

EUROSHIP



closing gaps in European social citizenship

***State-of-the-art review of indicators and data
on poverty and social exclusion***

EUROSHIP Working Paper No. 1

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EUROSHIP Working Papers are scientific outputs from the [EUROSHIP project](#). The series is edited by the project coordinator Professor Rune Halvorsen. The working papers are intended to meet the European Commission's expected impact from the project:

- i) to advance the knowledge base that underpins the formulation and implementation of relevant policies in Europe with the aim of exercising the EU social rights as an integral part of EU citizenship and promoting upward convergence, and
- ii) to engage with relevant communities, stakeholders and practitioners in the research with a view to supporting social protection policies in Europe.

Contributions to a dialogue about these results can be made through the [project website \(euroship-research.eu\)](#), or by following us on Twitter: @EUROSHIP_EU.

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Abstract

The aim of this paper is to evaluate the reliability and validity of existing indicators used by the European Commission to monitor developments in the field of poverty and social exclusion. We assess the quality and suitability of the main data sources to provide reliable indicators at the level of various vulnerable groups across Europe and identify any obstacles to comparative analyses across countries and over time, including the experiences of the European Statistical Office (Eurostat) and of national statistical offices. Further, we evaluate the validity of the Social Scoreboard indicators from a social rights point of view, including the views of scholars and other stakeholders. We find that there are vulnerable groups for which indicators are mostly reliable such as persons with low education, while others such as estimates for persons with migrant background are more problematic. Most indicators are reliable across groups, with only few exceptions such as the severe housing deprivation rate. Furthermore, an additional breakdown by sex aggravates problems in the case of indicators which are already problematic. The results of the statistical analysis are largely reinforced by the experiences of national statistical offices, assessed via an online survey. Measures to overcome the problems posed by sample size are on the table in some countries, such as Germany and Spain. Finally, according to our other survey conducted among social policy experts, the Social Scoreboard is considered to be a valuable and feasible tool, although not devoid of limits and in need of future improvements.

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1 Introduction

Social citizenship is the core concept of the [EUROSHIP](#) project. According to Andersen and Halvorsen (2002: 12–13), being a full and equal citizen is, basically, “... a question of practices: living a decent life in accordance with the prevailing standards in society, being able to act autonomously, being able to participate in social and political life in the broadest sense, and having ‘civic’ orientations to the political community and to one’s fellow citizens”. In EUROSHIP we focus on three dimensions of social citizenship as experienced by the citizens: security, autonomy and influence. In this report, we address indicators on the ‘security dimension’, i.e. people’s opportunities to live a decent life in accordance with the prevailing standards in society and to be protected against risks of poverty and exclusion.

By linking, social citizenship and the capability approach it will be possible to analyze ongoing social, economic and cultural processes that influence the opportunities for exercising social citizenship and, so doing, contribute to understand how society may pursue and foster social cohesion and a sustainable Social Europe. In these terms and from a European perspective, the role of policies lies in shaping individual capability building processes, so that European citizens get closer to a valued and recognized social standard. It will entail also an analysis of risks and stressors and how social protection systems and sub-systems are able to put in place adaptive and/or transformative resilience strategies.

The relatively recent efforts of the European Union to strengthen the centrality of social rights within the EU architecture is linked to growing awareness about the magnitude of the challenge currently faced both by the EU and its member states: to conciliate, link, and create synergies between social and economic progress within an overall framework of environmental sustainability. The proclamation of the EU Pillar of Social Rights by former Commission President Juncker and the renewed commitment by President von der Leyen are the most tangible attempts to provide a unique direction for the EU – i.e. to establish a minimum level of social rights that should be a shared achievement for all European citizens.

The release of the [Social Scoreboard](#) (i.e. a set of standardized indicators covering 12 areas related to the implementation of the European Pillar of Social Rights – for the structure and indicators of the scoreboard see Annex A1) and of the [Social Protection Performance Monitor](#) (i.e. a set of indicators to describe key social trends in Europe) are a relevant part of this commitment as it enables a wide range of European stakeholders to monitor the progress (or lack of) toward the achievement of European Pillar of Social Rights.

The aim of this paper is to evaluate the reliability and validity of existing indicators used by the European Commission to monitor the developments in the field of poverty and social exclusion. In order to achieve these objectives, the paper assesses the quality and suitability of the main data sources to provide reliable indicators at the level of various vulnerable groups across Europe and identify any obstacles to comparative analyses across countries

and over time, including the experiences of the European Statistical Office (Eurostat) and of national statistical offices. Further, we also assess the validity of the Social Scoreboard indicators from a social rights point of view, including the views of scholars and other stakeholders.

The paper is organised as follows. Section 2 presents a reliability analysis for selected indicators from the Social Scoreboard. A short introduction of these indicators (section 2.1) is followed by the statistical analysis (section 2.2) on two main data sources: the European Union Statistics on Income and Living Conditions (EU-SILC) and the European Union Labour Force Survey (EU-LFS). The results of the online survey among the representatives of the national statistical offices and of Eurostat are presented in section 2.3. Section 3 is dedicated to the online survey among experts in the field of social policy and social rights. Within that, first the methodology used is described (section 3.1), followed by the main results of the survey (section 3.2). Section 4 concludes. Underlying calculations are provided as online annexes (Annexes [A4](#) and [A5](#)) in Excel table format. The questionnaires of the online surveys are available in the Annex (national statistical offices questionnaire: Annex A2; online expert survey questionnaire: Annex A3).

2 The reliability of poverty and social exclusion indicators for vulnerable groups in Europe

2.1 Social scoreboard indicators and data

As indicated in the introduction above, the European Union officially declared in 2017 that being a European citizen means also to enjoy a fair standard of social rights. There is a growing awareness that the future of the EU largely relies on the member states' abilities to achieve significant improvements in these areas. The setting up of a sound monitoring system of the status of social rights in the EU is a key to meet this challenge. With this aim, the EU released the [Social Scoreboard](#) related to the implementation of the European Pillar of Social Rights. Besides the Scoreboard, the EC also relies on the [Social Protection Performance Monitor](#) (SPPM) dashboard, a tool that uses a set of key EU social indicators for monitoring developments in the social situation in the European Union.

In our analysis, we focus on selected indicators of the Social Scoreboard. The Social Scoreboard monitors the implementation of the European Pillar of Social Rights by tracking trends and performances across EU countries in 12 areas and feeds into the European

Semester of economic policy coordination. The scoreboard also serves as a tool to assess progress towards a social 'triple A'¹ for the EU as a whole.

The structure of the Social Scoreboard is based on 3 dimensions, covering 12 areas and including 36 indicators in total, as presented in Annex A1 of this paper. Among these 36 indicators, almost every measure is an overall figure for the population at risk, breakdowns by individual or household characteristics are not provided, with the exception of gender gap indicators, the severe housing deprivation rate (by owner status) and some of the health indicators (by sex). As separate modules, breakdowns by region and by urbanization degree are provided where available and reliable. Other breakdowns, however, are not part of the monitoring tool, and, therefore, the situation of vulnerable groups in these dimensions and areas cannot be assessed across time and across countries, within the frame of the scoreboard.

For the statistical analysis on the reliability of indicators, we have restricted our work to the two major datasources of the Social Scoreboard indicators: the European Union Statistics on Income and Living Conditions (EU-SILC) and the European Union Labour Force Survey (EU-LFS). Out of the 36 indicators of the Scoreboard, the following indicators were selected for the reliability check:

- EU-SILC
 - at-risk-of-poverty rate,
 - severe material deprivation rate,
 - living in very low work intensity household rate,
 - at-risk-of-poverty or social exclusion rate,
 - housing deprivation rate (both owners and tenants),
 - self-reported unmet need for medical care;
- EU-LFS
 - NEET rate,
 - unemployment rate,
 - part-time employment rate, as input variable for the gender gap in part-time employment rate indicator.

When selecting these indicators for our analysis, we have preferred to have heterogeneous underlying variables (variables on income, labour market and housing, as well as material

¹ President Juncker, in his 22 October 2014 speech to the European Parliament, set out his ambition for the EU to achieve what he called a 'Social Triple A' rating, in parallel to being 'triple A' in the financial sense. To reach this goal, he stated that the European Semester should not just be an economic and financial process, but must take into account the social dimension of Economic and Monetary Union (EMU) (European Parliament 2016). A more detailed description of how to achieve this 'Social Triple A' was set out in the Five Presidents' report, 'Completing Europe's Economic and Monetary Union' (June 2015).

deprivation items) that may strongly differ both in their item non-response rates and their distribution. According to our assessment, this selection gives an indication of the reliability of other indicators in the Social Scoreboard and makes our results generalizable.

2.2 Methods in assessing reliability: thresholds, underlying tables, and main tables

This subchapter describes in detail what methodology we followed when conducting the reliability check. It gives an overview of the thresholds used to categorize the reliability of the indicators for different groups as well as how the main output tables (Tables 1, 2 and 3 in the main text) and the underlying tables (in Online Annexes [A4](#) and [A5](#)) for this section were constructed.

The reliability check's main aim is to assess if, when looking at the microdata the indicators are calculated from, there are enough observations for each vulnerable group the EUROSHIP project is focusing on. Using the dataset of EU-SILC and EU-LFS, we first constructed the indicators for the respective reference groups, and then looked at the frequency tables of every group and subgroup, for all of the indicators described in the previous section. We did so in the case of four chosen years, 2005, 2009, 2013, as well as 2017. All countries included in the datasets were added to the analysis.

The thresholds used for the reliability check are partly based on the rules applied by Eurostat for the dissemination of aggregated data. These rules are the following:

- An estimate should not be published if it is based on fewer than 20 sample observations (or if the non-response rate for the item concerned exceeds 50%).
- An estimate should be published with a flag "low reliability" if it is based on 20 to 49 sample observations (or if the non-response rate for the item concerned exceeds 20% and is lower or equal to 50%).
- An estimate shall be published in the regular way when based on 50 or more sample observations (and the item's non-response does not exceed 20%).

Based on these, we chose 50 observations as the first threshold, below which the indicator is flagged as not reliable. Additionally, we introduced a second threshold for the robustness check set at 100 observations.

Figures 1 and 2 show the structure we followed to assess the reliability of indicators. In the case of EU-SILC (Figure 1), four vulnerable groups were considered: persons with low education (ISCED 0-2), persons at risk of poverty, persons living with disabilities/impairment, as well as persons with migrant background. In the case of migrants, we looked at both persons with an origin from non-EU and EU countries together (referred to in the tables as *All migrants*), and migrants from non-EU countries separately

(*Non-EU migrants*). As EUROSHIP takes on a gender-sensitive approach, we included an additional breakdown for all groups by sex, calculating frequencies for males and females as well. Finally, as described above, we used the following seven indicators:

- i) *at-risk-of-poverty rate,*
- ii) *severe material deprivation rate,*
- iii) *living in very low work intensity household rate,*
- iv) *the at-risk-of-poverty or social exclusion rate,*
- v) *severe housing deprivation rate owners*
- vi) *severe housing deprivation rate for tenants, and*
- vii) *self-reported unmet need for medical care rate.*

Each indicator was calculated for all group, except for the at-risk-of-poverty rate and the at-risk-of-poverty or social exclusion rate for persons at risk of poverty, as it would have made little sense. For the EU-LFS, the structure was very similar, with the two vulnerable groups being persons with low education, and persons with migrant background (both all and non-EU migrants). Following the breakdown by sex, the indicators in this case included

- i) *NEET rate,*
- ii) *unemployment rate, and*
- iii) *part-time employment rate (included to assess the gender gap in part-time employment rate indicator).*

In order to highlight the main findings, we present summary tables that contain the information for all groups and indicators in one table. For these tables, we used colour coding to make the results visually interpretable.

The summary tables are based on a set of underlying tables that are provided in the Annexes. First, unweighted frequency counts and proportions were estimated, which are provided in a separate online annex ([Annex A4](#)). Furthermore, an intermediary set of tables (included in [Annex A5](#)) was produced, which depicts whether the number of observations for a given combination of indicators and vulnerable groups is above the two chosen thresholds – 50 and 100 observations, respectively.

Figure 1: The structure of breakdowns for the reliability check, EU-SILC

Database	EU-SILC												
Vulnerable groups	Low education							At risk of poverty	Disabled/Impaired	Migrant background	Migrant background, non-EU		
Breakdown categories	Total							Male	Female	...	...	...	...
Indicators	At-risk-of-poverty rate	Severe material deprivation rate	Living in very low work intensity household rate	At-risk-of-poverty or social exclusion rate	Severe housing deprivation rate (owners)	Severe housing deprivation rate (tenants)	Self-reported unmet need for medical care rate	...	...	...	...	...	...

Figure 2: The structure of breakdowns for the reliability check, EU-LFS

Database	EU-LFS						
Vulnerable groups	Low education					Migrant background	Migrant background, non-EU
Breakdown categories	Total		Male	Female	...	...
Indicators	NEET rate	Unemployment rate	Part-time employment rate (for gender gap ind.)	...	...	...	...

2.3 Results of the reliability check

The following two sections provide the results for the reliability check for selected indicators from both the EU-SILC and the EU-LFS. They sum up the main findings for each group and indicator based on the summary tables (Tables 1 to 6). The textboxes contain notes on any deviations from the procedure outlined in the previous subchapters and provide help with the interpretation of the tables (e.g. how missing data was handled, problems with and differences in the computation of variables, etc.).

2.3.1 EU-SILC

Vulnerable groups

When looking at the indicators by group, we can see that there are vulnerable groups for which indicators are mostly reliable, while others are more problematic. *Persons with low education* and *persons with disabilities/impairment* tend to have the highest number of observations across countries and over time. This is due to the fact that these groups are quite large in all European countries and therefore, well-represented in the survey sample as well. What is also apparent from the table is that data on *migrants* is often scarce (in these tables, only migrants from non-EU countries are included): at least for a few countries, all indicators have less than 50 observations for at least 2 out of the 4 examined years (dark orange cells). As is to be expected, the lowest numbers can be observed in participating states without large immigration flows (Eastern Europeans, mostly). Here, 0 observations in a cell were not uncommon as some samples barely include persons with migrant background. In the case of migrants, the self-reported unmet need for medical care rate, an otherwise unproblematic indicator, is also highly unreliable across most of the countries. Indicators for the *at risk of poverty* group vary in their reliability, depending on the incidence of poverty in a given country as well. The *severe material deprivation* and the *living in very low work intensity household rate* have high number of observations, while the *severe housing deprivation rate* (both for *owners* and *tenants*) is problematic. This is in line with what we can see in the other vulnerable groups as well, while the *unmet medical care rate* indicator is less reliable than elsewhere.

Text box 1

The *severe housing deprivation* indicator could not be constructed for Germany in 2017, as the variables used to calculate it are not available in the EU-SILC survey for the country.

In Germany, Estonia, Latvia, Malta and Slovenia, the variable measuring *migrant status* does not include immigrants from EU member states as a category. Therefore, in these cases, the number of observations in the *migrant total* table equals those in the *migrant non-EU* table.

From 2013, *tenure status* was measured differently than in previous included years. The variables used to calculate *severe material deprivation* changed starting from the year 2009. Lastly, from 2013, variables used to construct the *housing deprivation* indicator changed as well. (For further information on these modifications, see survey documentation.)

In the summary tables, the rows for Croatia and Serbia are left blank. This is due to the fact that these countries did not participate in two of the four included rounds. Therefore, colour coding according to the same rules would have been misleading. However, in those cases where data for a given country is only missing for one wave, colour coding was applied in the same way. Missing countries are Bulgaria, Malta, Romania, and Switzerland for the year 2005 as well as Iceland for 2017.

Table 1: Reliability check for selected Social Scoreboard indicators, EU-SILC (Total)

	Low education							At risk of poverty					Disabled persons							Migrants						
	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC	SMD	LWI	SHDO	SHDT	UNHC	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC
1 BE																										
2 BG																										
3 CZ																										
4 DK																										
5 DE																										
6 EE																										
7 IE																										
8 EL																										
9 ES																										
10 FR																										
11 HR																										
12 IT																										
13 CY																										
14 LV																										
15 LT																										
16 LU																										
17 HU																										
18 MT																										
19 NL																										
20 AT																										
21 PL																										
22 PT																										
23 RO																										
24 SI																										
25 SK																										
26 FI																										
27 SE																										
28 UK																										
29 IS																										
30 NO																										
31 CH																										
32 RS																										

Source: own calculations based on EU-SILC user database (September 2019 release).

Notes: For additional information on methodology and missing data see Text box 1.

AROP – At-risk-of-poverty rate; **SMD** – Severe material deprivation rate; **LWI** – Living in very low work intensity household rate; **AROPE** – At-risk-of-poverty or social exclusion rate; **SHDO** – Severe housing deprivation rate (owners); **SHDT** – Severe housing deprivation rate (tenants); **UNHC** – Self-reported unmet need for medical care rate.

>100 in at least 3 out of 4 years
 >50 in at least 3 out of 4 years
 <100 in at least 2 out of 4 years
 <50 in at least 2 out of 4 years

Table 2: Reliability check for selected Social Scoreboard indicators, EU-SILC (Males)

		Low education						At risk of poverty					Disabled persons						Migrants								
		AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC	SMD	LWI	SHDO	SHDT	UNHC	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC
1	BE																										
2	BG																										
3	CZ																										
4	DK																										
5	DE																										
6	EE																										
7	IE																										
8	EL																										
9	ES																										
10	FR																										
11	HR																										
12	IT																										
13	CY																										
14	LV																										
15	LT																										
16	LU																										
17	HU																										
18	MT																										
19	NL																										
20	AT																										
21	PL																										
22	PT																										
23	RO																										
24	SI																										
25	SK																										
26	FI																										
27	SE																										
28	UK																										
29	IS																										
30	NO																										
31	CH																										
32	RS																										

Source: own calculations based on EU-SILC user database (September 2019 release).

Notes: For abbreviations and colour coding see Table 1. For additional information on methodology and missing data see Textbox 1.

Table 3: Reliability check for selected Social Scoreboard indicators, EU-SILC (Females)

	Low education							At risk of poverty					Disabled persons							Migrants						
	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC	SMD	LWI	SHDO	SHDT	UNHC	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC	AROP	SMD	LWI	AROPE	SHDO	SHDT	UNHC
1 BE																										
2 BG																										
3 CZ																										
4 DK																										
5 DE																										
6 EE																										
7 IE																										
8 EL																										
9 ES																										
10 FR																										
11 HR																										
12 IT																										
13 CY																										
14 LV																										
15 LT																										
16 LU																										
17 HU																										
18 MT																										
19 NL																										
20 AT																										
21 PL																										
22 PT																										
23 RO																										
24 SI																										
25 SK																										
26 FI																										
27 SE																										
28 UK																										
29 IS																										
30 NO																										
31 CH																										
32 RS																										

Source: own calculations based on EU-SILC user database (September 2019 release).

Notes: For abbreviations and colour coding see Table 1. For additional information on methodology and missing data see Textbox 1.

Indicators

Hereby, we present our results by focusing on what we can say about those indicators that were selected for this exercise. We have found that there are some indicators which are reliable across groups, and some that are unreliable in all cases. The number of observations passes the 100 threshold in the majority of cases for the *at-risk-of-poverty rate*, the *severe material deprivation rate* (with the exception of a few affluent countries), the *living in very low work intensity household rate*, as well as the *at-risk-of-poverty or social exclusion rate*. As mentioned above, the fact that they do not fare as well when it comes to migrants is due to the low number of persons with migrant background included in many national samples. As was also already touched upon, the reliability of the *unmet need for medical care rate* largely depends on the size of the subgroup: it is unproblematic in the case of those with low education and those with disabilities, but we can see many unreliable estimates (orange cells) in the remaining two groups. The most unreliable indicator everywhere is the *severe housing deprivation rate*. The reason for this is that it is split into two indicators, and thus, essentially includes a further breakdown into *owners* and *tenants*, which, of course, lowers the number of observations. Additionally, even though intuitively, *owners* could be wealthier and therefore, less affected by poverty or other forms of social exclusion, in practice, we do not see these trends everywhere. This is because the ownership structure of housing is very different across countries, and it does not always indicate wealth. In Romania, for instance, an overwhelming majority of respondents in the sample are owners. This is even though the rate for each indicator and the number of observations is much higher in this group than in Germany, for example, where ownership is less common and more a sign of wealth. Thus, all in all, the *severe housing deprivation rate* is roughly equally (un)reliable both for *owners* and *tenants*.

Countries

When it comes to individual countries, indicator estimates based on the EU-SILC might become unreliable for a number of other reasons as well. Firstly, there are some countries which *did not participate* in every examined round and so, the reliability check carries less information in their case. Bulgaria, Malta, Romania, Switzerland and Iceland are cases where only one year is missing. Additionally, Croatia and Serbia, for which there is no data for two out of the four included rounds, were left out of the tables as the colour coding would have been misleading. Secondly, in states where the *sample size is smaller* to begin with, breakdowns and thus, estimates for selected subgroups are, of course, unreliable as well. Examples of small samples include Malta, Luxembourg and Iceland. Finally, an indicator being less reliable is not always due to a small sample size, it can also occur if *the social outcome* we are measuring *is less significant* in that country – as in the case of poverty indicators for the Nordic member states. The opposite is true for countries where the prevalence of these outcomes is greater – this is partly the reason why Eastern European countries fare well when it comes to numbers of observations.

Breakdown by sex

Tables 2 and 3 depict the results for the additional breakdown by sex. We can see some differences in reliability which are the result of introducing a further breakdown category, although not many. The main finding based on this is that it aggravates the problems in the case of those indicators which were already problematic, and where the number of observations was close to the respective thresholds before this additional breakdown (see *Total* table – Table 1). This is especially true for the *severe housing deprivation rate* and the *unmet need for medical care rate*, making them almost impossible to work with in the case of some groups, such as *migrants* and those *at risk of poverty*. The *severe material deprivation rate* is also affected to some extent (mainly in Luxembourg, the Netherlands, Switzerland, and the Nordic countries), although not as gravely as the two mentioned before.

Another important outcome of the tendency outlined above is that those countries where the number of observations for indicators are often low are also where we can see more differences between males and females. These are mostly the more well-off, Western and Northern European countries where the percentage of those living in or at risk of poverty is lower. This does not mean that there are no differences between the two sexes in these countries, but because the numbers are both above the thresholds, they do not affect the reliability and do not show up in these tables.

2.3.2 EU-LFS

Vulnerable groups

In the case of the EU-LFS (Table 4), all indicators, that is, the NEET rate, the unemployment rate and the part-time employment rate for *persons with low education* are essentially completely reliable, with only one orange cell (for the NEET rate in Luxembourg). The group *migrants from non-EU countries* is much more problematic here as well, with quite a few countries having so few persons with migrant background in their national sample that none of the three indicators reaches the threshold of 50 observations in at least 3 out of the 4 examined years. As in the EU-SILC, these are (mostly Eastern European) countries without a large immigration flow, such as Bulgaria, the Czech Republic, Hungary, Malta, Poland, Romania, Slovakia, and Iceland.

Indicators

If we look at the indicators separately (Table 4), we see that because we only examined two groups in the EU-LFS, the number of observations largely depends on how large these vulnerable groups are in the sample. With only three exceptions, for persons with low education, the *NEET rate* is based on more than 100 observations in at least 3 years everywhere (with Iceland and Norway only passing the threshold of 50, and, as mentioned above, Luxembourg being the only country where the indicator can be considered unreliable). However, if we look at *migrants*, the picture is very much different: around half

of the countries (14 out of 31) have enough cases (light green and green cells), while the other half do not (light orange and orange cells). The remaining two indicators, the *unemployment* and the *part-time employment rate* fare slightly better. For the low education group, there are no countries where these indicators are flagged as unreliable, and only one and two, respectively, where they do not fall into the highest reliability category (Luxembourg for the former, and the Czech Republic as well as Estonia for the latter). When it comes to migrants, around 75% of countries can be considered unproblematic for both indicators, while in 7 and 9 cases, respectively, they are unreliable.

Countries

Contrary to the EU-SILC, there are no similar patterns in the case of the EU-LFS when it comes to individual countries. This is partly due to the fact that the EU-LFS has *higher sample sizes* and so, indicators tend to be more reliable. Further, due to the lack of identifiers (for poverty status and activity limitations), there are only two vulnerable groups in the reliability check. In several countries, especially in Eastern European member states, not even the larger sample size of the Labour Force Survey allows for reliable estimates for migrants and persons with migrant backgrounds.

Breakdown by sex

The additional breakdown by sex (Tables 5 and 6) uncovers more problems in the EU-LFS as well. Indicators for the group of migrants are particularly affected, especially the NEET rate, where it is now not only Eastern European, but most countries (22 for males and 21 for females) for which it cannot be calculated in a reliable manner. The number of orange cells increases (in some cases, even doubles, e.g. part-time employment rate for males) for the other two indicators and the low-educated, too. We can see some differences between the sexes: on average, all indicators are more reliable for females, as the rates are usually higher in their case. Countries where indicators for males are the most affected are Estonia, Croatia, Lithuania, Luxembourg, and Finland.

Text box 2

The *part-time employment* indicator could not be constructed for Ireland in 2005, as the necessary variable is not included in the data for the country.

In the summary tables, the row for Serbia is left blank. This is due to the fact that the country did not participate in any of the included rounds. As in the case of the EU-SILC tables, colour coding was applied to countries missing from one round, with the only such case being Malta in 2005.

The variable measuring *educational status* is different in 2017 than in the other three years (it is coded according to ISCED-11 instead of ISCED-97). (For further information, see survey documentation.)

2.3.3 EU-SILC and the EU-LFS compared

All in all, findings for the EU-SILC and the EU-LFS are in line with each other. They are comparable to some extent, as even though we looked at different indicators in the two databases, certain groups and the breakdown by sex were the same. In both cases, we could see that indicators for some groups are more reliable than for others (e.g. persons with low education vs. migrants), and that the additional breakdown by sex aggravates problems with indicators. Finally, it is important to note that even though there are similar trends, the EU-LFS has higher sample sizes and therefore, there are less problems with indicators based on the survey data.

Table 4: Reliability check for selected Social Scoreboard indicators, EU-LFS (Total)

		Low education			Migrants		
		NEET	UNEMP	PARTTIME	NEET	UNEMP	PARTTIME
1	BE						
2	BG						
3	CZ						
4	DK						
5	DE						
6	EE						
7	IE						
8	EL						
9	ES						
10	FR						
11	HR						
12	IT						
13	CY						
14	LV						
15	LT						
16	LU						
17	HU						
18	MT						
19	NL						
20	AT						
21	PL						
22	PT						
23	RO						
24	SI						
25	SK						
26	FI						
27	SE						
28	UK						
29	IS						
30	NO						
31	CH						
32	RS						

Source: own calculations based on EU-LFS user database (July 2019 release).

Table 5: Reliability check for selected Social Scoreboard indicators, EU-LFS (Males)

		Low education			Migrants		
		NEET	UNEMP	PARTTIME	NEET	UNEMP	PARTTIME
1	BE						
2	BG						
3	CZ						
4	DK						
5	DE						
6	EE						
7	IE						
8	EL						
9	ES						
10	FR						
11	HR						
12	IT						
13	CY						
14	LV						
15	LT						
16	LU						
17	HU						
18	MT						
19	NL						
20	AT						
21	PL						
22	PT						
23	RO						
24	SI						
25	SK						
26	FI						
27	SE						
28	UK						
29	IS						
30	NO						
31	CH						
32	RS						

Source: own calculations based on EU-LFS user database (July 2019 release).

Table 6: Reliability check for selected Social Scoreboard indicators, EU-LFS (Females)

		Low education			Migrants		
		NEET	UNEMP	PARTTIME	NEET	UNEMP	PARTTIME
1	BE						
2	BG						
3	CZ						
4	DK						
5	DE						
6	EE						
7	IE						
8	EL						
9	ES						
10	FR						
11	HR						
12	IT						
13	CY						
14	LV						
15	LT						
16	LU						
17	HU						
18	MT						
19	NL						
20	AT						
21	PL						
22	PT						
23	RO						
24	SI						
25	SK						
26	FI						
27	SE						
28	UK						
29	IS						
30	NO						
31	CH						
32	RS						

Source: own calculations based on EU-LFS user database (July 2019 release).

Notes. **NEET** – NEET rate; **UNEMP** – Unemployment rate; **PARTTIME** – Part-time employment rate (for gender gap in part-time employment indicator). For additional information on methodology and missing data see *Textbox 2*. For colour coding, see *Table 1*.

2.4 Results of the online survey among the experts of the central statistical offices and of Eurostat

2.4.1 Online survey method: description of the method and the structure of the questionnaire

With the aim to complement the results of the statistical analysis on the reliability of the indicators, we approached the representatives of national statistical offices in eight countries (that are also represented in the project consortium: Estonia, Germany, Hungary, Italy, Norway, Spain, Switzerland and the United Kingdom) with an online survey, to involve their experiences and views and relate them to our findings. In each case, the representative of the national statistical office, being in charge of the national data collection for EU-SILC or for EU-LFS (or both), received an email (see Appendix A2) with a summary of the EUROSHIP project, the main purpose of the survey, and the link to the survey. In total, 16 questionnaires were expected to be filled in (two for each country), and in half of the cases we have received fully completed documents with relevant answers for all questions. In five cases (Estonia, Germany, Hungary, Spain and Switzerland) the questionnaire was completed for the EU-SILC, in the United Kingdom for EU-LFS, while the representatives of the Hungarian Central Statistical Office and of the National Statistical Institute of Spain provided information for the EU-LFS, too. We also have a not fully completed questionnaires for EU-LFS in Estonia. This response rate is below the expectations since we assumed that the majority of the questionnaires would be completed.

The questionnaire (see Annex A2), apart from some technical information, dealt with two issues. The first topic was related to the sample size and provided the main focus of the questionnaire. The second, asked in a single question, reflected on the problem of low prevalence of some outcomes in some countries that may also pose difficulties to the reliability of estimates. In both cases, a question on whether these issues are planned to be tackled was asked. In addition, in an open question, we also asked about other issues that may affect reliability in estimates. In the following, we provide a short summary of our findings based on the available information.

2.4.2 Results: description of the main gaps identified and possible further developments of existing data sources

First, we checked whether the data are collected exclusively via survey methods or administrative data are also involved. In the case of the EU-SILC, data in Germany come exclusively from survey data, while in Estonia (since 2012), Hungary (since 2020), Spain (since 2013) and Switzerland from mixed sources of survey and administrative data. In the case of the EU-LFS, data are exclusively collected through survey methodology in Estonia, Hungary, and the UK, but is a combination of administrative and survey data in Spain since 2006. In addition, there is an increasing use of administrative data for the weighting procedure.

The answers fully coincided on the main factor defining the sample size at the national level. According to the received information, the main consideration is to allow for the production of indicators at the NUTS-2 level, in line with the new precision requirements concerning NUTS-2 regional level of the EU regulation (2019/1700), as highlighted in the German questionnaire. To meet this requirement, in Germany “(...) big changes in the organisation/field work of EU-SILC was made. EU-SILC was integrated into the German microcensus and since 2020, EU-SILC is part of the German microcensus. The sample size [has] increased from 14.000 households to around 40.000 households.” This change was also reflected in the data collection methodology in Germany: changes in the collection modes of CAPI, CAWI and the self-administered questionnaire. Besides the regional aspect, the Hungarian response for the EU-SILC also pointed, very generally, to the need to report on the level of major socio-economic breakdowns. The trade-off between budget restraints and the desired level of disaggregation and precision was mentioned as the main problem to comply with the Eurostat requirements.

In general (Germany, Hungary, Spain and Switzerland for EU-SILC; Hungary and Spain for EU-LFS), representatives of the national statistical offices reported that according to their assessment the sample size allows to produce national level aggregate figures and for most of the relevant breakdowns. We recorded three exceptions. In the UK, according to feedback from the international and national research community, the sample size of the national EU-LFS is fully suitable to produce all relevant indicators and breakdowns. In Estonia, however, also for EU-LFS, the sample size allows to produce national level aggregate figures and only for a few breakdowns. In the case of the Estonian EU-SILC, the sample size assessed as being suitable to produce all relevant indicators and breakdowns.

When specific breakdowns, like educational attainment, migrant status, degree of urbanization, regional NUTS-2 level (for both surveys) and global activity limitation status (for EU-SILC only) were mentioned, the answers for Spain (EU-SILC) indicated in most of the cases that reliability is not affected, but additional breakdowns (e.g. age groups) could be problematic. For the Spanish LFS, the picture is similar: there are some very specific groups (e.g. young age groups for ISCED 3-4 and 5-8, as well as for rural areas) and a few smaller NUTS-2 regions for which the estimates might be problematic, but in general, reliability criteria are met. In Hungary, estimates by migrant status based on both datasets are not reliable due to the low prevalence of this social group in the country. For Germany, the results of the new sample design and increased sample size are not available yet.

When information on how the low prevalence of some outcomes in some countries may also pose difficulties to the reliability of estimates was asked, the respondents from Hungary, the UK, Spain (for EU-LFS) and Germany did not report any problem when national figures and standard breakdowns are concerned. In Spain, the issues are present for some variables or indicators in the case of the EU-SILC. When a problematic variable is not very correlated with economic situation (for example ‘enforced lack of TV’), results are not

published. If the correlation is strong (for example 'capacity to afford a meal with meat, chicken, etc. '), results are published due to their importance in specific population groups. In Estonia, for EU-SILC, some indicators (e.g. persistent at-risk-of-poverty rate, severe material deprivation rate) are affected by this issue when multiple breakdowns are applied or estimates by counties are provided. Also, in Switzerland for the EU-SILC, the problem is present when subgroups and breakdowns are simultaneously applied.

There are some plans to overcome the problems related to the reliability of estimates in Germany and Spain. As already mentioned above, in Germany, an important change in the design of the EU-SILC has been implemented: it has been made part of the microcensus and its sample size has been almost tripled. In Spain, the duplication of the EU-SILC sample size was initiated in 2019, which will be consolidated in 2022. They expect a general improvement in the reliability of the results. On the other hand, in Spain for EU-LFS, plans for the future aim to re-adjust the sample size in different regions. The final outcome in this case would be a reduced sample size at national level. In Switzerland, pooling the annual CH-SILC data are considered in order to get more reliable estimates.

Finally, we gave the opportunity to respondents to mention other issues that may affect the reliability of the estimates besides those explicitly raised by the questionnaire. Related to the Spanish EU-SILC data collection, it was mentioned that the change of the mode of the data collection (use of CATI or CAWI instead of CAPI) due to the current Covid-19 situation can affect the results of the 2020 (and probably also of the 2021) survey.

3 Validity of the existing indicator set from a social rights point of view

As described in Section 1, the release of the [Social Scoreboard](#) and of the [Social Protection Performance Monitor](#) (i.e. a set of indicators to describe key social trends in Europe) is a relevant part of the European Union's commitment to strengthen the centrality of social rights within the EU architecture, as they enable a wide range of European stakeholders to monitor the progress (or lack thereof) toward the achievement of the European Pillar of Social Rights.

The EUROSHIP project is expected to produce new qualitative and quantitative knowledge about the status of social rights and the implementation of the European Pillar of Social Rights. This will require a careful review of existing evidence, opportunities and limitations of existing information.

At the stage of the EUROSHIP project, we decided to mobilize experts on EU social policies and social indicators to understand whether and to which extent, according to their knowledge and their experience currently available data are suitable for this task. The

forthcoming sub-sections will show the methods used to collect the necessary information and the main results.

3.1 Online survey method: description of the sampling strategy and the structure of the questionnaire

The experts were purposively selected and involved through an online survey. Each expert received an email (see Appendix A) with a short presentation of the EUROSHIP project, the main purpose of the survey, and the link to the survey. The survey was translated into electronic format on the SurveyGizmo platform. 70 experts were invited to participate in the survey (40 from universities and other research centres, 17 from international institutions², 16 from civil society organisations). We received 21³ answers (10 from the academia, 6 from international institutions, 5 from civil society organisations). The content of these will be summarised in the following section.

The proposed questionnaire (see Appendix B) mainly consisted of open-ended questions organised into three main sections.

- The first section was aimed at discussing the existing indicator set in terms of general relevance\adequacy and of coverage\quality
- The second section focused on the ability of existing indicators to provide a more detailed knowledge of the status of social rights in the EU. More precisely, we focused on indicators' ability to support gender-sensitive analysis, to account for the heterogeneous status of people belonging to vulnerable groups and to be disaggregated at the sub-national level.
- The third and last section focused on the linkage between research\analysis and policy-making.

Given the relatively small sample size, we will not include descriptive statistics about closed-ended questions, instead, we will focus on the main critical points which emerged from the responses.

3.2 Results: description of the main gaps identified and possible further developments of existing data sources

According to the survey results, there exists a quite wide consensus about the overall ability of the existing indicator system to provide a sound basis for the monitoring of social rights in the EU (only three interviewees found the level of adequacy/relevance and

² It is worth to remember that experts from national statistical offices and Eurostat were engaged within the framework of activities described in Section 2.4.

³ It means that the response rate was 30.0%.

coverage/quality to be insufficient). All in all, the Social Scoreboard is considered to be a valuable and feasible tool, although not devoid of limits and in need of future improvements. Several interviewees provided sharp insights about areas still not sufficiently covered by the indicator system. The improvement of *child-specific* indicators is indicated as an urgent need (particularly for education quality and early childhood). Moreover, indicators on *access to basic items* and, in particular, to energy-related goods and services (fuel, heating, electricity) are still lacking or not enough developed to cover the phenomenon (see the growing attention paid to energy poverty at the EU level⁴). Another dimension that is worth further coverage is *quality of work*, although it is not easy to define comparable indicators (as the concept of “quality” is likely to change across and even within countries). The ILO provides a meaningful reference point by defining decent work as a concept based on four pillars: (i) full and productive employment, (ii) rights at work, (iii) social protection and (iv) social dialogue (see ILO 2001). The ILO developed the concept of decent work also in terms of measurement and proposed a set of indicators (see ILO 2009) adapted to single countries (see the research project MAP funded by the EU and implemented by the ILO⁵).

Focusing on *gender*, most respondents (14 out of 21) acknowledged that indicators disaggregated by gender are usually available and sufficient to allow a gendered monitoring of social rights in the EU. At the same time, several experts underlined that a gender-sensitive analysis cannot be limited to a mere assessment of existing gender gaps in the values of the indicators we have available already. We also need an enlargement of the informational space through the inclusion of new indicators about gendered phenomena (e.g. care activities, life-work balance) and gender-related work specialisation (e.g. systematically stronger presence of women in low-wage productive sectors).

The ability of the Social Scoreboard to describe the actual access to social rights for persons belonging to vulnerable and/or marginalised groups is often identified as a weak point of the monitoring system (only 4 respondents out of 21 declared to be at least sufficiently satisfied). Data about persons with disabilities, migrants, persons in need of long-term care, homeless people, ethnic minorities (e.g. the Roma) are often not available and/or the sample size does not allow us to conduct appropriate elaborations. In some cases, the available data risks providing a biased picture. For instance, data about persons with disabilities is mainly focused on services and not on their scope for autonomy, experience of barriers, and facilitators of participation. Data on migrants from the EU-LFS risks being focused on those having a regular job and not covering those outside the ordinary and regulated labour market. These weaknesses are even more relevant given the asymmetric

⁴ More info at <https://www.energypoverty.eu/>

⁵ https://www.ilo.org/integration/themes/mdw/WCMS_123804/lang-en/index.htm

impact of the COVID-19 pandemic on persons whose life is characterised by pre-existing vulnerability factors.

The majority of the experts who responded recognises the need for conducting sub-national level analyses as EU cohesion is based not only on an upward convergence between, but also within countries. However, it is frequently observed that data availability is quite limited (16 out of 21 respondents considered it not sufficient): the feasibility of subnational level analyses is often undermined by actual sample sizes. Not all member states provide samples large enough to allow for regional level analyses. To enlarge sample sizes is thus quite an urgent need for keeping the cross-country comparability of regional level analyses.

Basically, all the experts identify more or less relevant problems in linking research and deliberation of the social policies. The experts identified the following main challenges:

- the distance between the EU branches commissioning research and those more directly involved in EU policy-making processes;
- the need to coordinate the preparation and the publication of research findings and policy-making (e.g. the European semester timing);
- the need to provide more “user-friendly” data.

Several experts underlined that the impact of research on political decision-making is often channelled through advocacy activities: in other words the involvement of civil society organisations (CSOs) in research projects is an indirect but effective way to influence policy-makers as CSOs are often more trained, have more experience and in a better position to communicate with policy-makers than researchers.

Focusing on future developments of the indicator systems the experts identified several development paths:

- The first, of course, is multi-stakeholder consultations and work to fill the gaps in indicators we have identified in this report (more attention to population groups in vulnerable positions, child-specific indicators, indicators concerning quality of education and of work, gender-related issues influencing access to social rights, etc.).
- The second is to link the monitoring of the status of social rights to environmental issues in compliance with the SDGs and Agenda 2030. This would be needed both for linking social and environmental rights and for monitoring the social impact of the ecological transition process.
- The third one is to use the existing empirical evidence to measure and monitor whether we find upward convergence among the member states and among European regions. It is worth to notice that this is an urgent issue particularly after the growing evidence that upward convergence mechanisms seems to experience relevant problems starting from the 2008 economic and financial crisis. One of the respondents referred to the framework elaborated by researchers from the

EUROFUND (Eurofund 2018) as an interesting attempt to operationalize the monitoring of upward economic convergence in the EU.

4 Summary

The aim of our paper was to evaluate the reliability and validity of existing indicators used by the European Commission to monitor the developments in the field of poverty and social exclusion. First, we assessed the quality and suitability of the main data sources to provide reliable indicators at the level of various vulnerable groups across Europe, including the experiences of Eurostat and of national statistical offices. Further, we also assessed the validity of the Social Scoreboard indicators from a social rights point of view, including the views of scholars and other stakeholders.

For the statistical analysis on the reliability of indicators, we restricted our work to the EU-SILC and EU-LFS, as main datasources for the Social Scoreboard. Out of the 36 indicators of the Scoreboard, the following indicators were selected for the reliability check: at-risk-of-poverty rate, severe material deprivation rate, living in very low work intensity household rate, at-risk-of-poverty or social exclusion rate, housing deprivation rate (for both owners and tenants), and self-reported unmet need for medical care (EU-SILC); NEET rate, unemployment rate, and part-time employment rate (EU-LFS).

Four vulnerable groups were considered: persons with low education (ISCED 0-2), persons at risk of poverty, persons living with disabilities/impairment, as well as persons with migrant background. As EUROSHIP takes on a gender-sensitive approach, we included an additional breakdown for all groups by sex, calculating frequencies for males and females as well.

Our results can be summarized as follows.

- There are vulnerable groups for which indicators are mostly reliable, while others are more problematic. *Persons with low education* and *persons with disabilities/impairment* for EU-SILC tend to have the highest number of observations across countries and over time, while estimates for *migrants* and *persons with migrant background* are less reliable and largely country-dependent.
- Most of the indicators, in the case of the EU-SILC, especially the *at-risk-of-poverty rate*, the *severe material deprivation rate* (with the exception of a few affluent countries), the *living in very low work intensity household rate*, and the *at-risk-of-poverty or social exclusion rate*, are reliable across groups, while the *severe housing deprivation rate* is unreliable in all cases. One reason for the latter is that it essentially includes a further breakdown into *owners* and *tenants* (as it is calculated separately for these groups). The reliability of the *unmet need for medical care rate* largely depends on the size of the subgroup: we can see many unreliable estimates

in the case of migrants and persons at risk of poverty. When it comes to the EU-LFS, no concerns regarding specific indicators can be formulated.

- The breakdown by sex aggravates the problems in the case of those indicators which are already problematic, and where the number of observations was close to the respective thresholds before this additional breakdown.
- When comparing EU-SILC and EU-LFS, we could see that indicators for some groups are more reliable than for others (e.g. persons with low education vs. migrants), and that the additional breakdown by sex aggravates problems with indicators. One may also note that despite similarities, the EU-LFS has higher sample sizes and therefore, there are less problems when reliability of indicators is concerned.
- The results of the statistical analysis are largely reinforced by the experiences of the national statistical offices. Measures to overcome the problems posed by the sample size are on the table in some countries. In both Germany and Spain the considerable increase of the sample size is either already implemented (Germany) or is an ongoing process (Spain).
- According to our survey conducted among social policy experts, the Social Scoreboard is considered to be a valuable and feasible tool, although not devoid of limits and in need of future improvements.
 - The improvement of child-specific indicators is indicated as an urgent need.
 - There is a lack of quality of work measures.
 - A gender-sensitive analysis cannot be limited to a mere assessment of existing gender gaps, it requires the inclusion of new indicators about the phenomena.
 - The ability of the Social Scoreboard to describe the actual access to social rights for persons in vulnerable or marginalised positions (vulnerable groups) is often identified as a weak point of the monitoring system, which is nowadays even more relevant given the asymmetric impact of the COVID-19 pandemic on persons whose life is characterised by pre-existing vulnerability factors.
 - There is a strong need of conducting sub-national level analyses as EU cohesion is based on an upward convergence both between and within countries, but the feasibility of these analyses is often undermined by actual sample sizes.

Recommendations to assist the development of the existing monitoring system in the field of poverty and social exclusion in Europe can be also formulated based on this report.

- Monitoring the results of the experiences related to increased sample sizes and to alternative data collection techniques in some members states would be of main importance and would benefit the coordination of the European Statistical System.
- Focusing on future developments of the indicator system, there is a need for

- multi-stakeholder consultations and work to fill the gaps in indicators we have identified in this report;
- linking the monitoring of the status of social rights to environmental issues in compliance with the SDGs and Agenda 2030;
- using the existing empirical evidence to measure and monitor whether we find upward convergence among the member states and among European regions.

5 References

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6 Annexes

6.1 Annex A1 The structure and indicators of the Social Scoreboard

Dimension	Area	Indicator	Data source
A. Equal opportunities and access to the labour market	1. Education, skills and life-long learning	Early leavers from education and training	EU-LFS
		Adult participation in learning	EU-LFS
		Tertiary education attainment	EU-LFS
	2. Gender inequality in the labour market	Gender employment gap	EU-LFS
		Gender gap in part-time employment	EU-LFS
		Gender pay gap in unadjusted form	SES
	3. Inequality and upward mobility	Income inequality - quintile share ratio (S80/S20)	EU-SILC
	4. Living conditions and poverty	At-risk-of-poverty rate or social exclusion	EU-SILC
		At-risk-of-poverty rate	EU-SILC
		Severe material deprivation rate	EU-SILC
		Persons living in very low work intensity households	EU-SILC
		Severe housing deprivation rate (owners)	EU-SILC
		Severe housing deprivation rate (tenants)	EU-SILC
	5. Youth	Young people neither in employment nor in education and training (NEET)	EU-LFS
	B. Dynamic labour markets and fair working conditions	6. Labour force structure	Employment rate	EU-LFS
Unemployment rate			EU-LFS
Activity rate			EU-LFS
Youth unemployment rate			EU-LFS
7. Labour market dynamics		Long-term unemployment rate	EU-LFS
		Employment in current job by duration	EU-LFS
		Transition rates from temporary to permanent contracts	EU-SILC
8. Income, including employment-related		Real gross disposable income of households	European sector accounts
		In-work-at-risk-of-poverty rate	EU-SILC
C. Public support/Social protection and inclusion		9. Impact of public policies on reducing poverty	Impact of social transfers (other than pensions) on poverty reduction	EU-SILC
	General government expenditure by function: Social protection		ESSPROS
	General government expenditure by function: Health		ESSPROS
	General government expenditure by function: Education		ESSPROS
	Aggregate replacement ratio for pensions		EU-SILC
	10. Early childhood education and care	Children aged less than 3 years in formal childcare	EU-SILC
	11. Healthcare	Self-reported unmet need for medical care	EU-SILC
		Out-of-pocket expenditure on healthcare	System of health accounts
		Healthy life years at age 65: Women	
		Healthy life years at age 65: Men	
		Life expectancy at age 65: Women	

		Life expectancy at age 65: Men	
	12. Connectivity	Individuals' level of digital skills	ICT

Source: <https://ec.europa.eu/eurostat/web/european-pillar-of-social-rights/indicators/social-scoreboard-indicators>

6.2 Annex A2 Online survey among representatives of national statistical offices

6.2.1 E-mail sent to the experts

Dear Ms/Mr XXX,

We are contacting you in respect with the EUROSHIP project, funded under the Horizon 2020 framework programme of the European Commission. EUROSHIP is a project aimed at deepening the progress in the implementation of the EU Pillar of Social Rights as a crucial component of the future of the EU. You can find more information about the project at <https://euroship-research.eu/> and in the attached leaflet. TÁRKI Social Research Institute (Budapest, Hungary) and the University of Florence (Italy) are part of the research consortium and are co-operating to deepen the issue of social rights indicators. We are currently in the early steps of the research project and we need inputs from the Academia and from the European civil society to target our efforts in forthcoming years.

We are approaching you following the advice of Prof. Jerome Bickenbach and Déborah Knecht (both Swiss Paraplegic Research). The survey focuses on the reliability of indicator estimates for selected vulnerable social groups and involves two data collections that serves as main data sources for the indicators in the field of poverty and social exclusion: EU-SILC and EU-LFS.

To answer this survey will not take more than 15-20 minutes. While the procedure to fill in the survey is straightforward, please note the followings.

- The questionnaire should be filled in separately for the two data collections. If the respective tasks will be fulfilled by separate persons, please share with them the same link and question 1 will allow them to choose the data collection for which they are responsible. If the same person fills in both questionnaires, one of the data collections should be selected under question 1 and start the survey again for the second data collection, using again question 1 for selection.
- Please always use the 'Previous' button (at the bottom of the page) in the survey to step back within the questionnaire, instead of the 'Back' button of the browser. In the latter case, the questionnaire starts again from the beginning.

We really hope you are going to accept to participate to this survey as we are sure that your contribution could substantially contribute to improve the quality and the impact of our work on EU and members countries policies.

In case you need more information, you can contact us by writing an e-mail to András Gábos, senior researcher at TÁRKI (gabos@tarki.hu).

To answer the survey you can use the following link: XXXXXXXXXXXXXXXXXXXXX

If, as we hope, you are interested to EUROSHIP project activities you can follow us through our website and on the main social media. Moreover you can subscribe our newsletter (see <https://socialplatform.us2.list-manage.com/subscribe?u=774e92f2da276e7fb5bb718ed&id=1a4cfc4dd4>).

With kind regards,

XX

6.2.2 Questionnaire

INTRODUCTION

This survey is part of the activities of the EUROSHIP research project funded by the European Commission. The overall aim of EUROSHIP is to provide an original and gender-sensitive assessment of the current gaps in social protection policies across Europe to formulate evidence-based and innovative policy options for national governments.

In 2017 the European Union officially declared that being European Citizens means also to enjoy a fair standard of social rights. Nowadays there is a growing awareness that the future of the EU largely relies in its and members' abilities to achieve valuable improvements in these areas. A sound monitoring system of the status of social rights in the EU is thus a key to meet this challenge. With this aim, the EU released the Social Scoreboard – i.e. a set of standardized indicators covering 12 areas related to the implementation of the European Pillar of Social Rights. Besides the Scoreboard, the EC also relies on the Social Protection Performance Monitor (SPPM) dashboard, a tool that uses a set of key EU social indicators for monitoring developments in the social situation in the European Union. A great challenge for these monitoring tools is presented by the reliability of indicator estimates **for specific vulnerable social groups** due to (i) low case numbers at given sample sizes and (ii) the distribution of the sample. This survey focuses on the issue of the sample size, but also touches the problem of distribution.

In this questionnaire we are going to ask you about your experience with the underlying data infrastructure to monitor the status of social rights and about future plausible developments of the monitoring system. To answer the forthcoming questions, will take no more than 15-20 minutes and will provide a valuable contribution to our research. When providing your answers, please always keep in mind both the set of [Social Scoreboard indicators](#) and the [Social Protection Performance Monitor](#), as well as the following surveys/datasets that are major sources for these indicators: EU-SILC and EU-LFS. Please, always provide separate answers for these data collections, where relevant.

1 For which data collection are you filling in this survey?

EU-SILC EU-LFS

PRELIMINARY INFORMATION

2 Country | _____ |

NOTE: In case of multiple respondents, please use a slash to separate information.

3 Name | _____ |

4 Role and affiliation | _____ |

5 Is the data collection in your country for the EU-SILC/EU-LFS exclusively based on survey methods or is a combination of administrative data and survey data? If there were a change in the methodology, please also indicate when this change happened.

6 In your country, what are the main factors determining the sample size of the EU-SILC/EU-LFS? What trade-offs related to the sample size do you face? When answering, please also indicate whether there was any major change in the data collection process since 2005 which affected the sample size, and if so, please explain in 2-3 sentences.

7 Considering as major data sources to produce the Social Scoreboard indicators, how would you evaluate the sample sizes of the EU-SILC/EU-LFS. When answering, please consider not only the breakdowns used for the [Social Scoreboard indicators](#), but other widely used breakdowns as well.

- i The sample size allows to produce national level aggregate figures, but not breakdowns
- ii The sample size allows to produce national level aggregate figures and for a few breakdowns
- iii The sample size allows to produce national level aggregate figures and for most of the relevant breakdowns
- iv According to our own experience and to feedbacks from the international and national research community, the sample size is fully suitable to produce all relevant indicators and breakdowns.

IF answers for question 7 fall in categories ii or iii

For the purposes of dissemination of aggregated data, Eurostat applies the following rules:

- An estimate should not be published if it is based on fewer than 20 sample observations or if the non-response for the item concerned exceeds 50%.
- An estimate should be published with a flag "low reliability" if it is based on 20 to 49 sample observations or if non-response for the item concerned exceeds 20% and is lower or equal to 50%.
- An estimate shall be published in the normal way when based on 50 or more sample observations and the item's non-response does not exceed 20%.

7a Please indicate, for which of the following breakdowns you would not advise the publication of the data for your country on a yearly basis due to reliability issues: educational attainment, poverty status, migrant status, global activity limitation indicator (GALI), NUTS-2 regional level. When providing your answer, please think about a simple indicator with a low item non-response rate (e.g. severe material deprivation rate). In each case, please also indicate whether an additional breakdown by sex or major age groups (e.g. 0-17, 15/18-34, 35-49, 50-64, 65+) would affect your recommendation or not.

Please indicate if your national practice on the publication of results differs from that used by Eurostat.

Educational attainment (grouped ISCED categories: 0-2, 3-4, 5-8) Yes No

Migrant status (Local, EU, non-EU) Yes No

Global activity limitation indicator (Strongly limited, Limited, Not limited – NOT RELEVANT FOR EU-LFS)

Yes No

Degree of urbanization (Cities, Towns and suburbs, Rural areas) Yes No

NUTS-2 regional level Yes No

8 In some countries, the distribution of a given indicator may lead to very low number of observations in the sub-population at risk in these data collections. This is for example the case of the severe material deprivation and severe housing deprivation indicator in affluent countries (EU-SILC) or part-time employment rate in some Eastern European countries (EU-LFS). Have you encountered this problem recently when preparing indicators and their relevant breakdowns or supplying data to third party for monitoring purpose? If yes, for which indicators?

9 Does your office plan to cope with the issues raised in questions 7 and 8 in any way in the near future, e.g. by increasing the sample size or using increased sub-samples? If yes, please shortly describe these plans.

10 Are there any other issues not related to sample size that may affect the reliability of Social Scoreboard or Social Protection Performance Monitor indicators for your country?

11 Shall you have any additional comments or information (including relevant literature in English related to this topic), please let us know here.

6.3 Annex A3 Online survey among experts in the field of social policy and social rights

6.3.1 E-mail sent to the experts

Dear Mr\Ms,

we are contacting you in in regards to the EU-funded research project EUROSHIP. EUROSHIP is a project aimed at progressing toward the implementation of the EU Pillar of Social Rights, which is a crucial component in shaping future of the EU. You can find more information on the project at <https://euroship-research.eu/> and in the attached leaflet. The University of Florence (Italy) and TARKI Social Research Institute (Hungary) are part of the research consortium and are co-operating to deepen the issue of social rights indicators.

You have been selected to participate to this survey given your strong experience and sound expertise in this field. The survey will involve around 40 experts such as scholars, researchers and activists. We are currently in the early steps of the research project and we welcome inputs from the Academia and from the European civil society to better target our efforts in forthcoming years.

Please mind that the survey will take no longer than 20 minutes for its completion. The survey mainly consists of open answer questions in order for you to share your opinions and ideas freely.

We really hope you are going to accept our invitation to participate to this survey as we are sure that your input will substantially contribute to improve the quality and the impact of our work on the EU and on EU Member States' policies.

To access the survey, please follow this link XXXXXXXXXXXXXXXXXXXX.

In case you need more information, you can contact Prof. Mario Biggeri (mario.biggeri@unifi.it) and Federico Ciani, PhD (federico.ciani@unifi.it).

If you wish to be updated on EUROSHIP project activities, follow us on the main social media channels (https://twitter.com/EUROSHIP_EU and). Moreover, you can subscribe to our newsletter (see <https://socialplatform.us2.list-manage.com/subscribe?u=774e92f2da276e7fb5bb718ed&id=1a4cfc4dd4>).

We sincerely thank you for your important contribution.

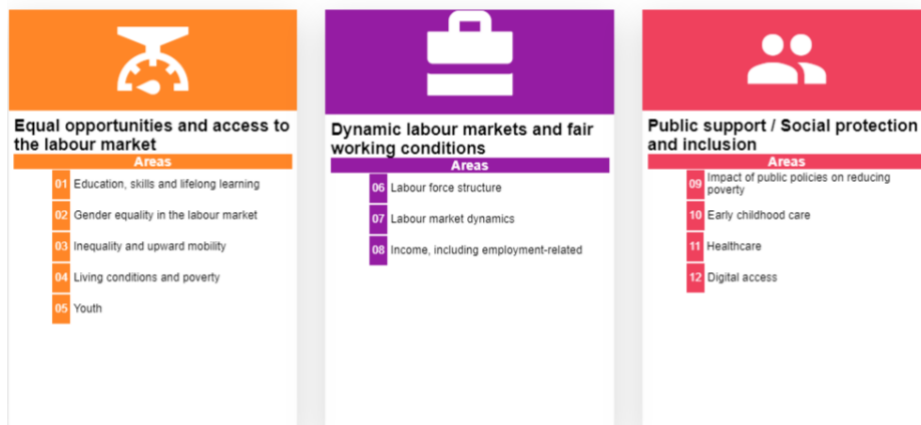
Best regards,

XX

6.3.2 Questionnaire

This survey is part of the activities of the EUROSHIP research project funded by the European Commission. The overall aim of EUROSHIP is to provide an original and gender-sensitive assessment of the current gaps in social protection policies across Europe to formulate evidence-based and innovative policy options for national governments.

In 2017 the European Union officially declared that being European Citizens also means to enjoy a fair standard of social rights. Nowadays there is a growing awareness that the future of the EU largely relies in its and its Member States' abilities to achieve valuable improvements in these areas (see the figure below).



A sound monitoring system of the status of social rights in the EU is thus key to meet this challenge. With this aim, the EU released the [Social Scoreboard](#) - i.e. a set of standardized indicators covering 12 areas related to the implementation of the European Pillar of Social Rights – and the [Social Protection Performance Monitor](#).

Considering your expertise in the field, this questionnaire will investigate on the currently used indicators and the available information to monitor the status of social rights. Questions will also concern the future plausible developments of the monitoring system. Please mind that the questionnaire will take **no longer than 20 minutes** for its completion. Findings from the survey will provide a valuable contribution to our research.

1. Do you accept to participate?⁶ Y N

Preliminary Information

2. Birth Year | ____ |

3. Sex M F

4. Main affiliation

| _____ |

Monitoring Social Rights in the EU

5. Focusing on the need to monitor the status of social rights in the EU, to what extent are the currently used indicators (Social Scoreboard) appropriate in terms of relevance and adequacy? (Max 600 characters)

- Not appropriate at all
- Poorly appropriate
- Sufficiently appropriate
- Fairly appropriate
- Fully appropriate

6. May you justify your answer by providing insights related to your own experience as researcher\analyst\activist? (Max 600 characters)

7. Focusing on the need to monitor the status of social rights in the EU, to what extent are the currently available data appropriate in terms of coverage and quality? (Max 600 characters)

- Not appropriate at all
- Poorly appropriate
- Sufficiently appropriate
- Fairly appropriate
- Fully appropriate

⁶ This questions was anticipated by a privacy statement

8. May you justify your answer by providing insights related to your own experience as researcher\analysist\activist? Can you please also indicate the three main existing gaps in the data infrastructure concerning the existing indicators to monitor social rights in the EU? (Max 600 characters)

Gender And Social Rights

9. To what extent are the currently used indicators sensitive to gender related differences in the progress toward the achievement of a fair level of social rights in the EU? (Max 600 characters)

- Not sensitive at all
- Not sufficiently sensitive
- Sufficiently sensitive
- Fairly sensitive
- Fully sensitive

10. May you justify your answer by providing insights related to your own experience as researcher\analysist\activist and by indicating possible future developments? (Max 600 characters)

Monitoring Social Rights Achievements For Vulnerable Groups

11. Focusing on the need to monitor the status of social rights in the EU, to what extent are the currently used indicators relevant and adequate to describe the situation of specific sub-groups of the European population (e.g. EU citizens with disabilities, migrants, persons in need of long term care)? (Max 600 characters)

- Not sufficient at all
- Not sufficient

- Sufficient
- Good
- Perfect

12. May you justify your answer by providing insights related to your own experience as researcher\analyst\activist and by indicating possible future developments? (Max 600 characters)

The Sub-National Level

13. Focusing on the need to monitor the status of social rights in the EU, to what extent are the currently available data appropriate to disaggregate analyses at the sub-national level? (Max 600 characters)

- Not appropriate at all
- Poorly appropriate
- Sufficiently appropriate
- Fairly appropriate
- Fully appropriate

14. May you justify your answer by providing insights related to your own experience as researcher\analyst\activist and by indicating possible future developments? (Max 600 characters)

From Monitoring To Policy Making

15. Focusing on the need to monitor the status of social rights in the EU, how satisfied are you about the linkage between research\analysis and policy making at the EU and national levels? (Max 600 characters)

- Very dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very satisfied

16. May you justify your answer by providing insights related to your own experience as researcher\analysist\activist and by indicating possible future developments? (Max 600 characters)

Conclusion

17. Can you please indicate three main priorities to improve and further develop the monitoring system of the status of social rights in the EU? Could you also indicate specific indicators that in your opinion could improve monitoring in this field? (Max 600 characters)

- 6.4 [Online Annex A4 Background tables for the statistical analysis in Section 2: unweighted frequency counts and proportions](#)
- 6.5 [Online Annex A5 Background tables for the statistical analysis in Section 2: intermediary calculations](#)