulty in understanding.

"Other loans and credit repayment are cash loans (other than mortgage repayment for the main dwelling) or hire purchase instalments and the like (e.g. mail order catalogues, car finance, etc.) Minimum credit/store card repayments are also included"

The definition provided is long, not easy to understand, should be simplified by adding a list of the most common cash loans that might be included into this category.

- The percentage of 'missing' plus 'not applicable' is quite high above 90%, reason is the non-applicability of the question to the respondents who don't have arrears or no housing bills
- As a result, the sample of the filled answers in all countries is too low (less than 6%) to make any conclusion

**Conclusion: We consider this variable as not relevant, and recommend not to keep it for a forthcoming EU survey**

**MI090: Major drop in household income during the last 12 months**

- "The income considered is the gross total income of the household"
- The question is clear, comprehensible and causes no ambiguity
- Missing Value is very low close to 0 in all countries (except UK 5.6%)
  - The sample of the filled answers in all countries is high (99-100%), we consider it to be consistent and representative

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

**MI095: Main reason for drop in income**

- The question is clear, comprehensible and causes no ambiguity. In the questionnaire a large list of possible reasons is provided;
- Missing Value is very low close to 0 in all countries
- The sample of the filled answers in all countries is relatively low (less than 32% ), because for more than 68% of the sample respondents the question was not applicable as the respondents don't have any drop in income.

**Conclusion: We consider this variable as relevant and meaningful, but the list of reasons should be adjusted from the survey 2008 experience.**

**MI100: Expectation of financial situation in the next 12 months;**

**do you expect your financial situation:** To improve , To stay about the same, To get worse, Don't know

**Answers are based on the respondent's (subjective) opinion.**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries, with the exceptions of France 3.45%, Finland 2.84% and UK 5.56%;
- The sample of the filled answers in all countries is higher than 94.4%.
- The “don't know” option is close to zero in CZ, FR, MT, NL, DK, PT, FI and its maximal value reaches 28,67% in Sweden.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

**Financial exclusion**

**Reasons why the household does not have a bank current account**

**MI110: Household does not need an account and prefers to deal in cash**

- The question is clear, comprehensible and causes no ambiguity
- Missing Value is very low close to 0 in all countries except Ireland 2.71%;
- Not applicable value is in most countries higher than 68.35% (exceptions are Romania 20.44% and Greece 27.04%) because the majority has a bank account;
- The sample of the filled answers in all countries is lower than 31.65% (with above-written exceptions Romania 79.56% and Greece 72.96%)

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

**MI111: The charges are too high**

- The question is clear, comprehensible and causes no ambiguity.
- Missing Value is very low close to 0 in all countries.
- All countries present the percentage of non-applicable value above 90% with two exceptions : Bulgaria (81%) and Romania (79%), as a result the sample of the filled answers in all countries is relatively low, it is below 21%.



**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

**MI112: There is no bank branch near where household lives or works**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- All countries present the percentage of non-applicable value above 90% with two exceptions : Bulgaria (81%) and Romania (79%), as a result the sample of the filled answers in all countries is relatively low it is below 21%.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

**MI113: Household has applied for an account and been turned down**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- All countries present the percentage of non applicable value above 90% with two exceptions : Bulgaria (81%) and Romania (79%), as a result the sample of the filled answers in all countries is relatively low.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

**MI114: Banks would refuse household**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- All countries present the percentage of non-applicable value above 90% with two exceptions : Bulgaria (81%) and Romania (79%), as a result the sample of the filled answers in all countries is relatively low.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

### **Reasons why the household does not have commercial credit**

**Variables MI120 to MI125 are asked together through a list that include different reasons.** Questions are filtered. Households that do have commercial credit or do not need it should not be asked the questions.

#### **MI120: Household does not need to borrow at all**

- Commercial credit is defined as " Commercial credit refers to overdraft facilities, credit or store cards, mortgages and other loans or credit linked to purchases. Borrowing from friends and relatives is not included " The definition is clear, comprehensible and causes no ambiguity but exclude "non-commercial" credit providers, microcredit,...
- Missing Value is very low close to 0 in all countries
- The percentage of non-applicable value vary from Sweden 0% and Bulgaria (10%) to Iceland (96%). Eleven countries have a percentage above 50%. The sample of the filled answers in the majority of countries is above 50% and in eleven countries varies in the range from 4.09% to 47.43%

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey, but to simplify the wording to avoid any trouble for the respondents.**

#### **MI121: Household can borrow from family or friends**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- the percentages of non-applicable value vary from Sweden (0%) and Bulgaria (10%) to Iceland (96%). Sixteen countries have a percentage above 50%.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey.**

#### **MI122: Household will not be able to repay debt**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- the percentages of non-applicable value vary from Sweden (0%), Belgium (20%) and Romania (14%) to Iceland (99%). Twenty seven countries have a percentage above 50%, as a result the sample of the filled answers in 27 countries is below 50%.

The specific information collected via this question is unclear. Should it be a group inside the "don't need" (can't afford it) and the "has been turned down" ones? Do we want to know if the respondent consider that not having a credit is reasonable, and so does not suffer from "exclusion"?

**Conclusion: We consider this variable should be clarified and potentially redesigned in a forthcoming EU survey.**

**MI123: Household has applied for credit and been turned down**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- the percentage of non applicable responses varies from Sweden (0%), Belgium (20%) and Romania (14%) to Iceland (99%). Twenty seven countries have a percentage above 50% as a result the sample of the filled answers in 27 countries is below 50%.

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

**MI124: Household used to have credit but the facility was withdrawn**

- The question is clear, comprehensible and causes no ambiguity
- Missing Value is very low close to 0 in all countries
- the percentages of non-applicable value vary from Sweden (0%), Belgium (20%) and Romania (14%) to Iceland (99%). Twenty seven countries have a percentage above 50% as a result the sample of the filled answers in 27 countries is below 50%

We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey

**MI125: Banks would refuse to give credit to household**

- The question is clear, comprehensible and causes no ambiguity;
- Missing Value is very low close to 0 in all countries;
- the percentages of non-applicable value vary from Sweden (0%), Belgium (20%) and Romania (14%) to Iceland (99%). Twenty seven countries have a percentage above 50% as a result the sample of the filled answers in 27 countries is below 50%

**Conclusion: We consider this variable as relevant and meaningful, and recommend to keep it for a forthcoming EU survey**

### **Summary:**

We recommend to keep 27 variables, to redesign 14 among them, and to skip the other eleven ones. For other relevant variables, we recommend to use alternative method of data collection. We consider in many cases that administrative data collection, via adjusted bank and credit annual accounting report should be more appropriate.

### **Variables we recommend to keep:**

MI010 : Household has a bank current account

MI051: Household has mortgage for other than the main dwelling

MI090: Major drop in household income during the last 12 months

MI100: Expectation of financial situation in the next 12 months;

do you expect your financial situation: To improve , To stay about the same, To get worse, Don't know

### Reasons why the household does not have a bank current account

MI110: Household does not need an account and prefers to deal in cash

MI111: The charges are too high

MI112: There is no bank branch near where household lives or works

MI113: Household has applied for an account and been turned down

MI114: Banks would refuse household

Reasons why the household does not have ~~commercial~~ credit (redesign)

MI121: Household can borrow from family or friends

MI123: Household has applied for credit and been turned down

MI124: Household used to have credit but the facility was withdrawn

MI125: Banks would refuse to give credit to household

**Variables that request a new design, or a simpler wording:**

MI020: Household is overdrawn on one of its bank accounts

MI040: Household has credit card and /or store card(s) with un-cleared balances

Source of credit and loans

MI050: Household has credits or loans (other than mortgage for the main dwelling)

MI052: Household has hire purchase instalments (e.g. leasing, car, technical equipment)

MI053: Household has home-related credit/loans (inventory, domestic appliances, repairs)

MI054: Household has credit/loans to pay for holidays/leisure

MI055: Household has credit/loans to pay for education or childcare

MI056: Household has credit/loans to pay for health issues

MI057: Household has credit/loans for investment or business start-up

MI058: Household has other cash loans (debt conversion, to cover overdraft, credit card and other bills, etc.)

MI060: Arrears on other non-housing household bills

MI095: Main reason for drop in income (list should be up-dated)

MI120: Household does not need to borrow at all

MI122: Household will not be able to repay debt



## **Annex 2: Recommendations to the Eurostat SILC module**

### Indicators for monitoring indebtedness levels

Indicators that are useful for monitoring debt levels and detecting the risk of over-indebtedness are located in the section 'Population and Social Conditions > Income, social inclusion and living conditions > Material deprivation' in two folders:

#### Economic strain (ilc\_mdcs)

- Arrears on mortgage, rent, utility bills or hire purchase (ilc\_mdcs05)
- Arrears on mortgage or rent payments (ilc\_mdcs06)
- Arrears on utility bills (ilc\_mdcs07)
- Arrears on hire purchase and other loans repayment (ilc\_mdcs08)

#### Economic strain linked to dwelling (ilc\_mdcd)

- Heavy financial burden of the repayment of debts from hire purchases or loans (ilc\_mdcd05)
- Financial burden of the total housing cost (ilc\_mdcd04)

In order to gain more complete picture we propose to add a few new indicators that will complement the indicators already collected in the SILC module. This will allow for more meaningful analysis and the insight into the potential causes of financial difficulties, in particular the indication whether the difficulties are related to credit use.

#### **Proposed adjustments to the existing indicators:**

- Arrears on mortgage or rent payments (ilc\_mdcs06) - this indicator covers both mortgage credit repayment and rent, we propose to separate them to clearly see whether an individual is overdue on mortgage payments or on rent, or both:
  - o Arrears on mortgage payments - ilc\_mdcs06a
  - o Arrears on rent payment - ilc\_mdcs06b
- Financial burden of the total housing cost (ilc\_mdcd04) - analogically to the indicator above we propose to separate financial burden on mortgage repayment from the financial burden on other housing costs:
  - o Financial burden of the mortgage repayment - ilc\_mdcd04a
  - o Financial burden of the non-mortgage housing costs - ilc\_mdcd04b

## Proposed additions of new indicators:

1. Credit use - in order to enable the analysis of the relationship between the use of credit and financial difficulties we propose to add indicators informing about the use of different forms of credit. Such indicators were included in the Eurostat SILC ad-hoc module of over-indebtedness in 2010 and we recommend using them in the regular module 'Income, social inclusion and living conditions'.

Household has credit card and /or store card(s) with un-cleared balances

Household has mortgage for the main dwelling

Household has mortgage for other than main dwelling

Household has credits or loans (other than mortgage)

Household is overdrawn on one of the bank accounts

Household has hire purchase instalments (e.g. leasing, car, technical equipment)

2. Debt burden - we recommend adding two indicators for assessing the burden of debt:

- Debt service to income ratio - total amount of monthly payments on all loans and credits from financial institutions and private persons divided by household gross income.

This indicator is used by the Household Finance and Consumption Survey conducted bi-annually by the European Central Bank in the Euro area.

Perception of risk of getting into arrears or of becoming over-indebted - the indicators measuring subjective feeling related to financial strain and the fear of falling behind the payments.

This indicator was used in the Special Eurobarometer survey No.355 Wave 74.1 in 2010.

3. Length of arrears - while indicators of the presence of arrears inform about the incidence of repayment difficulties it would be good to also know the depth of those difficulties, that is the length of the payment delays. We recommend adding the following indicators:

Length of arrears on credit payments - number of days behind the repayment schedule on the most overdue credit commitment

Length of arrears on bills and other non-credit payments - number of days behind the deadline on the most overdue commitment