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Facts and views

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Luxembourg: Publications Office of the European Union, 2015

ISBN 978-92-79-43616-1
doi:10.2785/59737
N° Cat: KS-05-14-073-EN-N

Theme: Population and social conditions
Collection: Statistical books

Printed in Luxembourg

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

Foreword

Economic indicators, such as the gross domestic product (GDP), while important, do not tell us completely how well we are doing. Following a growing consensus that societies need data to complement the information provided by GDP, the European Commission initiated in 2009 the action 'GDP and beyond — Measuring progress in a changing world' which proposes priority topics to further develop environmental and social indicators and to report more accurately on distribution and inequalities.

The indicators on quality of life, aiming to measure progress in society, should reflect its multidimensionality and cover the individuals' conditions that contribute to life satisfaction, such as job, health status, social relationships, free time, educational level, environmental quality, security and governance. Measuring quality of life requires looking at all of these elements at the same time and calculating economic and non-economic, subjective and objective, as well as averages and disparities across population groups.

This is exactly the purpose of this flagship publication which combines objective indicators on different life domains with subjective evaluations from individuals, using data on subjective well-being collected for the first time across all EU Member States with the quality standards of official statistics. A great potential is now offered to researchers, policy-makers and the EU citizens to know more about the social progress.

This publication, focusing on different aspects of people's well-being, also illustrates Eurostat's mission to address specific themes that are highly relevant for the general public. The objective is to shed light on what could impact upon the quality of life, ranging from the educational level, the activity and health status to the family and financial situation. I am convinced that the topics covered in this publication are all issues which you are concerned about.

The emphasis in this publication has been placed on the data collected through the 2013 ad-hoc module on subjective well-being, which was added to the survey on income and living conditions (EU-SILC). You can find the content of this publication in a richer online format in Statistics Explained and more detailed data can be downloaded from the Eurostat website.

This flagship publication is released along with a more interactive and playful infographic called 'Quality of life', which can be accessed through the Eurostat website and is a nice addition to this publication.

I wish you an enjoyable reading experience!

Walter Radermacher
Director-General, Eurostat
Chief statistician of the European Union

Abstract

Quality of life in Europe — facts and views presents different aspects of people's well-being combining for the first time objective indicators with subjective evaluation of individuals' situations and covering various aspects of quality of life. The indicators are analysed together with different elements affecting quality of life such as educational level, activity, health status or family and financial situation. The emphasis in this publication has been placed on the data collected through the 2013 ad-hoc module on subjective well-being, which was added to the statistics on income and living conditions (EU-SILC). Data are presented for the European Union and its Member States as well as for the EFTA countries.

Quality of life in Europe — facts and views provides an overview of the wealth of information that is available on Eurostat's website and within its online databases.

Editors

Jean-Louis Mercy, Agnieszka Litwinska, Didier Dupré, Stephen Clarke, Georgiana Aurelia Ivan and Colin Stewart

Eurostat, Unit F4 — Quality of life

Philippe Bautier, Fabienne Montaigne, Louise Corselli-Nordblad, Catherine Coyette, Isabelle Fiasse, Annika Johansson, Lucie Peterkova and Helene Strandell

Eurostat, Unit B4 — Dissemination

Contact details

Eurostat

Batiment Joseph Bech

5, rue Alphonse Weicker

L-2721 Luxembourg

LUXEMBOURG

E-mail: estat-user-support@ec.europa.eu

Production

This publication was produced by:

Catherine Kesy, Franz Eiffe, Dovile Minkeviciute, Dimitris Mazonakis, Nikkie Yiokari, Giota Anastasiou, Asanoula Chatzimakri, Kathrin Gärtner, Ivo Ponocny — ICON-INSTITUT Public Sector Gmbh in consortium with Statistik Austria and Quantos S.A.

William Helminger, Alain Mahieu, Bruno Scuvée — CRI (Luxembourg) S.A.

For more information please consult

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Statistics Explained: http://ec.eurostat.eu/eurostat/statistics-explained

Acknowledgements

The editors would like to thank their colleagues who contributed to this publication and, in particular, the members of the steering group for this publication — Mariana Kotzeva, Gallo Gueye, Emanuele Baldacci, Anne Clemenceau, Timothy Allen, Baiba Grandovska — and to those involved closely in the editorial work for each chapter — Lucian Agafitei, Marta Beck, Boyan Genev, Marina Grillo, Jakub Hrkal and Pascal Wolff.

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Introduction

About this publication

In late 2013 Eurostat introduced a new type of publication, the 'flagship publication', with the aim of providing statistical analyses related to important social, economic or environmental phenomena. The goal for these publications was to address specific themes that are highly relevant for the general public and the European Union (EU) policy-making.

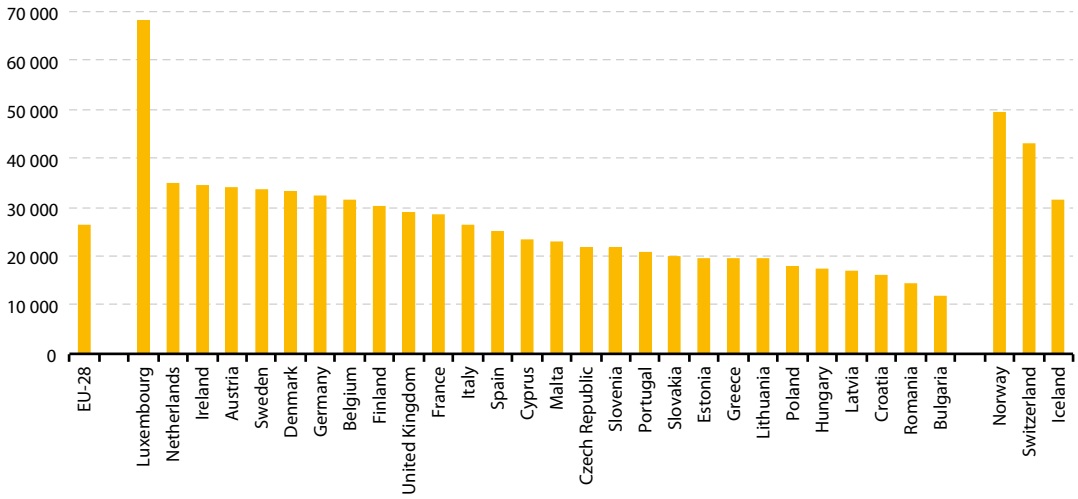
Quality of life — facts and views is part of this new breed of publications and presents different aspects of people's well-being combining for the first time objective indicators with individuals' subjective perception. It covers for instance the labour and health status, the living environment as well as the family and financial situation. Data are presented for the EU and its Member States as well as for the EFTA countries.

Quality of life — facts and views provides an overview of the wealth of information that is available on Eurostat's website and within its online databases.

Why this publication?

Traditionally official statistics describe economic developments by using indicators such as the gross domestic product (GDP) (Figure 1). However GDP alone is not enough to inform us on how well (or badly) people and our environment are doing. Hence, the statistical gaps need to be filled in order to complement GDP with indicators that monitor social and environmental progress.

Figure 1: Gross domestic product (GDP) at market prices, 2013
(Current prices, PPS per capita)



Source: Eurostat (online data code: nama_10_pc)

In August 2009, the European Commission published a communication titled 'GDP and beyond — Measuring progress in a changing world' (COM(2009) 433). Its goal was to better reflect the policy and societal concerns through improving, adjusting and complementing GDP with indicators that monitor social and environmental progress.

In September 2009, the Commission on the Measurement of Economic Performance and Social Progress published a report, the so-called Stiglitz/Sen/Fitoussi Commission report, with 12 recommendations on how to better measure economic performance, societal well-being and sustainability.

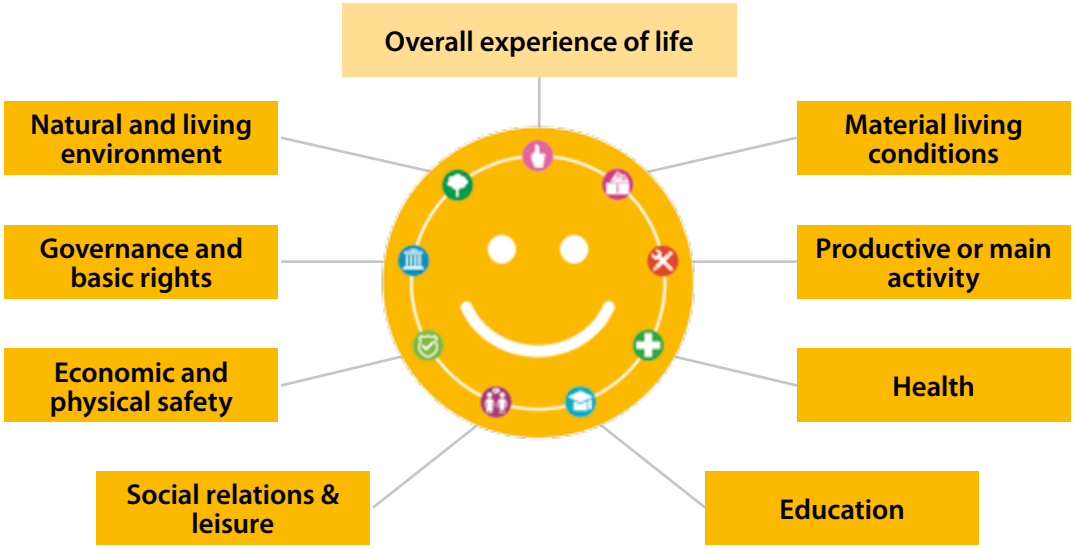
In 2011, the European Statistical System Committee (ESSC) adopted a report, on 'Measuring progress, well-being and sustainable development'. The report summarises 50 specific actions, to be taken by the European Statistical System (ESS), to implement recommendations on:

- Multidimensional measurement of the quality of life;
- Household perspective and distributional aspects of income, consumption and wealth; and
- Environmental sustainability.

In order to carry out the multidimensional measurement of quality of life, two main streams of actions were launched: developing a set of indicators (mainly based on existing data) and collecting new data.

Quality of life is a broader concept than economic production and living standards. It includes the full range of factors that influence what people value in living, beyond the purely material aspects. Quality of life being a multidimensional concept, the set of indicators was developed and organised along 8+1 dimensions which constituted the 'quality of life' framework. In this framework, the dimensions can be measured statistically to represent the different complementary aspects of quality of life, complementing the indicator traditionally used as the measure of economic and social development, the GDP. Eight of these dimensions relate to people's capabilities to pursue their self-defined well-being, according to their own values and priorities. The last dimension 'overall experience of life' refers to the personal perception of quality of life (i.e. life satisfaction, affects, meaning of life).

In 2013 Eurostat introduced an ad-hoc module on subjective well-being within the statistics on income and living conditions (EU-SILC). A set of variables with subjective appreciations of life in

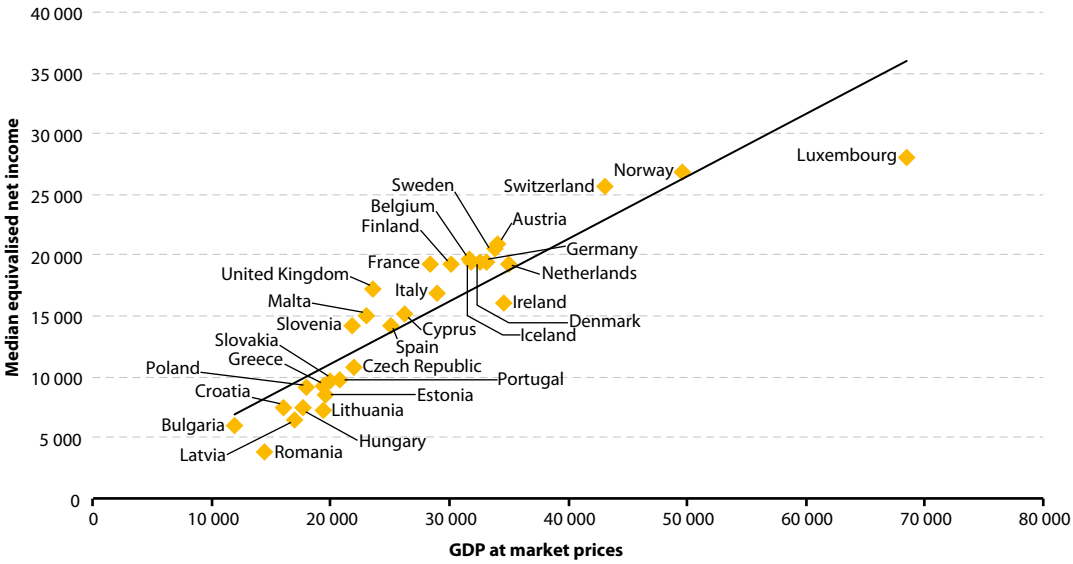


general but also several dimensions of quality of life complemented the data collected on income and living conditions (which is heavily used in the context of poverty and social exclusion analysis). The objective dimensions of people's living conditions were consequently supplemented with micro-data collected on people's perceptions of quality of life, also called 'subjective well-being'. Hence, data on subjective well-being were collected for the first time across all EU Member States with the quality standards of official statistics.

Micro-data on objective and subjective measures were checked and analysed. Indicators from the quality of life framework were computed and analysed together with different elements affecting quality of life, such as for instance educational level, activity and health status as well as family and financial situation. The results of these analyses are presented in this flagship publication.

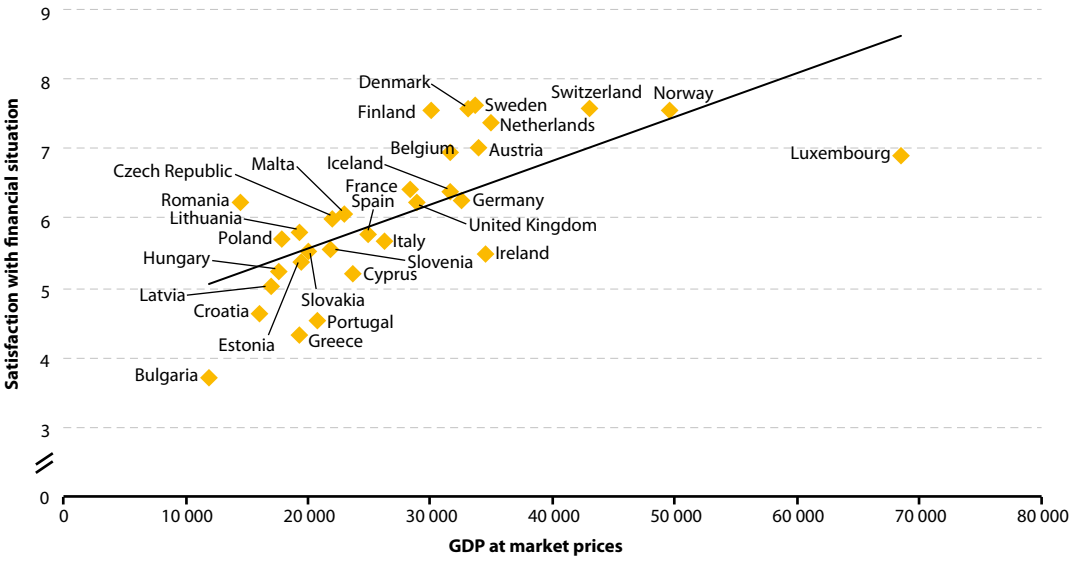
Figures 2, 3 and 4 show the different pictures that can be obtained when complementing the GDP with an objective indicator on households' income (Figure 2), the subjective perception of people's financial situation (Figure 3) and the subjective multidimensional indicator on people's life satisfaction (Figure 4). This illustrates the need for complementing the GDP to monitor social progress, since analysing the GDP alone (Figure 1) leads to somewhat different conclusions than analysing it in connection with these additional indicators.

Figure 2: Median equivalised net income versus GDP at market prices, 2013
(y-axis: PPS; x-axis: PPS per capita)



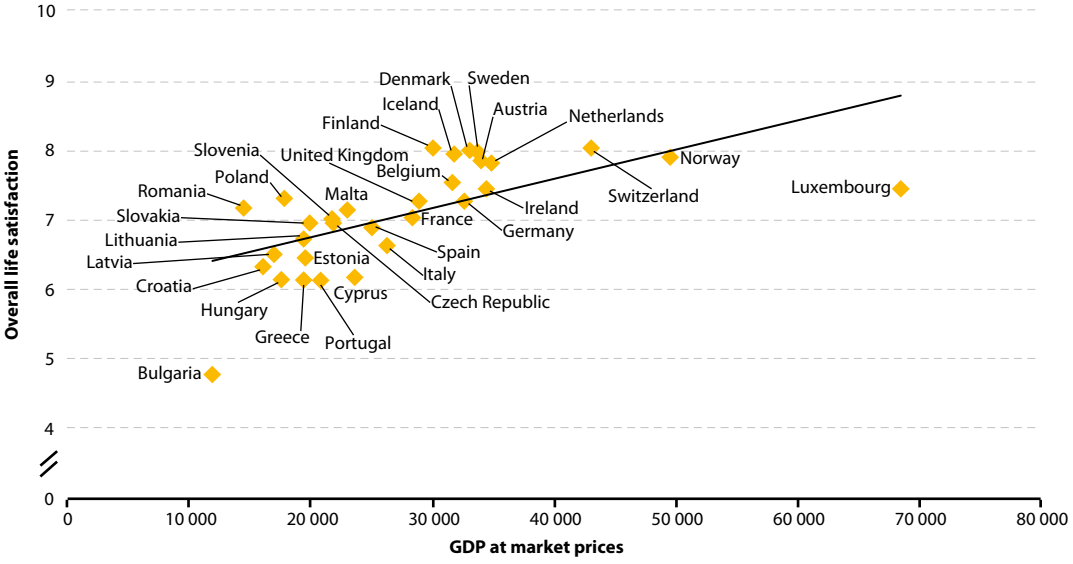
Source: Eurostat (online data codes: nama_10_pc and ilc_di03)

Figure 3: Satisfaction with financial situation of the household versus GDP at market prices, 2013
(y-axis: mean rating; x-axis: PPS per capita)



Source: Eurostat (online data codes: nama_10_pc and ilc_pw01)

Figure 4: Overall life satisfaction versus GDP at market prices, 2013
(y-axis: mean rating; x-axis: PPS per capita)



Source: Eurostat (online data codes: nama_10_pc and ilc_pw01)

What can you find in this publication?

Quality of life in Europe — facts and views is divided into nine chapters covering the 8+1 dimensions of the quality of life framework:

- material living conditions;
- productive or main activity (covering employment);
- health;
- education;
- leisure and social interactions;
- economic and physical safety;
- governance and basic rights;
- natural and living environment; and
- overall life satisfaction.

The emphasis in this publication has been placed on the data collected under the 2013 ad-hoc module on subjective well-being, which was added to the statistics on income and living conditions (EU-SILC). Nevertheless, the annual EU-SILC data and indicators coming from other sources within the European Statistical System (ESS), in particular the EU Labour Force Survey (EU-LFS), complement the picture.

As people's life satisfaction cannot be reduced to one single aspect, this publication presents the different aspects of quality of life, combining objective indicators with the subjective evaluation of individuals' situations. The subjective indicators available for each dimension are analysed taking into consideration different socio-economic factors such as age, sex, labour status, etc. while their impact on self-assessed satisfaction levels are evaluated. Then the relationship between the subjective perceptions and the objective measurements belonging to the same domain are studied. Nevertheless, the dimensions are often interlinked and multi-causality appears. This publication touches on the issue but does not examine it in details. This offers the potential for further research on the topic.

Please note that in the graphs presented in this publication, some totals may not correspond with the sum of the separate figures, due to rounding.

Aggregated source data, tables and graphs are available in Excel format through the *Statistics Explained* platform (see later in the publication).

Infographic associated to this 'Quality of life' publication

To complement this publication on quality of life, Eurostat has recently developed an infographic that provides information on people's well-being in a simple way. For each dimension of the quality of life framework the infographic shows an indicator of people's subjective evaluation complemented with an objective indicator. The infographic can be accessed through the homepage of Eurostat's website.

About Eurostat and the European statistics

Eurostat is the statistical office of the EU, situated in Luxembourg. Its task is to provide the EU with Eurostat is the statistical office of the EU, situated in Luxembourg. Its task is to provide the EU with statistics at a European level that enable comparisons between countries and regions. Eurostat's mission is to be the leading provider of high-quality statistics on Europe.

Accessing European statistics

The simplest way to access Eurostat's broad range of statistical information is through its website (http://ec.europa.eu/eurostat). Eurostat provides users with free access to its databases and all of its publications in portable document format (PDF) via the internet. The website is updated daily and gives access to the latest and most comprehensive statistical information available on the EU, its Member States, EFTA countries, as well as acceding and candidate countries.

Eurostat online data codes — easy access to the freshest data

Eurostat online data codes allow easy access to the most recent data on Eurostat's website. In this publication the online data codes are given as part of the source below each table and figure. In the PDF version of this publication, the reader is led directly to the freshest data by clicking on the hyperlinks that form part of each online data code. Readers of the paper edition can access the freshest data by typing a standardised hyper-link into a web browser — http://ec.europa.eu/eurostat/product?code=<data_code>&mode=view — where <data_code> is to be replaced by the online data code listed under the table or figure in question. Online data codes lead to either a two- or three-dimensional table in the TGM (tables, graphs, maps) interface or to an open dataset which generally contains more dimensions and longer time series using the Data Explorer interface.

Online data codes can also be fed into the 'Search' function on Eurostat's website. The results from such a search present related dataset(s) and possibly publication(s) and metadata.

Note that the data on the Eurostat's website are frequently updated and that the description above presents the situation as of May 2015.

Statistics Explained

Statistics Explained is part of Eurostat's website. It provides easy access to statistical information concerning the EU. It can also be accessed via an icon at the right-hand end of the top menu bar on most Eurostat webpages, or directly at http://ec.europa.eu/eurostat/statistics-explained.

Statistics Explained is an online publishing system about EU statistics which uses MediaWiki technology and resembles Wikipedia. This wiki-based system presents statistical articles which together form an encyclopaedia of European statistics, completed by a glossary of the statistical concepts and terms used. In addition, numerous links to the latest data and metadata as well as to further information are provided, making *Statistics Explained* a portal for regular and occasional users alike.

It is possible to search for articles using the 'Search' function on the top-right of the webpage, as to get a PDF version of the article, to print, to bookmark or forward content easily.

The content of this flagship publication *Quality of life — facts and views* is available on *Statistics Explained* and can be found under the online publication with the same title. Aggregated source data, tables and graphs are gathered in Excel files at the bottom of each article of this online publication to allow you to have more insight into the quality of life data.

1

Material living conditions

Introduction

This chapter presents the material living conditions of people across the European Union (EU). It covers both the financial situation and the housing conditions of EU residents. The financial situation relates to the standard of living as expressed through income. Disposable income provides the financial resources available for spending (or saving) and determines ownership of (or access to) material goods and services.

MEDIAN EQUIVALISED DISPOSABLE INCOME

Household disposable income corresponds to income from market sources and cash benefits after deduction of direct taxes and regular inter-household cash transfers. It can be considered as the income available to the household for spending or saving. The living standards achievable by a household with a given disposable income depend on how many people and of what age live in the household. Household income is thus 'equivalised' i.e. adjusted for household size and composition so that the incomes of all households can be looked at on a comparable basis. Equivalised disposable income is an indicator of the economic resources available to a standardised household.

In times of crisis, it is of interest to examine how the residents of the European Union perceive their material living conditions, which is only one in a whole set of factors determining an individual's well-being. This publication takes an innovative approach and uses data on subjective evaluations of different domains, collected for the first time in European official statistics, through the 2013 ad-hoc module of EU statistics on income and living conditions (EU-SILC) on subjective well-being. Objective indicators belonging to the same area are used to complement and analyse this type of information.

The analysis will first present the subjective indicators available on the topic also taking into consideration different socio-economic factors such as age, gender, labour status, etc. and evaluate their impact on self-assessed satisfaction levels. This evaluation will be followed by an examination of the relationship between assessment indicators and objective measurements belonging to the same domain. By analysing objective situations together with their subjective assessments, this chapter underlines that quality of life is influenced by an individual's/household's objective material (such as housing) and economic (such as income) conditions as well as the subjective perception one has of them. From this perspective, material living standards should not only be viewed in quantitative monetary terms, but also in a wider quality of life context. The influence of material living conditions on one's overall perception of life is the subject of a separate chapter.

DATA ON SUBJECTIVE WELL-BEING

For the first time, data on subjective evaluations and perceptions in different domains have been collected in a comparable way in all EU Member States. EU residents aged 16 and over rated their life satisfaction in general and for particular aspects of their life (like job, commuting time, financial situation and housing).

Aggregated source data and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).

EU POLICIES RELATED TO MATERIAL LIVING CONDITIONS

EU policies put a high emphasis on various types of social issues, including in the field of material living conditions, which are important determinants of well-being in that they affect individuals and households daily lives. The EU Sustainable Development Strategy (1) dedicates one of its seven key challenges to social inclusion, demography and migration, with the overall objective of 'creating a socially inclusive society' and 'to secure and increase the quality of life of citizens'. The Europe 2020 strategy targets particularly the risk of poverty, including material poverty (or so-called 'material deprivation'), and social exclusion. It has the goal of 'lifting at least 20 million people out of the risk of poverty and social exclusion' by 2020 (2). To support this ambitious objective, the European Commission has launched the two flagship initiatives 'Agenda for new skills and jobs' (3) and the 'European platform against poverty and social exclusion' (4) which will also contribute to reaching the EU's employment and education targets for 2020.

Material living conditions in a quality of life perspective

On a scale of 0 to 10, where 0 is the lowest satisfaction level and 10 is the highest, nearly half of EU residents (49.2 %) reported a medium level of satisfaction with their financial situation in 2013 (6–8 out of 10), 37.6 % reported a low satisfaction level (0–5 out of 10) and only 13.2 % a high satisfaction level (9–10 out of 10). This represents an average (mean) satisfaction of 6.0, with values ranging from 3.7 in Bulgaria to 7.6 in Denmark and Sweden.

THE SCALE (FROM 0 TO 10) AND THE THREE LEVELS OF SATISFACTION

Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6–8 and high satisfaction to 9–10.

Women and men were equally satisfied whereas older and younger EU residents appeared more satisfied than the rest of the age groups. The employed and those before and after their active/productive years (in education, training or retired) appeared on average more satisfied than the other groups.

The objective living conditions are strongly related to the subjective assessment of the financial situation, both at country and individual level. Being in a situation of severe material deprivation or not being able to make ends meet is especially damaging. Nevertheless, some countries do deviate from this pattern and show higher or lower levels of satisfaction than could be expected given their objective living conditions.

(1) Council of the European Union, 2009 Review of the EU Sustainable Development Strategy — Presidency report, 16818/09.
(2) European Commission, *Taking stock of the Europe 2020 strategy for smart, sustainable and inclusive growth*, COM(2014) 130 final, Brussels, 2014.
(3) European Commission, *An Agenda for new skills and jobs: A European contribution towards full employment*, COM(2010) 682 final, Strasbourg, 2010.
(4) European Commission, *The European Platform against Poverty and Social Exclusion: A European framework for social and territorial cohesion*, COM(2010) 758 final, Brussels, 2010

HOW ARE MATERIAL LIVING CONDITIONS AND QUALITY OF LIFE LINKED?

Individuals and households use material resources, according to their own values and priorities, to pursue their own self-defined well-being. Quality of life is, therefore, fundamentally constrained by an individual's own access to the material resources he or she needs or wishes even if only as material means to be transformed into well-being. In this perspective, economic conditions and, in particular, material living conditions, while not reflecting quality of life per se, provide a framework for the measurement of the potential of individuals and households to achieve it.

Material living standards

Household income development since 2008

As illustrated in Figure 1, purchasing power of the median equivalised household income has grown since 2008 in most EU Member States. Significant differences exist between countries with a median equivalised income ranging from 3 936 purchasing power standard (PPS) in Romania to 28 030 PPS in Luxembourg in 2013. The onset of the economic crisis in 2008 led to severe purchasing power losses in Greece (– 24.8 %), Ireland (– 12.1 %), Latvia (– 9.5 %) and the United Kingdom (– 9.3 %). The strongest increases were observed in Slovakia (+ 41.5 %), Poland (+ 36.0 %), Romania (+ 28.5 %) and Bulgaria (+ 23.8 %) between 2008 and 2013, which are all among the countries with the lowest median income in the EU. In the Nordic EU Member States (Sweden, Denmark and Finland), but also in Austria, Belgium, France and Germany, the purchasing power of the median income has grown between 8.2 % (Germany) and 16.8 % (Belgium).

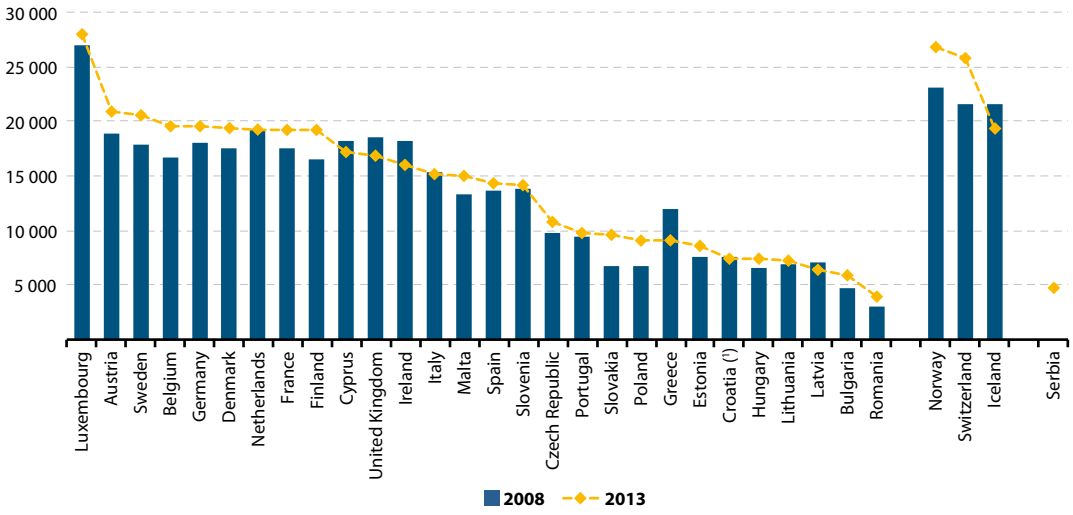
PURCHASING POWER STANDARD (PPS)

The purchasing power standard, abbreviated as PPS, is an artificial currency unit. Theoretically, one PPS can buy the same amount of goods and services in each country. However, price differences across borders mean that different amounts of national currency units are needed for the same goods and services depending on the country. PPS are derived by dividing any economic aggregate of a country in national currency by its respective purchasing power parities. PPS is the technical term used by Eurostat for the common currency in which national accounts aggregates are expressed when adjusted for price level differences using PPPs. Thus, PPPs can be interpreted as the exchange rate of the PPS against the euro.

Overall satisfaction with the financial situation of the household

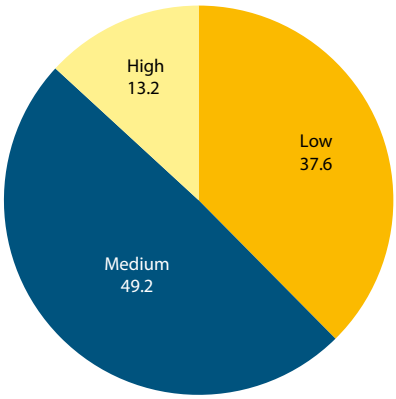
Figure 2 presents the overall satisfaction with the financial situation of the household, as reported by the EU-28 population. Almost half of the population (49.2 %) reported a medium level of satisfaction with the financial situation of their household in 2013, 37.6 % reported a low level of satisfaction whereas only 13.2 % reported a high level of satisfaction. The overall level of satisfaction with the financial situation averaged 6.0 for EU-28 Member States (on a scale of 0 to 10 where 0 corresponds to the lowest and 10 to the highest grade of satisfaction). However, as can be seen in Figure 3, values ranged from 3.7 (in Bulgaria) to 7.6 (in Denmark and Sweden).

Figure 1: Median equivalised disposable household income, by country, 2008 versus 2013
(PPS)



(1) 2010 data instead of 2008 data.
Source: Eurostat (online data code: ilc_di03)

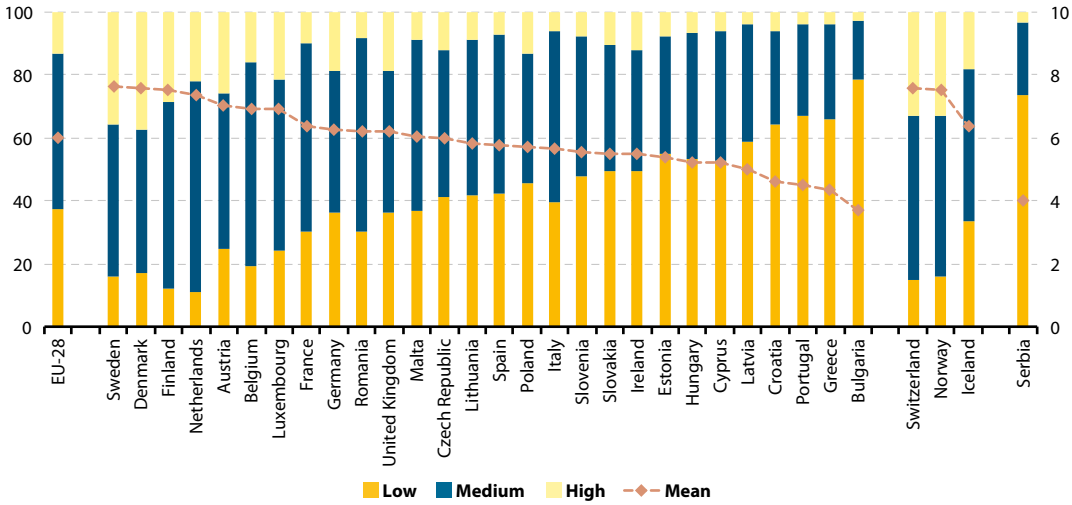
Figure 2: Satisfaction with the financial situation of the household, EU-28, 2013
(% of population by satisfaction level)



Source: Eurostat (online data code: ilc_pw05)

The highest levels of satisfaction were recorded in the northern EU Member States (Figure 3). In Denmark and Sweden, 37.4 % and 35.5 % of the population rated their satisfaction with a score of 9 or 10 out of 10, followed by Finland (28.6 %), Austria (26.1 %), the Netherlands (22.0 %) and Luxembourg (21.5 %). The mean satisfaction level in these EU Member States was very close to or exceeded 7 on a scale of 0 to 10. In contrast, only a small proportion (below the EU average) of the population of all eastern or southern EU Member States was highly satisfied with their financial situation. In some of these countries the highest proportions of low levels of satisfaction (0–5) were recorded. The countries with the highest proportions of low levels of satisfaction were Bulgaria (78.5 %), Portugal (67.0 %), Greece (65.9 %) and Croatia (64.5 %). Additionally, Bulgaria reported the lowest mean satisfaction level of 3.7, followed by Greece and Portugal, at 4.3 and 4.5 respectively.

Figure 3: Satisfaction with financial situation of the household, by country, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Among the EU population, 13 % reported a high level of satisfaction with their financial situation, while 38 % reported a low level of satisfaction.

How is the socio-demographic and economic background associated with satisfaction with the financial situation?

The next section examines how individuals' perception of their financial situation may vary depending on a set of socio-demographic factors/variables which may lead to different expectations and preferences, as well as objective differences in earnings which are related to age, sex, labour status and educational attainment. The relationship between the subjective and the corresponding objective indicators of financial satisfaction measuring material deprivation and income levels (income tercile, ability to make ends meet), is also described. The analysis below considers how such factors relate to the level of satisfaction of EU Member State residents.

INCOME TERCILES

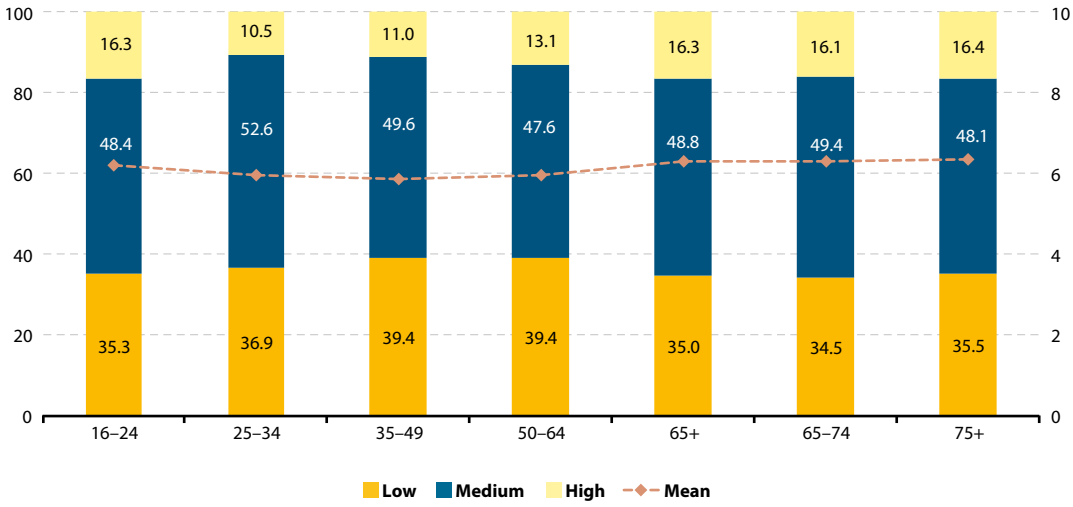
Income terciles are three equal-sized income groups which refer to the position of income in the national frequency distribution. The tercile cut-off value is obtained by sorting all incomes, from lowest to highest, and then choosing the value of income under which 33.3 % (lower limit), 66.6 % (second limit) and 100 % (upper limit) of the sample are located. A tercile as such is associated with the segment boundaries between two terciles. The first segment includes income below the lower tercile cut-off (33.3 %), the second segment includes income located between the lower cut-off and the higher tercile cut-off.

Financial satisfaction was highest among younger and older people

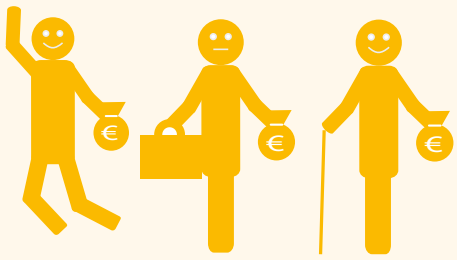
As can be seen in Figure 4 financial satisfaction is highly associated with age. The mean satisfaction was highest among the elderly population and the younger population. In particular, the mean satisfaction was 6.3 for age groups 75+, 65–74 and 65+ and 6.2 for age group 16–24. The intermediate age groups (25–34, 35–49 and 50–64) had an average satisfaction of 5.9–6.0. Although the means are quite similar for the intermediate age groups, in the youngest among them (age group 25–34) a lower percentage of low level of satisfaction was encountered (36.9 % compared to 39.4 % for age groups 35–49 and 50–64). The reasons for the higher level of satisfaction of the youngest and the oldest age groups may be quite different. In the case of the first category it may be related to the fact that many still depend on their parents for financial support (79.5 % of adults aged 18–24 were living with their parents in 2013 of which 29.3 % were employed) ([5]), while for the latter it may be related to their objective situation; in particular a higher wealth accumulation and lower consumption needs. The older (60 years or over) and younger (less than 30 years) age groups had the lowest consumption expenditure. Their mean consumption expenditure per adult equivalent was EUR 15 283 for the former and EUR 14 632 for the latter group, while for the middle aged groups it was higher than EUR 16 000 ([6]).

([5]) *Source*: Eurostat, EU-SILC (ilc_lvps08 and ilc_lvsp09).
([6]) *Source*: Eurostat, Household Budget Survey (hbs_exp_t135).

Figure 4: Satisfaction with financial situation by age group, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

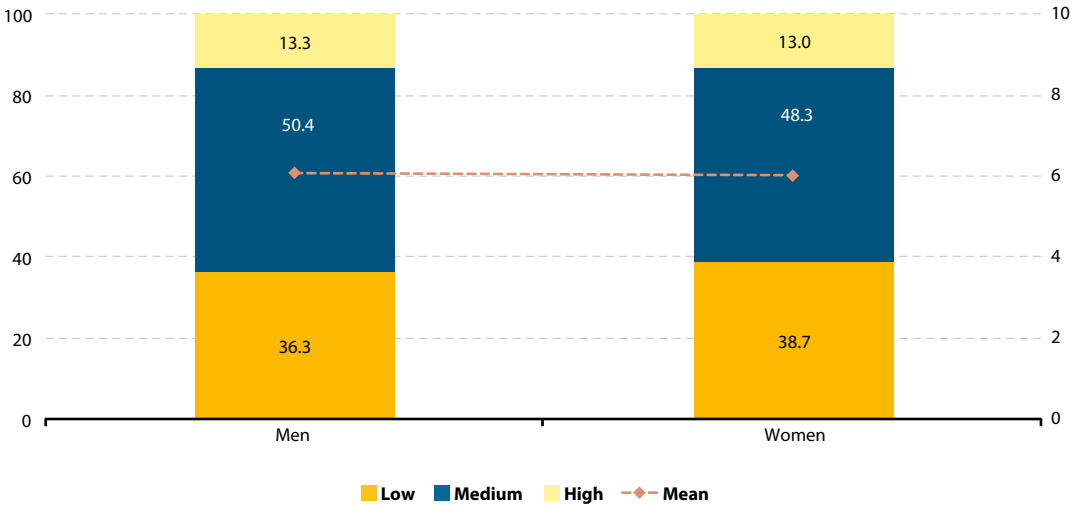


Young (16–24) and elderly (65+) EU residents were more satisfied with their financial situation than the middle-aged group, probably because of lower consumption needs.

Slight gender effect on financial satisfaction

As shown in Figure 5, the mean level of financial satisfaction of males was comparable to that of females although slightly higher (6.1 as opposed to 6.0). Although in these terms the two genders are very similar, some differences are visible when analysing the low levels of satisfaction. The percentage of women who reported a low level of financial satisfaction was 2.5 points higher than that of men.

Figure 5: Satisfaction with financial situation by sex, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



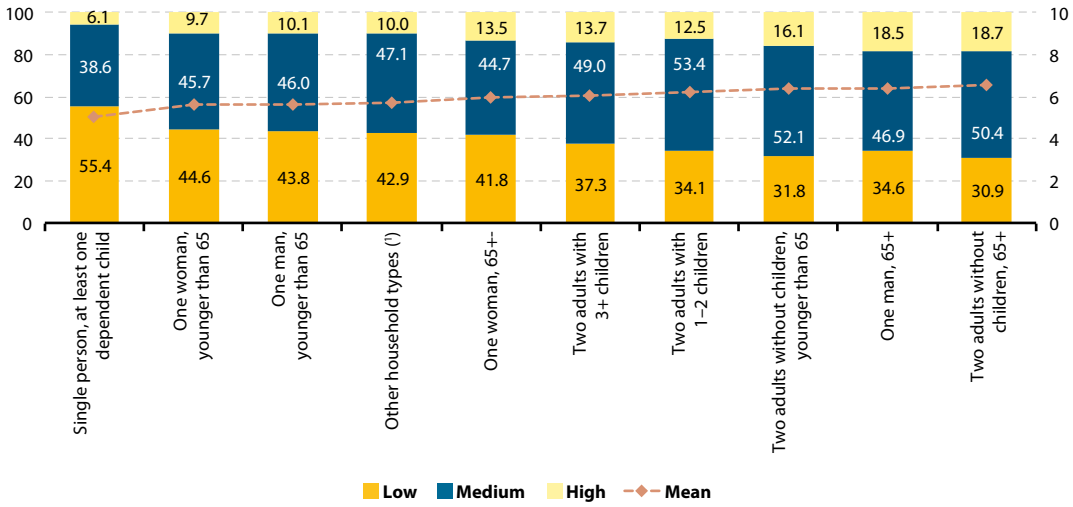
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Financial satisfaction was highest in households with two (older) adults without children

As can be seen in Figure 6, the average financial satisfaction was highest amongst two-adult households without children (regardless of their age), in particular at 6.6 for those in which at least one partner was over 65 years old and 6.4 for those younger than 65. The lowest financial satisfaction was observed in single-person households with at least one dependent child (5.0) followed by younger one-adult (male or female) households without children (both groups averaging at 5.6). This may reflect diverging financial situations across these groups. Two adult households without dependent children (many of which are dual earners) were at the lowest risk of poverty (10.4 % for the older two-adult households and 11.2 % for two-adult households younger than 65). Accordingly, the groups with the lowest financial satisfaction levels were at the highest risk of poverty, at 31.8 % for single persons with dependent children and 27.5 % for one-adult households aged less than 65 years in 2013 (7).

(7) *Source*: Eurostat, EU-SILC (ilc_li03).

Figure 6: Satisfaction with financial situation by household type, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other household types' refers to other households with and without dependent children.
Source: Eurostat (EU-SILC)

It is worth noting that even though the average financial satisfaction of single person households was the same for males and females younger than 65, the proportion of women declaring a low level of financial satisfaction was higher by 0.8 percentage points in general. For older single person households the gender-related difference was larger, as 7.1 percentage points more women reported having a low level of financial satisfaction. This probably reflects the existing differences between the income levels.

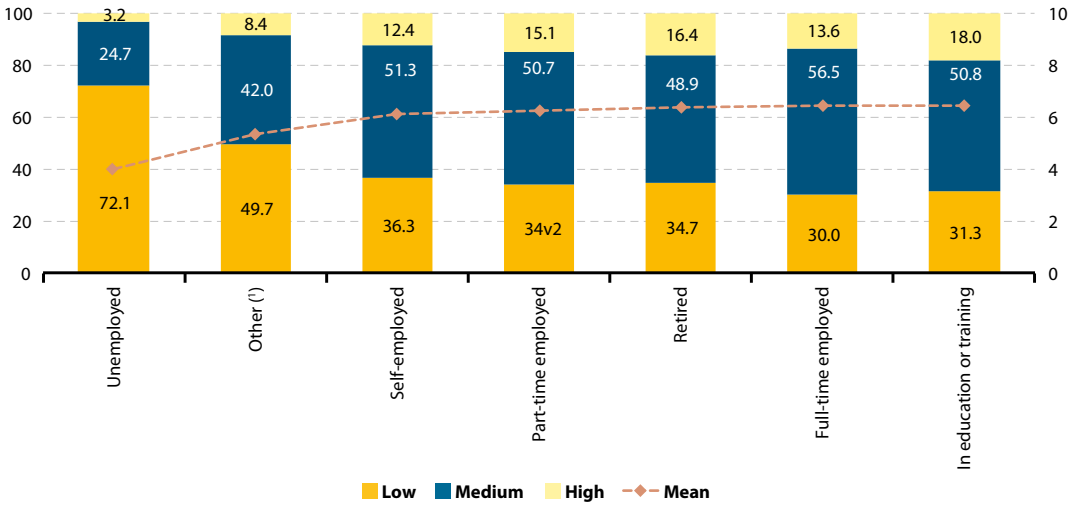
Persons in education or training and full-time employees were the most satisfied with their financial situation

Figure 7 highlights a clear relationship between labour status and financial satisfaction.

People before or after their active years (in education, training or in retirement) were more satisfied with their financial situation than the other groups. Being in employment is also a source of satisfaction.

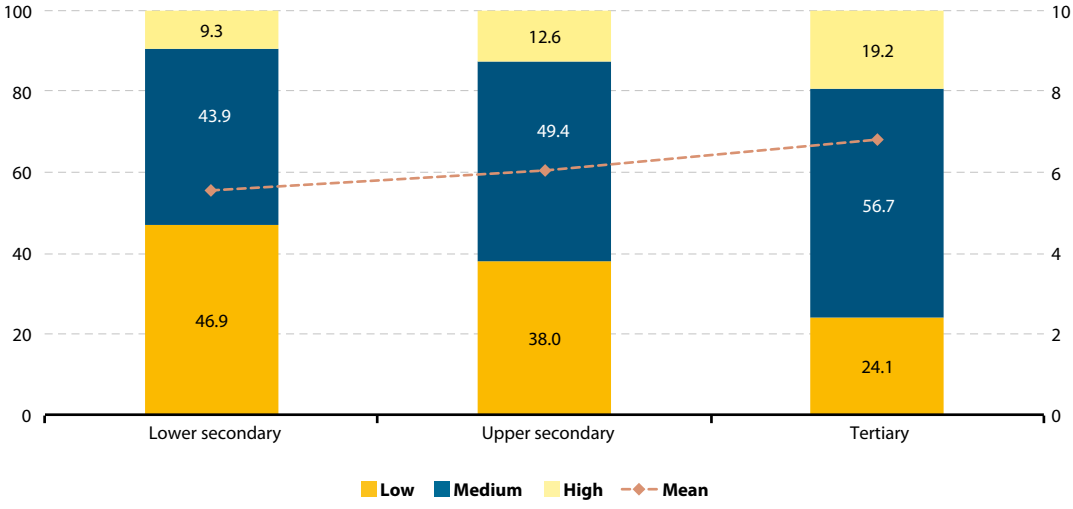
The lowest level of financial satisfaction was reported by the unemployed (average rating of 4) and the highest by respondents in education and training (6.5). Within the group of employed, the overall mean was lower for employees working part-time (6.2) than their full time counterparts (6.4). However, a higher percentage of part-time employees was very satisfied (15.1 %) than full-time employees (13.6 %). This may be due to different household situations, as the income referred to in terms of satisfaction is that of the household and not solely the individual. This observation is also to be taken into account when analysing satisfaction with the financial situation of people in education or training, as they most likely do not have their own source of income. With an average of 6.1, the self-employed appeared less satisfied with their financial situation than employees.

Figure 7: Satisfaction with financial situation by economic status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other' includes people permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

Figure 8: Satisfaction with financial situation by educational attainment, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Strong effect of education on financial satisfaction

There is a clear relationship between educational attainment and satisfaction with one's financial situation, as indicated in Figure 8. As education is also linked to income levels, this finding is not unexpected. People whose highest educational attainment is lower secondary education had an average satisfaction of 5.5, whilst those with upper secondary education reported an average satisfaction of 6.0 and those with tertiary education (and above) reported an average satisfaction of 6.8. This pattern was also reflected in the analysis of the population with high and low levels of satisfaction.

Satisfaction with the financial situation of the household was quite strongly related to income terciles

Figure 9 illustrates the relationship between income level (measured through the income tercile that the person belongs to on the basis of the distribution at the country level) and satisfaction with the financial situation. It shows that higher income (relative to the country's average) leads to higher satisfaction levels. The average level of satisfaction hence progressed by tercile from 5.1 in the lowest to 6.1 and 7.0 in the second and third tercile. 55.4 % of the population in the lowest income tercile had a low financial satisfaction and only 6.8 % of them declared to be very satisfied with their financial situation, whilst this was true for 21.9 % of the people in the highest income tercile. In the top tercile most people (57.9 %) declared a medium level of satisfaction with their financial situation. The income levels associated with the terciles vary considerably by country.

A very high proportion of severely materially deprived EU residents had a low level of satisfaction with the financial situation of their household

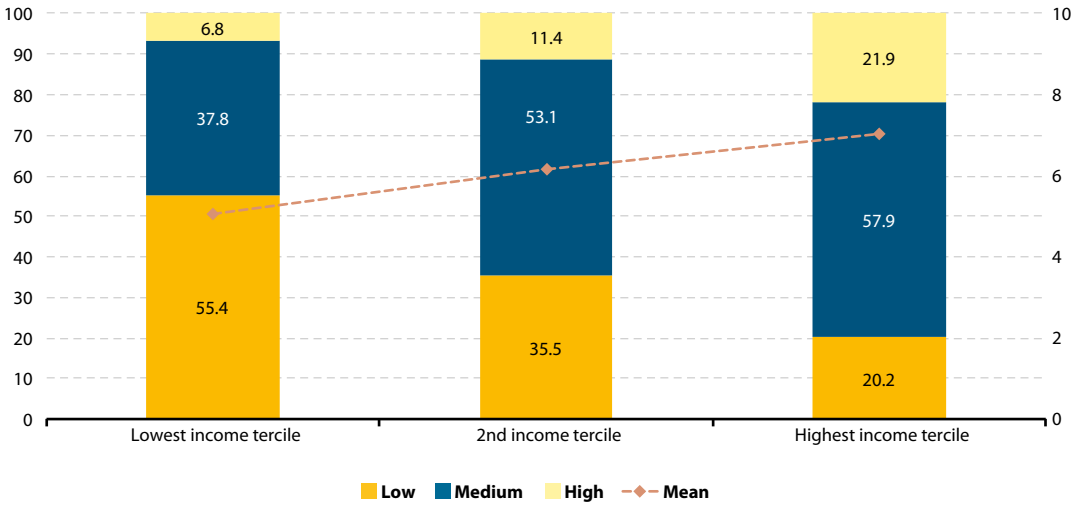
In contrast to the income terciles, which refer to the position of the individual on the income scale of the country, severe material deprivation refers to the ability of individuals to pay for a series of goods or services that are the same for all EU Member States Severe material deprivation translates into bad living conditions severely constrained by a lack of resources. It is the second most prevalent form of poverty and social exclusion in Europe in 2013, after monetary poverty and before low work intensity ([9]).

INCOME, MATERIAL CONDITIONS AND CONSUMPTION

Within the framework of quality in life, the material living conditions dimension is split into three sub-dimensions: income, material conditions and consumption. 'Income' covers income levels, monetary poverty, and the distribution of income within the same country. 'Material conditions' refer to material deprivation and housing conditions. Indicators on the topic 'consumption' are collected both at micro level (from Household Budget Survey) and macro level (Actual individual consumption, a National Accounts aggregate). These objective indicators are supplemented by a subjective one, which measures the satisfaction with the financial situation of the household, collected for the first time through the 2013 module of EU-SILC on subjective well-being.

([9]) *Source*: Eurostat (t2020_51, t2020_52 and t2020_53).

Figure 9: Satisfaction with financial situation by income tercile, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



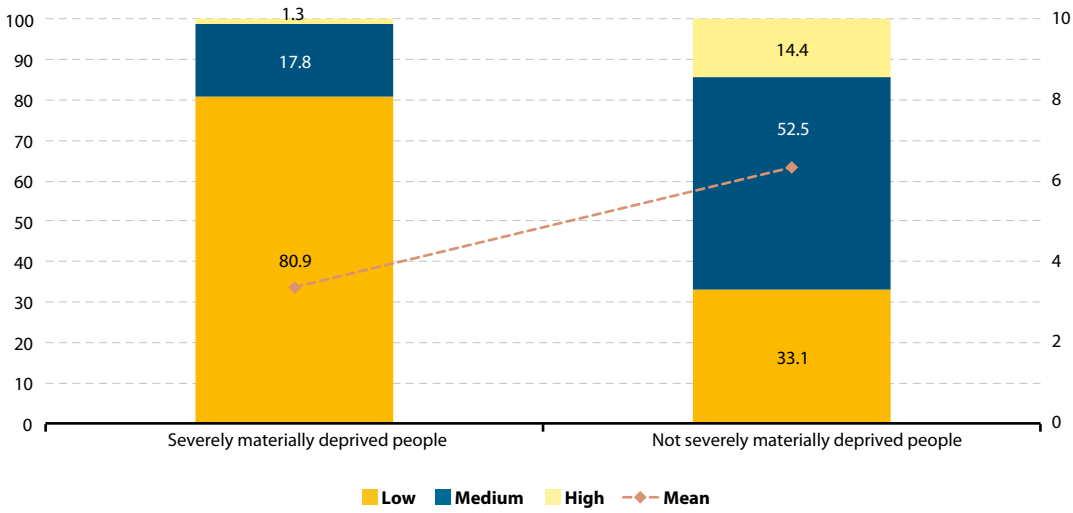
Source: Eurostat (EU-SILC)

SEVERE MATERIAL DEPRIVATION

Material deprivation covers issues relating to economic strain and durables. Severely materially deprived persons have living conditions greatly constrained by a lack of resources and cannot afford at least four of the following: to pay rent or utility bills; to keep their home adequately warm; to pay unexpected expenses; to eat meat, fish or a protein equivalent every second day; a week holiday away from home; a car; a washing machine; a colour TV; or a telephone.

As shown in Figure 10, there is a clear connection between being severely materially deprived and satisfaction with financial resources, with a mean almost twice as high for the non-deprived population (6.3) than for those severely deprived (3.4). This difference is due to the particularly low proportion of very satisfied population (1.3 %) and the very high proportion of those with a low level of satisfaction (80.9 %) among the group of deprived people.

Figure 10: Satisfaction with financial situation by material (deprivation) status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)

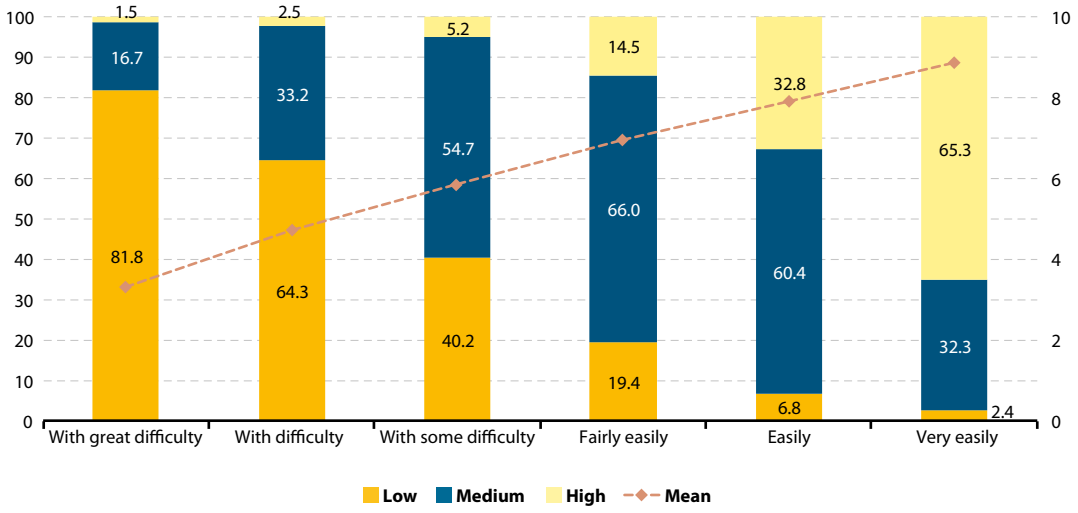


Source: Eurostat (EU-SILC)

The ability to make ends meet was strongly related to financial satisfaction

Living conditions may also be measured through more subjective indicators such as the ability to make ends meet, which is the expression of households' self-perceived financial hardship. The analysis in Figure 11 illustrates the relationship between capacity to face expenses and satisfaction with income, with a tendency for satisfaction to decline as difficulties grow. As a result the mean was more than twice as high in the upper group (8.8) than for the lowest group (3.3). Therefore, self-perceived financial hardship (or the absence of it) is strongly related to the levels of financial satisfaction.

Figure 11: Satisfaction with financial situation by ability to make ends meet, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

How are the objective material conditions in EU countries connected to the financial satisfaction of their residents?

Subjective well-being and income are closely related. On average, the richest individuals were more satisfied with their income and life in general (see chapter 9 on overall life experience) than the poorer ones, in most countries. Table 1 aims at comparing the share of people who declared a low satisfaction with their financial situation in 2013 with the share of people facing the risk of poverty, severe material deprivation and the share of households making ends meet with difficulty or great difficulty.

As expected, the countries with a higher risk of poverty and worse material conditions also had a higher proportion of their populations declaring a low level of financial situation. Some exceptions will be analysed below.

Table 1: Poverty and material conditions indicators versus low financial satisfaction, by country, 2013 (%)

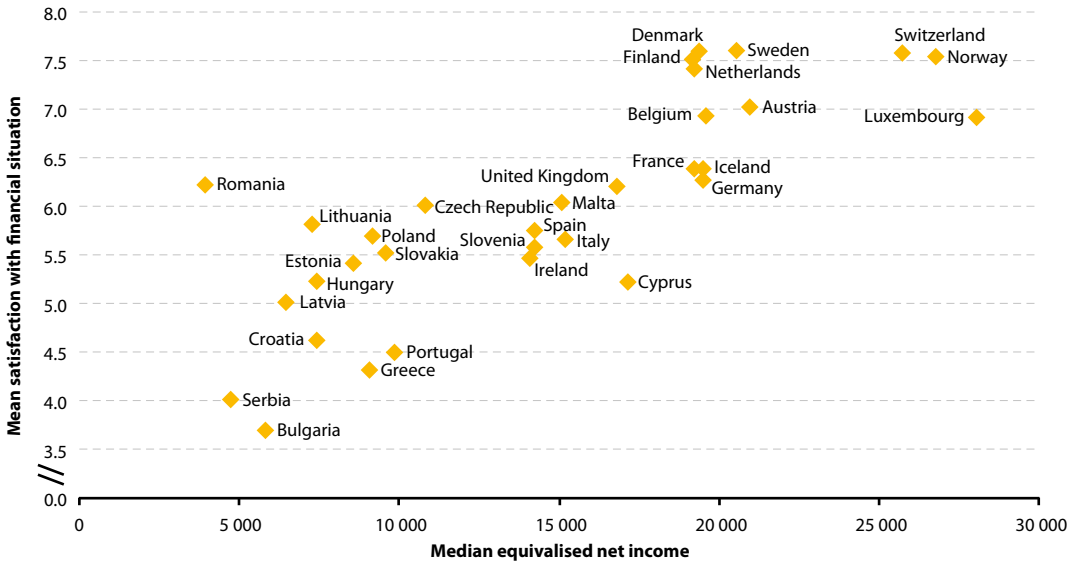
	Low satisfaction with financial situation	At-risk-of-poverty rate ([1])	Severely materially deprived people	Making ends meet with difficulty or great difficulty
EU-28	37.6	16.6	9.6	28.9
Belgium	19.5	15.1	5.1	21.0
Bulgaria	78.5	21.0	43.0	65.2
Czech Republic	41.0	8.6	6.6	31.7
Denmark	17.2	12.4	3.8	12.1
Germany	36.0	16.2	5.4	9.1
Estonia	54.8	18.5	7.6	23.4
Ireland	49.2	14.1	9.9	36.8
Greece	65.9	23.1	20.3	78.3
Spain	42.6	20.4	6.2	38.8
France	30.4	13.7	5.1	20.5
Croatia	64.5	19.5	14.7	55.4
Italy	39.8	19.1	12.4	41.6
Cyprus	52.8	15.3	16.1	59.4
Latvia	58.5	19.3	24.0	54.4
Lithuania	42.0	20.5	16.0	32.9
Luxembourg	24.3	15.9	1.8	13.4
Hungary	53.2	14.3	26.8	53.9
Malta	36.9	15.7	9.5	36.6
Netherlands	10.9	10.4	2.5	15.1
Austria	24.9	14.4	4.2	14.0
Poland	45.4	17.1	11.9	32.5
Portugal	67.0	18.7	10.9	46.9
Romania	30.2	22.3	28.5	50.9
Slovenia	48.0	14.5	6.7	33.1
Slovakia	49.7	12.8	10.2	36.6
Finland	12.3	11.8	2.5	6.9
Sweden	15.8	14.7	1.4	6.6
United Kingdom	36.4	15.9	8.3	21.1
Iceland	33.5	9.3	1.9	23.7
Norway	16.2	10.9	1.9	6.6
Switzerland	15.0	14.6	1.0	12.0
Serbia	73.6	24.5	26.9	64.6

([1]) Cut-off point: 60% of median equivalised income after social transfers.
Source: Eurostat (EU-SILC)

Median equivalised incomes were associated with average levels of satisfaction with the financial situation, with some exceptions

The median disposable income of households increased in most EU countries since 2005 (Figure 1). Big differences exist across countries, with a median more than seven times higher in Luxembourg (28 030 PPS) than in Romania (3 936 PPS) in 2013. Figure 12 compares the median equivalised net income to the mean satisfaction with the financial situation.

Figure 12: Mean satisfaction with financial situation versus median income, by country, 2013
(median income: PPS; mean satisfaction: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_di03)

A country analysis shows that Denmark and Sweden recorded the highest mean satisfaction rates (7.6 on the scale from 0 to 10) and were among the countries with the highest median income levels (19 349 PPS and 20 516 PPS respectively) in Europe in 2013. Following the pattern, Bulgaria — among the EU Member States with the lowest income levels (5 900 PPS) — also had the lowest mean satisfaction (3.7).

In spite of its top-position in terms of income, Luxembourg was not at the top of the ladder in terms of satisfaction with financial situation, with a mean of 6.9. On the other hand, Romania had one of the EU's lowest median incomes, but is far from having the lowest financial satisfaction, with a mean of 6.2, almost equal to the EU average (6.0) (analysis in Figures 2 and 3).

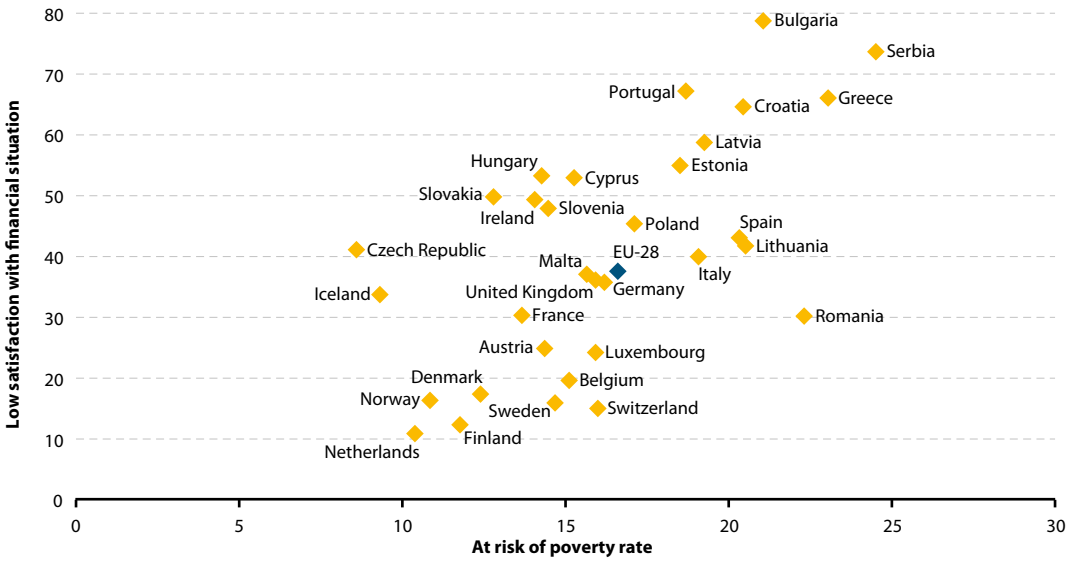
Low poverty risk was associated with higher financial satisfaction in Northern EU Member States

Monetary poverty was the most widespread form of poverty in 2013, affecting 83.5 million people in the EU (that is 16.7 % of the EU-28 population), followed by material deprivation and low work intensity, which affected 48.2 and 40.2 million people respectively (9). Generally, there is an association between the rate of people at risk of poverty in a country and the corresponding proportion of people with low satisfaction with the financial situation. As illustrated in Figure 13, in countries which experience a relatively low poverty risk a smaller share of people reported a low satisfaction with their financial situation. This is the case in the Netherlands, Finland, Sweden and Denmark, i.e. mainly northern EU Member States. On the other hand, the populations of countries with the highest monetary poverty rates (above 20 %) such as Bulgaria, Greece and Croatia, were to a lesser degree satisfied with their financial situation. Romania is an exception, as despite its high rate of poverty risk (22.3 %) the proportion of its population which declared a low level of financial satisfaction was 30.2 %, which is well below the EU average (37.6 %).

However, the opposite is also true in some cases. In particular, approximately half the population of Hungary, Cyprus, Slovakia, Ireland and Slovenia had a low level of financial satisfaction despite the fact that their poverty risks are below the EU average.

Furthermore, although the Czech Republic had the lowest poverty risk (9.6 %) in the EU, its share of people with a low satisfaction exceeded the EU average by 3.5 percentage points.

Figure 13: Low satisfaction with financial situation versus poverty risk, by country, 2013
(median income: PPS; mean satisfaction: mean rating)



Source: Eurostat (online data codes: ilc_pw05 and ilc_li02)

(9) *Source*: Eurostat (t2020_51, t2020_52 and t2020_53).

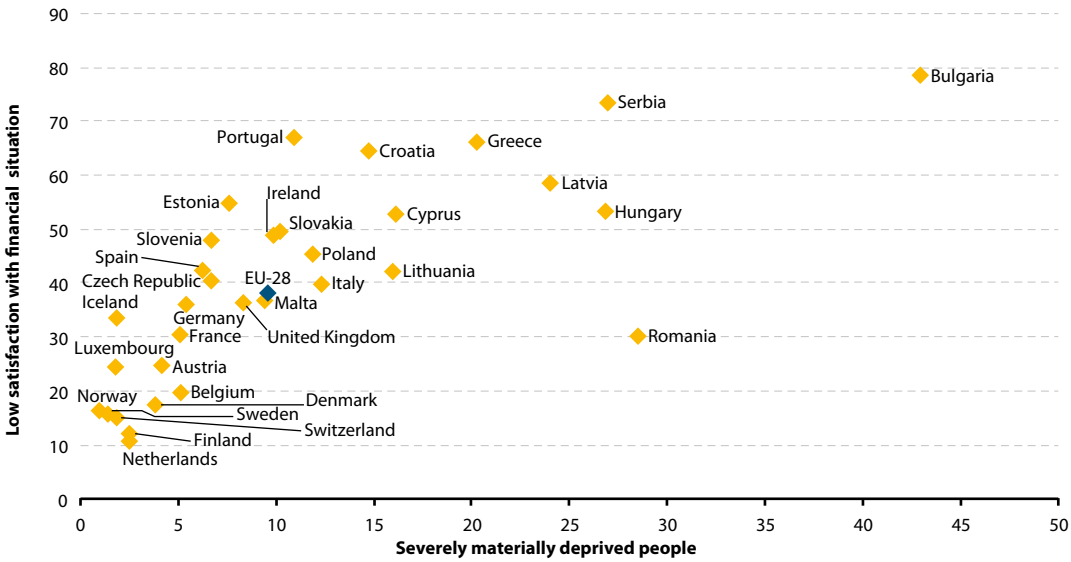
The Czech Republic had the lowest share of people at risk of poverty. However, more than 40 % of Czech residents had a low level of satisfaction with their financial situation.

Material deprivation negatively impacted financial satisfaction in most countries

Severe material deprivation is the second most prevalent form of poverty ([10]), with 9.6 % of the EU population (or one in eleven people) being affected by it. The country analysis in Figure 14 presents the relationship between the rate of severely materially deprived people and their reported financial situation.

The countries with a significantly higher share of severely materially deprived people such as Bulgaria (43 %), Hungary (26.8 %) and Latvia (24 %) also recorded the highest proportion of people least satisfied with their financial situation (78.5 %, 53.2 % and 58.5 % respectively). Romania is an exception, as it recorded a relatively low proportion (30.2 %) despite its high rate of deprived population (28.5 %); Hungary, which recorded a fairly similar deprivation rate, had a much higher share of poorly satisfied people. On the other hand, countries least affected by severe material deprivation such as Sweden (1.4 %), Finland and the Netherlands (2.5 % each) also reported the smallest shares of people with low levels of satisfaction The proportion of the population with a low level of satisfaction ranged from 10.9 % in the Netherlands to 15.8 % in Sweden.

Figure 14: Low satisfaction with financial situation versus severe material deprivation rate, by country, 2013
(%)



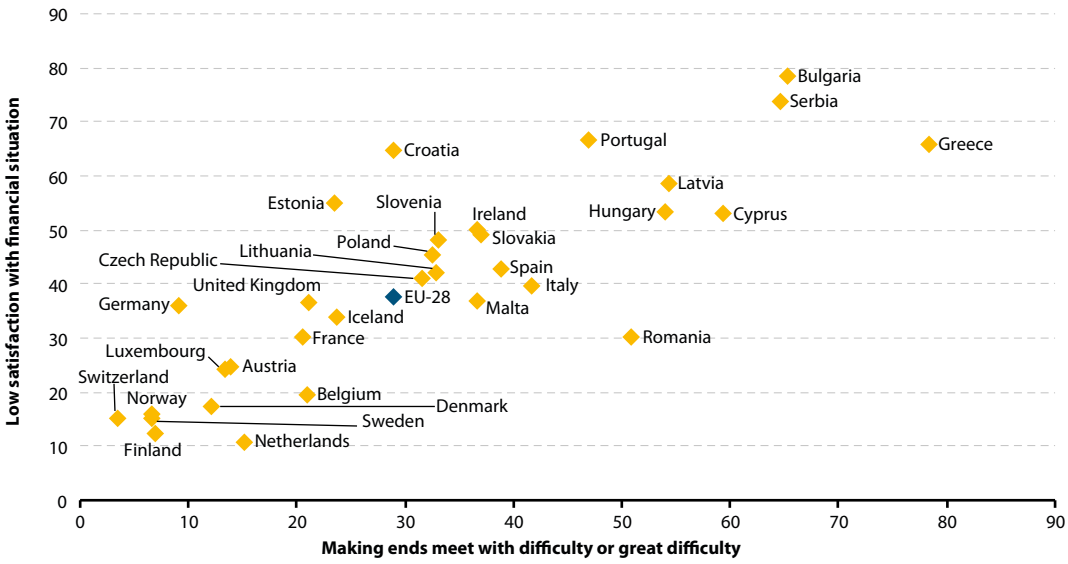
Source: Eurostat (online data codes: ilc_pw05 and t2020_53)

([10]) *Source:* Eurostat (t2020_51, t2020_52 and t2020_53).

Financial satisfaction also connected with ability to make ends meet

In 2013 almost 30 % of the EU population reported that their household was not able to face unexpected expenses and approximately 12 % of them expressed great difficulties in making ends meet ([11]). Figure 15 presents this subjective measure of self-perceived impression of the household's financial situation and its link to self-perceived financial satisfaction.

Figure 15: Low satisfaction with financial situation versus ability to make ends meet, by country, 2013 (%)



Source: Eurostat (online data codes: ilc_pw05 and ilc_mdes09)

In most countries, a clear relationship between ability to make ends meet and satisfaction with financial situation can be established. The countries which reported fewer difficulties in making ends meet generally were among the countries with low shares of low satisfied people (and vice-versa): this is the case for the northern EU Member States, such as the Netherlands, Finland, Sweden and Denmark. In the same vein, in several eastern and southern EU Member States such as Greece, Bulgaria, and to a lesser extent, Cyprus, Hungary and Portugal, high percentages of people with great difficulties in making ends meet were associated with low levels of satisfaction expressed by their population. With its high proportion of residents facing difficulties in making ends meet and a relatively modest proportion of low satisfied people (7.4 percentage points below the EU average), Romania remains a special case.

([11]) *Source*: Eurostat, EU-SILC (ilc_mdes09).

Housing conditions

In 2013, 17.2 % of EU residents were living in overcrowded dwellings, a decrease of 2.3 percentage points compared to 2005. Over the same time period 34.4 % of EU residents were living in under-occupied dwellings, an increase of 3.1 percentage points compared to 2005.

Based on these figures, it is not surprising that more than eight in ten Europeans were relatively satisfied with the dwelling in which they lived. In particular, on a scale of 0 to 10, 51.8 % of EU residents reported a medium satisfaction (6–8 out of 10), 32.5 % of EU residents reported a high satisfaction (9–10 out of 10) and only 15.7 % reported a low satisfaction (0–5 out of 10) with the dwelling they lived in. This is a much better situation compared with the satisfaction levels of EU residents regarding their financial situation, which is the other aspect of material living conditions just being analysed.

In terms of mean satisfaction, this translates into an average of 7.5 with values ranging from 6.0 in Bulgaria to 8.4 in Finland. Significant gender-specific patterns of housing satisfaction were not observed, although women reported a slightly higher share of low and high satisfaction. Belonging to the older age groups and owning one's housing led to significantly higher housing satisfaction.

Whilst national specificities exist, countries tend to follow patterns of housing satisfaction in which high proportions of dwellings affected by housing problems tend to be associated with low satisfaction levels, and vice-versa. This however does not apply to structural problems. Thus, a relationship between the presence of structural problems and the level of housing satisfaction cannot be established in most EU Member States.

Major developments in housing conditions since 2005

As illustrated in Figure 16, the prevalence of overcrowded dwellings amongst the EU population has declined by 2.3 percentage points since 2005 (from 19.5 % in 2005 to 17.2 % in 2013) while that of under-occupied dwellings has increased by 3.1 percentage points (from 31.3 % in 2005 to 34.4 % in 2013).

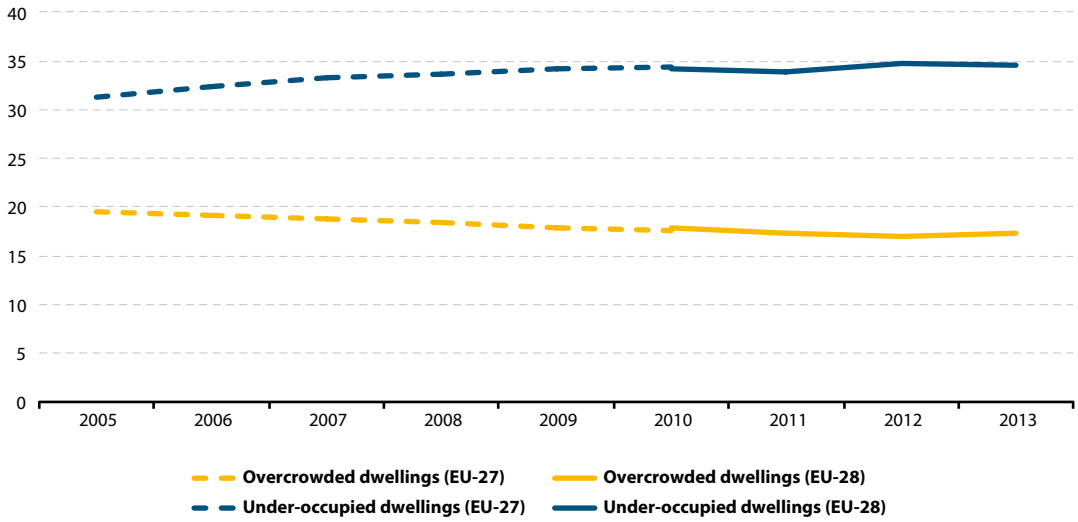
OVERCROWDING AND UNDER-OCCUPIED DWELLING

The overcrowding rate is defined as the share of the population living in an overcrowded household. The information on whether a dwelling is overcrowded or not refers obviously to the household level and involves considering the minimum number of rooms needed for the household which is calculated according to the criterion of assigning: one room for the household, one by couple in the household, one for each single person aged 18 and more, one by pair of people of the same sex between 12 and 17 years of age, one room for each single person between 12 and 17 years of age and not included in the previous category, and one by pair of children under 12 years of age. The overcrowding rate is computed by comparing the total number of rooms available with this minimum number of rooms needed. If the overcrowding rate is below the latter the household is classified as overcrowded.

The dwelling is considered under-occupied when the number of rooms available to the household exceeds by at least one the minimum number of rooms needed for the household.

Source: European Commission, Document for point 3A of the agenda, Housing conditions, 6th *meeting of the expert group on quality of life indicators*, Luxembourg, 20–21 November 2013, p. 3 and 7.

Figure 16: Population living in overcrowded or under-occupied dwellings, EU, 2005–13
(% of total population)



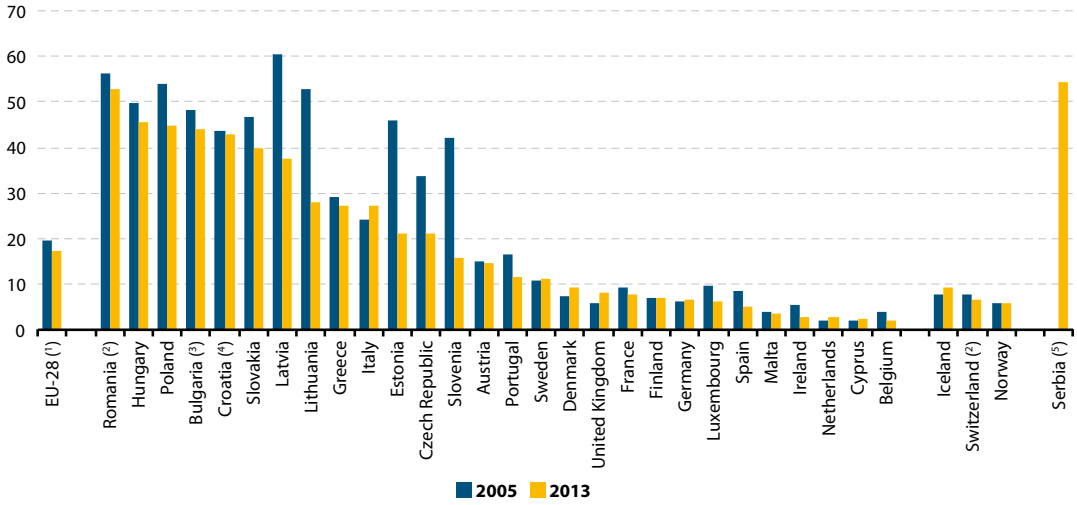
Source: Eurostat (online data codes: ilc_lvho05a and ilc_lvho50a)

Although most EU Member States have followed this pattern over time, there exist significant differences between countries. In particular, more than half of dwellings in Romania are overcrowded while this is the case for a mere 2.0 % of dwellings in Belgium, followed by Cyprus and the Netherlands (2.4 % and 2.6 % overcrowded dwellings respectively).

The most considerable declines in overcrowded dwellings between 2005 and 2013 (above 20 percentage points) were observed in some eastern EU Member States such as Slovenia, Estonia, Lithuania and Latvia. In cases where increases in overcrowded dwellings between 2005 and 2013 were observed, they remained moderate. For instance, Italy reported an increase in overcrowded dwellings between 2005 and 2013 of 3.1 percentage points.

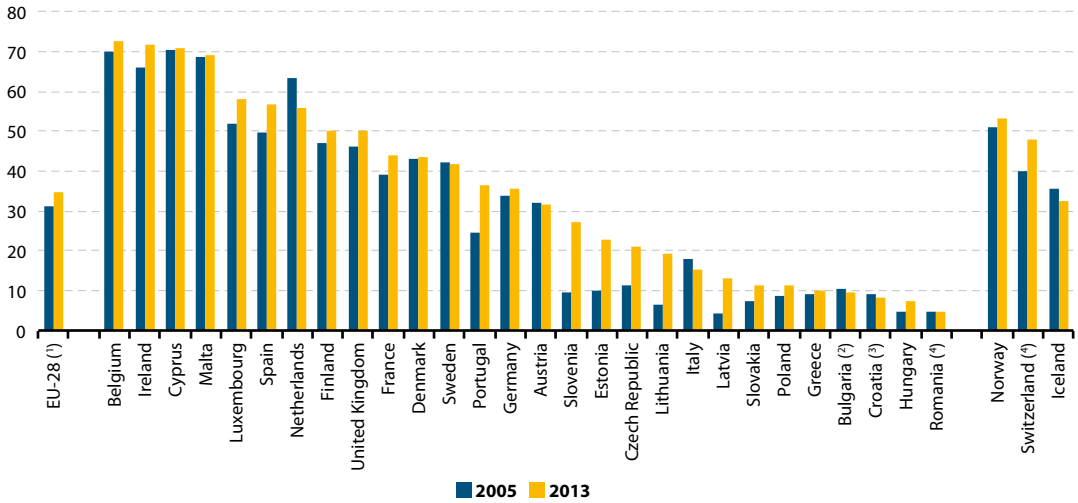
Comparing Figures 17.a and 17.b which display the population living in overcrowded and under-occupied dwellings by country almost opposite situations can be observed with more or less the same countries displayed above and below the EU average. Again Romania and Belgium appear at each end of the scale as Romania recorded 4.9 % under-occupied dwellings and Belgium reported 72.7 % under-occupied dwellings in 2013. The highest increase in under-occupied dwellings between 2005 and 2013 was recorded by Slovenia with an increase of 17.9 percentage points followed by Estonia, Lithuania and Portugal all of which recorded an increase of 12.0 percentage points. On the contrary, the sharpest declines were recorded in the Netherlands (– 7.6 percentage points) and Italy (– 2.6 percentage points).

Figure 17.a: Population living in overcrowded dwellings, by country, 2005 and 2013
(% of total population)



(1) EU-27 instead of EU-28 for 2005 data.
(2) 2007 data instead of 2005 data.
(3) 2006 data instead of 2005 data.
(4) 2010 data instead of 2005 data.
(5) 2005 data not available.
Source: Eurostat (online data code: ilc_lvho05a)

Figure 17.b: Population living in under-occupied dwellings, by country, 2005 and 2013
(% of total population)



(1) EU-27 instead of EU-28 for 2005 data.
(2) 2006 data instead of 2005 data.
(3) 2010 data instead of 2005 data.
(4) 2007 data instead of 2005 data.
Source: Eurostat (online data code: ilc_lvho50a)

Housing conditions and satisfaction with accommodation

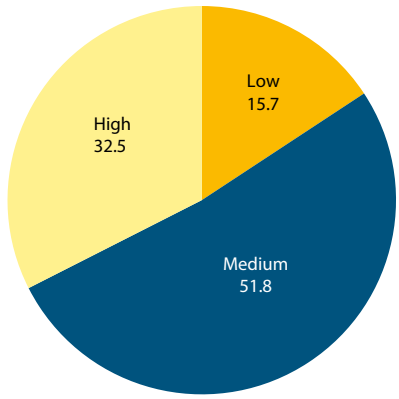
Housing is a major component in household budget, often representing the largest expenditure item. In 2012, 11 % of Europeans were living in households allocating more than 40 % of their disposable income to housing, hence being sometimes overburdened by such costs ([12]). This situation can lead modest households to live under poor housing conditions, obliging them to possibly give up other basic needs, and preventing them from achieving a decent standard of living.

Similar to satisfaction with financial situation, self-reported housing satisfaction may be based on both objective and subjective criteria. The assessed home may be judged alongside objective criteria such as type of tenure, sufficiency or lack of space ([13]), quality of housing (availability of certain amenities and existence of structural problems such as rot or damp in accommodation etc.). The subjective criteria depend on people's different needs and values (for example, a big house, which was necessary for the household when it needed to accommodate a larger family, can become a disadvantage at an older age).

How satisfied were EU residents with their housing?

Figure 18 displays the satisfaction levels of EU residents regarding the dwelling in which they lived in 2013. On a scale of 0 to 10, overall 84.3 % of EU residents reported a medium or high level of satisfaction. Particularly, 51.8 % of EU residents reported a medium satisfaction (6–8 out of 10), 32.5 % of EU residents reported a high satisfaction (9–10 out of 10) while only 15.7 % appeared to be little satisfied (0–5 out of 10).

Figure 18: Satisfaction with accommodation, EU-28, 2013
(% of population by satisfaction level)



Source: Eurostat (online data code: ilc_pw05)

([12]) European Commission, *Living conditions in Europe*, 2014 edition, p. 50.
([13]) See Figures 16 and 17 on overcrowded and under-occupied dwellings.

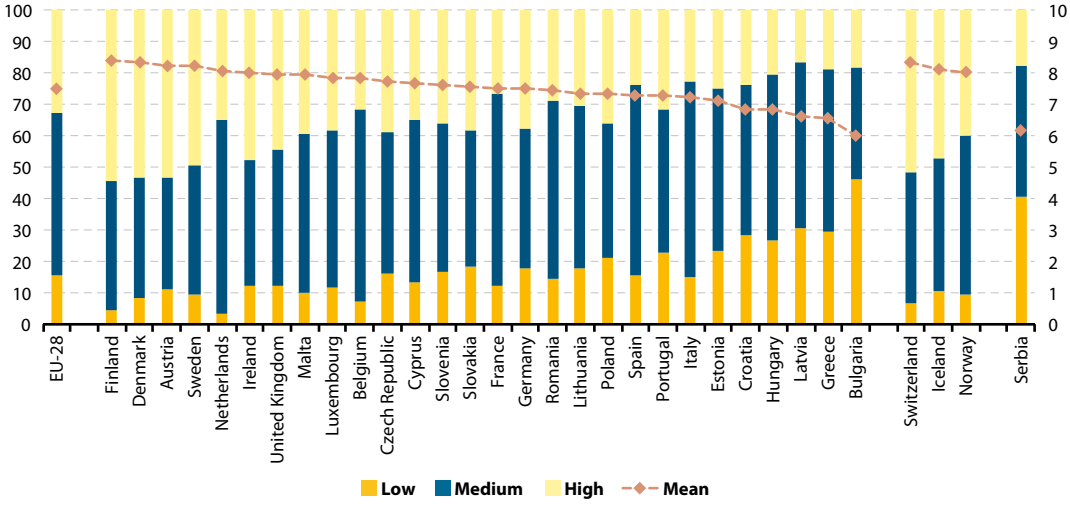
A third of the EU population was very satisfied with their dwelling, while only 16 % reported a low level of satisfaction.

The overall mean housing satisfaction was higher compared to the mean overall financial satisfaction of EU residents (averaging 7.5 versus 6.0)

The mean housing satisfaction of EU residents was 7.5 with values ranging from 6.0 in Bulgaria to 8.4 in Finland followed by 8.3 in both Austria and Denmark (Figure 19).

Housing satisfaction follows a model opposing eastern/southern EU Member States to western/northern parts of the EU as was the case for financial satisfaction (see Figure 19). Of the 12 countries with a mean below the EU average, all were located in the eastern and southern EU. At the other end of the spectrum, of the 16 countries with a mean above the EU average the majority were located in the western and northern part of the EU, except for Slovenia, Slovakia, the Czech Republic, Cyprus and Malta. The relatively low housing costs, compared to the total income of the household ([14]), which prevail in these countries, seemed to play an important role in regards to this. Especially in Malta and Cyprus the percentage of residents overburdened by housing costs was extremely low, at 2.6 % and 3.3 % respectively in 2013 (compared to an EU-28 average of 11 %).

Figure 19: Satisfaction with accommodation, by country, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

([14]) *Source:* Eurostat, EU-SILC (ilc_lvho07a).

The highest percentages of people with a low housing satisfaction were found in Bulgaria (46.2 % of the population), followed at a distance by other eastern or southern EU Member States such as Latvia (30.6 %), Greece (29.7 %) and Croatia (28.5 %). High satisfaction was reported by approximately half of the residents in Finland, Austria, Denmark, Sweden and Ireland. Specifically, Finland, Denmark and Sweden were among the countries in which less than 10 % of the population reported a low level of satisfaction with accommodation.

How does satisfaction with accommodation vary in different socio-demographic and economic groups?

The satisfaction with accommodation may be influenced by different socio-demographic characteristics such as age, sex, household composition, tenure status, and income/monetary poverty or material deprivation.

The analysis below examines the relation between such factors and the level of satisfaction of EU residents with their home.

The older population groups were more satisfied with their home

As Figure 20 illustrates, similarly to financial satisfaction, housing satisfaction increases with age, with the exception of the youngest age group (which in most cases are still living with their families). Therefore, the average housing satisfaction was highest, at 7.8, within the groups of persons aged 65 years and more followed by the population aged 50–64 (7.6) and the youngest age group (7.5). The remaining two age groups were the least satisfied, especially those aged 25–34 (7.1).

Overall, the difference in the average rating of satisfaction of the individual age groups varies by a maximum of merely 0.7 percentage points. However a larger variation between the percentages of age groups for the various levels of satisfaction exists. A striking example is the difference between the proportions of persons with a high level of satisfaction which varied by 9.3 percentage points between persons aged 16–24 (35.0 %) and persons aged 25–34 (25.7 %).

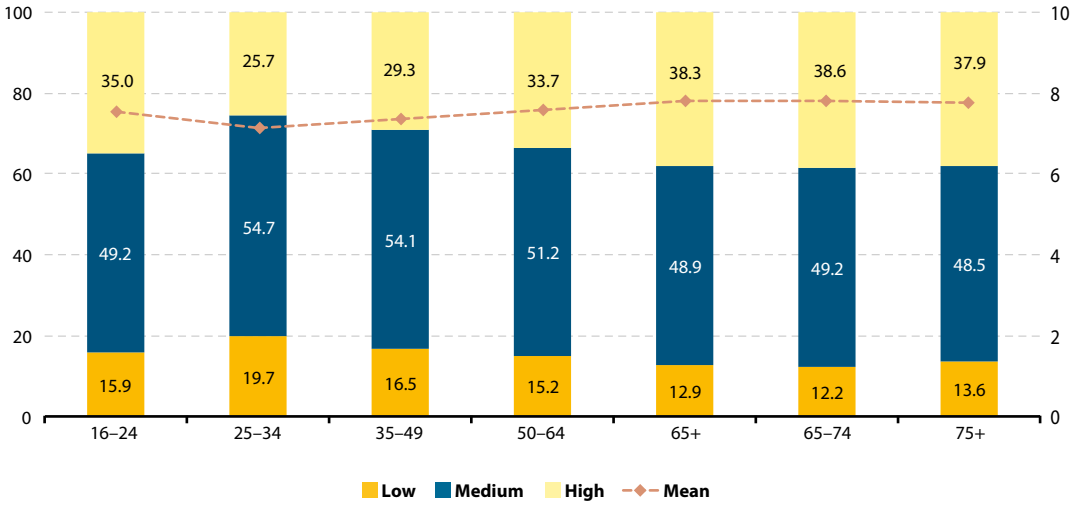
One explanation could be that the group aged 25–34 is the age group in which many people start to live apart from their families (79.5 % of those aged 18–24 live with their parents, while for those aged 25–34 the proportion is 28.8 % ([15])) and they may find it more difficult to afford good housing conditions in the beginning.

No specific gender patterns of housing satisfaction

Figure 21 does not highlight any clear relationship between gender and housing satisfaction, with an equal average satisfaction reported by the two genders. This is not surprising given the fact that the majority of the population (59.8 %) lived as a couple (with or without children) sharing the same accommodation and therefore the same objective housing conditions ([16]). A similar trend was observed for satisfaction with the financial situation of the household, however with a more moderate mean of around 6. Despite the above, it should be noted that the percentage of women who were either highly or little satisfied was slightly higher than the respective percentages for men (which are more numerous in the 'medium' category).

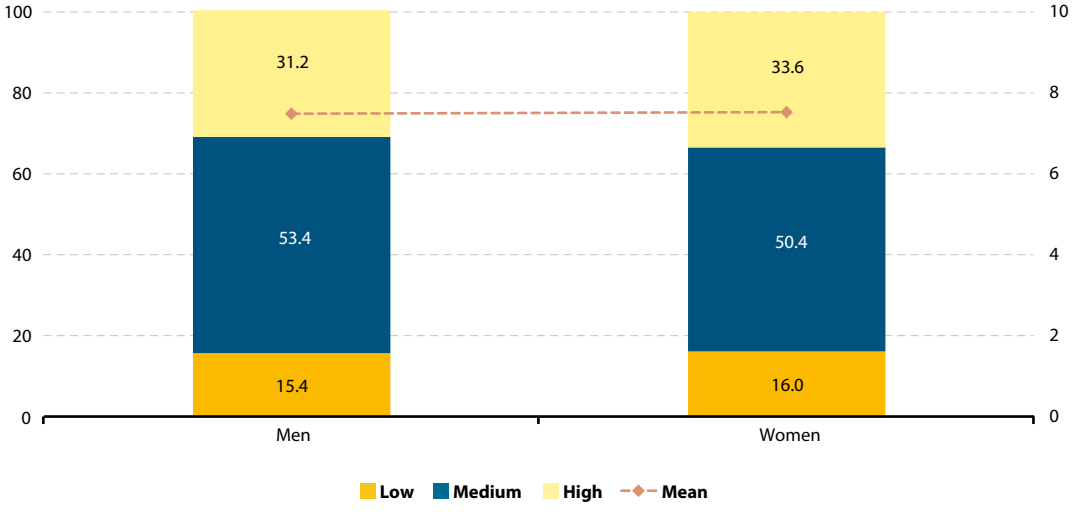
([15]) *Source*: Eurostat, EU-SILC (ilc_lvps08).
([16]) *Source*: Eurostat, EU-SILC (ilc_lvps02).

Figure 20: Satisfaction with accommodation, by age group, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 21: Satisfaction with accommodation, by sex, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Housing satisfaction was highest in the older households

According to Figure 22 housing satisfaction was lowest for younger persons living by themselves (averaging 7.0 for singles with dependent children and males aged less than 65 and 7.3 for females in the same age group). Satisfaction with accommodation was highest amongst those aged over 65 (averaging 7.9 for two adult households, 7.7 for females and 7.6 for males). This does not come as a surprise as older age groups are expected to be able to provide themselves with better housing conditions compared to younger age groups (as a result of more years of spending on housing during their life), explaining their higher degree of housing satisfaction.

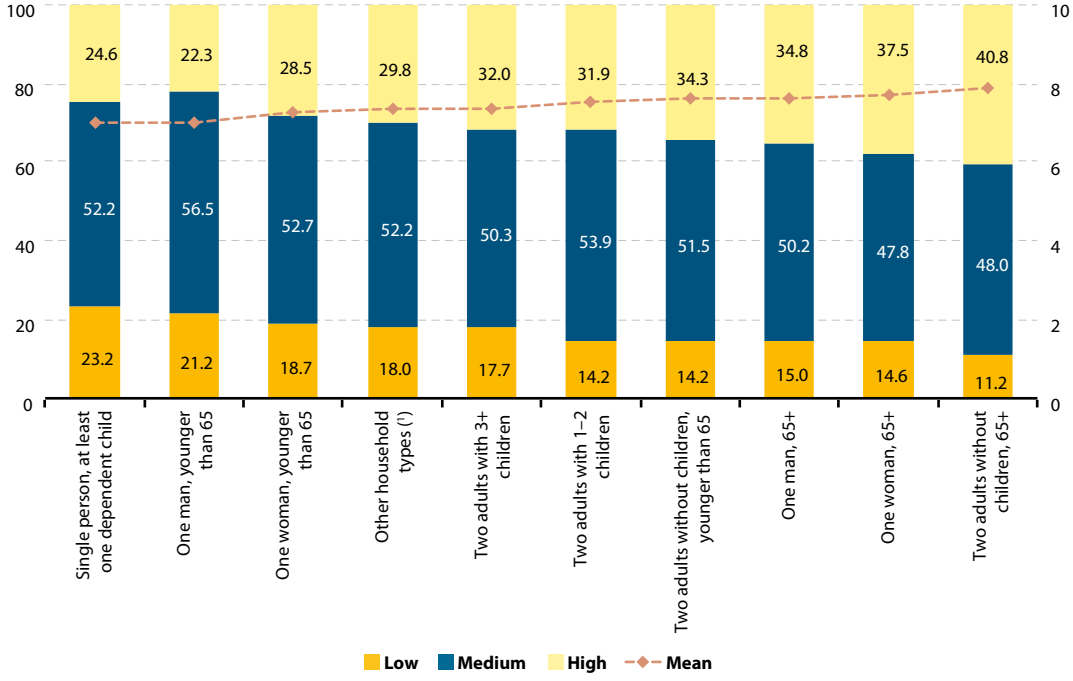
Two adult households aged less than 65 without children were marginally more satisfied with their accommodation than those with children (7.6 as compared to 7.5 for two adult households with 1 or 2 children and 7.4 for those with 3 or more children). Overall these three age groups averaged higher than one adult households belonging to the same age group, which may be partially ascribed to the availability of double income within the household and therefore its ability to afford better housing conditions.

Owners had a much higher level of satisfaction with their housing conditions

Figure 23 explores the link between tenure status and housing satisfaction. The average degree of satisfaction was about 1 percentage point higher for owners than for tenants, at respectively 8.0 and 7.7 for owners with or without a mortgage versus 6.9 for tenants living in dwelling rented at reduced rate and 6.8 for tenants occupying dwellings rented at market rate. The differences were more striking between the proportions of people with a low level of satisfaction which vary by a factor of three between owners with a mortgage (8.5 %) and tenants at market or reduced rates (25.5 % and 25.4 % respectively). These differences may be related to the much higher feelings of housing insecurity among the latter group ([17]). In addition, when making the decision to buy a house (as opposed to renting one) people may be more selective and more willing to invest in good housing conditions.

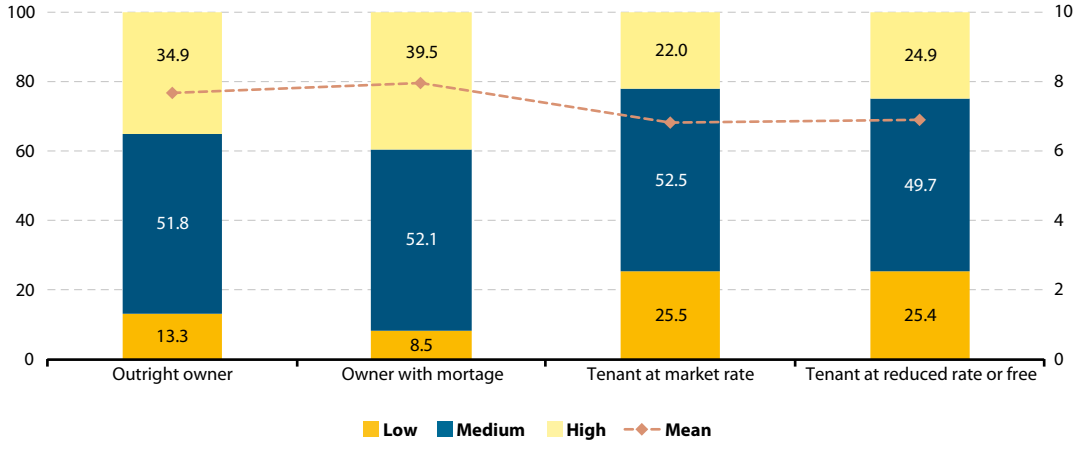
([17]) European Commission, Eurofound, *Quality of life in Europe, Subjective well-being, 3rd European quality of life survey* (2013) p. 56.

Figure 22: Satisfaction with accommodation, by household type, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



(1) 'Other household types' refers to 3 or more adults with and without dependent children.
Source: Eurostat (EU-SILC)

Figure 23: Satisfaction with accommodation, by tenure status, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



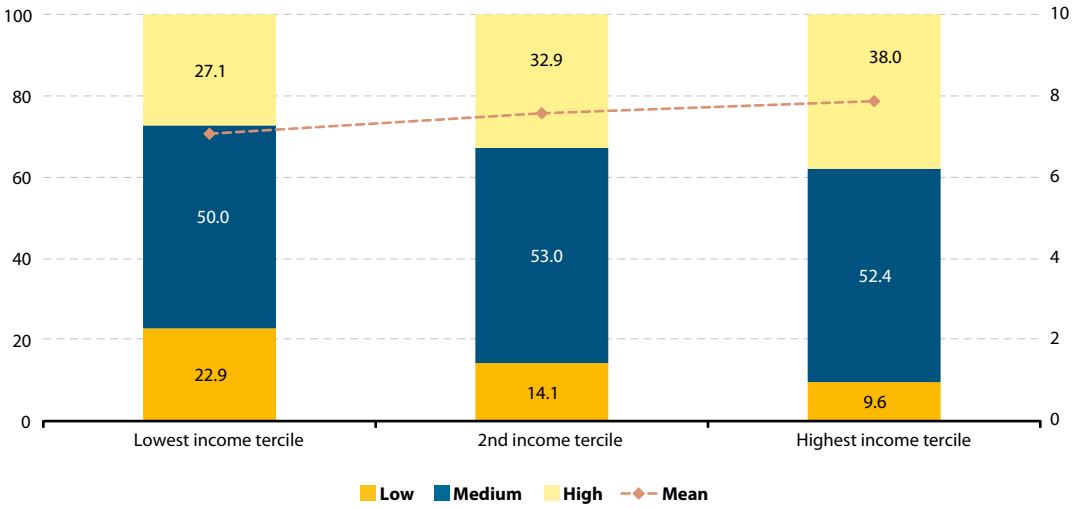
Source: Eurostat (EU-SILC)

The difference between owners with or without a mortgage should be interpreted with caution. For historical and cultural reasons, the people who own their house without having a mortgage are probably located to a larger extent in eastern and southern European countries ([18]), and in these geographical regions people are less satisfied on average with their accommodation.

People in the top income tercile were more likely to be highly satisfied with their accommodation

As one could expect there is a relationship between income and housing satisfaction, more precisely differences between the average satisfaction of people in the highest and lowest income terciles (Figure 24). Overall, the mean satisfaction with housing varied by almost 1 percentage point among the three income groups, ranging from 7.1 in the lowest tercile to 7.9 in the highest. In between, the 2nd tercile reported an average satisfaction of 7.6. The contrasts between the three groups are starker if the proportions of people with a low level of satisfaction are analysed. This amounts to 22.9 % for the lowest income tercile, as opposed to 9.6 % for the highest. The majority of those belonging in the lowest income tercile (50 %) nonetheless reported a medium level of satisfaction with accommodation, this also being the case for the other two income terciles. However, people in the top tercile were much more likely to report a high level of housing satisfaction than those in the medium and bottom terciles.

Figure 24: Satisfaction with accommodation, by income tercile, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



Source: Eurostat (EU-SILC)

([18]) 96.1 % of people in Romania own their house, while the same is true for 51.9 % of those living in Germany, *source*: Eurostat, EU-SILC (ilv_ilc_lvps15).

The severely materially deprived had a much lower housing satisfaction

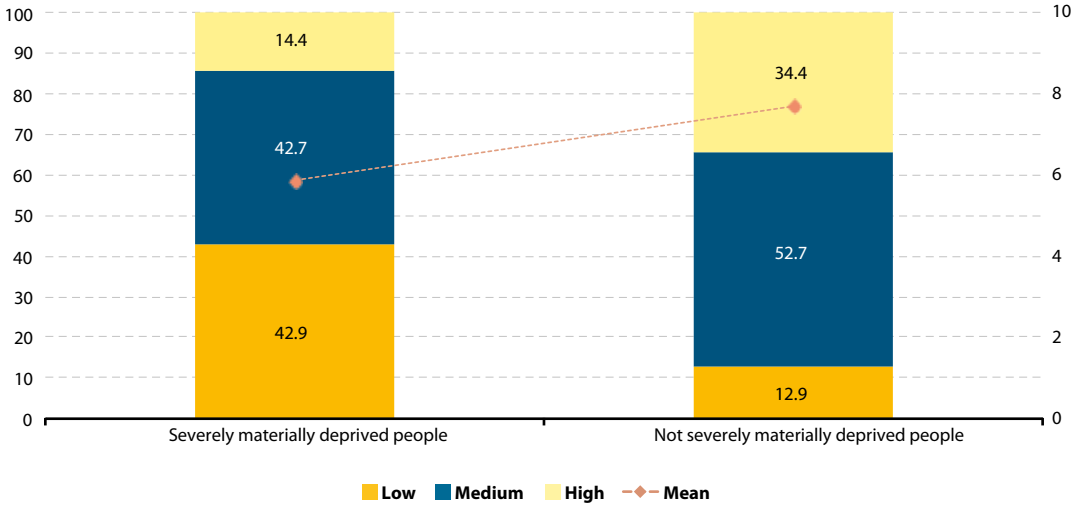
As indicated in Figure 25, severely materially deprived people had a much less favourable assessment of their housing, with a mean rating of 5.9, which is 1.8 percentage points lower than the non-deprived people.

Only 14.4 % of them were highly satisfied with their home versus 34.4 % of the residents not affected by severe deprivation. On the other hand the share of little satisfied persons was approximately three times higher for the deprived compared with non-deprived persons. The differences between the two groups are much less pronounced than for satisfaction with the households' financial situation: as many as 82.4 % of severely materially deprived people declared a low level of satisfaction with their financial resources.

Satisfaction with accommodation was lower in households affected by housing problems

Figure 26 compares the housing satisfaction of the population affected by various housing problems in 2013 with that of the total EU population.

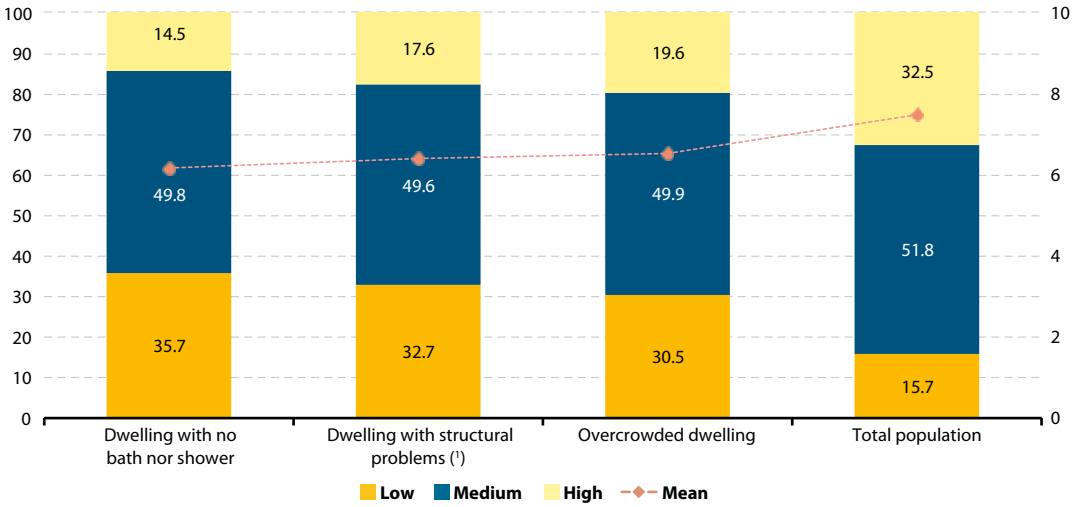
Figure 25: Satisfaction with accommodation, by material (deprivation) status, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



Source: Eurostat (EU-SILC)

As expected, the population living in dwellings affected by housing problems had a much lower average satisfaction with their dwelling than average EU residents. Europeans lacking bath or shower inside a dwelling had the lowest average housing satisfaction (6.2), followed by those whose dwellings had structural problems (6.4) and those living in an overcrowded dwelling (6.5). Overall, these figures were much lower than the average housing satisfaction of the total EU population, which was 7.5. The lack of decent bathroom equipment also generated comparatively higher shares of people reporting low satisfaction with housing than the other two problems. It must be said that it is rather common that the same household experienced different types of housing problems at the same time, and that their prevalence varied at EU level between 2.5 % for lacking bathroom amenities to 17.4 % for the overcrowding rate.

Figure 26: Satisfaction with accommodation, by housing problem, EU-28, 2013
(bar graph: satisfaction in %; line graph: mean rating)



(1) Structural problems: leaking roof, damp walls, floors or foundation, or rot in window frames of floor.
Source: Eurostat (EU-SILC)

How are objective conditions connected to subjective assessments of one's accommodation, at country level?

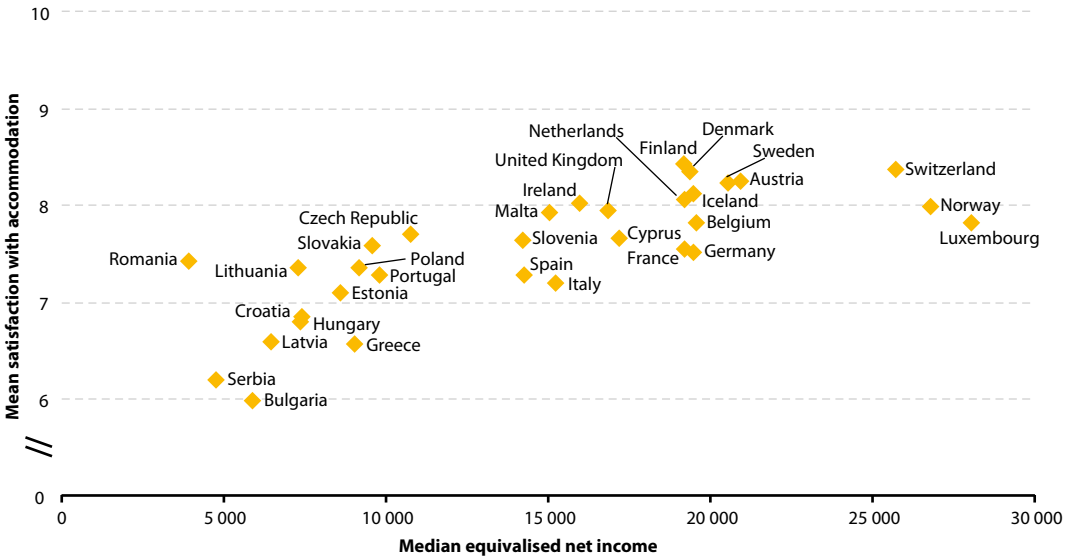
The analysis below focuses on the relationship between satisfaction with accommodation and objective housing (for example structural problems, space adequacy and availability of some basic amenities like shower or bath) and economic conditions reported at country level.

Disposable income related to housing satisfaction in most EU Member States

Figure 27 shows the relationship between income and housing satisfaction and underlines big differences in median annual income levels which vary by a factor of 7 across EU Member States, ranging from 3 936 PPS in Romania to 28 030 PPS in Luxembourg, together with big differences in average assessments of housing satisfaction which varies from 6.0 in Bulgaria to 8.4 in Finland.

A relationship between income and housing satisfaction can be established. Indeed, the five EU Member States with the lowest mean housing satisfaction of below 7, Bulgaria, Greece, Latvia, Hungary and Croatia, also had some of the most modest income levels in the EU.

Figure 27: Main satisfaction with accommodation versus median equivalised net income, by country, 2013
(y-axis: mean rating; x-axis: median income in PPS)



Source: Eurostat (online data codes: ilc_pw01 and ilc_di03)

Additionally, some national specificities can be observed. Although Romania had the lowest median income (3 936 PPS) its mean satisfaction was 7.4, which is very close to the EU average (7.5). In spite of quite similar average satisfaction degrees (7.8 and 7.9), Luxembourg and Malta displayed very uneven income levels (28 030 and 15 056 PPS respectively). In the same way, with an average satisfaction of 7.7, Cyprus and the Czech Republic had a slightly lower mean than Luxembourg but completely different median income levels (17 165 and 10 802 PPS). The highest mean satisfaction ratings of above 8.0 (and high satisfaction shares, between 34.7 % and 54.2 %), were unsurprisingly found in some of the highest income countries (with median income close to or above 20 000 PPS in 2013). These are countries located mainly in the northern and central EU; Finland (8.4), Denmark and Austria (both at 8.3), Sweden (8.2) and the Netherlands (8.1).

How were the objective housing conditions found in EU Member States connected wih the satisfaction with accommodation of their residents?

Table 2 compares the share of the population living in a dwelling affected by some of the most commonly identified housing problems that people may experience in Europe (i.e. various types of housing deficiencies, problems related to the adequacy of space) to the share of people who declared a low housing satisfaction in 2013.

As can be seen, housing deficiencies affected EU residents to various extents, as merely 2.8 % of them reported living in a dwelling with neither a bath, nor a shower, nor indoor flushing toilet and 15.7 % reported living in a dwelling with structural problems. Space availability, which was examined under the prism of overcrowded or under-occupation of a dwelling, was also experienced quite differently by EU residents, as almost twice as many of them were living in an under-occupied home (34.2 % ([19]), see Figure 28) rather than in an overcrowded one (17.4 %).

EU residents were living in better quality housing compared with 2005

The proportion of the EU population facing overcrowding and other housing problems ([20]) has continuously decreased. Yet in spite of the improved situation, not all EU residents today are living in decent accommodation ([21]).

In particular, approximately one quarter 23.5 %) of the population at risk of poverty reported living in dwellings with structural problems like a leaking roof or damp walls, floors or foundation, or rot in window frames or floor in 2013.

On average, Finland, Denmark, Austria, Sweden and the Netherlands recorded satisfaction with housing conditions of over 8.0 (on the scale from 0 to 10).

([19]) *Source*: EU-SILC (ilc_lvho50a).
([20]) *Source*: Eurostat, Overcrowding EU-SILC (ilc_lvho05a); Dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames of floor: EU-SILC (ilc_mdho01), Dwelling having neither a bath, nor a shower, nor indoor flushing toilet in their household: EU-SILC (ilc_mdho05).
([21]) *Source*: European Commission, *Living conditions in Europe*, (2014), p. 55.

Table 2: Housing condition indicators versus low housing satisfaction, by country, 2013
(%)

	Low housing satisfaction	Dwellings having neither a bath, nor a shower, nor indoor flushing toilet in their household ([1])	Dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames of floor	Overcrowded dwellings
EU-28 ([2])	15.7	2.7	15.7	17.3
Belgium	7.3	0.3	18.1	2.0
Bulgaria	46.2	13.0	12.9	44.2
Czech Republic	16.3	0.4	10.0	21.0
Denmark	8.4	0.8	17.1	9.4
Germany	18.0	0.0	13.1	6.7
Estonia	23.6	6.4	17.5	21.1
Ireland	12.2	0.3	14.3	2.8
Greece	29.7	0.7	14.0	27.3
Spain	15.8	0.1	16.7	5.2
France	12.1	0.3	13.2	7.6
Croatia	28.5	1.5	13.1	42.8
Italy	14.8	0.1	23.1	27.3
Cyprus	13.6	1.0	31.1	2.4
Latvia	30.6	13.5	27.7	37.7
Lithuania	17.8	12.0	19.9	28.0
Luxembourg	11.4	0.0	15.3	6.2
Hungary	26.9	3.6	25.8	45.7
Malta	10.2	0.1	11.8	3.6
Netherlands	3.6	0.0	15.6	2.6
Austria	11.3	0.2	12.5	14.7
Poland	21.3	3.0	10.1	44.8
Portugal	22.7	0.9	31.9	11.4
Romania	14.5	32.2	15.0	52.9
Slovenia	16.7	0.4	27.0	15.6
Slovakia	18.5	0.2	7.5	39.8
Finland	4.2	0.4	5.2	6.9
Sweden	9.3	0.0	7.5	11.2
United Kingdom	12.4	0.2	15.9	8.0
Iceland	10.7	0.0	18.0	9.1
Norway	9.3	0.2	7.0	6.0
Switzerland	6.5	0.0	11.5	6.7
Serbia	40.6	4.0	21.6	54.3

([1]) Sweden and Iceland: 2009 data; Norway: 2011 data; Germany, Netherlands and Switzerland: 2012 data.
([2]) The EU-28 averages for housing problems are estimates.
Source: Eurostat (online data code: ilc_lvho07a)

The share of people living in dwellings without a bath, shower or indoor flushing toilet has also decreased from 3.7 % in 2005 to 2.8 % in 2013. However, big differences still remain between countries ([22]). This issue was most evident in eastern EU Member States, such as Romania (32.2 %), and to a less extent Latvia (13.5 %), Bulgaria (13.0 %) and Lithuania (12.0 %).

Under-occupation has increased by approximately 3 percentage points since 2005, a trend which is to be examined in conjunction with the increasing number of single-person households (+1.3 percentage points since 2005 ([23])). It is by far those with income above 60 % of median equivalised income who benefited from under-occupied dwellings (37 %). The corresponding share of people at risk of poverty (earning less than 60 % of median equivalised income) occupying such dwellings was merely 2.5 %. On the contrary, overcrowding is a long-standing issue affecting 17.3 % of EU residents in 2013, but declining from 19.5 % in 2005 ([24]). It is more widespread amongst the population at risk of poverty who are twice as affected by it (30.4 % as compared to 14.8 % in the general population). In addition, people living in larger households (three or more adults with dependent children) were the most affected by overcrowding (46.5 % of them were living under such conditions in 2013) ([25]).

The presence of problems affecting dwellings is not always directly related to the percentage of people who declared a low level of satisfaction in the countries, but may also depend on the importance individuals give to the quality of their housing, on the degree of seriousness of these problems within a household and other factors which are not described in this article. The analysis below will focus on space adequacy, from both the perspective of overcrowding and under-occupation, and the presence of structural problems such as leaking roof, damp walls, floors or foundation, or rot in window frames or floor. The absence of toilets situated inside the dwelling only affects a moderate proportion of the population from a few countries and is hence not further analysed.

Overcrowding was associated with low housing satisfaction in most countries

Alongside housing deficiencies, the availability of 'sufficient' space for each member of a household in a dwelling is a key factor in assessing the quality of housing conditions.

OVERCROWDED AND UNDER-OCCUPIED DWELLINGS

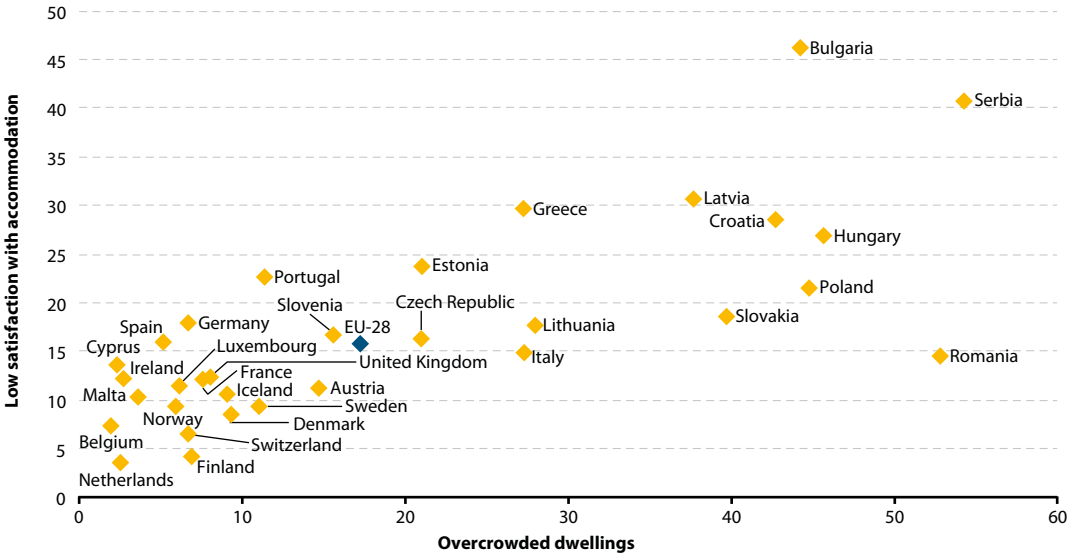
Based on the total number of rooms available to a household and a minimum number of rooms needed per household, an individual can assess objectively whether a dwelling is overcrowded, or not, or even under-occupied, and more subjectively, assess the adequacy of this available space ([26]).

([22]) *Source*: Eurostat, EU-SILC (ilc_mdho05).
([23]) *Source*: Eurostat, EU-SILC (ilc_lvps02).
([24]) *Source*: EU-28 data for 2013 but EU-27 data for 2005.
([25]) *Source*: Eurostat, EU-SILC (ilc_lvho05a).

Figure 28 presents the relationship between the share of people living in overcrowded dwellings which is the most prevailing problem of those observed above, (reported by 17.4 % of the EU population, see Table 2) and housing satisfaction as declared by EU residents.

A clear link between overcrowding and housing satisfaction can be deduced from Figure 28, as low satisfaction is most often declared by the population living in countries with a high share of overcrowded dwellings such as Bulgaria (46.2 % low satisfaction versus 44.2 % overcrowding rate), and at a distance Latvia, Greece, Croatia and Hungary. At the other end of the spectrum, countries with low shares of little satisfied residents, such as the Netherlands, Finland, Belgium, Denmark, Sweden and Malta (close to or below 10 %), also recorded low percentages of overcrowded dwellings (reaching a maximum of 11.2 % in Sweden). Romania is an outlier again, with both the highest share of overcrowded dwellings (52.9 %) and comparatively low percentages of low satisfaction (14.5 %, which is 1.2 percentage points below the EU average). Spain and Germany to some extent also display particular satisfaction patterns. Although they reported one of the lowest proportions of overcrowded dwellings (5.2 % and 6.7 % respectively), their corresponding shares of residents who declared a low housing satisfaction exceeded the EU average. In the case of Germany it could be due to the very large percentage of persons who do not own their house.

Figure 28: Low satisfaction with accommodation versus population living in an overcrowded dwelling, by country, 2013
(%)



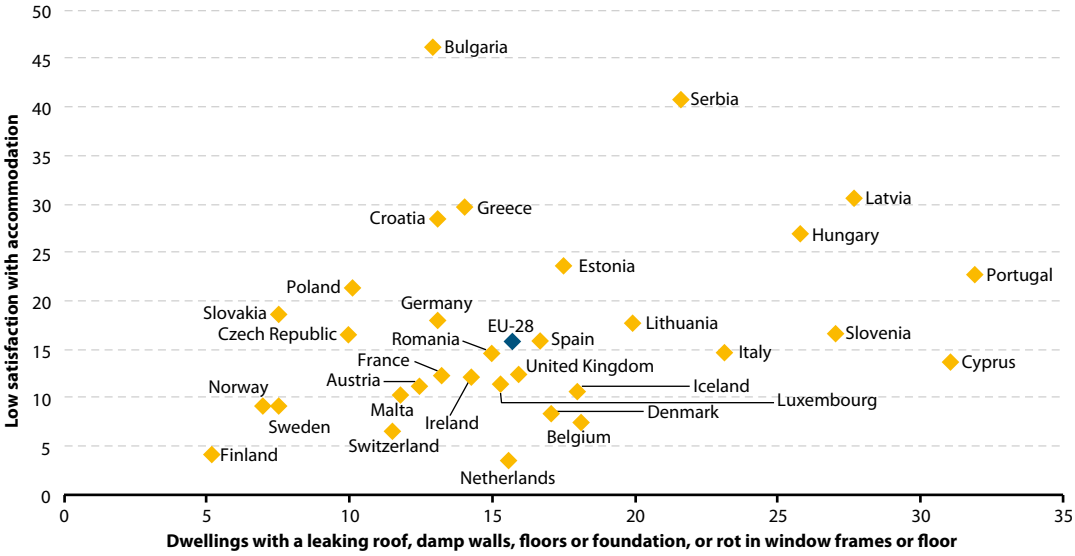
Source: Eurostat (online data codes: ilc_pw05 and ilc_lvho05a)

(26) European Commission, Document for point 3A of the agenda, Housing conditions, 6th meeting of the expert group on quality of life indicators, Luxembourg, 20–21 November 2013.

The prevalence of structural problems had no real impact on housing satisfaction

The presence of structural problems such as leaking roof, damp walls, floors or foundation, or rot in window frames or floor in accommodation was reported by 15.7 % of the EU population, which is 1.7 percentage points less than overcrowding and much lower than under-occupation (34.2 %) (Table 2 and Figure 30). As Figure 29 reveals, the prevalence or absence of these structural housing problems is in most countries not related to the level of housing satisfaction. Hence, 46.2 % of Bulgarians reported a low housing satisfaction while only 12.9 % of them were living in dwellings presenting structural problems. Only Latvia, Hungary and more moderately Portugal reported some of the highest shares of structural problems and low housing satisfaction. In the countries where smaller proportions of the population were affected by structural problems, only Finland and Sweden also displayed the lowest shares of little satisfied people. Cyprus displayed a pattern almost opposite to that of Bulgaria, with a low share of residents with low housing satisfaction (13.6 %) and a relatively high proportion of dwellings with structural problems (31.1 %). This may be explained to some extent by the extremely low percentage of Cypriot residents overburdened by housing costs (3.3 % in 2013 compared to an EU-28 average of 11 %).

Figure 29: Low satisfaction with accommodation versus population living in an dwelling with structural problems, by country, 2013
(%)

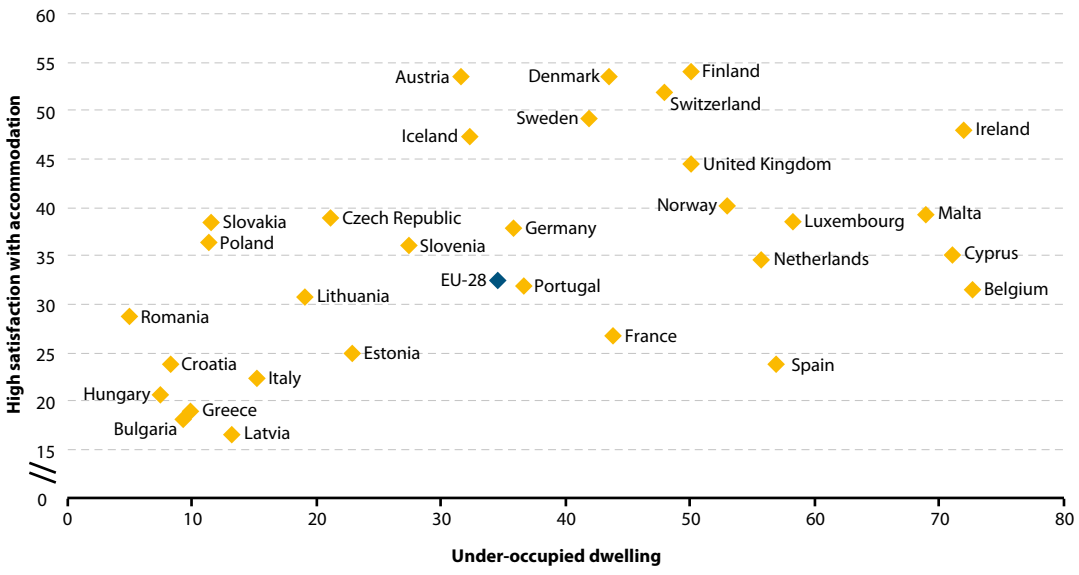


Source: Eurostat (online data codes: ilc_pw05 and ilc_mdho01)

Living in an under-occupied dwelling was slightly related to high housing satisfaction in most countries

Figure 30 shows that in most countries where a high proportion of the population was living in under-occupied dwellings there was also a high proportion of high housing satisfaction reported. This is particularly visible in Finland where more than half of the population was in such a situation. To a lesser extent, this is also true in Austria, Denmark, Sweden and the United Kingdom. Ireland and Malta could be expected to have even higher satisfaction rates than reported (48.0 % and 39.3 % respectively), as they had by far the highest shares of under-occupied dwellings (close to or exceeding 70.0 %). However, the opposite pattern prevails too. In countries where a small proportion of the population was living in under-occupied dwellings a smaller proportion of the population also reported high housing satisfaction. This is especially the case in Latvia, Bulgaria, Greece and Hungary. These four countries displayed percentages of highly satisfied residents reaching a maximum of 20.7 % and of under-occupied dwellings not exceeding 13.2 %. Nonetheless, some countries did not follow this pattern. Spain, France and Belgium had shares of under-occupied dwellings well above the EU average, however the shares of people with a high housing satisfaction were well below it. Additionally, 71 % of Cypriots were living in under-occupied dwellings but only about one third of them (35.1 %) reported a high level of housing satisfaction. However it should be noted that these countries (except Spain) displayed high levels of average housing satisfaction.

Figure 30: High satisfaction with accommodation versus population living in a under-occupied dwelling, by country, 2013
(%)



Source: Eurostat (online data codes: ilc_pw05 and ilc_lvho05a)

2

Employment

Introduction

The present chapter focuses on employment, or more specifically 'productive or main activity', which is the second dimension of the '8+1' quality of life indicators framework. Employment is at the heart of European Union (EU) policies as it is the basis for wealth creation. Knowing how satisfied EU residents are with their occupation is very important since losing one's job may undermine one's life satisfaction and its overall meaning (1).

Productive or main activity refers to both paid and unpaid work and to other types of main activity status. Whether paid or unpaid, work usually takes up a significant part of someone's time and it can have a significant impact on the quality of life, either positively or negatively. On the upside, work generates an income, provides an identity and presents opportunities to socialise with others, to be creative, to learn new things and to engage in activities that give a sense of fulfilment and enjoyment. Conversely, quality of life may deteriorate when job insecurity is experienced or work is inadequately paid. Lack of work or unemployment may even threaten one's psychological health (2).

The analysis in this chapter first provides an overview of the employment situation in the EU, before focusing on subjective assessments of job and commuting time, by various socio-demographic characteristics such as age, sex, income, education, occupation and other employment situations. The last section tries to establish a link between objective working conditions (such as work intensity and types of contracts) and job satisfaction (3).

The objective indicators presented in this chapter come from the EU Labour Force Survey (EU-LFS), which provides data on labour participation of people aged 15 and over as well as on persons outside the labour force, and from the EU Statistics on Income and Living Conditions (EU-SILC), a survey aimed at collecting data on income, poverty, social exclusion and living conditions. Data on subjective assessments were collected through the 2013 module of EU-SILC on subjective well-being.

Assessing the effects of work on quality of life is a complex matter, because many complementary aspects of a person's activity have to be taken into account. By analysing objective situations together with subjective assessments, this chapter underlines that job satisfaction is influenced by a whole set of factors going beyond factual aspects of employment, thus highlighting the wide-ranging nature of quality of life.

EU POLICIES RELATED TO EMPLOYMENT

Employment is at the heart of EU policies as it is the basis for wealth creation. The Europe 2020 strategy for growth and jobs is thus putting high emphasis on employment and job creation through its 'inclusive growth' priority.

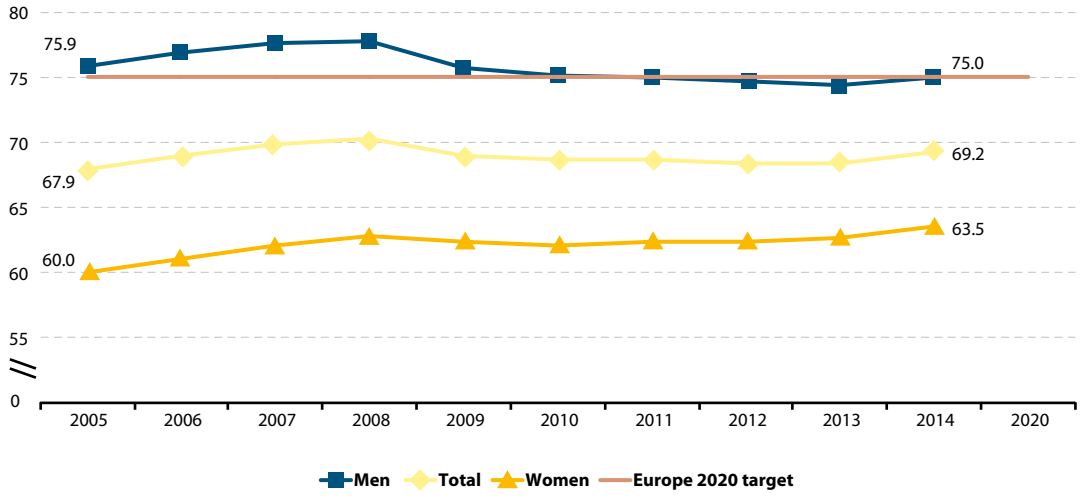
Paid work and also unpaid main activities such as domestic work affect the quality of life besides the income or utility generated, because they are an important determinant of personal identity and provide opportunities for social interaction. Apart from mere access to employment (i.e. the quantitative aspect), the quality of paid work is especially important, since it relates to personal dignity. Hence, 'addressing the quality of jobs and employment conditions' and the aspect is covered in the Guidelines for the Employment Policies of the Member States (Council Decision 2010/707/EU).

(1) See Statistics Explained on *Quality of life indicators — overall experience of life* (2015) and Europe 2020 strategy (Commission Communication, *Europe 2020 — A strategy for smart, sustainable and inclusive growth*, COM(2010) 2020 final).
(2) Theodossiou, I., *The effects of low-pay and unemployment on psychological well-being: A logistic regression approach* (1998), Journal of Health Economics, 17, pp. 85–104.
(3) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).

Employment in the European Union

In 2014, the employment rate for the age group 20–64 in the EU was 69.2 %, compared with 67.9 % in 2005 and 70.3 % in 2008, the year the global financial and economic crisis hit (Figure 1). The employment rate was thus in 2014 5.8 percentage points (pp) below the 75.0 % target (of the same age group) which the EU has set for 2020. In spite of efforts to bring more women into employment, there was still an 11.5 pp gap between male and female employment rates in 2014 (down from 15.9 pp in 2005).

Figure 1: Employment rate by sex versus Europe 2020 target, EU-28, 2005–14
(% of population aged 20–64)



Source: Eurostat (online data codes: lfsi_emp_a and lfsa_urgaed)

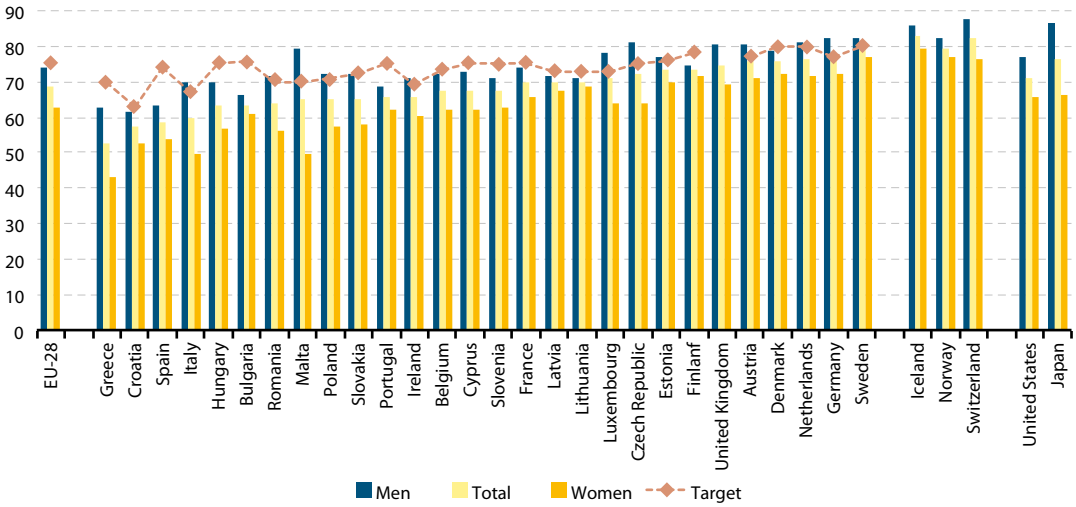
EMPLOYMENT RATE

The employed population consists of those persons who during the reference week did any work for pay or profit for at least one hour, or were not working but had jobs from which they were temporarily absent. (i.e. the number of employed people as a proportion of the population aged 15–64). However, as the Europe 2020 employment target is based on a lower age limit of 20 years (to ensure compatibility with the strategy's headline targets on education), the employment rate is calculated here by dividing the number of persons aged 20–64 in employment by the total population of the same age group. The indicator is based on the EU-LFS. The survey covers the entire population living in private households and excludes those in collective households such as boarding houses, halls of residence and hospitals.

As 2013 is the reference year for the data collected through the EU-SILC ad-hoc module on subjective well-being, the analysis presented in this chapter, which aims to link the objective indicators on employment with the subjective ones from the EU-SILC module, will not use the latest 2014 employment figures, but the 2013 ones.

The employment rate in 2013 for the EU as a whole was 68.4 % but EU Member States experienced rather diverging situations, as shown in Figure 2. In 2013, the highest employment rates were reported in Sweden (79.8 %) and other northern or western EU Member States such as Germany, the Netherlands, Denmark and Austria (all above 75.0 %) while the lowest were reported in Greece (52.9 %) and some other southern/mediterranean EU Member States such as Croatia, Spain and Italy (all below 60.0 %).

Figure 2: Employment rate versus national targets, by country, 2013 ([1])
(% of population aged 20–64)



([1]) The overall EU employment target is 75 %. It varies from 62.9 % (Croatia) to 80.0 % (Denmark, the Netherlands and Sweden) across countries. The United Kingdom has no target.
Source: Eurostat (online data codes: lfsi_emp_a and lfsa_urgaed)

All EU Member States — except Germany (for which the employment rate stood at 77.3 %, slightly exceeding its 77 % target) — still needed to make an effort to meet their national targets. Sweden was a mere 0.2 pp away from its 80 % target while Luxembourg and Austria were less than 2 pp away from their less ambitious targets of 73 % and 77 % respectively. The biggest gaps with the target (over 15 pp) were recorded in Greece and Spain.

The employment rate of the EU was lower than that of its main international competitors with an employment rate of approximately 2.8 pp lower than that of the United States (68.3% vs 71.1 %) and 8 pp lower than that of Japan (68.3% vs 76.4 %).

The EU also reported a gap of 11.6 pp between male and female employment rates in 2013 (74.2 % vs 62.6 %), although similar gaps were also recorded in the United States (77.0 % vs 65.4 %) and Japan (86.4 % vs 66.3 %).

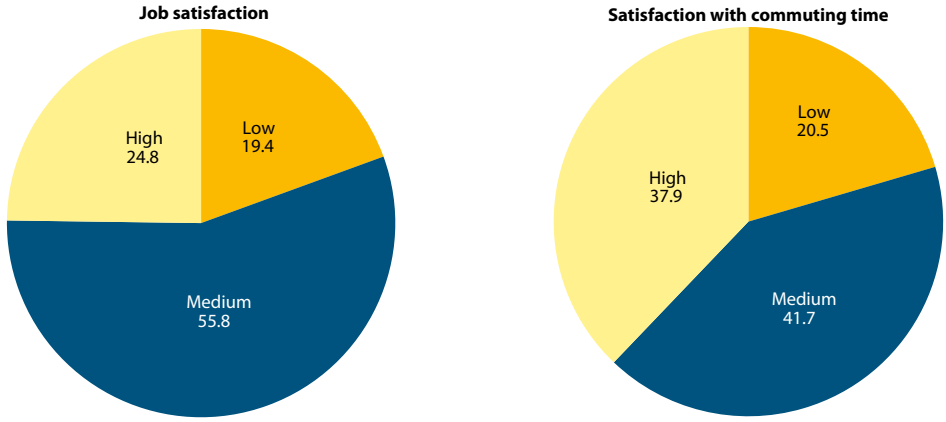
Job satisfaction

Paid employment is essential in order to guarantee a decent standard of living, enabling people to achieve their personal goals and expectations. It is thus a strong factor in and predictor of life satisfaction ([4]). A recent study showed that job satisfaction was the second most important predictor of overall life satisfaction among British workers ([5]). Conversely, unemployment was closely associated with low levels of life satisfaction and happiness.

In the EU, approximately one in five residents (19.4 %) ([6]) currently in employment expressed low levels of satisfaction with their job, whereas approximately one in four (24.8 %) expressed high levels of satisfaction. The remaining residents (55.8 %) declared medium levels of satisfaction with their job (Figure 3). On a scale of 0 to 10 — where 0 is the lowest level of satisfaction and 10 the highest ([7]) — this resulted in a mean satisfaction of 7.1, which was similar to the overall average life satisfaction in the EU.

Employment is also associated with constraints such as commuting time. This is the time (mostly unpaid) workers go from home to work and back ([8]). Although this is not considered as working time from the employers' point of view, it is time dedicated to work ([9]).

Figure 3: Satisfaction with job and commuting time, EU-28, 2013
(% of population)



Source: Eurostat (online data code: ilc_pw05)

([4]) See Statistics Explained on *Quality of life indicators — overall experience of life* (2015).
([5]) Using *BHPS* data. See: Van Praag, B.M.S. and Ferrer-i-Carbonell, A., *Happiness Economics: A New Road to Measuring and Comparing Happiness. Foundations and Trends in Microeconomics* (2010), 6 (1), pp. 1–97.
([6]) All current household members aged 16 and over who are currently working.
([7]) Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6–8 and high satisfaction to 9–10.
([8]) Some workers are eligible for the reimbursement of at least part of their travel expenses, in particular self-employed workers.
([9]) At the EU-27 level, around 4 hours were spent on commuting in 2005. *Source*: Eurostat, *Reconciliation between work, private and family life in the European Union* (2009), p. 42 (*Source*: Eurofound, *European Working Conditions Surveys* — EWCS).

As can be seen in Figures 4.a and 4.b, the proportion of EU workers ([10]) who declared low levels of satisfaction with their commuting time was close to the proportion of EU workers who reported low job satisfaction (20.5 % vs 19.4 %). However, EU workers were much more likely to be highly (37.9 %) or moderately satisfied (41.7 %) with their commuting time compared to their job satisfaction. This led to a higher mean satisfaction with commuting time compared to job satisfaction (7.4 vs 7.1 out of 10).

At country level (Figure 4.a), the mean job satisfaction varied from 6.0 in Bulgaria and 6.1 in Greece to 8.1 in Denmark and Finland. The underlying reason behind the negative assessment made by Greek residents is likely to have been Greece's currently unfavourable labour market situation, with an employment rate of 52.9 % and an unemployment rate of 27.3 % in 2013. Bulgaria's situation was similar, with low employment ([11]) and high unemployment ([12]) rates (63.5 % and 12.7 % respectively in 2013). On the other hand, Denmark and Finland recorded some of the most favourable labour market situations in the EU, with employment rates well above and unemployment rates ([13]) well below the EU average.

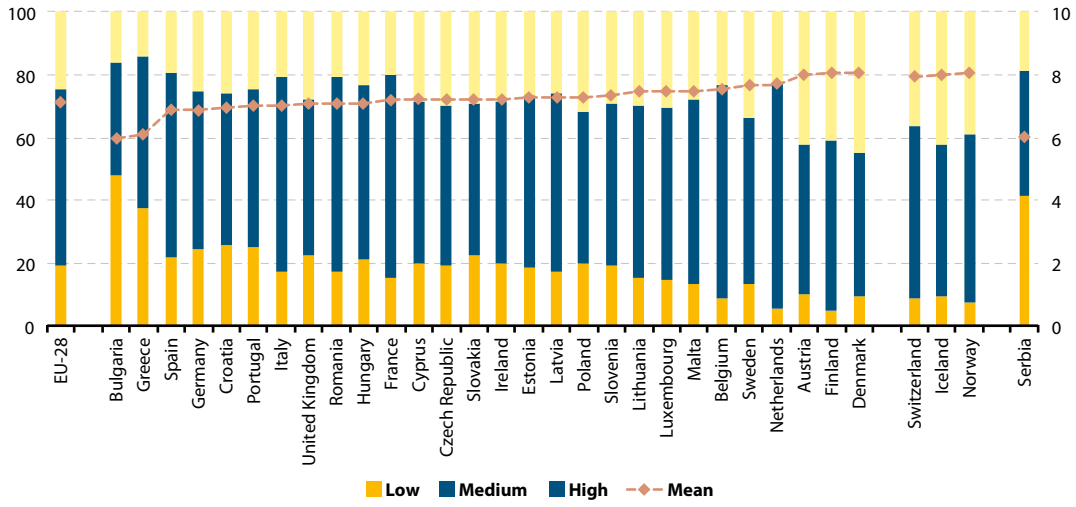
Apart from the overall situation of the labour market, a whole set of other factors influencing the levels of life satisfaction may explain the diverging situations in these two groups of countries ([14]).

The mean satisfaction hides wide-ranging differences regarding the levels of job satisfaction reported by individuals working within a country. Thus, the low mean reported in Bulgaria and Greece may be formulated by the very high proportion of workers with a low level of job satisfaction (47.7% and 37.7% respectively). In the Netherlands and Belgium the mean satisfaction was relatively high, which may be attributed to the very high proportion of workers with a medium level of job satisfaction. Likewise, although the average job satisfaction in Spain and Germany was similar, the levels of job satisfaction varied. In particular, Germany reported a higher proportion of people with high and low satisfaction compared to Spain.

Job satisfaction is analysed in conjunction with various factors, reflecting more comprehensively the overall objective and subjective assessment of the situation of the national labour market. These include the supply and demand of labour, the employer assessment of potential growth or contraction, the ease with which employers can hire or fire, together with the structure of the economy, the autonomy and flexibility workers can benefit from and other job quality related aspects. These elements affect employees' job opportunities and perceived job security, hence their job satisfaction. Some of these elements are analysed in the following sections.

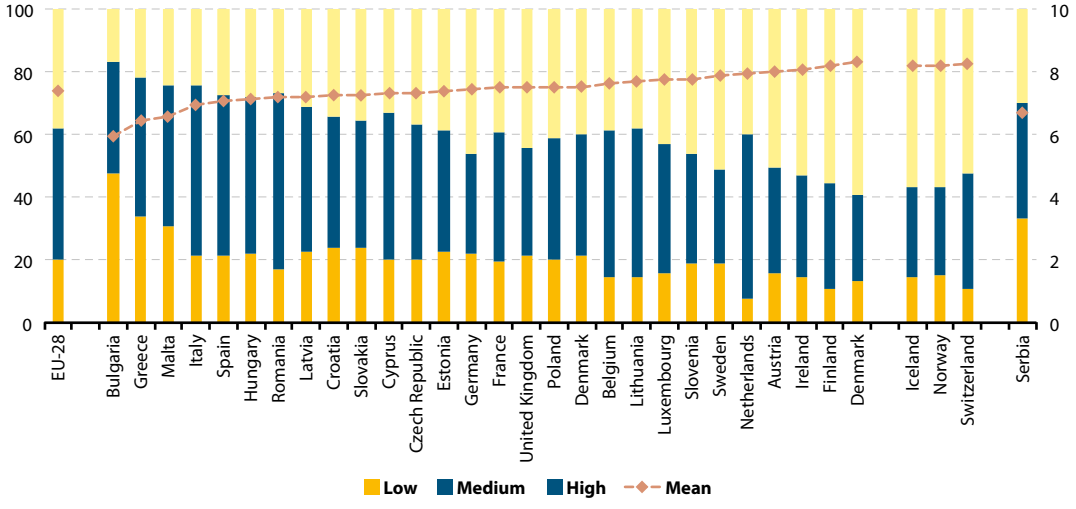
([10]) Respondents are all current household members aged 16 and over who are currently working. The variable refers to the respondent's opinion/feeling about the degree of satisfaction with his/her job.
([11]) See Figure 2.
([12]) *Source*: Eurostat, EU-LFS (lfsa_urgaed).
([13]) Unemployment rate (among the population aged 20–24) reached 6.6 % in Denmark and 7.5 % in Finland; the EU-28 average was 10.6 %. *Source*: Eurostat, EU-LFS (lfsa_urgaed).
([14]) See chapter 9 'Overall life satisfaction'.

Figure 4.a: Satisfaction with job, by country, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 4.b: Satisfaction with commuting time, by country, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 4.b displays the satisfaction of EU employees with commuting time. Northern EU Member States are displayed at the right end of the scale, reporting the highest levels of satisfaction with commuting time (close to or above 8.0 out of 10).

All western EU Member States, including Ireland, Germany and the United Kingdom reported an average satisfaction with commuting time above the EU mean. On the other hand, most eastern EU Member States (except Poland, Lithuania and Slovenia) and all southern EU Member States (except Portugal) reported an average satisfaction with commuting time below the EU mean.

The figures on mean satisfaction with commuting time were nonetheless comparable to those recorded for the job satisfaction. The lowest average satisfaction was reported by Bulgaria (5.9 out of 10) and the highest by Denmark (8.3 out of 10) and Finland (8.2 out of 10). Satisfaction with commuting time may be influenced by several factors such as the number of commuting hours, the number of paid and unpaid working hours and the eligibility for reimbursement of travel expenses ([15]).

Among the EU population in employment, 25 % declared a high level of satisfaction with their job, while 19 % reported a low level.

How is the socio-demographic background associated with job satisfaction?

Characteristics such as age, sex, income, educational attainment, labour status and occupation, living in an urban or rural area ([16]), working time and a recent change of job may lead to different objective conditions, but also expectations and preferences, which are then reflected upon an individual's assessment of their working conditions. This can refer to their job or to some work-related aspects such as commuting time. The analysis below first considers how such factors influence the level of job satisfaction in the EU as a whole. It then focuses on specific working conditions such as low work intensity, underemployment or temporary contracts, and assesses their respective relation with job satisfaction at country level.

Job satisfaction did not vary with age, although older workers were slightly more satisfied with commuting time

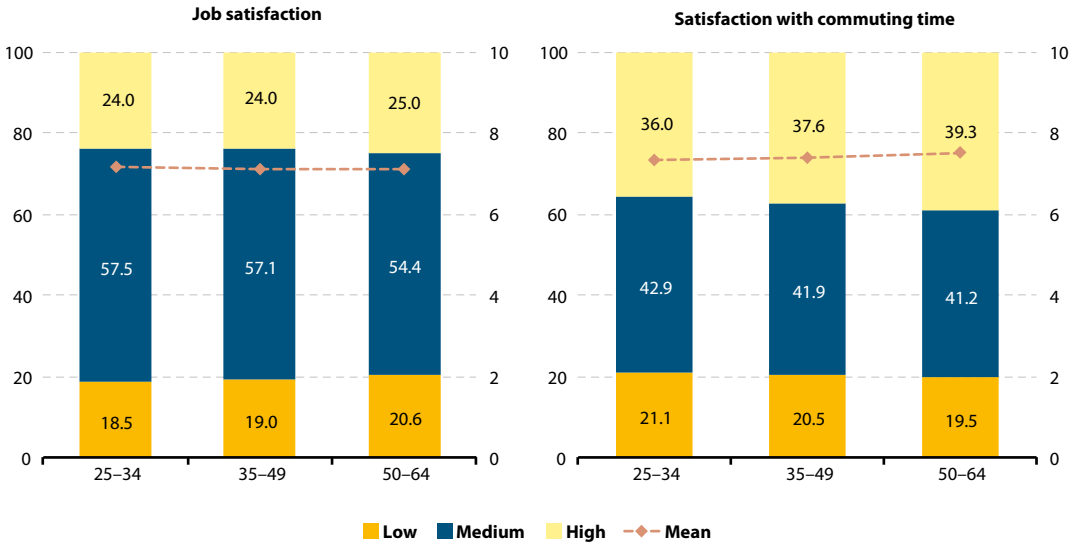
As Figure 5 shows, the relation between age and job satisfaction during an individual's active life time is very weak, with a mean remaining constant among the three age groups for job satisfaction and varying by 0.2 points for satisfaction with commuting time. The three age groups considered (consisting of people participating in the labour force) had an identical average job satisfaction of 7.1 out of 10.

([15]) For more information about working hours, see Eurostat, *Reconciliation between work, private and family life in the European Union* (2009), p 42.
([16]) The degree of urbanisation of the area which an individual lives in.

This highlights that job satisfaction does not increase with age, even though incomes are expected to rise with age as a result of longer work experience. However, the proportion of workers with a high and a low level of satisfaction was slightly higher in the older age group than in the other two.

In 2013 satisfaction with commuting time grew gradually with age, ranging from 7.3 out of 10 in the youngest age group (25–34), to 7.4 out of 10 in the middle age group (35–49) and 7.5 out of 10 in the older age group (50–64). These differences may be related to different housing situations of each age group. People in the youngest age group often have dependent children making commuting a more constraining obligation whereas people in the older age group often have the ability to buy a property closer to their place of work or have better chances of finding a job close to home due to their experience.

Figure 5: Satisfaction with job and commuting time, by age group, EU-28, 2013 ([1])
(left axis: % of population ; right axis: mean rating)



([1]) The age groups 16–24 and older than 65 have been excluded from the analysis as they represent marginal shares of the population in employment and are not fully reliable.

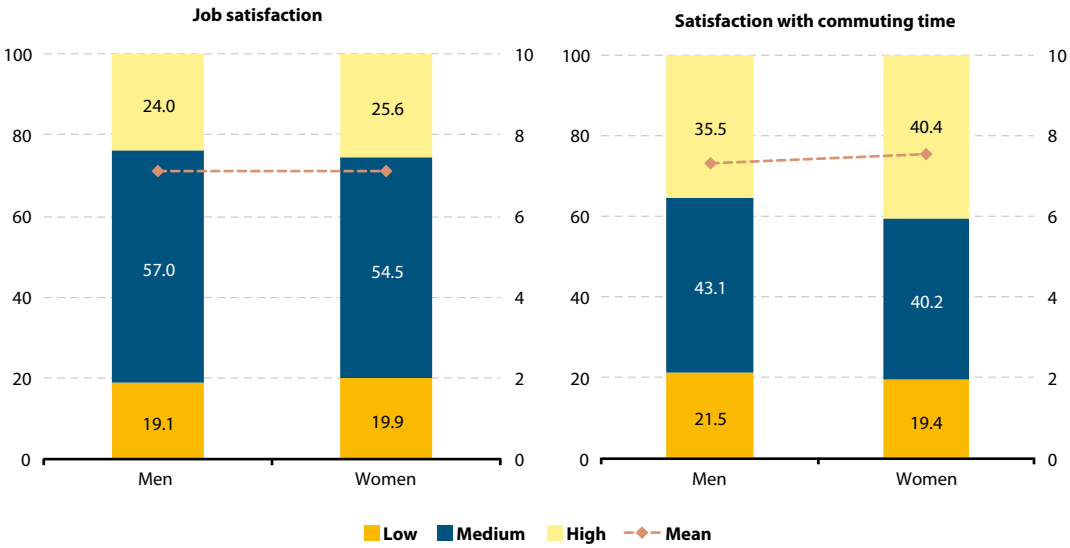
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Slight gender effect on satisfaction with commuting time

As shown in Figure 6, the mean level of job satisfaction for men and women is the same, at 7.1 out of 10 although slight differences can be observed. In particular, the percentage of women who reported low and high levels of job satisfaction was respectively 0.8 and 1.6 pp higher than that of men, who, in turn, were more numerous in the 'medium' category.

The 'gender effect' on satisfaction with commuting time is a bit more pronounced. In particular, women who were highly satisfied with their commuting time were 5.0 pp more numerous than their male counterparts.

Figure 6: Satisfaction with job and commuting time, by sex, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

However, on average, women were only 0.2 points more satisfied than men (7.5 vs 7.3 out of 10) with regard to commuting time. This may be due to the fact that women spent less time commuting than men ([17]) as they were more likely to occupy jobs closer to home and/or work fewer days a week to be able to also cope with family obligations.

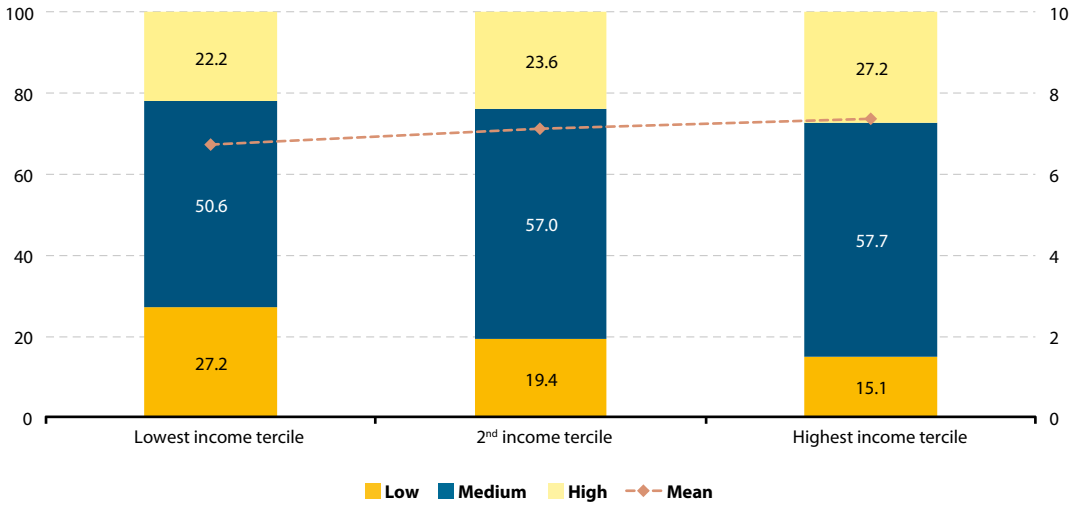
Job satisfaction was closely related to income levels

Figure 7 depicts the relation between income level (measured through the income tercile that a person belongs to on the basis of the distribution at the country level) and job satisfaction. The average level of job satisfaction progressed by tercile from 6.7 out of 10 in the lowest to 7.1 and 7.4 out of 10 in the second and third terciles. At the same time, the percentage of employed people with a high level of satisfaction ranged from 22.2 % in the bottom tercile to 27.2 % in the top one. Conversely those in the bottom tercile were almost twice as likely to report a low level of job satisfaction as those in the top tercile (27.2 % versus 15.1 %) ([18]).

Satisfaction with commuting time did not show a link with income (the mean varied by merely 0.1 pp ranging from 7.3 to 7.4 out of 10 across terciles), which is why it is not illustrated in a graph.

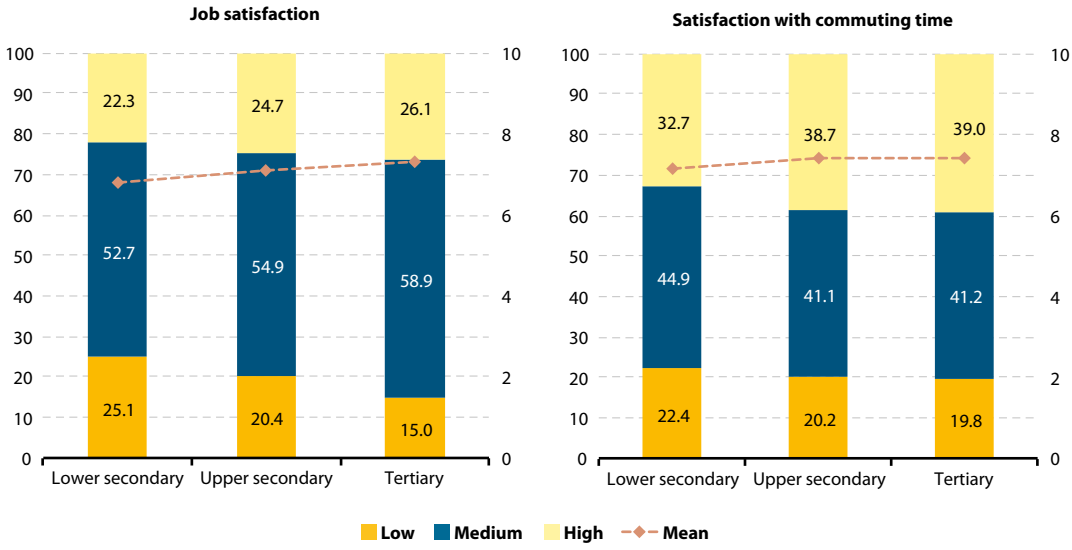
([17]) Eurostat, *Reconciliation between work, private and family life in the European Union* (2009), p. 43.
([18]) An analysis by wage quantiles reveals the same satisfaction patterns. Wage quantiles are five equal-sized wage groups which refer to the position of wage in the national frequency distribution.

Figure 7: Satisfaction with job, by income tercile, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (EU-SILC)

Figure 8: Satisfaction with job and commuting time, by educational attainment, EU-28, 2013 (1)
(left axis: % of population; right axis: mean rating)



(1) Lower secondary: pre-primary, primary and lower secondary education (ISCED levels 0–2); upper secondary: upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4); tertiary: first and second stage of tertiary education (ISCED levels 5 and 6).
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Strong effect of education on job satisfaction

As indicated in Figure 8, there was a clear relationship between educational attainment and job satisfaction and to a lesser extent, with commuting time. People with a low level of education had a mean job satisfaction of 6.8 out of 10, whereas people with an upper secondary education or a tertiary education had a mean job satisfaction of 7.1 and 7.3 out of 10 respectively.

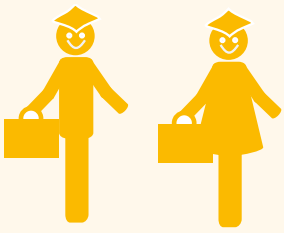
While the most educated people are expected to occupy the most skilled and best paid jobs, thereby attaining a higher level of job satisfaction, the link between education and satisfaction with commuting time was less clear-cut, ranging from 7.2 out of 10 among people with a low educational level to 7.4 out of 10 for those with intermediate and higher education.

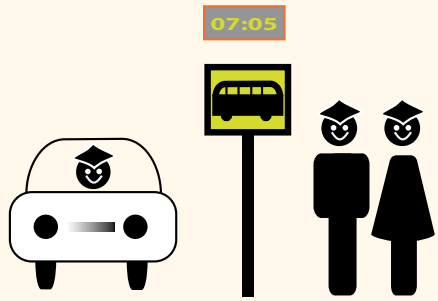
As was the case with income, education did not appear to influence satisfaction with commuting time, which is probably more dependent on other factors such as actual commuting time and family obligations.

Satisfaction with commuting time was more related with the type of employment than job satisfaction

Figure 9 highlights the relation between the type of employment and job satisfaction, which was similar in magnitude for the two indicators, varying by 0.5 average rating points in both cases.

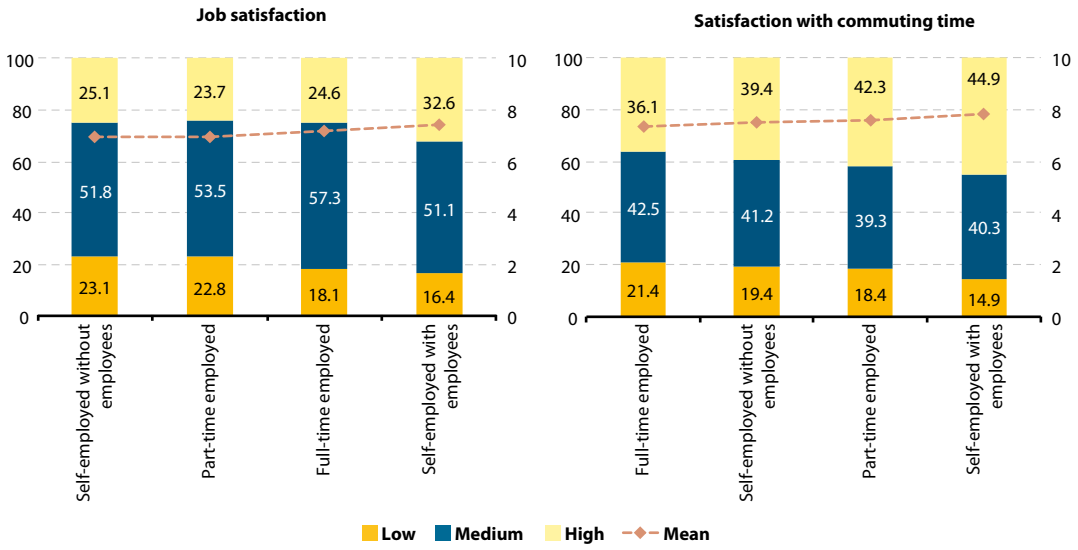
Self-employed workers with employees were more satisfied with their job (at 7.5 out of 10) than their counterparts without employees and part-time employees (both at 7.0 out of 10) and moderately more satisfied than the full-time employees (at 7.2 out of 10). The self-employed with employees probably had more rewarding and better paid jobs resulting in higher shares of highly satisfied workers. Job flexibility and a high degree of control over their work probably played a role in the important share of self-employed without employees reporting high levels of job satisfaction. In the group of the full-time employees, safer working conditions and greater job security might explain their high levels of satisfaction with their jobs.





Among the EU residents in employment with tertiary education, 26 % were highly satisfied with their job and 39 % with their commuting time.

Figure 9: Satisfaction with job and commuting time, by labour status, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (EU-SILC)

The figures relating to the satisfaction with commuting time were a lot more contrasting. For reasons related to the number and nature of hours spent commuting, the full-time employees reported the lowest degrees of satisfaction. On the other hand, commuting time is often more flexible and travel expenses more commonly reimbursable for the self-employed, explaining their more positive perception of this additional time spent on the road. Part-time employees tend to spend less time commuting than their full-time counterparts as they are more likely to accept jobs closer to their place of residence and/or to work fewer days per week ([19]).

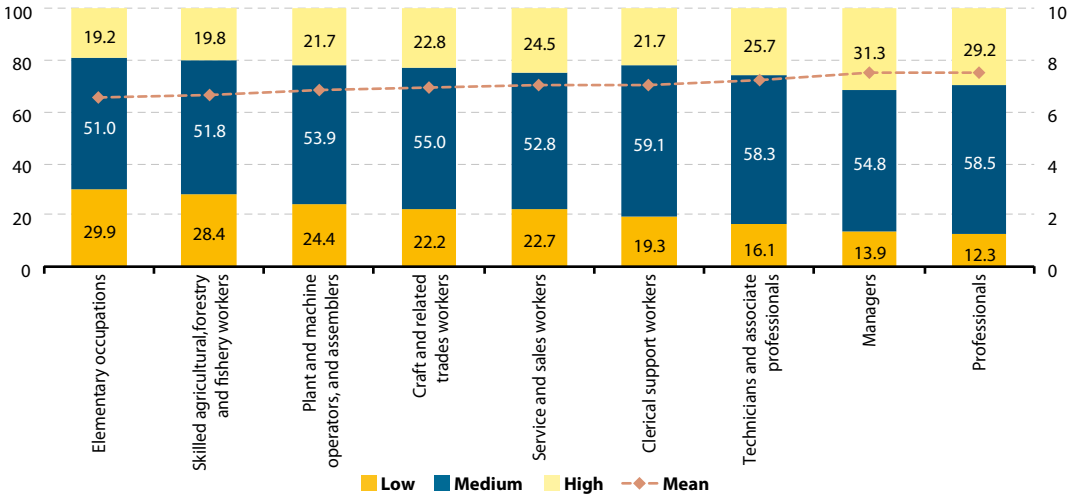
SELF-EMPLOYED PERSONS AND EMPLOYEES

Self-employed persons are the ones who work in their own business, farm or professional practice. They are considered to be working if they meet one of the following criteria: working for the purpose of earning profit, spending time on the operation of a business or in the process of setting up their business.

Employees are defined as persons who work for a public or private employer and who receive compensation in the form of wages, salaries, payment by results or payment in kind; non-conscript members of the armed forces are also included. Full-time/part-time time distinction in the main job is made on the basis of a spontaneous answer given by the respondent in all countries, except for the Netherlands, Iceland and Norway, where part-time is determined on the basis of whether the usual hours worked are fewer than 35, while full-time on the basis of whether the usual hours worked are 35 or more, and in Sweden where this criterion is applied to the self-employed persons as well.

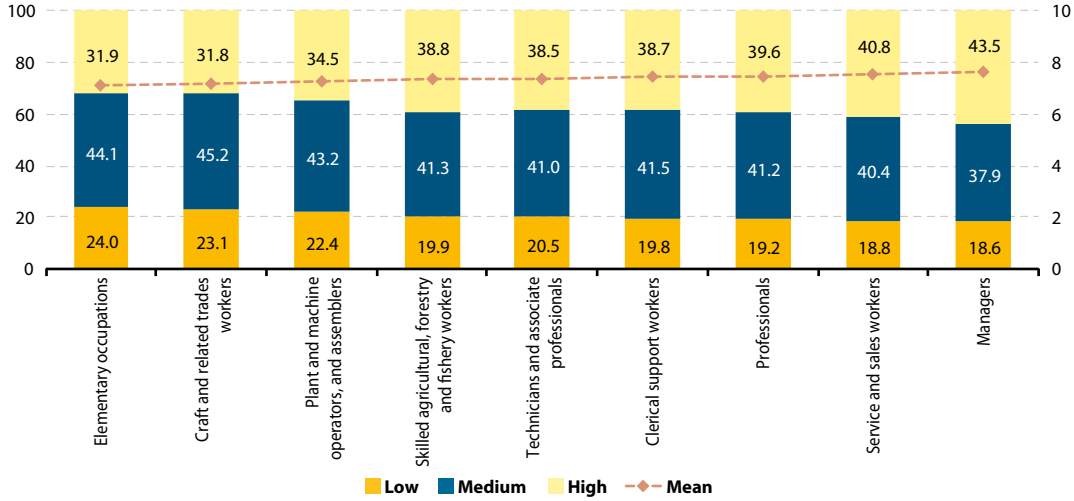
([19]) *Source*: Eurostat, *Reconciliation between work, private and family life in the European Union* (2009), p. 44.

Figure 10.a: Satisfaction with job, by occupation, EU-28, 2013
(left axis: % of population; right axis: mean rating)



([1]) International Standard Classification of Occupations approved by ILO, the International Labour Organization, in 1988 (ISCO-88).
Source: Eurostat (EU-SILC)

Figure 10.b: Satisfaction with commuting time, by occupation, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (EU-SILC)

Managers and professionals were most satisfied with their job and commuting time

Figure 10.a reveals a strong link between job satisfaction and occupation, with the average level of job satisfaction varying along with the level of education across various occupational classes. Higher educational attainment generally gives access to higher-level careers and better paid jobs, thus leading to a better appreciation of a person's job.

Unsurprisingly, elementary occupations, which require basic skills, recorded the lowest mean rating (6.5 out of 10) followed by skilled workers in the primary sector ([20]) (6.6 out of 10) and plant and machine operators (6.9 out of 10). These last two occupation classes include people mainly holding upper secondary education degrees (over 50 % of the former and close to 70 % of the latter) and very few tertiary graduates (less than 10 %).

In the most educated categories of workers, consisting of professionals, managers and technicians, two thirds of which graduated from higher education, the satisfaction was highest, ranging from 7.3 out of 10 for technicians, to 7.5 out of 10 for managers and professionals. In between, craft workers, sales workers and clerks reported a mean satisfaction rating of between 7.0 and 7.1 out of 10. The differences between occupational categories reflected to some extent those between the different educational attainment levels (Figure 8) ([21]).

The pattern of the satisfaction with commuting time (Figure 10.b) is different across occupational classes and can be analysed through three main groups. A first group consists of more satisfied workers with a mean satisfaction level comprised between 7.5 and 7.6 out of 10 including managers, service, sales workers and professionals. A second group covers workers who rated their satisfaction at 7.4 out of 10 and includes clerks, technicians and skilled workers, i.e. people with different educational backgrounds. Finally a third group of less satisfied employees, reporting a mean rating of 7.1 to 7.2 out of 10, includes workers in elementary level occupations, plant and machine operators (the least educated categories) but also craft and related trades workers. Actual commuting time and the degree of flexibility of the workers to adjust their working hours are likely to be more associated with the satisfaction with commuting time than occupation, education or income.

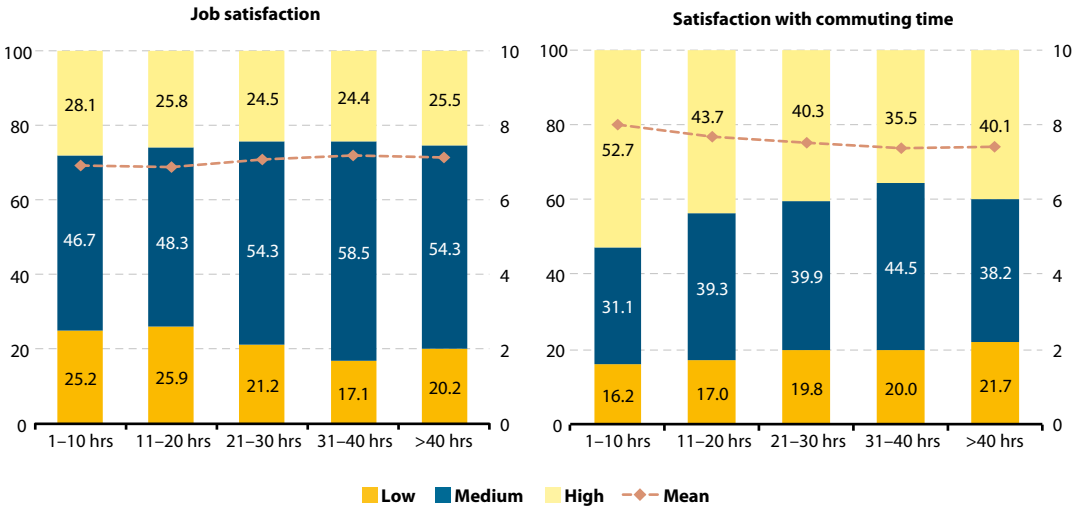
Working time had a pronounced effect on satisfaction with commuting time

Figure 11 shows that working time had little impact on job satisfaction. Indeed, those working between 31 and 40 hours per week (that is full time or close to it) ([22]) were on average more satisfied with their job (by only up to 0.3 points) than those working less. Full-time workers also recorded the lowest share of people with low satisfaction (17.1 %) but not the highest share of people with high satisfaction. Interestingly enough, the people working the fewest hours were also the most satisfied. People working more than the usual 40 hours per week and those working between 21 and 30 hours per week shared the same mean satisfaction rate at 7.1 out of 10 and also followed very similar satisfaction patterns.

The reason for the high share of high satisfaction level among people working more than usual may be that these employed persons were doing overtime which is paid extra by their employer. This increased their income and therefore — marginally — the satisfaction with their job. Some of them may also have occupied the highest, most rewarding but also most time-consuming positions in the hierarchy.

([20]) Agriculture, forestry, fishing and mining.
([21]) See chapter 4 'Education'.
([22]) The average number of usual weekly working hours in the main job in Europe is 37.4 hours per week in 2013. *Source*: Eurostat, EU-LFS (lfsa_ewhun2). Full-time/part-time distinction in the main job is made on the basis of a spontaneous answer given by the respondent in all countries, except for the Netherlands, Iceland and Norway, where part-time is determined on the basis of whether the usual hours worked are fewer than 35, while full-time on the basis of whether the usual hours worked are 35 or more, and in Sweden where this criterion is applied to the self-employed persons as well. *Source*: LFS series — Detailed annual survey results (lfsa).

Figure 11: Satisfaction with job and commuting time, by working time, EU-28, 2013 ([1])
(left axis: % of population; right axis: mean rating)



([1]) Average number of usual weekly hours of work in the main job. The number of hours actually/usually worked during the reference week includes all hours including extra hours, either paid or unpaid, but excludes the travel time between home and the place of work as well as the main meal breaks (normally taken at midday). Persons who have also worked at home during the reference period are asked to include the number of hours they have worked at home. Apprentices, trainees and other persons in vocational training are asked to exclude the time spent in school or other special training centres.
Source: Eurostat (EU-SILC)

In the category of employed working 21–30 hours, part-time work was probably more of a personal choice, made in many cases by women living in dual-earner households. In the remaining two categories, consisting of employed working up to 20 hours, part-time may have been chosen involuntarily hence giving rise to a lower mean satisfaction with the job (mostly due to higher proportions of employed with a low job satisfaction than in the other categories).

Figure 11 shows a very distinct pattern in which mean satisfaction with commuting time declined as working time grew. The mean satisfaction of those employed working the least hours was 8.0 out of 10 while the mean satisfaction of those employed working the most hours stood at 7.4 out of 10. This may be explained by the time spent in commuting which was lower amongst those working less intensively ([23]).

Job stability engendered higher levels of satisfaction

A connection between job satisfaction and job stability can be established by looking at Figure 12. The average rates of job satisfaction indicate that among all respondents, those who were working and changed their job recently were slightly less satisfied than those who remained in the same job over the last year (6.9 versus 7.1 out of 10). Though a high proportion of those having a new job reported increased levels of job satisfaction (as this may provide opportunities for career development and increasing motivation), an even higher proportion (as compared with those who did not experience any change) reported low levels of satisfaction.

([23]) Eurostat, *Reconciliation between work, private and family life in the European Union* (2009), p. 44.

A similar pattern — although with a slightly stronger magnitude — appears for the level of satisfaction with commuting time. A recent change of employment decreased the satisfaction with commuting time on average by 0.3 rating points.

The degree of urbanisation only slightly impacted the satisfaction with commuting time

Whereas no strong link between the degree of urbanisation and job satisfaction could be established (which is why it is not illustrated in a graph), the impact of urbanisation on satisfaction with commuting time is more evident, as Figure 13 shows.

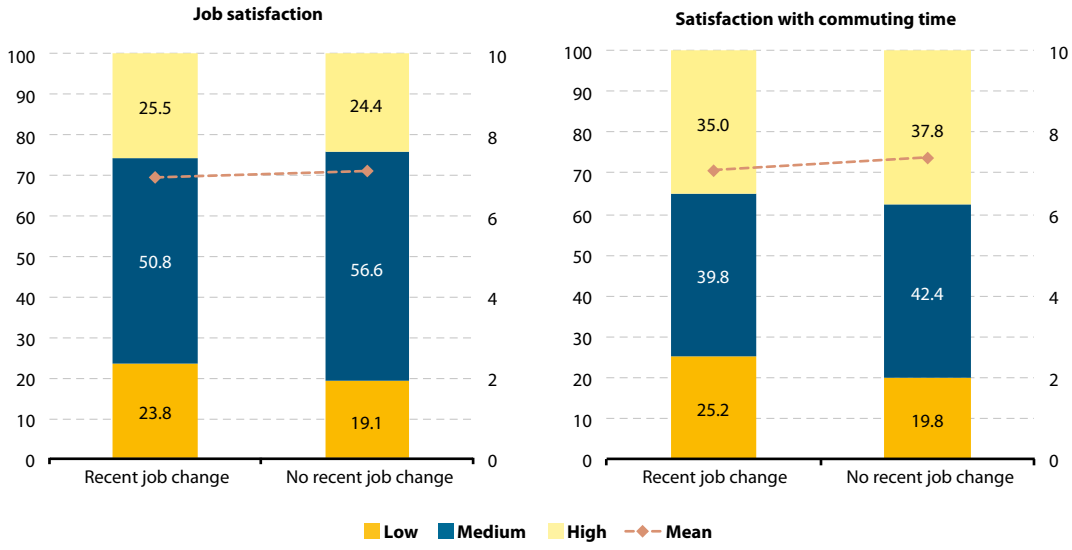
People living in the more and less densely populated areas were less satisfied with their commuting time (respectively 7.3 and 7.4 out of 10) than those living in intermediately urbanised areas (7.5 out of 10). The differential is probably due to a higher commuting time in the former two types of areas. This resulted in more time spent in traffic jams for people living in densely-populated areas due to traffic caused by city dwellers, and in longer travel distances for those people living in thinly-populated areas.

CHANGING JOBS

For employees, a change of job means a change of employer or a change of contract with the same employer.

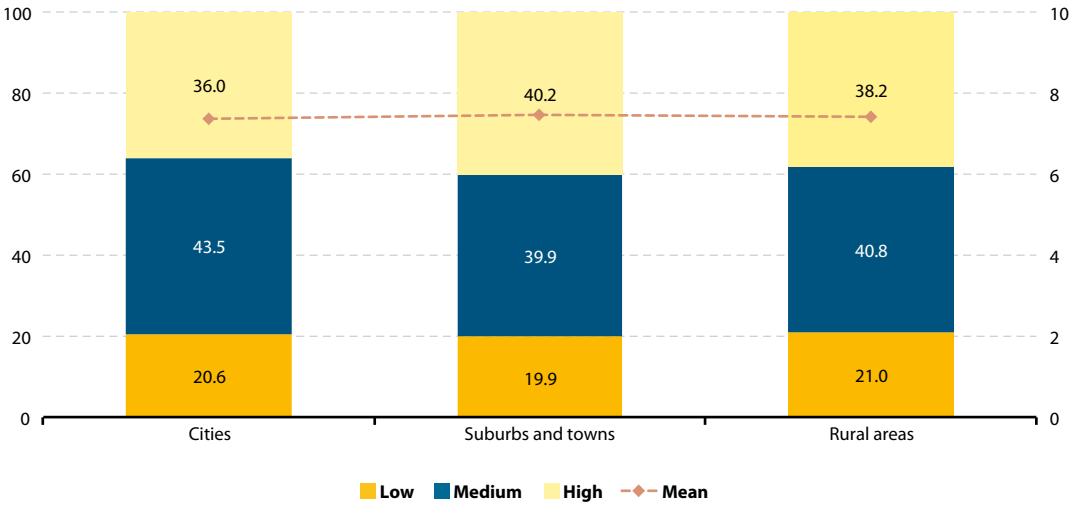
For the self-employed, a change of job means a change in the nature of the activity performed (or moving between employee and self-employed status).

Figure 12: Satisfaction with job and commuting time of those who change their job as compared to the previous year, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (EU-SILC)

Figure 13: Satisfaction with commuting time, by degree of urbanisation, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (online data code: ilc_pw02)

How do various objective employment conditions connect with the job satisfaction of EU residents?

At country level, job satisfaction and working conditions are closely related. Table 1 compares the share of residents experiencing various forms of unfavourable working conditions (living in households with very low work intensity ([24]), being underemployed ([25]) or working under a temporary contract ([26])) with the share of people declaring a low satisfaction with their job in 2013 ([27])([28]).

([24]) People living in households with very low work intensity as a percentage of total population aged less than 60. Persons are defined as living in households with very low work intensity if they are aged 0–59 and the working age members in the household worked less than 20 % of their potential during the past year. *Source*: Eurostat, EU-SILC (ilc_lvhl11).
([25]) Underemployed part-time workers are persons working part-time who wish to work additional hours and are available to do so. Part-time work is recorded as self-reported by individuals. The age group covered is 15–74. *Source*: Eurostat, EU-LFS (lfsi_sup_age_a).
([26]) Employees with temporary contracts are those who declare themselves as having a fixed-term employment contract or a job which will terminate if certain objective criteria are met, such as completion of an assignment or return of the employee who was temporarily replaced. *Source*: Eurostat, EU-LFS (lfsa_etpga).
([27]) All current household members aged 16 and over who are currently working.
([28]) These figures may be seen in conjunction with the share of people in the EU-28 declaring to be underemployed part-time workers in 2013 (4.1 % of the active population, representing 9.9 million people). Underemployed part-time workers are persons working part-time who wish to work additional hours and are available to do so. Part-time work is recorded as self-reported by individuals. *Source*: Eurostat, EU-LFS (lfsi_sup_age_a).

Table 1: Employment condition versus low job satisfaction, by country, 2013
(%)

	% of employed (aged 16 and over) with low job satisfaction	% of people (aged 0–59) living in households with very low work intensity	% of underemployed part-time workers (aged 15–74) in total employment	% of employees (aged 15–64) with temporary contracts
EU-28	19.4	10.8	4.6	13.7
Belgium	8.5	14.0	3.6	8.1
Bulgaria	47.7	13.0	1.1	5.6
Czech Republic	19.0	6.9	0.7	9.1
Denmark	9.1	12.9	3.0	8.8
Germany	24.3	9.9	4.4	13.4
Estonia	18.4	8.4	1.3	3.5
Ireland	20.0	23.9	7.8	10.0
Greece	37.7	18.2	6.1	10.2
Spain	21.5	15.7	9.1	23.2
France	15.5	7.9	6.0	15.9
Croatia	25.4	14.8	2.2	14.5
Italy	17.5	11.0	2.9	13.2
Cyprus	20.0	7.9	7.4	17.5
Latvia	17.3	10.0	3.6	4.3
Lithuania	15.0	11.0	2.7	2.7
Luxembourg	14.5	6.6	2.0	7.0
Hungary	20.9	12.6	2.3	10.8
Malta	13.0	9.0	2.9	7.5
Netherlands	5.4	9.3	2.2	20.3
Austria	10.2	7.8	4.0	9.2
Poland	19.8	7.2	2.3	26.8
Portugal	25.1	12.2	5.9	21.4
Romania	17.4	6.4	2.7	1.5
Slovenia	19.3	8.0	2.5	16.3
Slovakia	22.3	7.6	1.9	6.8
Finland	4.7	9.0	3.2	15.3
Sweden	13.0	7.1	5.3	16.3
United Kingdom	22.4	13.2	6.5	6.1
Iceland	9.6	6.2	:	14.4
Norway	7.2	6.4	6.0	8.4
Switzerland	8.5	4.1	2.9	12.9
Serbia	41.6	18.1	:	:

Source: Eurostat (EU-SILC)

The nature of people's jobs has consistently been shown to be a central factor affecting their long-term risks of unemployment, poverty and ill-health ([29]). Hence, low work intensity, underemployment and temporary employment measure the important aspect of lack of employment in the context of quality of life. For people working fewer hours than they would like to there are implications for their income opportunities, social interactions and shaping of identity, all of which impact their quality of life. People sometimes accept part-time work due to lack of full-time alternatives. In some EU Member States without favourable legislation or collective agreements, part-time work may involve inferior conditions in terms of access to benefits and training opportunities ([30]) as well as career advancement.

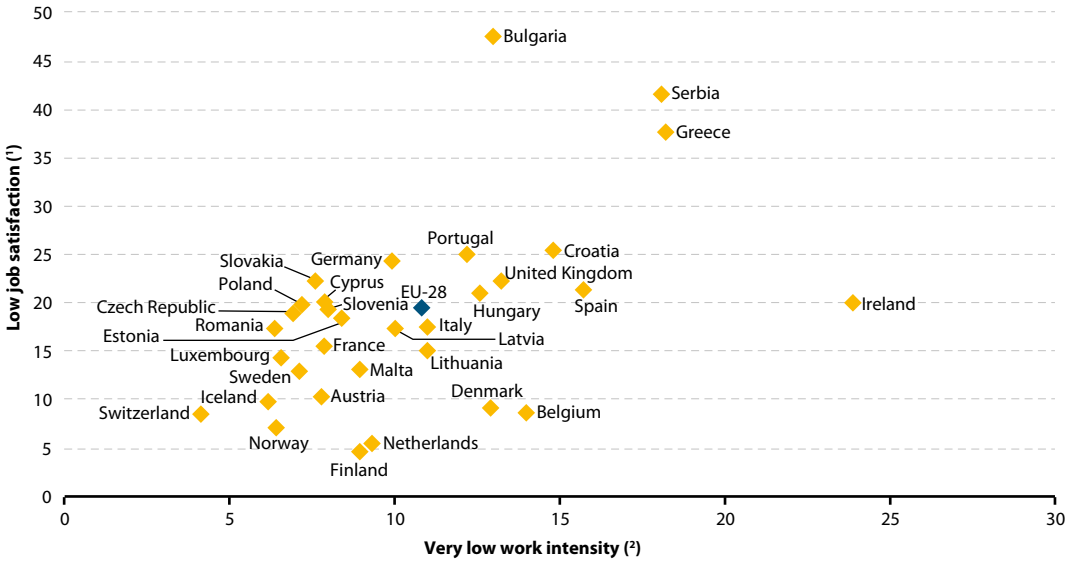
Against this background, the shares of reported low job satisfaction varied by a factor of 10 across EU Member States. Countries in which high proportions of employees were confronted with lack of job security as expressed through high shares of households with low work intensity tended to record higher shares of low job satisfaction. This was less clear-cut for underemployment and temporary employment as these employment situations may generate different conditions in terms of social protection depending on countries or professions. They are often related to lack of job availability on the labour market, although certain employees may opt for temporary contracts voluntarily, as a result of their household situation or for reasons of 'flexicurity' ([31]). The opposite may also be true: legal barriers to laying off employees combined with a permanent contract may, in reality, be quite weak in some countries.

Low work intensity associated with low job satisfaction

Approximately 19.4 % of EU workers ([32]) assessed their job negatively in 2013. In the same year, 10.8 % of the population aged 0–59 was living in households with very low work intensity. This is 1.7 pp higher than in 2008, when the global financial and economic crisis started to impact the European economy ([33]). On average slightly more women than men tended to live in such households (by 1 pp) ([34]). Figure 14 shows that most EU Member States are clustered in the bottom left part of the graph, relatively close to the EU average, indicating a link between job satisfaction and low work intensity. The relation is most visible in countries such as Luxembourg, France and Latvia on the one hand, and Hungary, the United Kingdom and Croatia on the other. These EU Member States are positioned in an almost straight line (which also encompasses the EU average) and their low job satisfaction shares have grown parallel to their low work intensity shares. Greece and Serbia were at the extreme end of this virtual line as these countries recorded very high shares of people living in households with low work intensity and employed persons with low job satisfaction.

([29]) European Commission (2002). Eurobarometer 56.1 October 2002.
([30]) Employers are the most common providers of non-formal education and training activities, providing close to one third (32.0 %) of such activities according to the 2011 survey. *Source*: Eurostat, Adult Education Survey (AES) (tmg_aes_170).
([31]) The concept of 'flexicurity', which emerged in the Netherlands in the mid-1990s, presupposes a 'double bind': high levels of flexibility are required to compete successfully in a globalised market and thus to afford high levels of employment security. Flexicurity is advocated in the Europe 2020 strategy and its predecessor, the Lisbon strategy, and in guideline 21 of the European Employment Strategy 2007.
([32]) Respondents are all current household members aged 16 and over who are currently working.
([33]) EU-27 figures. *Source*: Eurostat, EU-SILC (ilc_lvhl11).
([34]) 10.3 % of men and 11.3 % of women living in the EU-28. *Source*: Eurostat, EU-SILC (ilc_lvhl11).

Figure 14: Low job satisfaction versus very low work intensity, by country, 2013
(job satisfaction: % of employed respondents aged 16 and over; work intensity: % of population aged 0–59)



(1) All current household members aged 16 and over who are currently working.
(2) People living in households with very low work intensity as a percentage of total population aged less than 60. Persons are defined as living in households with very low work intensity if they are aged 0–59 and the working age members in the household worked less than 20 % of their potential during the past year.
Source: Eurostat (online data codes: ilc_pw05 and ilc_lvhl11)

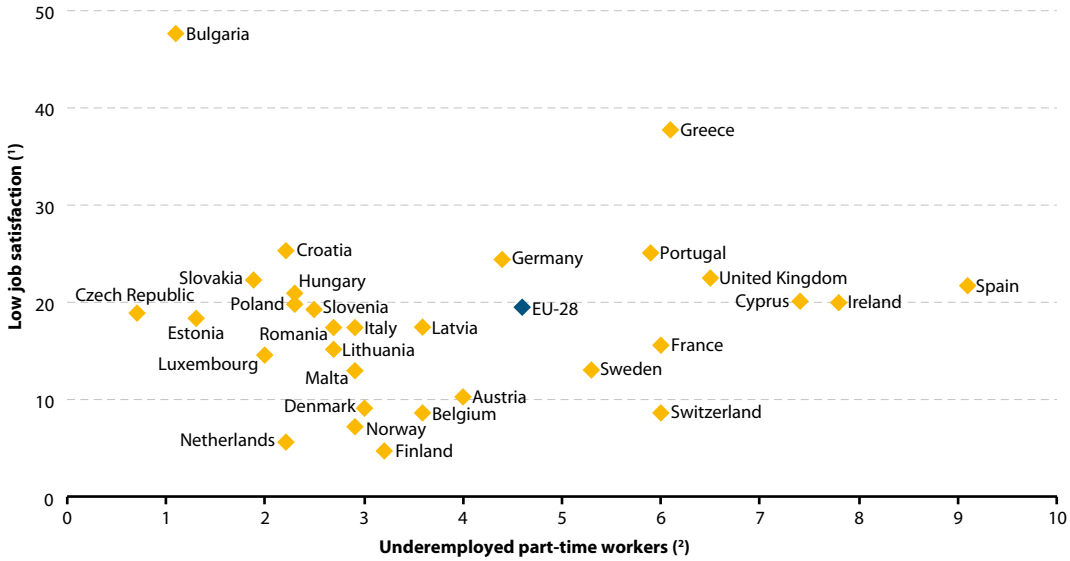
Bulgaria and Ireland displayed quite different profiles. In Bulgaria, almost half of the workers (47.7 %) — the highest rate at EU level — assessed their job negatively, whereas a comparatively lower rate of workers (13.2 %, which is 2.2 pp more than the EU average) lived in households with low work intensity. Slovakia, Poland, Cyprus and the Czech Republic reported low shares of households with a low work intensity (under 8.0 %) and comparatively high shares of people with a low job satisfaction (between 19.0 % in the Czech Republic and 22.3 % in Slovakia). Ireland, on the other hand, was the country most affected by low work intensity (23.9 %), while its share of workers reporting a low job satisfaction (20.0 %) only slightly exceeded the EU average. Denmark and Belgium reported rather similar shares of low work intensity (12.9 % and 14.0 % respectively, or about 2–3 pp over the EU average) and both EU Member States also reported comparatively low job satisfaction figures (9.1 % and 8.5 % respectively).

Underemployment and low job satisfaction not closely linked

In 2013, 4.6 % of total employment (approximately 10 million people) consisted of underemployed part-time workers, varying from 0.7 % in the Czech Republic and less than 2.0 % in Bulgaria, Estonia and Slovakia to 9.1 % in Spain and over 7.0 % in Ireland and Cyprus ([35]).At EU level the share of underemployed part-time workers grew by 1.3 pp between 2008 and 2013, confirming a

([35]) *Source*: Eurostat, EU-LFS (lfsi_sup_age_a). See also footnote 39.

Figure 15: Low job satisfaction versus underemployed part-time workers, by country, 2013
(job satisfaction: % of employed respondents aged 16 and over; underemployed part-time workers: % of total employment)



(1) All current household members aged 16 and over who are currently working.
(2) Underemployed part-time workers are persons working part-time who wish to work additional hours and are available to do so. Part-time work is recorded as self-reported by individuals. The age group covered is 15–74.
Source: Eurostat (online data codes: ilc_pw05 and lfsa_eppgai)

trend towards more such contracts and generally more part-time employment, whether voluntary or not ([36]).

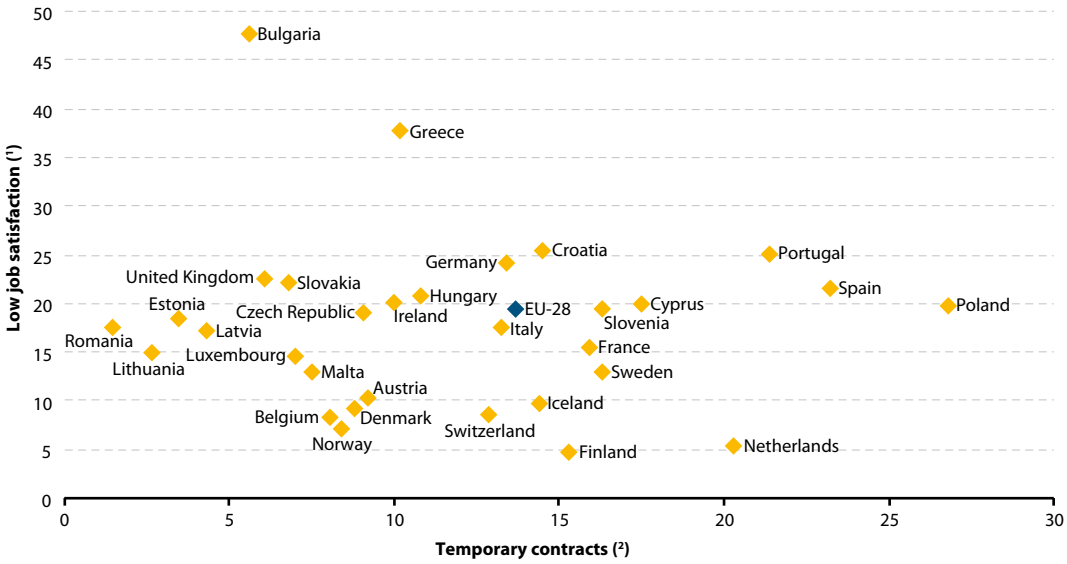
Underemployment affected women much more than men (6.7 % versus 2.8 %). As illustrated in Figure 15, the underemployment share in 2013 did not tend to be closely associated with the percentage of employed people reporting a low level of job satisfaction. Nonetheless, EU Member States such as the Netherlands, Finland, Denmark, Belgium and Austria appeared at the left bottom of the graph as they displayed low shares for both variables. Spain, Ireland and Cyprus, displayed a different pattern, with shares of low satisfaction around 20.0 % and shares of underemployment between 7.4 % (in Cyprus) and 9.1 % (in Spain). In Bulgaria, where the share of underemployed part-time workers was close to the figures reported in the Czech Republic (around 1.0 %), its residents were more than twice as likely to report a low job satisfaction (47.7 % versus 19.0 %). In fact, many eastern EU Member States were in a similar situation, recording low percentages of underemployment but high percentages of people with low job satisfaction (i.e. the Czech Republic, Estonia, Croatia, Slovakia, Hungary, Poland and Slovenia). Greece had 6.1 % of underemployed part-time workers and low job satisfaction was reported by 37.7 % of people in employment.

([36]) *Source:* Eurostat, EU-LFS (lfsa_eppgai) and (tps00159).

Temporary employment not linked to low job satisfaction

The percentage of temporary contracts amongst EU employees grew from 13.2 % in 2004 to a peak of 14.6 % in 2007 before decreasing to 13.7 % — close to mid-2000s levels — in 2013. There was neither a real gender gap ([37]) nor any education effect on the prevalence of such contracts across the employee population ([38]). While 19.7 % of respondents declared a low satisfaction with their job in 2013, Figure 16 reveals that there was no strong relationship between the two variables, with the majority of country values being sparsely distributed over the lower bottom of the graph.

Figure 16: Low job satisfaction versus temporary employment, by country, 2013
(job satisfaction: % of employed respondents aged 16 and over; temporary contracts: % of employees aged 15–64)



(1) All current household members aged 16 and over who are currently working.
(2) Employees with temporary contracts are those who declare themselves as having a fixed term employment contract or a job which will terminate if certain objective criteria are met, such as completion of an assignment or return of the employee who was temporarily replaced.
Source: Eurostat (online data codes: ilc_pw05 and lfsa_etpga)

([37]) Hence, in 2013, 14.2 % of women employees had a temporary contract versus 13.2 % of men. See footnote 32. *Source*: Eurostat, EU-LFS (lfsa_etpga).
([38]) In 2013, 26.6 % of temporary contracts were held by lower educated people who made up 27.9 % of the population aged 15–64; for upper secondary education, the respective shares were 45.8 % and 46.8 %, and for tertiary education it was 27.2 % versus 25.3 %. *Source*: Eurostat, EU-LFS: temporary contracts by education: (lfsa_etgaed); educational attainment: (edat_lfse_05), (edat_lfse_06) and (edat_lfse_07).

While there is considerable range in the propensity to use limited duration contracts between EU Member States, there is also considerable range in the patterns of job satisfaction. Hence, countries such as the Netherlands or Finland recorded high proportions of temporary contracts without a corresponding share of people with a low job satisfaction, which one might have expected. However in Poland, Spain and Portugal, high shares (close to or above EU average) of temporary contracts were clearly associated with lower job satisfaction. The opposite was not always true. Indeed, Bulgaria and the United Kingdom — who are aligned vertically on the left side of the graph, as they both account for low proportions of employees in temporary employment (5.6 % and 6.1 % respectively) — experienced very divergent shares of employed people with low job satisfaction, at 47.7 % and 22.4 % respectively. Slovakia displayed the same pattern as the United Kingdom. Similarly, Greece, Ireland and Hungary all recorded shares of employees on temporary contracts at under 11 %, while their negative job evaluations ranged from 37.7 % in Greece, to approximately 20.0 % in Ireland and Hungary. Meanwhile, in the Netherlands, where temporary work contracts were quite common (20.3 %), only a very small minority of people declared a low job satisfaction (5.4 %).

In 2013, the Netherlands and Finland recorded high proportions of temporary contracts but only a small share of people with a low job satisfaction.

Temporary contracts are rarely the result of a choice made by the workers but rather a constraint of the labour market. The relation between job satisfaction and the proportion of employees with a temporary contract might be linked to some extent to the way in which flexibility is applied across EU Member States. A question to be asked would be whether temporary contracts are accompanied by low or high security for the employees (and how this ultimately translates into labour productivity and GDP per capita) ([39]). Looking at the Netherlands and Portugal, which have similar shares of temporary contracts, their diverging assessments of job satisfaction may lie in that the former applies flexicurity (which combines high flexibility and job security) whereas in the latter, low flexibility is not associated with a high security of employees. What matters to employees is not so much whether or not their contract is temporary, but the risks they are exposed to due to their contract being temporary, which can be buffered by the welfare state and the availability of jobs on the labour market.

([39]) European Commission, *Flexicurity in Europe: Final report* (2013). See also: http://ec.europa.eu/social/main.jsp?catId=102.

Conclusions

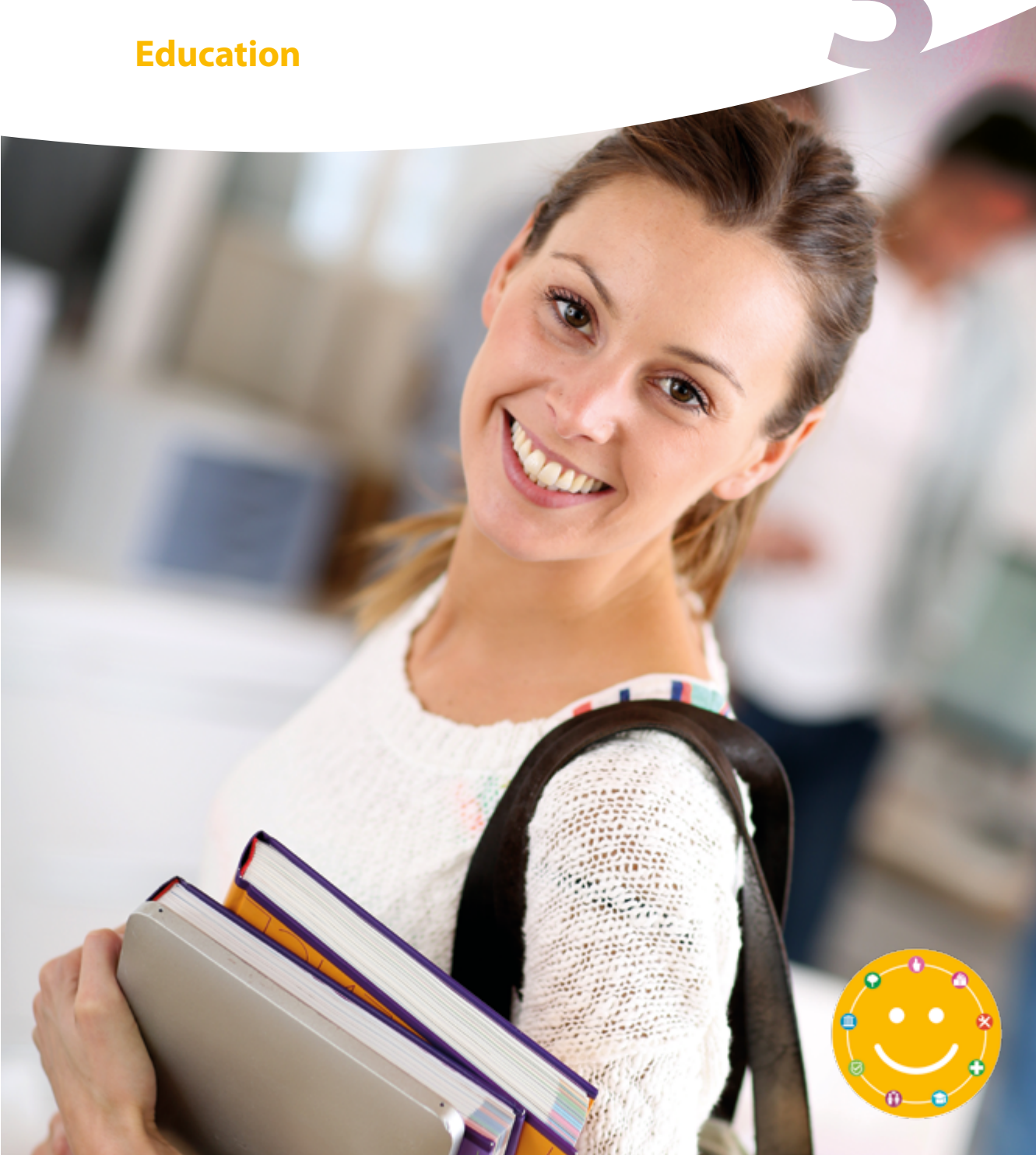
Job satisfaction displayed distinct patterns depending on the socio-demographic group in which a worker may belong to. A link between job satisfaction and factors such as age and gender could not be established. However, average job satisfaction increased visibly across income terciles, education levels and occupational classes. The employment status was also related to job satisfaction as self-employed with employees reported a higher mean satisfaction compared with the other groups. Working full time slightly increased mean job satisfaction. The same held true for job stability although a recent job change gave rise to moderately higher shares of workers who were highly satisfied with their job. Satisfaction with commuting time followed distinct patterns compared with job satisfaction. There was a slight impact from age, with the youngest employees being less satisfied than their older peers. Similarly, gender slightly impacted satisfaction levels as male employees reported being a little less satisfied than their female counterparts. The impact of income was negligible ([40]) and that of education only minor. Working full time decreased satisfaction with commuting time more distinctively whereas job stability ([41]) increased it moderately. Lastly, living in a town or suburb resulted in a slightly higher average satisfaction with commuting time compared with cities and rural areas.

Low job satisfaction varied by a factor of 10 across EU Member States. Countries in which high proportions of people in working age were confronted with work insecurity and difficulties in accessing the labour market (as expressed through low work intensity) tended to also register a lower job satisfaction. This was less clear-cut for underemployment, which depended on the prevalence of part-time contracts in the total, and temporary employment which was associated with risks that can be mitigated by the situation on the labour market or the welfare state.

([40]) Not analysed in a graph.
([41]) Measured through the absence of a reported recent job change. See Figure 12.

3

Education



Introduction

Education affects the quality of life of individuals in many ways. People with limited skills and expertise tend to have worse job opportunities and worse economic prospects, while early school leavers face higher risks of social exclusion and are less likely to participate in civic life. In the same way as employment, education is at the very heart of European Union (EU) policies, in that the level of education of its residents can have a major impact on their employability, hence reducing their risk of poverty, by providing them the necessary skills and expertise to adapt in a rapidly changing labour market and society. By enhancing creativity, entrepreneurship and innovation, education can also contribute to job creation and growth. Moreover, beyond pragmatic considerations, education is one of the greatest values of society, since it allows for a better understanding of the world we live in.

The first part of the chapter focuses on the analysis of educational attainment indicators (including the prevalence of early education and early school leaving) as well as of self-reported expertise and skills, such as the knowledge of foreign languages and digital literacy. It is followed by an analysis of the variation of educational attainment between EU Member States by various socio-demographic variables such as age, sex, income, labour status and occupation ([1]).

Statistical findings in other chapters of this publication have indicated that job satisfaction and overall life satisfaction were higher amongst tertiary graduates ([2]). Based on this, the last part of the chapter examines education as a determinant of the quality of life of individuals, looking at the relations between educational attainment and various aspects of well-being at EU level and in the EU Member States.

EU POLICIES RELATED TO EDUCATION

Education plays a central role in the context of Europe 2020 ([3]), the EU strategy for growth and jobs. Two headline targets of the overarching Europe 2020 strategy come from this field:

- at least 40 % of its 30-34–year-olds should be tertiary graduates; and
- early leaving from education and training should be less than 10 % by 2020.

Also, making lifelong learning and mobility a reality, as well as improving the quality and efficiency of education and training are objectives set in the strategic framework for European cooperation in education and training (ET 2020, Council conclusions of 12 May 2009). ET 2020 includes a benchmark of 95 % for the participation of children aged 4 in education.

Another important European strategy promotes multilingualism with a view to strengthening social cohesion, intercultural dialogue and European construction (Council Resolution of 21 November 2008).

([1]) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).
([2]) See chapter 2 'Employment'.
([3]) European Commission/Eurostat, *Smarter, greener, more inclusive? Indicators to support the Europe 2020 strategy* (2014), p 94.

Education in a quality of life perspective

In 2014, there were about 4.6 million early leavers from education and training (aged 18-24) across the EU-28. These people were at great risk of deprivation and social exclusion, as about 41 % of them were jobless ([4]). Since 2005, the share of early leavers has fallen continuously in the EU, from 15.7 % in 2005 to 11.1 % in 2014. Almost all EU Member States experienced the same trend. Nonetheless, the EU-28 as a whole still finds itself 1.1 percentage points above the 10 % target that it set itself for the year 2020 ([5]).

EARLY LEAVERS

Early leavers from education and training refers to persons aged 18–24 fulfilling the following two conditions (numerator):

- the highest level of education or training attained corresponds to lower secondary education (ISCED 0, 1, 2 or 3c short second); and
- respondents declared not having received any education or training in the four weeks preceding the survey.

The denominator consists of the total population of the same age group, excluding 'No' answers to the questions 'highest level of education or training attained' and 'participation to education and training'. Both the numerators and the denominators come from the EU-LFS. This includes both people who failed and dropped out of school and those who did not fail but left education without continuing.

INDICATORS RELATED TO EDUCATION

As a dimension of the Quality of Life framework, education refers to acquired expertise and skills, to the continued participation in lifelong learning activities and to aspects related to the access to education.

- Expertise and skills are measured through data on educational attainment of the population (provided by the EU-LFS), including an early school leavers indicator. These are complemented by measures on self-reported (knowledge of a foreign language and computer literacy) and assessed skills (currently available through the Programme for the International Assessment of Adult Competencies — PIAAC).
- Life-long learning covers the proportion of the population in further education and training (provided by the EU-LFS).
- Additional indicator related to opportunities for education is being developed. The indicator will cover participation of children aged 4 in early childhood education (ISCED 0+1).

([4]) European Commission, *Education and training — Monitor report* (2014), p. 30.
([5]) *Source*: Eurostat, EU-LFS (t2020_40).

THE ISCED STANDARD

The classification of educational activities is based on the International Standard Classification of Education (ISCED). Data until 2013 are classified according to ISCED 1997 and data as from 2014 according to ISCED 2011.

ISCED 1997 covered 6 categories at 1-digit level:

- Level 0 – Pre-primary education
- Level 1 – Primary education or first stage of basic education
- Level 2 – Lower secondary or second stage of basic education
- Level 3 – (Upper) secondary education
- Level 4 – Post-secondary non-tertiary education
- Level 5 – First stage of tertiary education
- Level 6 – Second stage of tertiary education.

ISCED 2011 cover 8 categories at 1-digit level:

- Level 0 – Less than primary education
- Level 1 – Primary education
- Level 2 – Lower secondary education
- Level 3 – Upper secondary education
- Level 4 – Post-secondary non-tertiary education
- Level 5 – Short-cycle tertiary education
- Level 6 – Bachelor's or equivalent level
- Level 7 – Master's or equivalent level
- Level 8 – Doctoral or equivalent level.

Data on educational attainment are presented for three aggregates – low, medium and high level of education:

- The aggregate 'lower secondary education attainment' refers to levels 0, 1 and 2 of the ISCED 2011. Data up to 2013 refer to ISCED 1997 levels 0, 1 and 2 but also include level 3C short (educational attainment from ISCED level 3 programmes of less than two years).
- The aggregate 'upper secondary education attainment' corresponds to ISCED 2011 levels 3 and 4. Data up to 2013 refer to ISCED 1997 levels 3C long, 3A, 3B and 4.
- The aggregate 'tertiary education attainment' covers ISCED 2011 levels 5, 6, 7 and 8. Data up to 2013 refer to ISCED 1997 levels 5 and 6.

This positive trend can to some extent be attributed to the progress in pre-primary education which is considered a first policy lever to prevent early school leaving. In 2012, the EU-28 was only 1.1 percentage point away from its 95 % benchmark on pre-primary education which was already universal in a few EU Member States.

The EU-28 was performing better in terms of ICT skills — the percentage of those who had never used the internet was halved from 43 % to 21 % between 2005 and 2013. An important divide in computer literacy between northern/central EU Member States and southern/eastern EU Member States continued to subsist however.

About one third of the EU population (34.3 %) reported not to know any foreign language in 2011, ranging from 72.7 % in Ireland to 1.1 % in Luxembourg. Out of the remaining population (those speaking at least one foreign language) more than half reported either a good or a proficient level of knowledge of their best-known foreign EU language, but figures at country-level were again quite diverging.

There has been a decline in the percentage of the population aged 25–74 having completed lower secondary education only (from 34.7 % in 2005 to 28.1 % in 2013 and even to 27.2 % in 2014) linked to an increase in tertiary educational attainment (which grew for the same age group from 20.9 % in 2005 to 26.8 % in 2013, even to 27.5 % in 2014) in the EU-28. The proportion of women with tertiary graduates (aged 25–74) outweighed men by 1.2 percentage points (27.3 % versus 26.1 %) in 2013. Most tertiary education graduates were found amongst the younger age groups (25–34), as well as amongst the most advantaged categories of EU residents, people in employment or occupying managerial positions, professionals and technicians. Income was closely linked with the level of educational attainment.

Education appeared to be a strong determinant of subjective well-being: the most educated people in the EU were much less prone to report being down, depressed or nervous, and were happier than the least educated ones. Educational attainment also seems to affect satisfaction with different aspects of life both at EU level and across EU Member States, which the most educated almost systematically assessed more positively. This was particularly true regarding the satisfaction with the financial situation of their household which was superior by around 1.3 percentage points to that recorded by the least educated. Additionally tertiary graduates experienced more rewarding social relationships, felt more secure and in better health. Lastly, their overall rating of life satisfaction and its meaning was higher by 0.9 and 0.6 points rating respectively.

Major achievements in education and skills since 2005

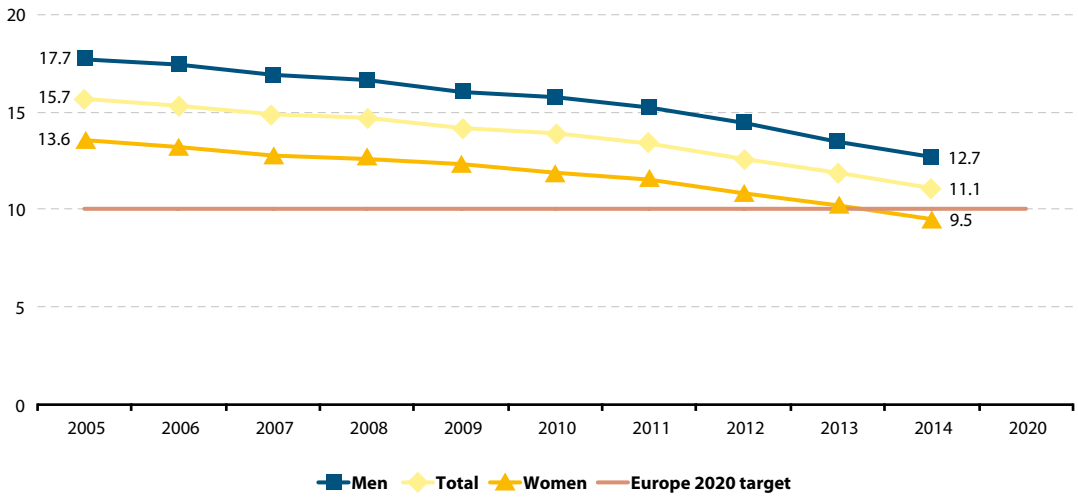
The section below focuses on trends in education and skills achievement since 2005 within the EU-28 as a whole and by country level.

Less and less people were leaving education and training early

There were about 4.6 million early leavers from education and training (aged 18-24) across the EU-28 in 2014. They were potentially at great risk of deprivation and social exclusion, in particular due to the high probability of unemployment they were facing: 41.0 % of the early school leavers were jobless ([6]).

Figure 1 indicates that since 2005 the share of early leavers from education and training had fallen continuously in the EU-28. From 15.7 % in 2005, it went down to 11.1 % overall in 2014, ranging from 12.7 % for men to 9.5 % for women. Both proportions of men and women early school leavers followed the same tendency and the gender gap remained almost constant between 2005 and 2014. The EU-28 average was still in 2014 1.1 percentage points over the 10 % target set for the year 2020, but the share for women reached that year the target, being 0.5 percentage points below the target.

Figure 1: Early leavers from education and training, by sex, EU-28, 2005–14 ([1])
(% of population aged 18–24)



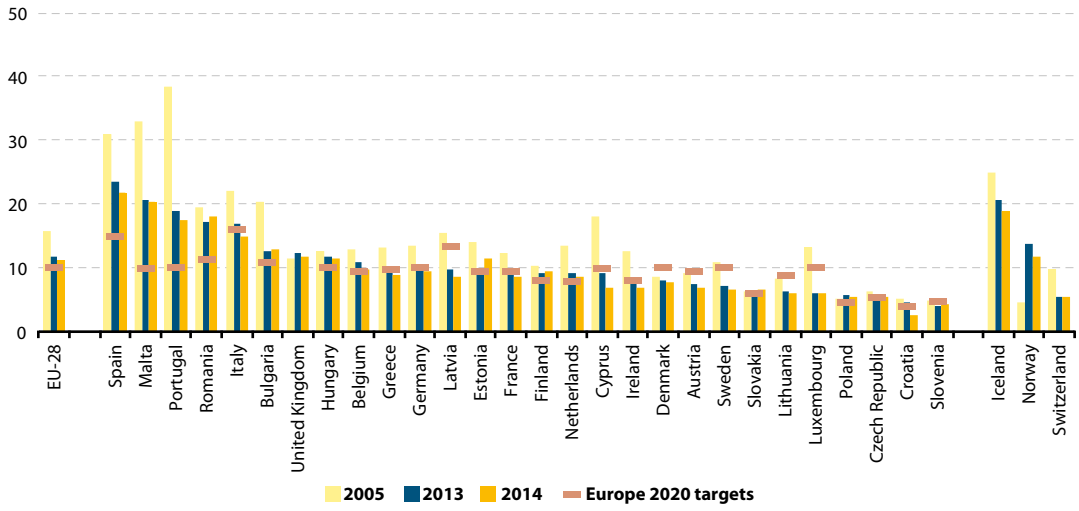
([1]) Break in series in 2006 and 2014.
Source: Eurostat (online data code: edat_lfse_14)

([6]) European Commission, *Education and training — Monitor report* (2014), p 30.

The decline of the number of early school leavers observed at EU-28 level mirrored decreases in almost all EU Member States since 2005 (Figure 2). Member States registering the lowest proportions of early school leavers were mainly from the central and eastern parts of the EU (Slovenia, the Czech Republic, Poland and Croatia). On the other hand, southern EU Member States (such as Spain, Malta, Portugal and Italy) but also Romania and Bulgaria, displayed the highest shares of early school leavers, although their figures improved considerably.

While Malta and Portugal had achieved the sharpest reductions in their share of early school leavers by 2014, they were still some distance away from their Europe 2020 national targets (10.4 and 7.4 percentage points respectively). Spain, which recorded the highest share of early school leavers in 2014 (21.9 %), also achieved one of the sharpest decreases since 2005 (9.1 percentage points), while it was still 6.9 percentage points away from its national target.

Figure 2: Early leavers from education and training, by country, 2005, 2013 and 2014
(% of population aged 18–24)



Source: Eurostat (online data code: edat_lfse_14)

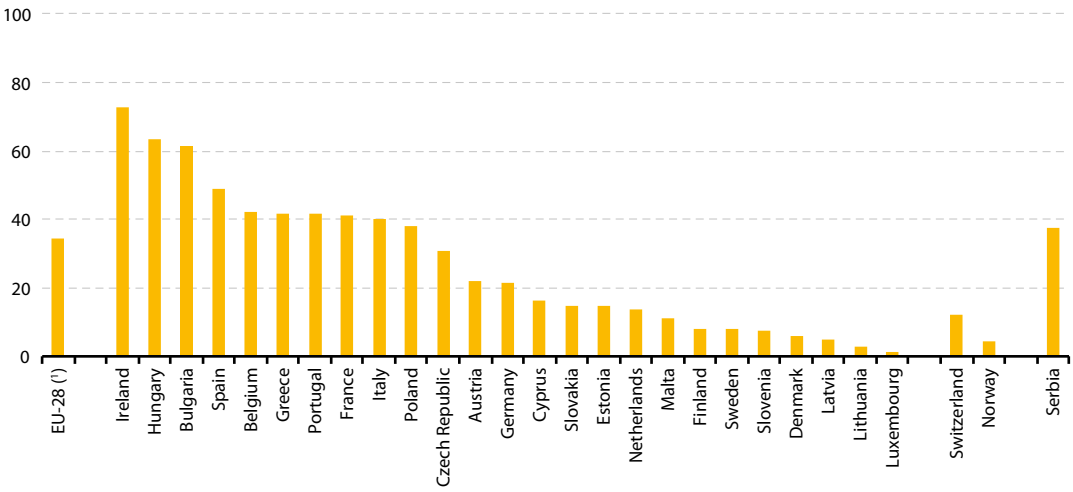
More than half of the population reported a good or proficient knowledge of its best-known foreign language

One of the important outcomes of initial education is a proper level of basic expertise as this has an impact on the labour market productivity of the working-age population. However, transversal expertise, such as the ability to communicate in one or more foreign languages or to use the internet and a computer, are becoming crucial qualifications in a rapidly changing labour market and in everyday life. Such skills are expected to increase mobility and employability and to facilitate intercultural dialogue ([7]).

According to the results of the Adult Education Survey, one third (34.3 %) of the EU population aged 25–64 reported that they did not speak any foreign language in 2011. Another third (35.8 %) could speak at least one foreign language, 21.1 % two and 8.8 % three or more. Some progress can be observed compared with the respective shares of 2007, when those who could speak no foreign language at all (39.3 %) or just one (37.2 %) were more numerous, and fewer reported being able to communicate in 2 languages (16.9 %) or more (6.6 %). Age had a decreasing effect on the number of languages spoken: hence a much higher proportion of those aged 55–64 (47.6 %) reported not knowing any foreign language compared with those aged 25–34 (22.8 %) in 2011 ([8]).

A cross-country analysis reveals diverse situations (Figure 3), where almost no Luxembourgish residents reported not knowing any foreign language (1.1 %), while more than seven in ten Irish residents did not speak any foreign language (72.7 %). Please note that no data were not available for Croatia, Romania and the United Kingdom.

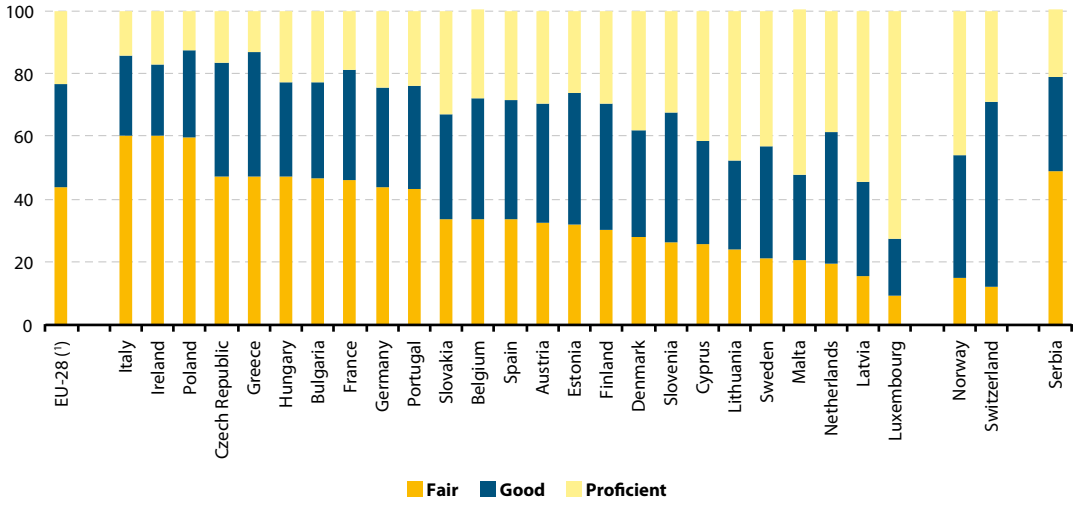
Figure 3: Number of foreign languages known (self-reported), by country, 2011
(% of respondents who reported not knowing any foreign language)



([1]) EU-28 average excludes Croatia, Romania and the United Kingdom.
Source: Eurostat (online data code: edat_aes_l22)

([7]) European Commission, *Education and training — Monitor report* (2014), pp. 42, 46, 49, 53.
([8]) *Source*: Eurostat, Adult Education Survey (AES) (edat_aes_l22).

Figure 4: Level of best-known foreign language by the respondent, by country, 2011
(% of respondents aged 25–64 who speak at least one foreign language)



(1) EU-28 average excludes Croatia, Romania and the United Kingdom.
Source: Eurostat (online data code: edat_aes_l32)

Figure 4 shows the level of the foreign language best-known to a respondent who can speak at least one foreign language, whichever it may be, in 2011. At EU-28 level, more than half of respondents reported either a good (32.7 %) or a proficient (23.4 %) level of knowledge of their best-known foreign language, 'fair' being reported by the remaining 43.9 %.

At country level, Italy, Ireland and Poland were the only EU Member States recording shares of respondents with at least good level below 50.0 % (around 40.0 % in each EU Member State when summing up proficient and good). The shares of all the other EU Member States ranged from 52.6 % in the Czech Republic and Greece to 90.5 % in Luxembourg.

The EU population has improved its digital skills

Just as for language skills and other transversal expertise, digital skills are expected to improve employability and social inclusion, by enhancing societal learning, creativity, emancipation and empowerment.

EU policies and initiatives implemented in the field of education and employment and more generally within the context of the Europe 2020 strategy ([9]), have been tackling the issue of ICT skills (as well as connectivity) at business and citizen levels. However, as Figure 5 denotes, a large part of the EU-28 population was still affected by a deficit in digital literacy, with about 79.0 % reporting to have already used the internet in 2013, but only 12.0 % declaring to have high level skills in its use. While this was a major improvement since 2005, it also meant that in 2013, over 20.0 % of the respondents had never used the internet.

INTERNET SKILLS

The level of internet skills are measured using a self-assessment approach, where respondents indicate whether they have carried out specific tasks related to internet use, without these skills being assessed, tested or actually observed.

In 2005, 2006, 2007, 2010, 2011 and 2013, six internet-related items were used to group the respondents into levels of internet skills:

- use a search engine to find information;
- send an e-mail with attached files;
- post messages to chat-rooms, newsgroups or any online discussion forum;
- use the internet to make telephone calls;
- use peer-to-peer file sharing for exchanging movies, music etc.; and
- create a web page.

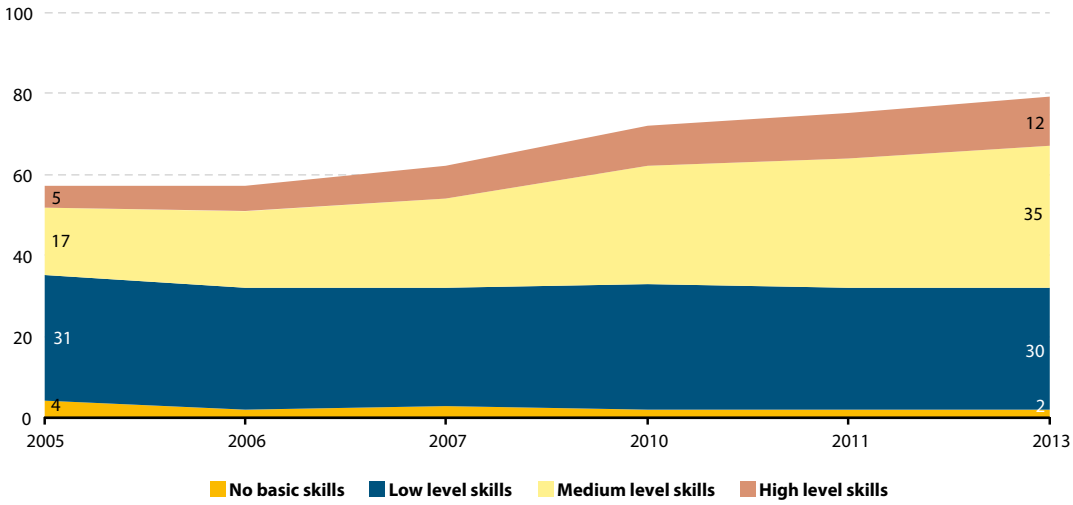
Respondents were classified into four categories:

- No basic internet skills: individuals who have not carried out any of the six internet-related items.
- Low level of basic internet skills: individuals who have carried out one or two of the six internet-related items.
- Medium level of basic internet skills: individuals who have carried out three or four of the six internet-related items.
- High level of basic internet skills: individuals who have carried out five or six of the six internet-related items.

As the questions on skills were only addressed to individuals who used the internet, those who never used computers completed the picture for the whole population.

([9]) See flagship initiatives *Digital Agenda for Europe* and *Agenda for new skills and jobs*.

Figure 5: Level of basic internet skills by individuals, EU-28, 2005–13 ([1])
(% of individuals aged 16–74)



([1]) EU-27 instead of EU-28 for 2005 and 2006.
Source: Eurostat (online data code: isoc_sk_iskl_i)

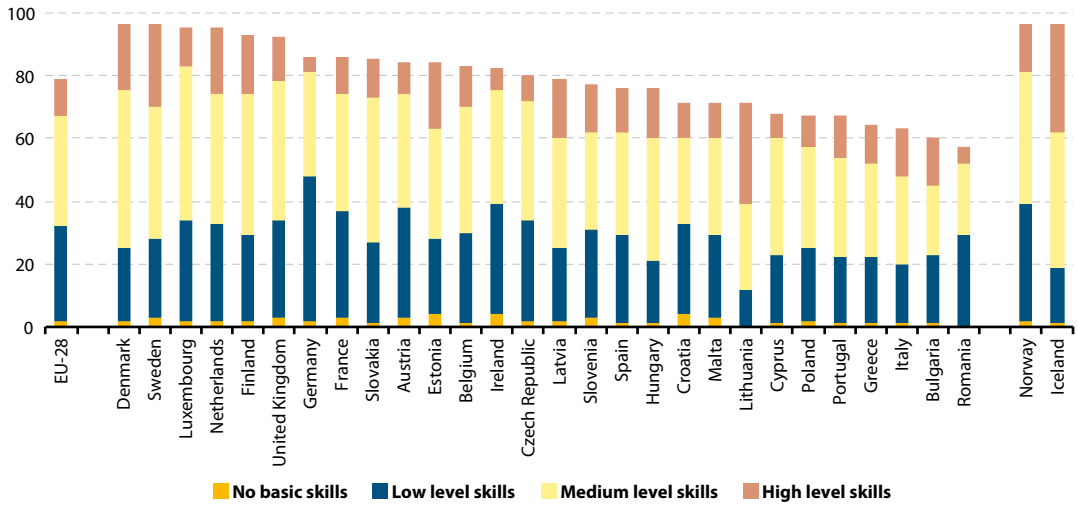
These favourable trends were also mirrored at country level. Since 2005, the shares of individuals who had carried out three, four, five or six of the six internet-related activities increased in all EU Member States for which data was available ([10]).

However, there were some national discrepancies in 2013, as shown in Figure 6. The smallest shares of people who have never used the internet (or have not performed any of the listed internet activities) were found in Denmark (6.0 %), closely followed by Luxembourg, Sweden and the Netherlands, whereas the highest shares were recorded in Romania (43.0 %) and Bulgaria (42.0 %). The southern EU Member States (Italy, Greece, Portugal, Cyprus, Malta and Spain), where a higher proportion of the population only had primary or lower secondary education ([11]), also registered higher than the EU-28 average shares of people who had never used the internet.

Among those who used the internet, there was also a degree of variation in the skill levels across EU Member States. The share of self-reported low skill level varied between 12.0 % in Lithuania and 46.0 % in Germany. For medium skills, it varied between 22.0 % in Bulgaria and 50.0 % in Denmark while, for high skill level, it was as little as 5.0 % in Germany and Romania and as much as 32.0 % in Lithuania.

([10]) *Source*: Eurostat, ICT household survey (isoc_sk_iskl_i).
([11]) *Source*: Eurostat (edat_lfs_9903).

Figure 6: Level of basic internet skills by individuals, by country, 2013
(% of individuals aged 16–74)



Source: Eurostat (online data code: isoc_sk_iskl_i)

Progress in ICT skills was accompanied by substantial increases in broadband internet connections in businesses and households in most EU Member States ([12]). In spite of these improvements, much remains to be achieved if the EU wants to catch up to its main international competitors. In effect, only half of the so-called 'digital-native generation' reported being able to solve more than basic problems in technology-rich environments ([13]).

Major achievements in educational attainment since 2005

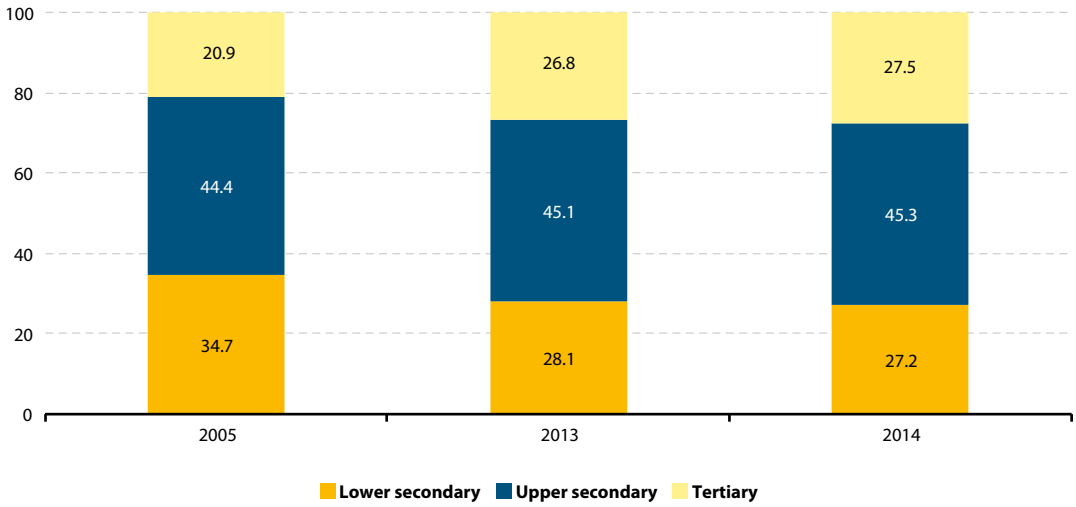
The level of education of EU residents has been improving

Turning the EU into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion, requires increasing the overall level of skills and expertise, and hence the level of education of EU residents.

Since 2005, as illustrated in Figure 7 (for people aged 25–74), one can observe a trend towards an increase in the level of educational attainment in the EU. The share of low educated people declined from 34.7 % to 27.2 % in 2014, while the share of tertiary graduates grew from 20.9 % to 27.5 %. Upper secondary education, while still held by the majority, remained almost stable at approximately 44–45 %.

([12]) *Source*: Eurostat (tin00089 and tin00090). In 2014, the share of household connectivity was 78 %; for enterprises it was 90 % in 2013.
([13]) European Commission, *Education and training — Monitor report* (2014), p. 49.

Figure 7: Educational attainment, EU-28, 2005 versus 2013 and 2014 ([1])
(% of population aged 25–74)



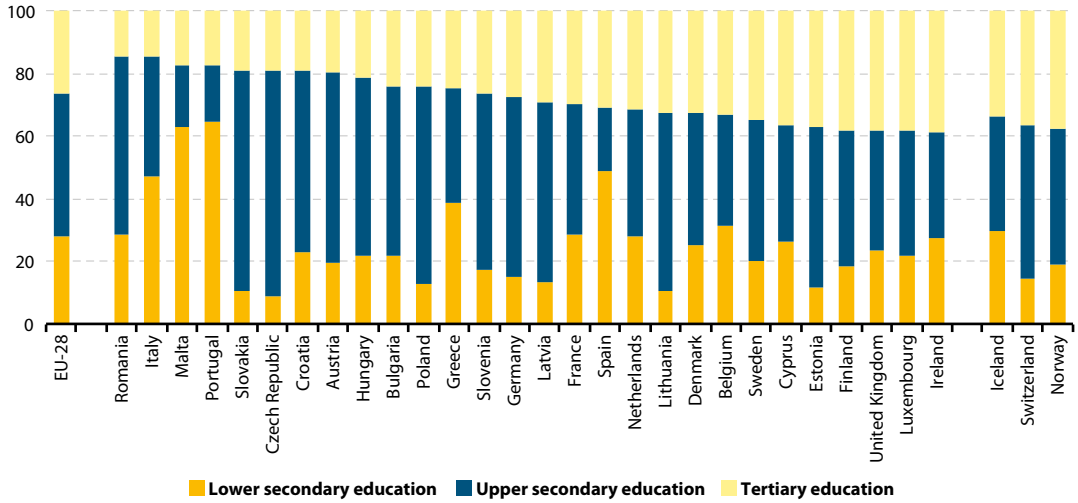
([1]) EU-27 instead of EU-28 for 2005. Break in series in 2014.
Source: Eurostat (online data code: edat_lfs_9903)

As 2013 is the reference year for the data collected through the EU-SILC ad-hoc module on subjective well-being, the analysis presented below, which aims to link the objective indicators on education with the subjective ones, will not be based on the latest 2014 figures, but on the 2013 ones.

In 2013, the distribution of the EU-28 population by educational level was the following: 26.8 % were graduated from tertiary education, 45.1% attained the upper secondary education and 28.1 % completed lower secondary education only.

All EU Member States except Denmark (+ 3.6 percentage points) experienced downward trend in the share of people having at most completed lower secondary education since 2005. There was no exception to the upward trend in tertiary education. However, as indicated in Figure 8, as of 2013, there were some notable variations in the percentage of people having completed lower secondary education (ranging from 8.8 % in the Czech Republic to 64.5 % in Portugal). In addition, 18.0 % completed upper secondary education in Portugal versus 72.1 % in the Czech Republic. The percentage of people having graduated from tertiary education ranged from 14.5 % in Romania to 38.7 % in Ireland.

Figure 8: Educational attainment, by country, 2013
(% of population aged 25–74)



Source: Eurostat (online data code: edat_lfs_9903)

Educational attainment varies across different socio-demographic groups

The socio-economic status was still by far the major element of an individual's key basic expertise ([14]). Against this finding, this section will examine possible correlations between individual educational attainment and belonging to certain socio-demographic groups, broken down by age, sex, income, labour status and occupation.

The 25–34-year-olds were the most educated

Figure 9 shows that the level of educational attainment of the younger generations was higher than that of the older ones. This was particularly true for the tertiary education level. Among people aged 25–34, 36.2 % had completed tertiary education as opposed to only 18.9 % in the group of people aged 55–74. The trend was inverted for lower secondary education, with percentages declining from 39.7 % for the 55–74 age group to 17.7 % for the 25–34 age group.

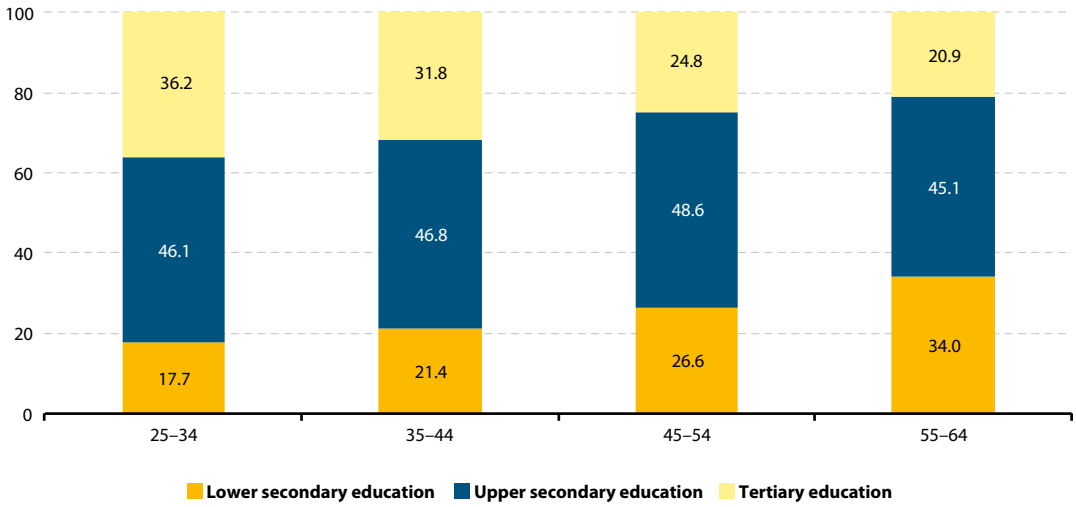
These differences across age groups represented a structural trend and were mainly the result of an increased focus on education in recent decades, driven by technological changes and the development of knowledge-based societies and economies. The adoption of EU policies such as Europe 2020 and its predecessor, the Lisbon strategy ([15]), also played a part in these recent developments.

There were more female than male tertiary graduates

When looking at male and female educational attainment in 2013 (Figure 10), women appeared to perform better than men in terms of tertiary education by 1.2 percentage points (27.3 % versus 26.1 %). However, more women than men had completed lower secondary education (29.6 % versus 26.5 %), while more men than women held upper secondary degrees (47.3 % versus 43.2 %).

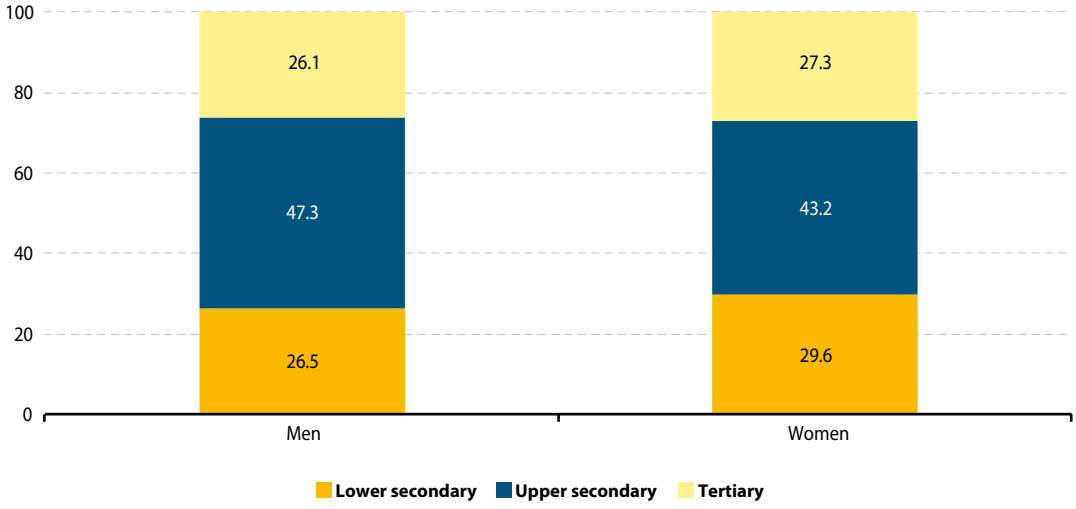
([14]) European Commission, *Education and training — Monitor report* (2014), p. 8.
([15]) European Commission, *Europe 2020 — A strategy for smart, sustainable and inclusive growth*, COM(2010) 2020 final (2010).

Figure 9: Educational attainment, by age group, EU-28, 2013
(% of population aged 25–74)



Source: Eurostat (online data code: edat_lfs_9903)

Figure 10: Educational attainment, by sex, EU-28, 2013
(% of population aged 25–74)



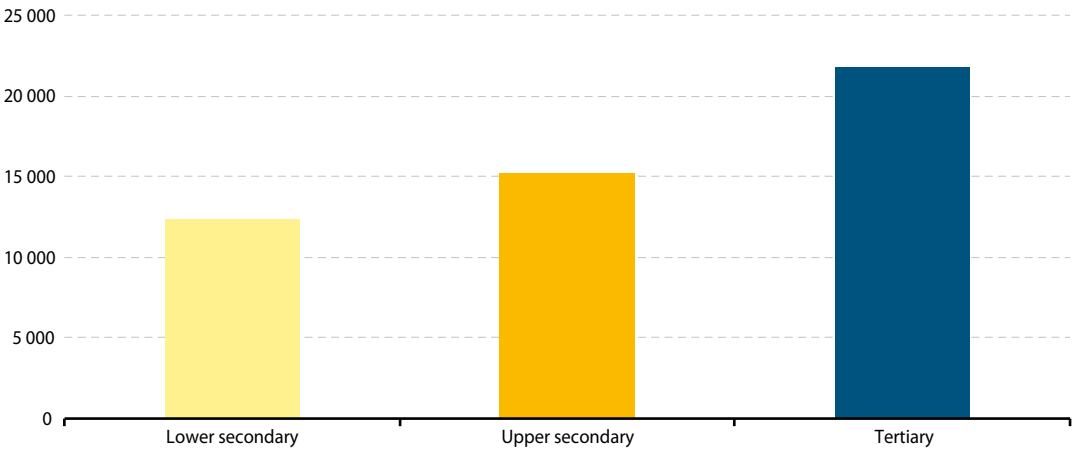
Source: Eurostat (online data code: edat_lfs_9903)

A more in-depth analysis ([16]) of the most and least educated age groups (those aged 25–34 and 55–74 respectively) (for which data is available), reveals that young adult women (25–34) exceeded the proportion of highly graduated men by almost 10 percentage points in that age group (41.1 % versus 31.5 %). However, they were outperformed by men in the 55–74 age group (16.5 % for women versus 21.6 % for men). Differences in the other education levels (lower and upper secondary) were less apparent. The explanation mostly lies in changing ways of life observed in recent decades which have encouraged women to further their education with a view to increasing their participation in the labour force and in civil society.

Education attainment was linked to pronounced income inequalities

As can be seen in Figure 11, the level of education attained clearly affected income levels of the EU population. The median income ([17]) of lower secondary education graduates (EUR 12 721) was one fifth lower than that of upper secondary education graduates (EUR 15 275) and half that of tertiary graduates (EUR 21 769).

Figure 11: Median equivalised net income, by education level and sex, EU-28, 2013
(yearly amount in euros for the population aged 18 and over)



Source: Eurostat (online data code: ilc_di08)

([16]) Source: Eurostat, EU-LFS (edat_lfs_05, edat_lfs_06 and edat_lfs_07).
([17]) Median equivalised disposable income. Household disposable income corresponds to income from market sources and cash benefits after deduction of direct taxes and regular inter-household cash transfers. It can be considered as the income available to the household for spending or saving. The living standards achievable by a household with a given disposable income depend on how many people and of what age live in the household. Household income is thus 'equivalised' i.e. adjusted for household size and composition so that the incomes of all households can be looked at on a comparable basis. Equivalised disposable income is an indicator of the economic resources available to a standardised household. *Source*: Eurostat, Statistics Explained *Living standard statistics* (2014).

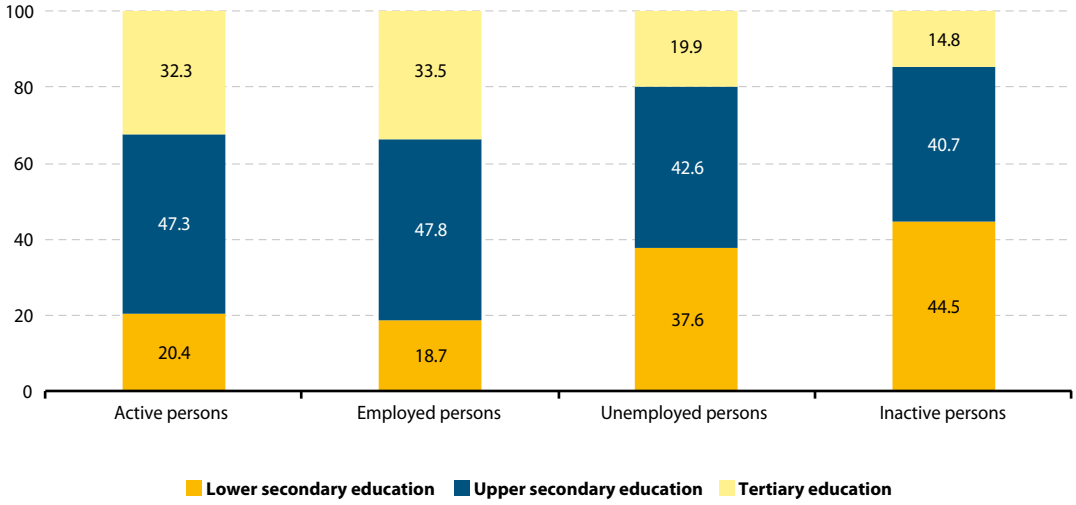
Low educational attainment was mainly found amongst the unemployed and inactive

As Figure 12 shows, for around half of the EU employed population (aged 25–74), upper secondary education was the highest educational attainment. The other types of education were less evenly distributed across labour status categories. The highest proportion of low educated people (44.5 %) was found amongst inactive persons. This group includes people outside the labour market — those still in education (and not yet graduated) or retired, or inactive on other grounds (personal/family reasons, health status, lack of employability. Amongst the group of active people, the impact of education on employability is pronounced with the unemployed making up the category with highest share of low educated people (37.6 %) with, on the contrary, the employed recording the highest shares of tertiary graduates (33.5 %).

INACTIVE POPULATION

A person is economically inactive, according to the International Labour Organization (ILO) definition, if they are not part of the labour force. So inactive people are neither employed nor unemployed. The inactive population can include pre-school children, school children, students, pensioners and housewives or -men, for example, provided that they are not working at all and not available or looking for work either; some of these may be of working-age.

Figure 12: Educational attainment, by labour status, EU-28, 2013 (1)
(% of population aged 25–74)

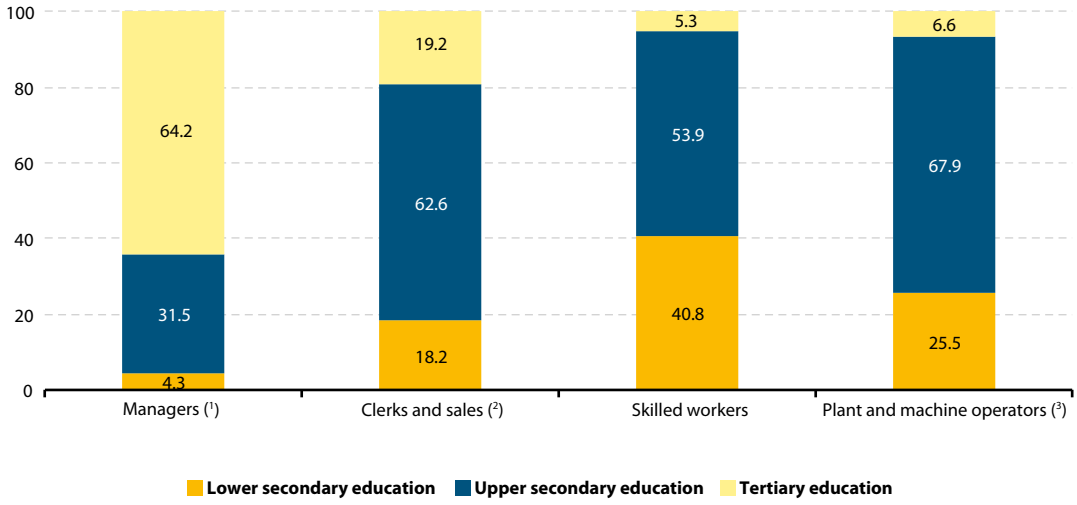


(1) The populations aged under 25 and over 75 have been excluded from the analysis as they represent marginal shares of the population in employment and are not fully reliable.
Source: Eurostat (online data code: edat_lfs_9904)

Educational attainment varied considerably across categories of employees

Figure 13 puts into light a strong link between an individual's level of education and class of occupation. Available figures about employees reveal that around two thirds of managers (64.2 %) had graduated from higher education whereas more than half of the employed in the other three categories had mainly completed upper secondary education (with shares varying from 53.9 % for skilled workers to 67.9 % for plant and machine operators). In these two occupational classes, the proportion of persons with tertiary education was the lowest, at a maximum of 6.6 %.

Figure 13: Educational attainment of employees, by occupation, EU-28, 2013
(% of employees aged 25–74)



(1) Managers include: managers, professionals, technicians and associate professionals.
(2) Skilled workers include: skilled agricultural and fishery workers, craft and related trades workers.
(3) Plant and machine operators include: plant and machine operators and assemblers and elementary occupations.
Source: Eurostat (online data code: edat_lfs_9905)

Occupations requiring high skills are expected to give rise to more rewarding jobs both in terms of quality of the tasks undertaken and of their corresponding remuneration, and vice-versa. Hence, it is amongst managers, professionals technicians and associate professionals — most of whom are tertiary graduates — that the highest shares of employed people declaring a high level of job satisfaction were found ([18]).

([18]) See chapter 2 'Employment'.

Relations between education and satisfaction

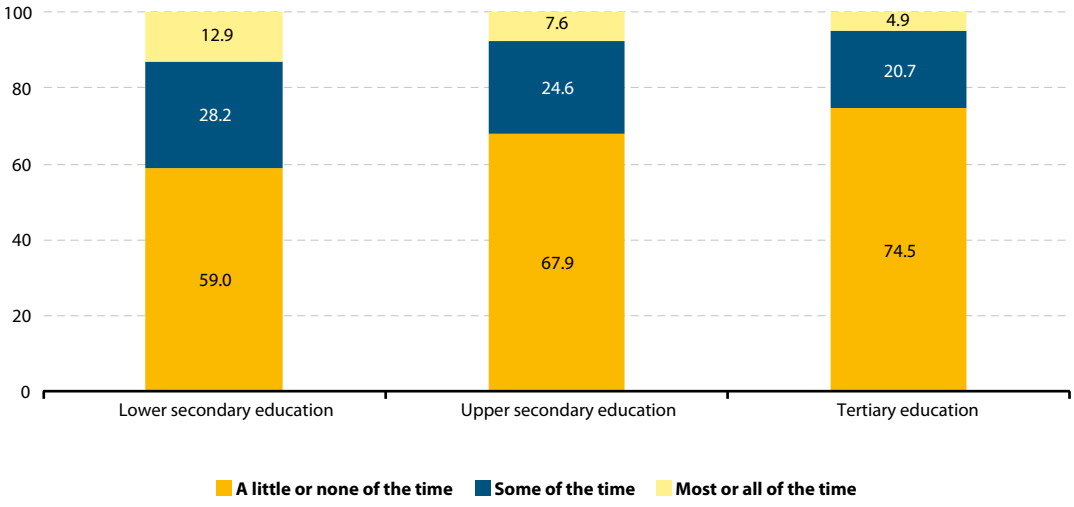
How are education and mental well-being connected?

Education, being likely to provide a different understanding of society and its challenges, but also as a gateway to a better income and social status, may lead to differences in individuals' psychological well-being. This perception may be measured through various types of emotional aspects of subjective well-being, including feeling downhearted or depressed, down in the dumps, very nervous, or, on the contrary, happy ([19]).

Education had a positive effect on psychological well-being

As shown in Figure 14, people with a low level of education appeared to be feeling downhearted or depressed more frequently than those in the other two groups. In the EU-28, on average, 12.9 % of them declared being in this state of mind most or all of the time, which was about two or three times more than holders of upper secondary and tertiary-level qualifications. Moreover, 59.0 % of them reported to be downhearted or depressed a little or none of the time, versus 67.9 % and 74.5 % in the other two groups. Similarly, the least educated had a higher propensity to feel down in the dumps, in rather comparable proportions as when reporting being depressed or downhearted.

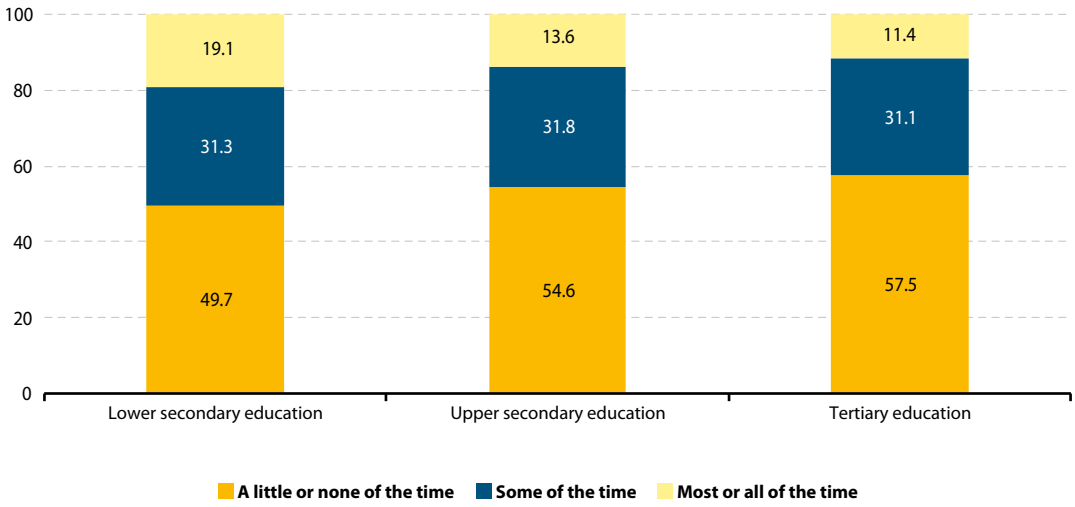
Figure 14: Frequency of feeling downhearted or depressed in the last 4 weeks, by educational attainment, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (EU-SILC)

([19]) The data source used is the 2013 ad-hoc module on subjective well-being from the Eurostat EU-SILC survey, in which respondents are all current household members aged 16 and over who are currently working. The variables (PW050–090) are based on self-rated affects or emotions and aim at measuring psychological well-being. The variables refer to the respondent's feeling; he/she should be invited to indicate to what extent he/she has felt this way during the past four weeks. 'Being nervous' should be understood as a status characterised by or showing emotional tension, restlessness, agitation, etc. Further references can be found in EHIS Guidelines or on the International quality of life assessment (Iqola) website.

Figure 15: Frequency of being very nervous in the last 4 weeks, by educational attainment, EU-28, 2013
(% of population aged 16 and over)



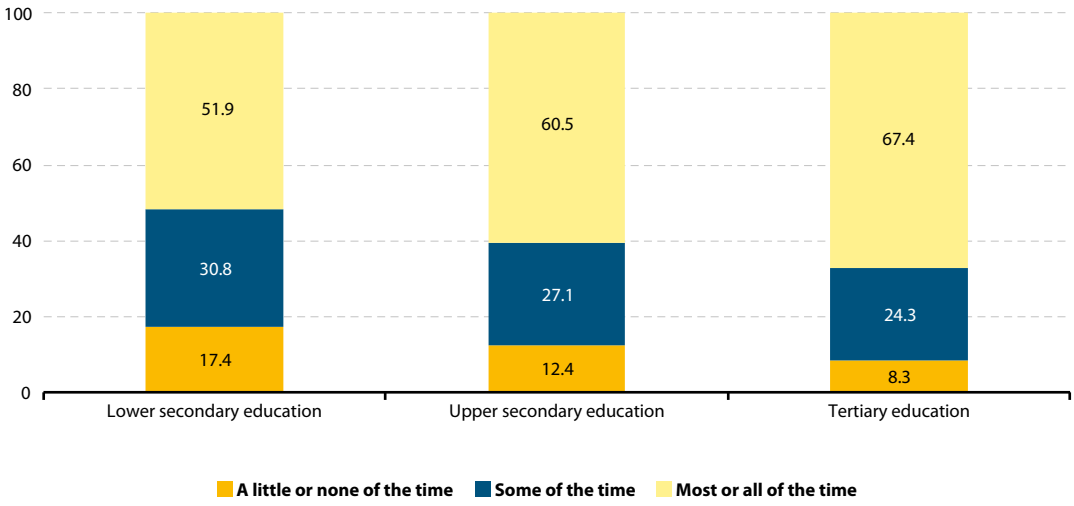
Source: Eurostat (EU-SILC)

Being nervous gave rise to the same overall pattern, as depicted in Figure 15, but with less considerable divergences across the different levels of frequency of this emotion. Those with a lower level of education were almost three times as likely as the tertiary graduates to have felt downhearted or depressed most or all of the time in the last four weeks (12.9 % as opposed to 4.9 %), and almost twice as likely to have felt very nervous with the same frequency (19.1 % as compared with 11.4 %).

When it comes to assessing happiness, the least educated appeared once more as having the lowest level of happiness (Figure 16). About half of them (51.9 %) reported that they were feeling happy most or all of the time, against 60.5 % amongst people with upper secondary education and 67.4 % amongst tertiary graduates. On average, they were also much more prone to declare feeling happy only a little or none of the time.

Among the EU population with tertiary education, 67 % felt happy most or all of the time (in the last 4 weeks).

Figure 16: Frequency of being happy, by educational attainment, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (EU-SILC)

How are educational attainment and satisfaction with various aspects of life linked?

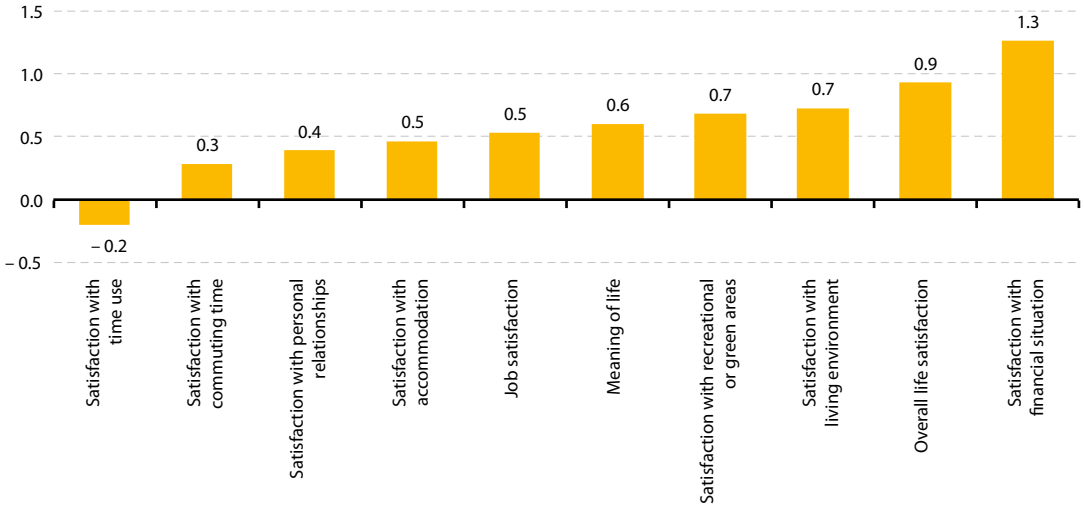
While educational attainment is an influencing factor of an individual's mental well-being, it may also lead to distinct evaluations of some major aspects of everyday life, such as material living conditions, job, personal relationships, health and others. Ultimately, it may also affect overall life satisfaction and give rise to a different perception of its meaning.

Overall life satisfaction and meaning of life measure different things. Meaning of life is perceived as the psychological or 'functioning' approach to subjective well-being — such as purpose, sense of meaning or autonomy — while life satisfaction is intended to cover a broad, reflective appraisal of all areas relating to a person's existence. The two items are regarded as key indicators for subjective well-being and are considered as reliable measures backed by international studies and guidelines ([20]) ([21]).

([20]) Life satisfaction (variable PW010) represents a report of how respondents evaluate or appraise their life taken as a whole. It is intended to represent a broad, reflective appraisal people make of their lives. The term life is intended here as all areas of a person's life at a particular point in time (these days). The variable therefore refers to the respondents' opinion/feeling about the degree of satisfaction with their lives. It focuses on how people are feeling 'these days' rather than specifying a longer or shorter time period. The intent is not to obtain the current emotional state of the respondent but for them to make a reflective judgement on their level of satisfaction. See E. Diener, *Guidelines for National Indicators of Subjective Well-Being and Ill-Being*.

([21]) Meaning in life (variable PW020) is a multi-faceted construct that has been conceptualised in diverse ways. It refers broadly to the value and purpose of life, important life goals, and for some, spirituality. The respondents should be invited to think about what makes their lives and existence feel important and meaningful and then answer by rating life from 'Not worthwhile at all' (0 rating) to 'Completely worthwhile' (10). The term 'worthwhile' denotes meaning of purpose/beneficial. It is not related to any specific area of life, focuses rather on life in general.

Figure 17.a: Evaluation of major aspects of life, differences in mean ratings between holders of high and low education levels, EU-28, 2013
(mean rating points)



Source: Eurostat (online data code: ilc_pw01)

Education had a positive effect on almost all satisfaction items

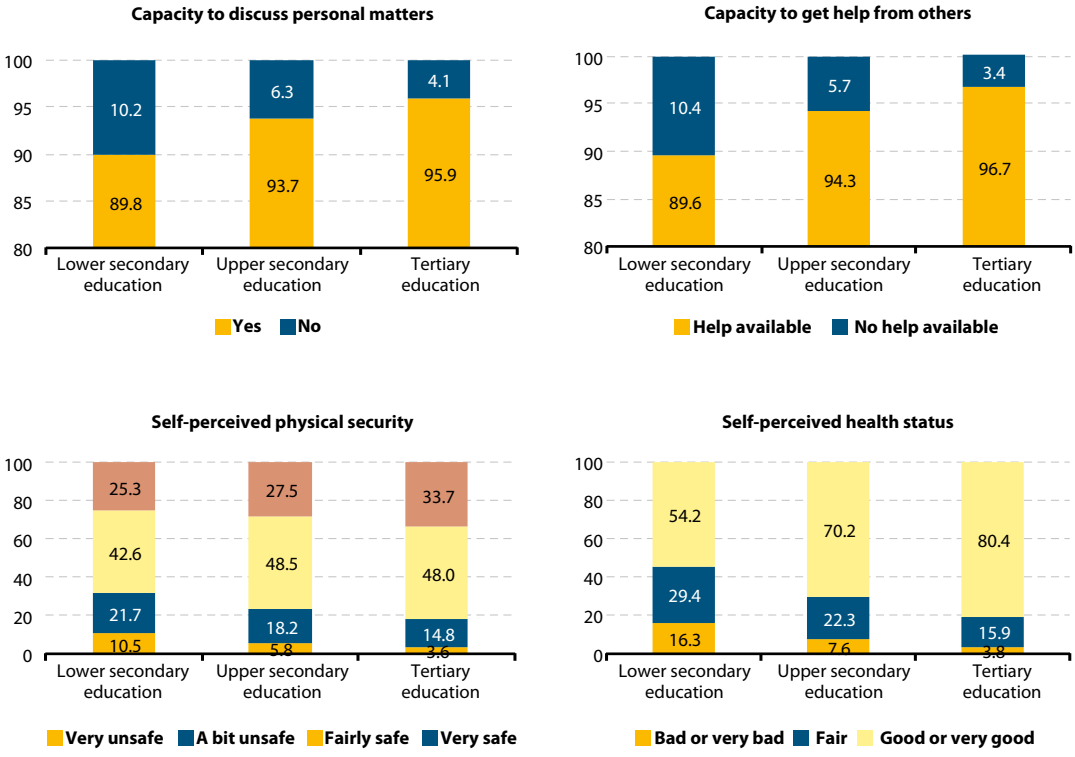
An analysis of the impact of educational attainment reveals that the most educated almost systematically had a better assessment of their quality of life (Figure 17.a). The effect of education was strongest on the household's satisfaction with the financial situation (the difference between the average of those with a high and those with a low level of education was around 1.3 points, on the 0–10 scale). The effect on overall life satisfaction was also quite significant (+ 0.9 mean rating for tertiary graduates). It was lowest on satisfaction with commuting time (+ 0.3). Time use was the only item where people with a low educational level had a higher average degree of satisfaction than the most educated ones (0.2 point).

At country level, the gaps were quite small, below 1 point rating (on the 0–10 scale) in most cases. Central and eastern EU Member States registered the highest differences in rating between the least and the most educated people. In Croatia, the differential in favour of the most educated people reached 2.3 points in terms of satisfaction levels with the financial situation, the widest gap recorded by an EU Member State across all satisfaction items. The gap between the least and the most educated people was non-existent for both financial and overall life satisfaction in Sweden.

In some cases, the gap in rating favoured the least educated. Such was the case for satisfaction with accommodation in particular in Sweden and the United Kingdom; for job satisfaction in Sweden and Denmark; for satisfaction with commuting time in Denmark and Ireland; for satisfaction with personal relationships in Denmark and Sweden; and for satisfaction with green areas and environment in Greece.

Satisfaction with time use, which follows a specific pattern, being much less related to educational attainment and income, was systematically assessed as better by those having only completed lower education in France and Sweden (1 point difference at the expense of tertiary graduates).

Figure 17.b: Evaluation of major aspects of life, by educational attainment, EU-28, 2013 (%)



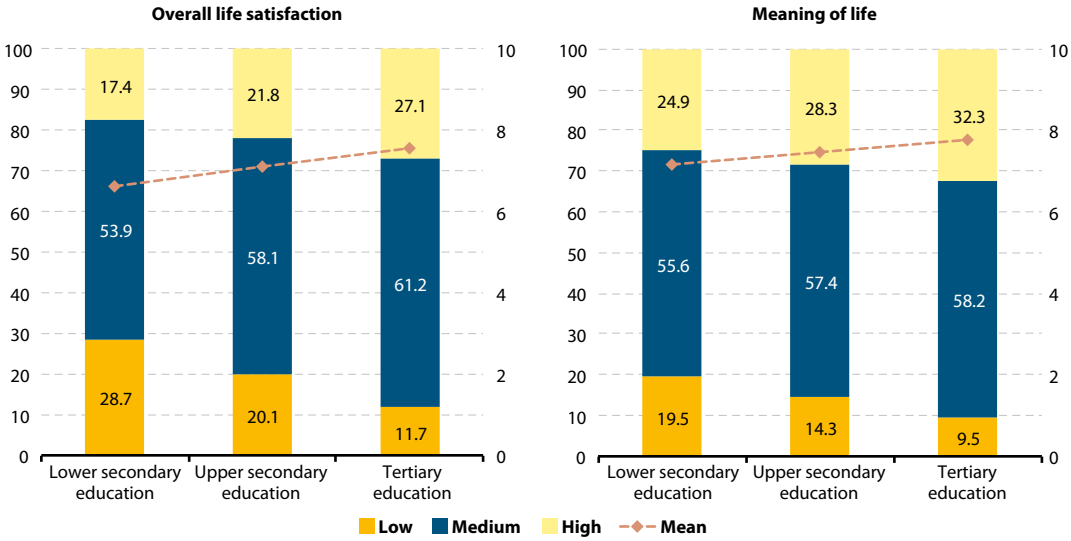
Source: Eurostat (online data code: ilc_pw06)

While the analysis of educational attainment focused on the population aged 25–74, the analysis of the link between education and satisfaction was based on the total population of respondents (all current household members aged 16 and over) and did not reflect the influence of factors such as age, which are also influential (as could be seen in the other chapters of this publication). Hence, in spite of being amongst the least educated people (as many did not yet complete the educational programmes they were attending) ([22]), the youngest (16–24) assessed most life domains more positively than the total population, especially in the case of time use. Tertiary graduates also had more rewarding social relationships, felt more secure and assessed their health more positively (Figure 17.b).

This outcome could be explained by the fact that better education provides more opportunities for personal development and a better quality of life, by offering better opportunities to those who are most skilled, hence better paid jobs, and enabling a better understanding of the challenges which an individual has to face in a rapidly changing world. Beyond being an economic resource, for many, education may even be regarded as a value in itself.

([22]) *Source*: Eurostat, EU-LFS (edat_lfs_9903).

Figure 18: Overall life satisfaction and meaning of life, by educational attainment, EU-28, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (online data code: ilc_pw01)

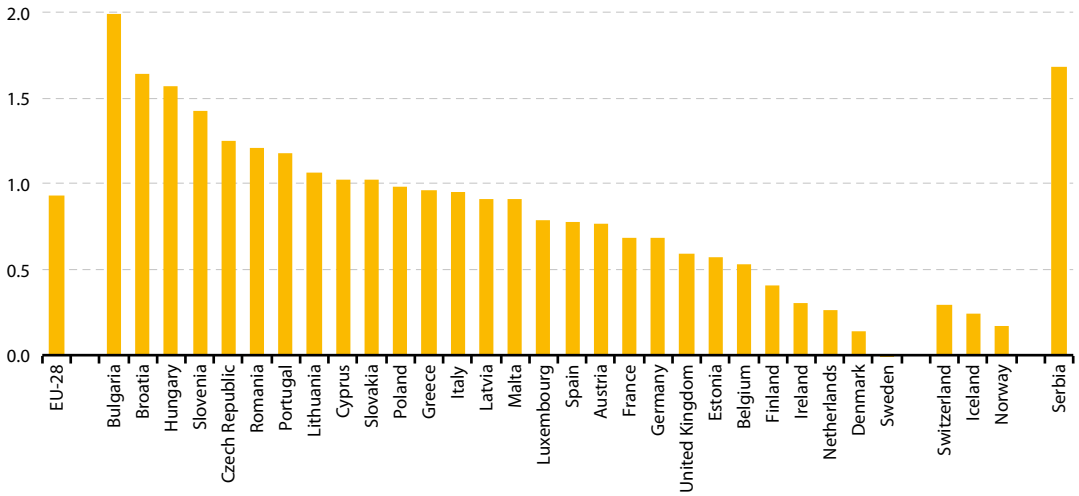
Ultimately, education had a positive influence on life satisfaction and its meaning

Figure 18 shows that education also favourably impacts the perception of life as a whole. Indeed, on average people with lower secondary education rated their overall life satisfaction at 6.6, which was 0.5 points less than amongst holders of upper secondary education and almost 1 point (0.9) less than amongst tertiary graduates. The shares of people having reported a low or high satisfaction with life were almost inverted across the two groups of least and most educated people.

Figure 18 also illustrates the link between education and the meaning of life, a 'eudaimonic measure' of subjective well-being ([23]). It confirms the impact of education on subjective well-being, by revealing means ranging from 7.2 amongst people having completed lower secondary education, to 7.5 and 7.8 amongst the other two groups. While the gap across education groups was more limited, these ratings were higher than for overall life satisfaction. Nonetheless the patterns were quite similar.

([23]) Etymologically, *eudaimonia* consists of the words 'eu' (good) and '*daimōn*' (spirit). It is a central concept in Aristotelian ethics where it was used as the term for the highest human good. See chapter 9 'Overall life satisfaction'.

Figure 19: Overall life satisfaction, difference between holders of high and low education degrees, by country, 2013
(mean rating points)



Source: Eurostat (online data code: ilc_pw01)

The most educated rated life satisfaction higher in most EU Member States

Figure 19 illustrates the gap in life satisfaction between people with a high and a low level of education at country level, revealing a divide between mostly northern and western EU Member States and a majority of the eastern and southern EU Member States. In Sweden the perception of individuals was identical across the three levels of educational attainments, at around 8.0 mean rating (the highest in the EU-28). The gap was negligible in Denmark (0.1 point rating) whose residents rated their life satisfaction at approximately 8.0 (just as in Sweden) whatever their education level.

In Bulgaria, the rating gap between the least (3.8 points) and the most educated people (5.8 points) was the largest as regards the 0–10 scale (for the whole population, mean life satisfaction reached 4.8, the lowest in the EU-28). Hungary and Croatia follow, with a rating gap equal to 1.6 points. These two EU Member States also recorded some of the lowest means for life satisfaction by total population (6.2 and 6.3, well below the EU-28 average of 7.1) ([24]). Estonia and Spain (and to a lesser extent Malta and Latvia) seemed to deviate from the pattern observed in most eastern or southern EU Member States, by displaying rating gaps below the EU-28 average (0.9 point).

([24]) See chapter 9 'Overall life satisfaction'.

In 2013, the gap in life satisfaction between people with a high and a low level of education was the widest in Bulgaria, followed by Hungary and Croatia.

The shares of tertiary graduates were only moderately associated with the proportion of highly satisfied residents

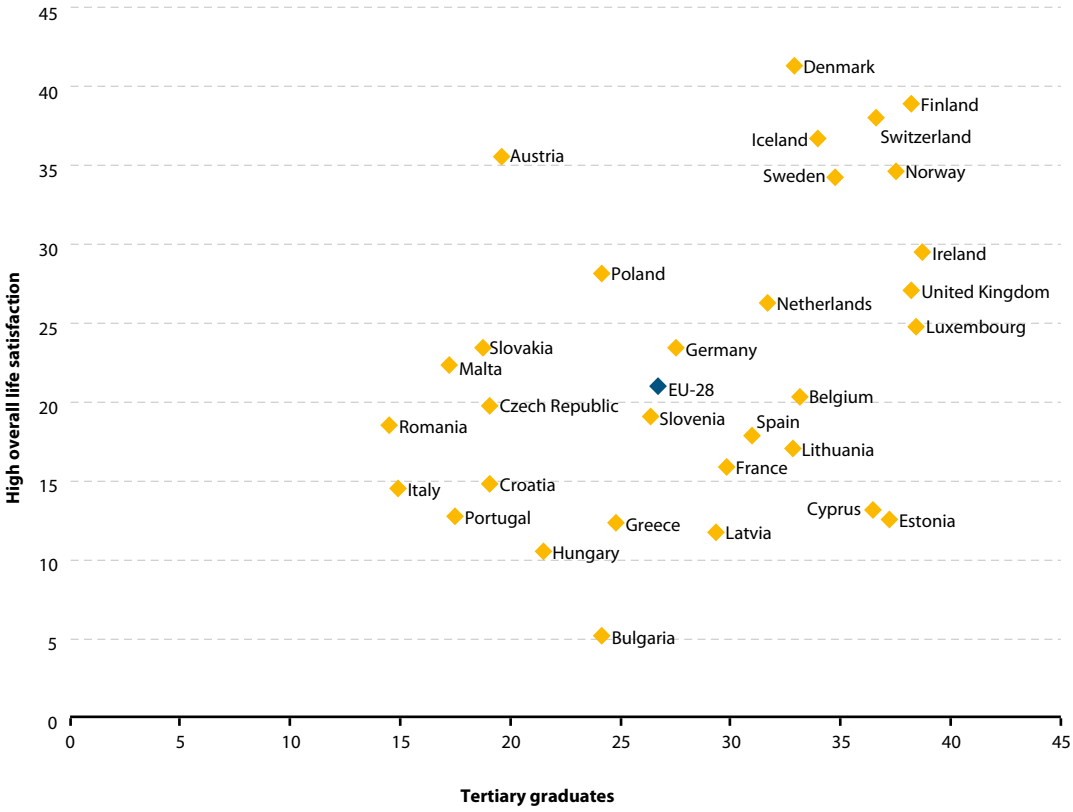
The relation between level of education and well-being is analysed in the cross-country picture (Figure 20). The shares of tertiary graduates appear to be in some cases associated with people reporting a high degree of overall life satisfaction. Hence, while registering some of the highest shares of tertiary graduates, over 32 % each, Denmark, Finland and Sweden also registered some of the most sizable proportions of residents highly satisfied with their life, ranging from 41.3 % in Denmark to 34.3 % in Sweden.

In Austria on the other hand, which registered a quite similar share of highly satisfied residents (35.5 %), the share of tertiary graduates reached only 19.6 % (which was 7.1 percentage points below the EU average). Moreover, Ireland, the United Kingdom and Luxembourg, which recorded, along with Finland, the highest shares of tertiary graduates (above 38 %), reported comparatively less positively on life satisfaction (especially the Finnish at 38.9 %) with shares of highly satisfied residents varying between 29.4 % in Ireland and 24.8 % in Luxembourg.

At the other end of the scale, a group of EU Member States with similar shares of tertiary graduates, below 20 %, reported differently on life satisfaction: the residents of Italy, Portugal and Croatia were much less satisfied (below 15 % of high satisfaction) than their counterparts from Romania, the Czech Republic, Slovakia and Malta (which reported shares of tertiary graduates varying between 19.8 % in the Czech Republic and 23.3 % in Slovakia).

As seen above, the Austrians assessed their life much more positively (35.5 %) with similar proportions of highly educated people (19.6 %) as in the previous group. Bulgaria was another special case: only 5.2 % of its residents appeared to be highly satisfied with their life while one fourth of them (24.2 %) had graduated from tertiary education. This negative perception was also visible in Cyprus and Estonia where high life satisfaction was only reported by about 12–13 % of residents while the share of tertiary graduates reaches about 37 %. In several other EU Member States, such as Latvia, France, Spain, Lithuania (and Belgium), the relatively high shares of people having graduated from higher education (close to 30 %) did not appear to translate in higher life satisfaction.

Figure 20: Share of tertiary graduates versus high overall life satisfaction, by country, 2013
(% of population aged 25–74)



Source: Eurostat (online data codes: edat_lfs_9903 and ilc_pw01)

4

Health

Introduction

Bad health not only potentially shortens people's life spans, but it can also undermine their quality of life. At a collective level, it hinders economic and social development by reducing the available so-called 'human capital' of a society and generates costs for it. Thus long and healthy lives are not just an important personal aim, but also an indication of societal well-being and success.

Health expenditure constitutes a significant part of government and private expenditure in the European Union (EU). Its effectiveness can be measured by a combination of objective 'health outcome' indicators, such as life expectancy and healthy life years, and self-assessments about access to healthcare and self-perceived (physical and mental) health status.

This chapter will first present indicators that are generally assumed to measure the outcomes of healthcare systems: life expectancy and healthy life years. The next indicator to be examined is self-perceived health (the overall levels and differences between socio-demographic groups such as age, gender, income, labour status and educational attainment levels). This evaluation will be followed by two types of analyses of the health assessment indicator (1):

- the link between the percentage of people assessing their health as bad or very bad and the incidence in the population of other healthcare related problems (such as long-standing illness and lack of access) in EU Member States;
- the relation — at the individual level — between self-perceived health and overall life satisfaction, as expressed by EU residents.

Reported assessments of health status reveal a link between income and wealth production, and health outcomes. Nonetheless, while health expenditure by all EU Member States (except Luxembourg) tends to be lower than in the United States (2), life expectancy is higher in most European countries (3). This finding suggests that several other factors are also at play, including the quality of healthcare, its funding (by private or public agents) and its accessibility across a national territory. Cultural attitudes and lifestyle choices also matter.

EU POLICIES RELATED TO HEALTH

Health is not only a fundamental determinant of both the length and the quality of people's lives. It also inherently affects access to all the other functional capabilities that in turn determine overall quality of life (i.e. the other quality of life dimensions). It is not only a value in itself. It is also a European policy goal of the utmost importance. The Proposal for a Regulation of the European Parliament and of the Council on establishing a Health for Growth Programme COM final 0709/2011 (the third multi-annual programme of EU action in the field of health for the period 2014–20), underlined the importance of health policy, especially in light of the challenges related to demographic change that Europe is facing, as well as the need for action to reduce inequalities in health as a condition for inclusive growth. In the Sustainable Development Strategy (4), health is a key challenge whose objective is to promote good public health on equal conditions and improve protection against health threats. The promotion of good health is also of particular importance in the Europe 2020 strategy (5), especially in relation to the attainment of its smart and inclusive growth priorities.

(1) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).
(2) Around EUR 5 700 per inhabitant versus EUR 5 800 in Luxembourg (2009 figures). *Source*: Eurostat (hlth_sha1h).
(3) Life expectancy in the United States is 78.7 years at birth (2011 estimate) versus 80.3 years in the EU-28 (2012 data). *Source*: OECD, '*Life expectancy at birth, total population*' (2014), *Health: Key Tables from OECD*, No. 11. DOI: http://dx.doi.org/10.1787/lifexpy-total-table-2014-1-en
(4) Council of the European Union, *2009 review of the Sustainable Development Strategy — Presidency report*, 16808/09.
(5) *Commission Communication, Europe 2020 — A strategy for smart, sustainable and inclusive growth*, COM(2010) 2020 final.

Health in a quality of life perspective

In 2012 the residents of the EU were expected to live on average up to the age of 80.3, which is 1.8 years more than in 2005. Although northern EU Member States with high GDP per capita seem to get a better handle on problems such as access to medical care, the high life expectancy in southern Europe could lead to the conclusion that economic output is not the only determinant of health outcomes.

Life expectancy is not equal between the two genders. On average women in the EU lived 5.6 years longer than men in 2012, but the gap has diminished since 2005. On average, women could also hope to live 0.6 years longer than men without limitations to their usual activities caused by health problems, but this advantage has also declined compared with 2005.

Against this background, men nonetheless tended to have a more positive assessment of their health status. In particular, a higher share of men (70.7 %) than women (65.0 %) assessed their health as good or very good and a lower share stated that their health was bad or very bad (8.4 % versus 10.5 %) in 2013. Younger residents had the best self-assessed health status, for natural reasons. However, even over the age of 65, only 5.0 % of EU residents described their personal health situation as very bad ([6]).

How people assess their health seems to be associated with their income and those in the 3rd tercile were more numerous to report having good or very good health. As income levels tend to be higher among the most educated and those most actively participating in the labour market, higher education graduates or full-time employees reported the most positively about their health condition. The same applied to those in education or training for motives linked to their age. Retired people on the other hand displayed less favourable patterns of self-perceived health.

Meeting one's medical needs appeared problematic in a very small number of EU Member States, however this did not appear to impact the way in which EU residents assessed their health condition. The share of the population assessing their health as (very) bad was, in most EU Member States, connected to the prevalence of health problems leading to limitations in usual activities and chronic diseases. Life expectancy at country level however appeared to be linked to the proportion of people assessing their health as good or very good. Lastly, self-reported health was the strongest predictor of overall life satisfaction.

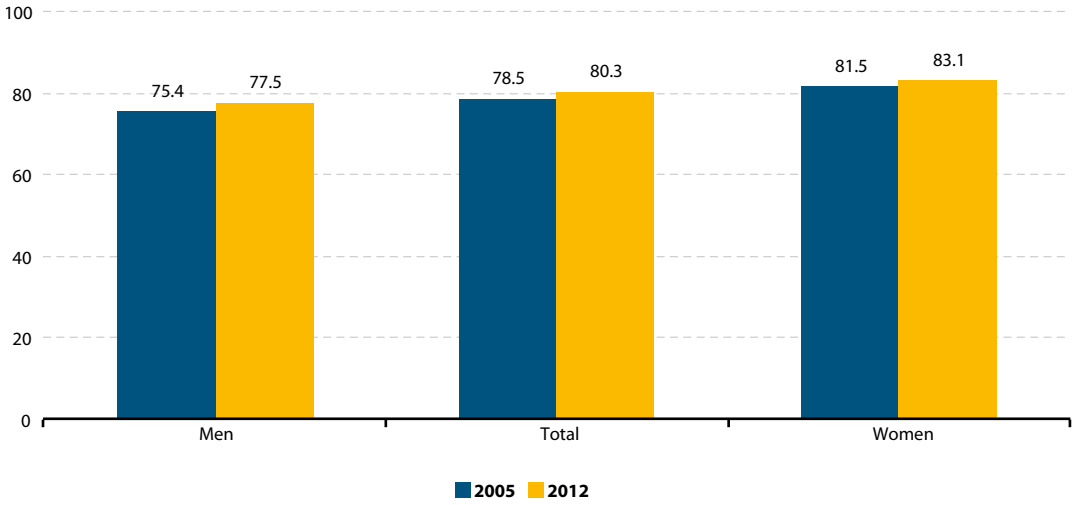
Almost 7 out of 10 EU residents reported that they were in a good health condition.

([6]) *Source*: Eurostat (hlth_silc_01).

Europeans live longer…

Figure 1 shows that the life expectancy of EU residents at birth has increased by 1.8 years from 2005 to 2012, to slightly more than 80 years (80.3). Figures for men and women presented a gap amounting to 5.6 years in life expectancy at birth. On the other hand, life expectancy for men seemed to rise faster, increasing by 2.1 years between 2005 and 2012, compared with 1.6 years for women.

Figure 1: Life expectancy at birth, by sex, EU-28, 2005 versus 2012
(mean number of years)



Source: Eurostat (online data code: demo_mlexpec)

LIFE EXPECTANCY

The term 'life expectancy at birth' refers to the mean number of years a newborn child can expect to live if subjected throughout his or her life to the current mortality conditions. Life expectancy at a certain age is the mean additional number of years that a person of that age can expect to live, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying, i.e. the death rates observed for the current period).

A country-level analysis (Figure 2) confirms a general upward trend in life expectancy at birth for both sexes ([7]), however many differences remained at national level.

On average, Spanish, Italian, Cypriot and French residents lived longer than all other EU residents, with life expectancy figures at birth exceeding 82 years in 2013. At the other end of the scale, the

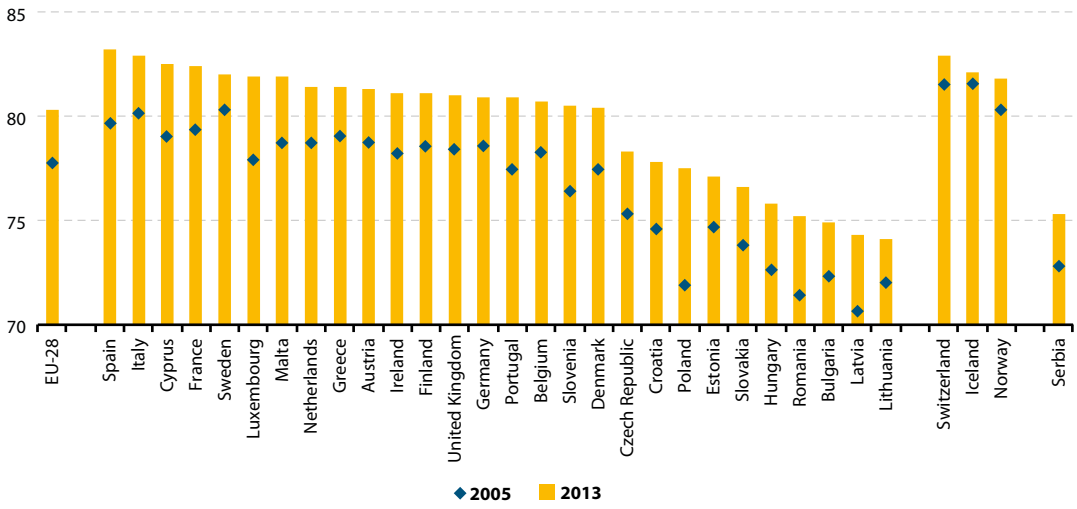
([7]) *Source*: Eurostat (demo_mlexpec).

Lithuanians, Latvians and Bulgarians were likely to live on average less than 75 years. In general, life expectancy was lower (not exceeding the EU average) in the countries that joined the EU after 2004, with the exception of southern EU Member States such as Malta and Cyprus.

While a 1.8 year increase in life expectancy could be observed for the EU as a whole from 2005 to 2012, at country level improvements ranged from 1.5 years in Sweden to 4.8 years in Estonia (where the former EU Member State had one of the highest life expectancies in the EU in 2005 and the latter one of the lowest). Using the latest data available at country level, the life expectancy rose by 1.7 years in Sweden and by 5.6 years in Estonia in the period 2005-13.

The reasons for these country differentials did not exclusively reside in differences in wealth production (although life expectancy was lower in countries from the central and eastern EU with a relatively low GDP or income per capita). Luxembourg was a good example as it was not the country with the highest life expectancy despite having the highest median equivalised net income in the EU ([8]). In a less pronounced manner, some of the western and northern EU Member States such as Denmark and Belgium, with high GDP or income per capita, were not among the EU Member States with the longest life expectancy. Indeed, some of the highest life expectancies were recorded in the Mediterranean EU Members States, despite average GDP or income per capita values. Hence, different ways of living, together with the progress of science and the increasing (near-universal) access to healthcare services for the EU population seem to have helped close the gap in life expectancy between EU Member States ([9]).

Figure 2: Life expectancy at birth, by country, 2005 versus 2013 ([1])
(mean number of years)



([1]) 2012 data instead of 2013 data for the EU-28 and the United Kingdom.
Source: Eurostat (online data code: demo_mlexpec)

([8]) EUR 33 301 in 2013 which is almost twice as much as the EU-28 average (EUR 15 382). *Source*: Eurostat (ilc_di03).
([9]) Eurostat, Statistics Explained, *Quality of life indicators — health* (2013).

How do people in the EU evaluate their health status?

Self-perceived health is, by its very nature, subjective. The notion is restricted to an assessment coming from the individual and not from an interviewer, healthcare worker or relative. Even though it may be influenced by impressions or opinions of others, it takes place after these impressions have been processed by the individual relative to their own beliefs and attitudes. The reference is to health in general rather than the present state of health, as the question is not intended to measure temporary health problems. The respondent is expected to include the different dimensions of health, i.e. physical, social and emotional function and biomedical signs and symptoms. The analysis below examines how people in the EU perceived their health in general.

HEALTH ASSESSMENT

The statistical assessment of health requires both mortality- and morbidity-related measures (i.e. health outcomes), as well as health drivers and access to healthcare.

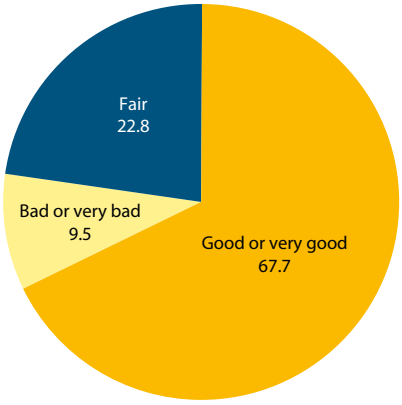
- Health outcomes indicators include data on life expectancy (the number of remaining years a person is expected to live at birth or at a certain age), as well as data on morbidity and health status, including healthy life years, self-perceived health and self-reported limitation in activities because of health problems. A mental health indicator is also being developed. Data for the indicators referring to long-standing illnesses and self-perception of health are collected through the European Statistics of Income and Living Conditions (EU-SILC). Data on life expectancy are provided in population statistics, and are based on administrative records. Healthy life years are estimated using data referring to life expectancy and a question on limitation in activities collected in EU-SILC.
- Health drivers refer to healthy or unhealthy behaviours and include data on body mass index (BMI) and regular smokers calculated using data from European Health Interview Survey (EHIS). This survey aims to measure the health status, lifestyle (health determinants) and healthcare services use of EU residents on a harmonised basis and with a high degree of comparability among EU Member States. Indicators on alcohol consumption and the frequency of physical activity are being developed.
- Access to healthcare is gauged by measuring self-reported unmet medical needs (for reasons of cost, distance or existence of waiting lists), data which is also collected as part of the EU-SILC.

Two out of three people in the EU reported having a good or very good health

As can be seen in Figure 3, almost seven out of ten (67.7 %) EU residents reported being in good or very good health. Of these, 22.2 % actually reported being in very good health which is comparable to the shares of those who reported being in fair health (22.8 %). A more in-depth analysis shows that amongst those who felt the worst (9.5 %), only a very small percentage reported very bad health (1.8 % of the total population).

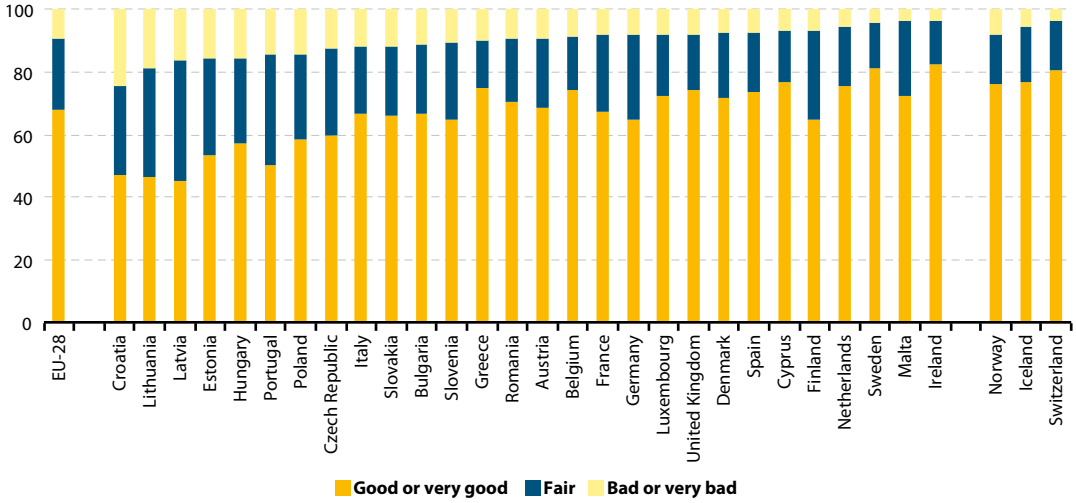
The country analysis depicted in Figure 4 reveals that individual EU residents perceived their health by a factor of almost 7 for bad or very bad, and by a factor of about 2 for good or very good.

Figure 3: Self-perceived health, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (online data code: hlth_silc_02)

Figure 4: Self-perceived health, by country, 2013
(% of population aged 16 and over)



Source: Eurostat (online data code: hlth_silc_02)

In 2013, Irish residents assessed their health status the least negatively (3.6 %), followed by the Maltese (3.9 %), Swedish (4.0 %), Dutch (5.4 %), Finnish (6.7 %) and Cypriot (6.9 %) residents. Additionally, Irish residents assessed their health most positively with 82.4 % of them declaring a good or very good health, followed by the Swedish (81.1 %), Cypriot (76.8 %), Dutch (75.4 %), and Greek (75.1 %) residents. By contrast, less than half of the Croatian (47.0 %), Lithuanian (46.3 %) and Latvian (45.4 %) residents stated to be in a good or very good health whilst between 16.5 % and 24.7 % of them perceived their health to be bad or very bad. These countries also registered some of the shortest life expectancies in the EU.

Despite rather low proportions of people reporting bad or very bad health in Finland (6.7 %) and Germany (8.1 %), comparatively their populations reported low shares of good or very good health (at a bit less than 65 % each). This might be related to the level of awareness regarding potential health problems that also has an impact on the indicator 'healthy life years' (which has relatively low values in these two EU Member States).

The populations living in the EU Member States with high income levels such as Sweden and Finland and to a lesser extent the Netherlands and Ireland seemed more likely to be able to afford quality healthcare. Cyprus is considered a medium income country while median income in Malta and particularly Greece was well below the EU average ([10]). However, this did not prevent the residents of these countries from having a positive assessment of their health.

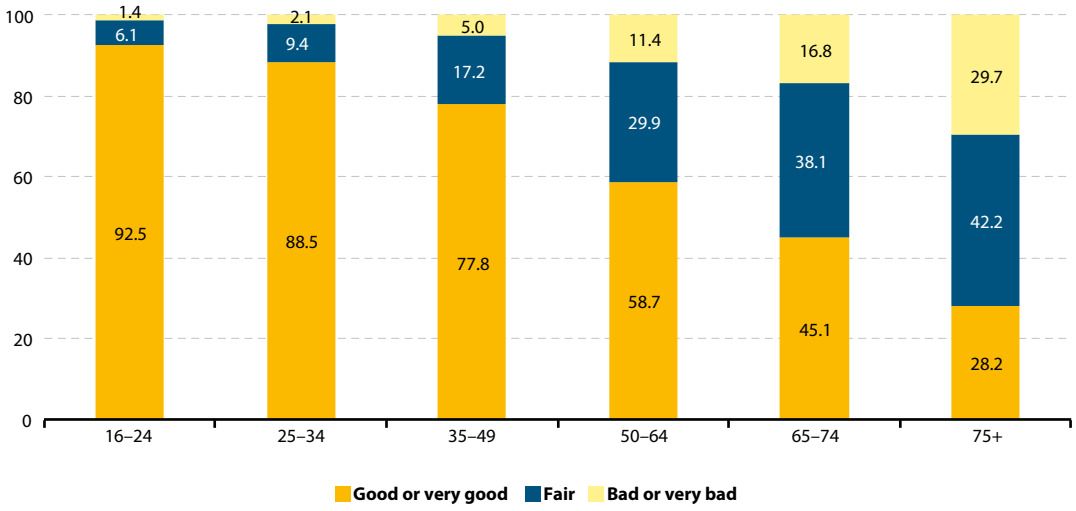
Hence, when analysing the differences across EU Member States a whole set of factors have to be taken into account. These factors may be of a socio-economic nature, including the availability/accessibility and quality of medical care which vary from one EU Member State to another although access to healthcare is almost universal in the EU. Other determinant factors include environmental conditions, cultural attitudes (e.g. towards smoking or drinking), differences in reporting one's health status (including awareness of health problems). This could potentially explain the absence of Luxembourg — which held the EU's highest figures in terms of median income and healthcare expenditure per capita/inhabitant ([11]) — from the list of countries reporting the highest shares of people feeling in good or very good health.

How is the socio-demographic background related to self-perceived health?

The analysis below examines how factors such as age categories, gender, income quintiles etc. relate to how EU residents assessed their overall health status. The differences between groups are likely to reflect objective differences but also different expectations, lifestyles and levels of awareness which may translate in a distinct manner into an individual's self-perceived health.

([10]) *Source*: Eurostat (ilc_di03).
([11]) EUR 33 301 in 2013 and EUR 5 828 in 2012 respectively. *Source*: Eurostat (ilc_di03 and hlth_sha1h).

Figure 5: Self-perceived health, by age, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (online data code: hlth_silc_02)

Self-perceived health declining with age

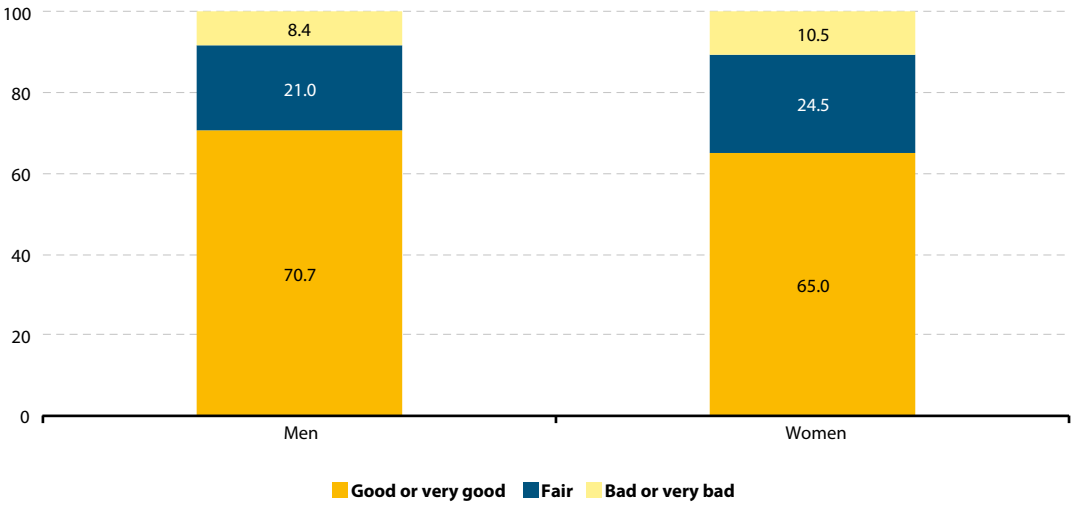
With age, the percentages of people in bad health increased and those of people in good health decreased (Figure 5). Overall, more than a quarter of the people in the 75+ age group declared to be in (very) good health (28.2 %), while a bit more than nine in ten of the younger age group (16–24) reported the same (92.5 %). The share of people reporting bad or very bad health increased significantly with age, the youngest residents (16–24) reporting the lowest share of bad or very bad health (1.4 %) and the oldest residents (75+) reporting the highest share of bad or very bad health (29.7 %).

Men reported being in better health than women

As shown in Figure 6, men in the EU tended to assess their health status more positively than women. 70.7 % of men either perceived their health as good or very good and only 8.4 % as bad or very bad, while the respective shares for women were 65.0 % and 10.5 %. The main differences between male and female perceptions lied in the higher assessment of very good health by the men (5.7 percentage points) ([12]) and their lower assessment of fair health (3.5 percentage points).

([12]) *Source:* Eurostat (hlth_silc_02).

Figure 6: Self-perceived health, by sex, EU-28, 2013
(% of population aged 16 and over)



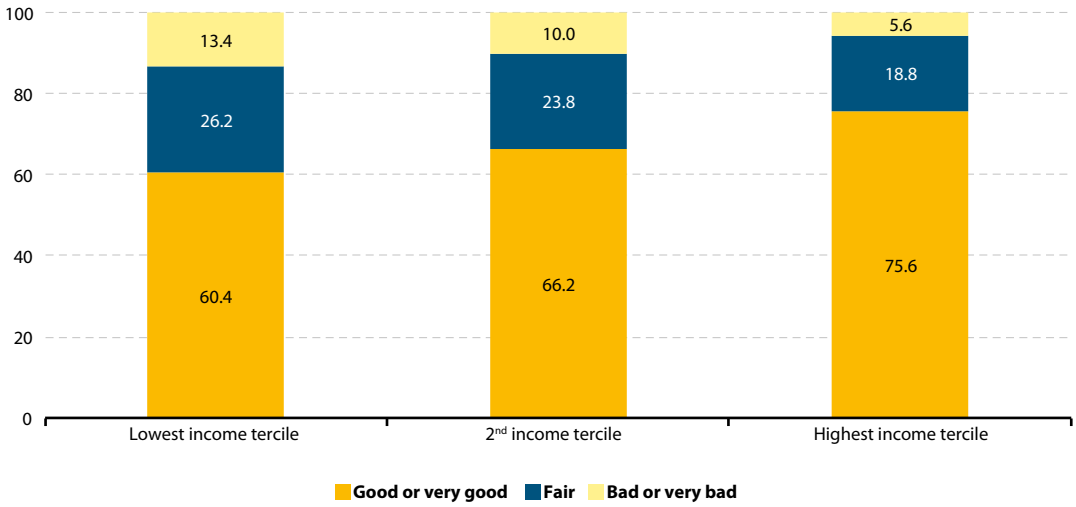
Source: Eurostat (online data code: hlth_silc_02)

In most age groups, women tended to report less positively (and more negatively) than men on their health. On the one hand, good or very good health was reported by 91.4 % of women versus 93.7 % of men in the 16–24 age group and by 34.3 % of women and 41.3 % of men in the 65+ age group. On the other hand, bad or very bad health was reported by 1.5 % of women versus 1.3 % of men in the 16–24 age group and by 24.7 % of women and 19.5 % of men in the 65+ age group.

A probable explanation could be that women were more likely to live longer than men, thus facing more health problems — they tended to be more prone to long-standing illnesses than men ([13]) — and assessing their health more negatively. Women, in particular from the age of 65 (many of which are living on their own), also tended to have more problems meeting their medical needs due to financial reasons ([14]). Finally the degree of awareness on the importance of health varied between genders. As other studies have pointed out, men ended to be less aware of their symptoms than women, and were therefore more reluctant to seek help. As such, they were less likely than women to say they were in poor health, but more likely to die over the next 5 years ([15]).

([13]) The respective shares are 34.0 % for women versus 29.7 % for men in 2013. *Source*: Eurostat (hlth_silc_05).
([14]) Unmet needs for medical examination for affordability reasons (too expensive) were reported by 3.5 % of women versus 2.5 % of men aged 65+. This was 2.7 % of the total female and 2.0 % of the total male population. *Source*: Eurostat (hlth_silc_08).
([15]) http://news.bbc.co.uk/2/hi/health/8588686.stm

Figure 7: Self-perceived health, by income tercile, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (EU-SILC)

People in the highest income tercile had better self-perceived health

Figure 7 illustrates the relation between self-perceived health and income terciles. The proportion of people in the lowest income tercile reporting bad or very bad health was much higher than in the highest tercile (13.4 % versus 5.6 %) while the proportion of people in the lowest income tercile perceiving their health as good or very good was much lower than in the highest tercile (60.4 % versus 75.6 %). In fact, there were very few people reporting very bad health regardless of the tercile (varying from less than 1 % in the highest to 2.7 % in the lowest tercile).

It is worth underlining that these patterns reflected diverging levels of affordability of medical care, healthy nutrition and income-dependent lifestyles, which translated into higher levels of long-standing illnesses among low income earners (35.9 %) rather than among high income earners (25.9 %) ([16]). On the other hand, health problems may also have led people to constrain their work intensity or to even lose their job thus making them enter the lowest tercile and as a consequence face higher problems meeting their medical needs.

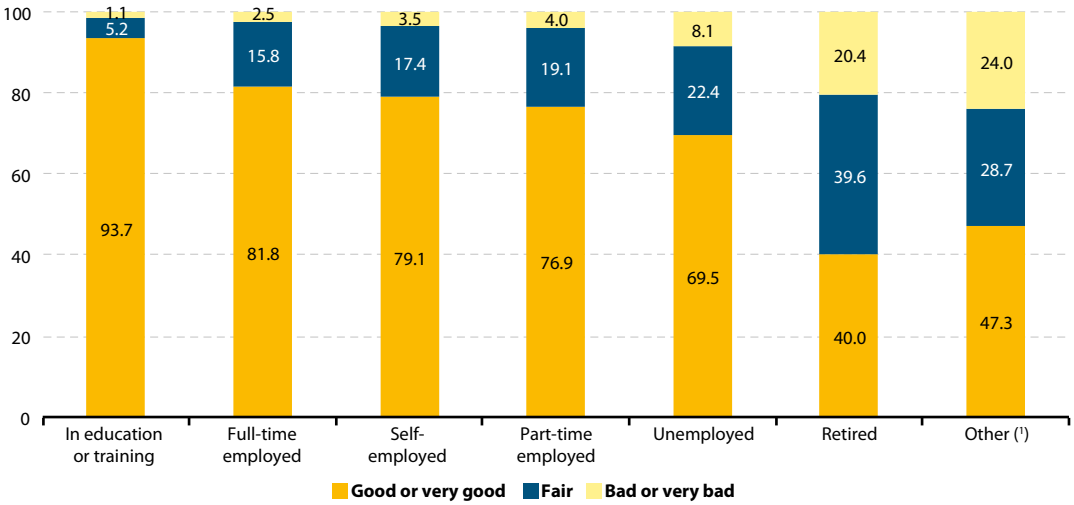
([16]) This data refers to respectively the first and fifth income quintiles. *Source*: Eurostat (hlth_silc_11).

Persons in education or training and full-time employees assessed their health most positively

Figure 8 highlights a clear link between labour status and how health is perceived by people in the EU.

Being in education, training or employment generated the most positive health condition assessments. This may be related to the fact that people belonging to these groups tended to be younger. Indeed, more than nine in 10 people in education or training and eight in 10 people in full-time employment felt in good or very good condition. The situation was a bit less positive for the self-employed and part-time employed with shares of people in good or very good health nonetheless exceeding 75.0 %. The share of self-assessed good or very good health declined to 69.5 % in the case of the unemployed. The retired had by far the lowest proportions of people with very good health (40.0 %). The 'other' category encompassed people with heterogeneous socio-demographic backgrounds (including permanently unfit for work) whose health patterns could not be compared with those in the other labour status categories and thus were difficult to interpret.

Figure 8: Self-perceived health, by labour status, EU-28, 2013
(% of population aged 16 and over)



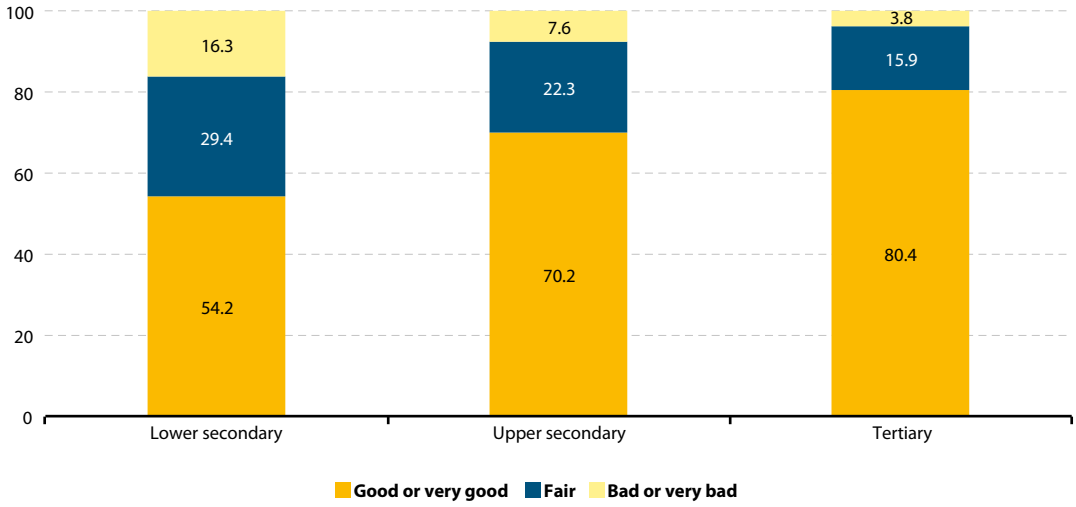
(1) 'Other' includes people permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (online data code: hlth_silc_01)

The least educated had the worst self-perceived health

There is a strong correlation between educational attainment and self-perceived health, as indicated in Figure 9. About half of the people whose highest educational attainment was lower secondary had a good or very good assessment of their health status (54.2 %) as compared with 80.4 % of those with tertiary education. The low-educated people also had the least positive assessment of their health status as 16.3 % of them reported being in bad or very bad health, which was 4 times higher than the share reported by the most educated group.

This finding is not unexpected as education is also linked to income levels, hence greater capacities to meet one's medical needs and probably also greater awareness of the suitability of adopting healthy lifestyles (and financial ability to pay for healthy diet including sufficient consumption of fruit and vegetables). Age also plays a role as younger generations included the highest shares of tertiary graduates (31.8 %) which was almost double that of the 55–74 age group (18.9 %) ([17]).

Figure 9: Self-perceived health, by educational attainment, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (online data code: hlth_silc_02)

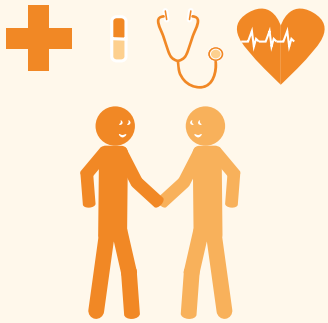
([17]) 2013 figures. *Source*: Eurostat (edat_lfs_9903). See chapter 3 'Education'.

Those who can benefit from support from others reported a better health

More than nine in 10 (93.3 %) EU residents declared to be able to count on help from others ([18]). On average EU residents also reported to be satisfied with their personal relationships at 7.8 out of 10 ([19]), which was the highest assessment across all variables questioned in the SILC 2013 ad-hoc module on well-being ([20]). While those who could ask for/count on support from their relationships reported a higher overall life satisfaction than those who could not (7.2 versus 5.6 out of 10), Figure 10 shows that those who were able to get help were more likely to state that they were in (very) good health (68.4 %) than those who were not (49.5 %). In this second group, more than double the proportion of people reported bad or very bad health (20.0 % compared with 8.9 %). This was in line with recent findings, that often show a robust correlation between social and emotional support from others and physical health ([21]). However, why this comes to be (and especially if there is a protective effect of social support on health and the specificity of such links) is still being studied. This research could be crucial to better tailor support interventions (for example by including a social support element into them) impacting on physical health outcomes, and ultimately quality of life as well.

HELP FROM OTHERS

In the EU-SILC ad-hoc module on subjective well-being, the variable refers to the respondent's possibility to ask for help (any kind of help: moral, material or financial) from any relatives, friends or neighbours.

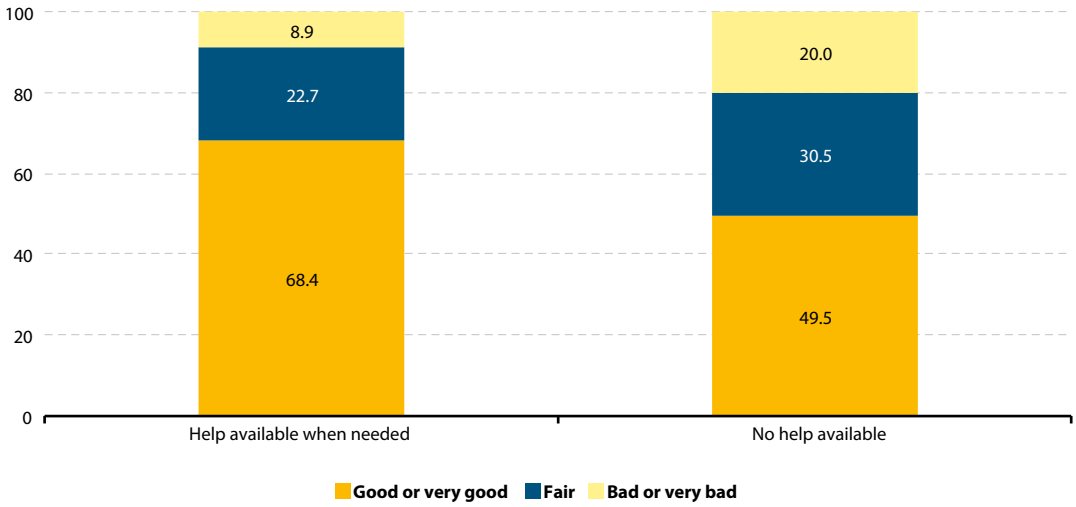


Among the EU residents who declared being able to get help when needed, 68 % reported to be in good or very good health, while this share fell below 50 % among people who had no help available.

About 8.3 % of EU residents declared to be suffering from severe long-standing limitations in usual activities due to health problems.

([18]) See chapter 5 'Leisure and social interactions'.
([19]) Personal relationships cover all possible relationships with e.g. relatives, friends, work colleagues etc.
([20]) *Commission Regulation (EU) No 62/2012* of 24 January 2012 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the 2013 list of target secondary variables on well-being.
([21]) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2729718/

Figure 10: Self-perceived health, by availability of supportive social relationships, EU-28, 2013
(% of population aged 16 and over)



Source: Eurostat (EU-SILC)

What is the connection between incidence of self-reported health problems and life expectancy?

While affected by social and cultural factors ([22]), 'self-perceived health' is related to the existence or absence of health problems and people's capacity to afford medical examinations or treatments.

Table 1 looks at EU Member States and compares the situation of residents reporting health problems or their inability to meet their medical needs with their life expectancy at birth.

In 2013 about 8.3 % of EU residents declared to be suffering from severe long-standing limitations in usual activities due to health problems. About 17.4 % of EU residents complained about some limitations while 74.2 % reported not having any limitations at all ([23]). Around one third of EU residents (32.0 %) reported having a long-standing illness or health problem ([24]) while 3.6 % could not

([22]) OECD, *Health at a glance: Europe 2012* (2012), p. 34.
([23]) Activity limitation: the concept is operationalised by using the Global Activity Limitation Indicator (GALI) for observing limitation in activities people usually do because of one or more health problems. The limitation should have lasted for at least the past six months. Limitations should be due to a health-related cause and not due to financial, cultural or other non-health-related causes. Three answer categories are possible: 'severely limited', 'limited but not severely' or 'not limited at all'. *Source*: Eurostat (hlth_silc_07).
([24]) Chronic morbidity: the concept is operationalised by a question asking if the respondent suffers from any chronic (longstanding, of a duration of at least six months) illness or health problem. The main characteristic of a chronic condition is that it is permanent and may be expected to require a long period of supervision, observation or care; temporary problems are not of interest. *Source*: Eurostat (hlth_silc_05).

Table 1: Self-perceived health problems versus life expectancy and access to health care, by country, 2013

	Bad or very bad self-perceived health	Self-perceived severe long-standing limitations in usual activities due to health problem ([1])	People having a long-standing illness or health problem	Self-reported unmet needs for medical examination (too expensive; too far to travel or waiting list)	Life expectancy at birth ([2])
	(%)				(Mean number of years)
EU-28 ([2])	9.5	8.3	32.0	3.6	80.3
Belgium	8.5	7.9	25.7	1.9	80.7
Bulgaria	11.3	3.6	18.9	8.9	74.9
Czech Republic	12.7	6.4	31.5	1.0	78.3
Denmark	7.4	6.7	38.3	1.6	80.4
Germany	8.1	10.4	28.5	1.3	80.9
Estonia	15.6	9.2	44.3	8.4	77.5
Ireland	3.6	5.4	27.3	3.3	81.1
Greece	9.7	10.0	22.8	9.0	81.4
Spain	7.2	4.4	29.9	0.8	83.2
France	8.3	8.8	36.0	2.7	82.4
Croatia	24.7	7.6	30.5	3.3	77.8
Italy	12.0	9.1	24.5	7.1	82.9
Cyprus	6.9	7.7	32.8	4.4	82.5
Latvia	16.6	9.9	39.4	13.8	74.3
Lithuania	18.5	8.0	30.9	3.2	74.1
Luxembourg	8.2	7.7	23.3	0.9	81.9
Hungary	15.5	7.6	36.8	2.4	75.8
Malta	3.9	3.1	29.2	0.9	81.9
Netherlands	5.4	5.8	36.5	0.4	81.4
Austria	9.0	9.6	34.4	0.4	81.3
Poland	14.2	7.9	34.0	8.8	77.1
Portugal	14.5	7.2	36.1	3.0	80.9
Romania	9.1	7.9	19.4	10.4	75.2
Slovenia	10.6	9.2	31.3	0.0	80.5
Slovakia	11.7	9.5	30.4	1.9	76.6
Finland	6.7	7.2	47.5	4.3	81.1
Sweden	4.0	6.8	35.2	1.9	82.0
United Kingdom	7.9	9.8	32.0	1.6	81.0
Iceland	5.7	9.7	29.2	3.6	82.1
Norway	7.9	5.6	34.0	1.5	81.8
Switzerland	3.7	5.2	34.5	1.2	82.9
Serbia	21.2	4.8	:	:	75.3

([1]) 2012 data for Finland.
([2]) 2012 data for the EU-28 and the United Kingdom.
Source: Eurostat (online data codes: hlth_silc_02, hlth_silc_03, hlth_silc_05, hlth_silc_07 and demo_mlexpec).

meet their medical needs because their access to healthcare was constrained ([25]). Trends over time showed an increased prevalence of these two types of long-standing health problems amongst the EU population together with a decreased share of people who reported unmet medical needs ([26]) and a higher life expectancy at birth (80.3 in 2012 versus 78.5 in 2005) ([27]).

As can be seen in Table 1, the EU Member State whose residents tended to report the most negatively about their health was Croatia (24.7 %) in 2013. The shares of the other EU Member States ranged from 18.5 % in Lithuania to 3.6 % in Ireland. The residents of Slovenia were the most affected by severe long-standing limitations (9.2 %) while those from Malta were the least affected (3.1 %). People reporting long-standing illnesses mostly resided in Finland (47.5 %) and Estonia (44.3 %). The population of Bulgaria and Romania were the least affected (below 20 %). The EU Member States whose residents had the most difficulty in meeting their medical needs were Latvia (13.8 %) and Romania (10.4 %). Conversely, several EU Member States such as Malta, Luxembourg, Spain, the Netherlands and Austria reported shares below 1 % with Slovenia even reaching 0.0 %. Against this background, the life expectancy of EU residents varied in 2013 from less than 75 years in Lithuania, Latvia and Bulgaria, to more than 82 years in Spain (83.2 years), Italy (82.9 years), Cyprus (82.5 years) and France (82.4 years).

Factors that mattered for achieving good health outcomes were numerous and included the importance given by individual governments to health expenditure in their national budgets, vaccination campaigns (and their effectiveness), disease management/screening programmes (and their longevity) to accompany some major diseases like cancer or diabetes and the adherence to quality guidelines in medical practice where available. Finally, environmental conditions and the existence of cultural factors (including e.g. 'lifestyles' and attitudes towards smoking and drinking, nutrition and physical activity) were expected to play a role as well ([28]).

The analysis below will examine how health-related issues correlate with self-perceived health at country level.

Self-perceived health and severe limitations in usual activities were not always correlated

In 2013, 8.3 % of EU residents declared having severe long-standing limitations in usual activities due to health problems. This corresponded to an increase of about 1 percentage point compared with the respective percentage in 2005 (7.4 %). Interestingly, 10.4 % of German residents reported having severe long-standing limitations in usual activities due to health problems in 2013. Conversely, less than 5 % of residents from Malta, Bulgaria and Spain reported a similar situation. Against this background, Figure 11 indicates the existence of a connection between self-assessments of bad or very bad health and severe long-standing limitations in 2013. With the exception of most central and eastern EU Member States, the two variables were reported in similar proportions by respondents in the majority of EU Member States. Deviations from the overall picture were only observed in Bulgaria, the Czech Republic,

In Malta only 3.1 % of residents declared having severe long-standing limitations in usual activities due to health problems and 3.9 % reported being in bad or very bad health in 2013.

([25]) Self-reported unmet needs: Person's own assessment of whether he or she needed examination or treatment for a specific type of healthcare, but did not have it or did not seek for it. EU-SILC collects data on two types of healthcare services: medical care and dental care. 'Reasons of barriers of access' combines the following three reasons: 'Could not afford to (too expensive)', 'Waiting list' and 'Too far to travel or no means of transportation'. *Source*: Eurostat (hlth_silc_03).
([26]) *Source*: Eurostat (hlth_silc_03, hlth_silc_05 and hlth_silc_07).
([27]) *Source*: Eurostat (demo_mlexpec).
([28]) OECD, *Health at a glance: Europe 2012* (2012), pp. 90–108.

Portugal, Poland, Hungary, Latvia, Lithuania, Estonia and Croatia. In these EU Member States, a relative small proportion of residents reported long-standing limitations although a large proportion of these countries' residents reported bad or very bad health (well above the EU average of 9.5 %). This was especially true in Croatia, where merely 7.6 % of the population reported limitations and as many as 24.7 % a bad or very bad health condition. These EU Member States also recorded some of the shortest life expectancies in the EU.

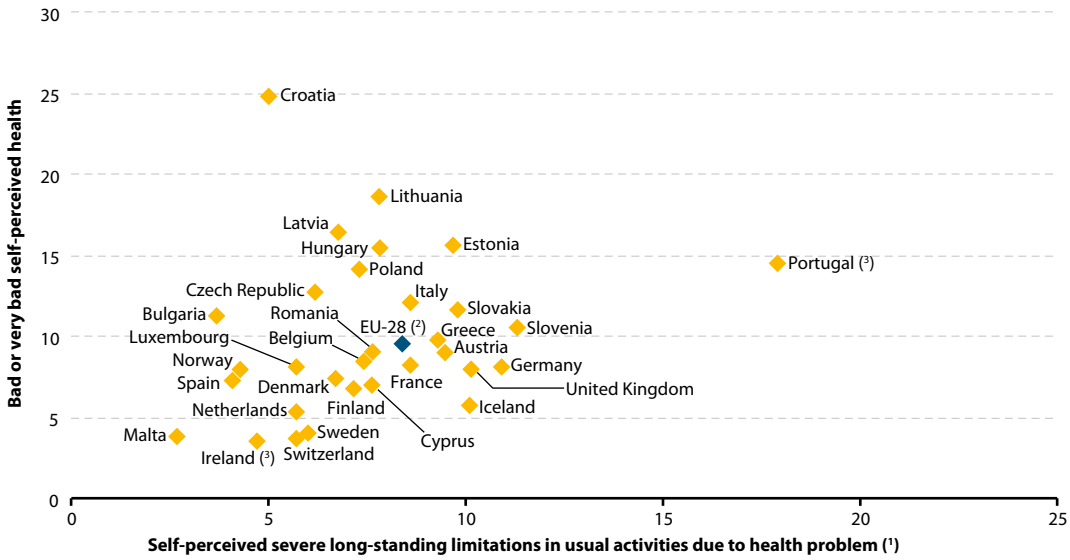
Most northern and western EU Member States are gathered in the bottom left section of Figure 11 — sometimes well below the EU average — as they recorded both low shares in self-perceived bad or very bad health and little long-standing limitations. Germany and the United Kingdom displayed a somewhat diverging pattern by registering shares of people with self-perceived limitations above the EU average (around 10 %).

The prevalence of chronic diseases was loosely related to shares of bad self-perceived health

Around 32.0 % of EU residents declared having a chronic disease in 2013, which was 1.7 percentage points higher than in 2005 (30.3 %) ([29]). This was about 3 times higher than the share of people declaring to be in bad or very bad health (9.5 %).

As a general trend, one can extrapolate from Figure 12 a rather loose link between the prevalence of chronic diseases and the share of people assessing their health negatively (as bad or very bad).

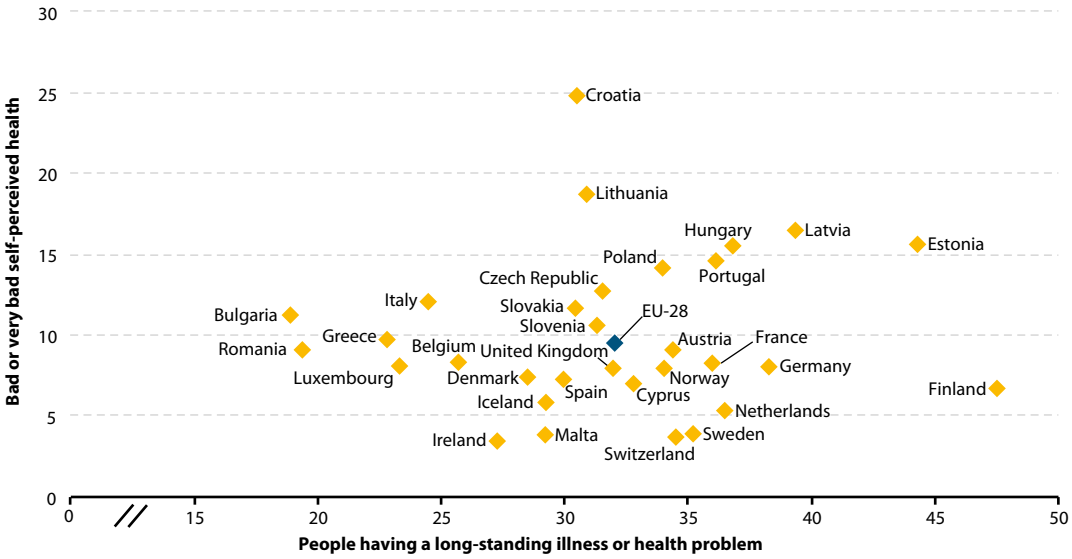
Figure 11: Bad or very bad self-perceived health versus self-perceived severe long-standing limitations in usual activities due to health problem, by country, 2013
(% of population)



(1) 2012 data.
(2) EU-28 average without Ireland and Portugal.
(3) 2011 data.
Source: Eurostat (online data codes: hlth_silc_02 and hlth_silc_07)

([29]) 2005 EU-27 estimate. The EU-27 and EU-28 estimates for 2013 are equal. *Source*: Eurostat (hlth_silc_05).

Figure 12: Bad or very bad self-perceived health versus people having a long-standing illness or health problem, by country, 2013
(% of population)



Source: Eurostat (online data codes: hlth_silc_02 and hlth_silc_05)

Few country clusters stand out from Figure 12. The residents of Bulgaria, Romania, Greece and Luxembourg, displayed quite similar patterns, i.e. they recorded shares of bad or very bad self-perceived health between 8.2 % in Luxembourg and 11.3 % in Bulgaria — which was close to the EU average (9.5 %) — and shares of long-standing illness or health problems varying from 18.9 % in Bulgaria to 23.3 % in Luxembourg, which were well below the EU average (32.0 %).

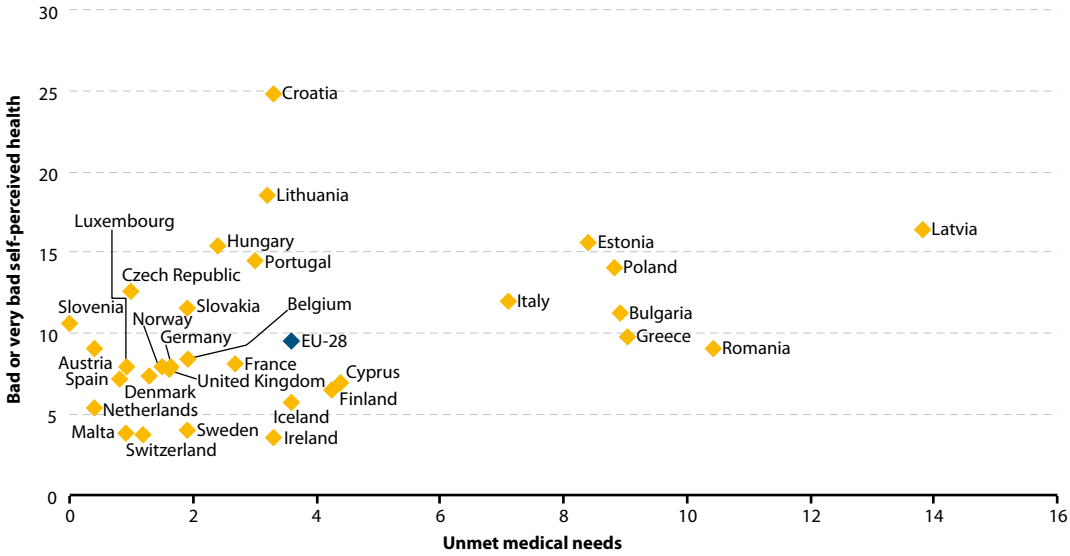
Another group of EU Member States, consisting of Estonia, Latvia, Hungary and Portugal, recorded high shares (over 36 %) of people with a long-standing illness or health problem, as well as some of the highest shares of people reporting bad health (around 14–17 %). Conversely, in Ireland, Malta, Sweden and the Netherlands, some of the lowest shares in the two items were registered. In these EU Member States, the share of self-perceived bad health was comprised between 3.6 % (Ireland) and 5.4 % (the Netherlands) while the share of people having a long-standing illness or health problem was comprised between 27.3 % and 36.5 % (in the same countries).

Croatia and Lithuania were the countries with the highest percentage of the population reporting negatively about their health status (24.7 % and 18.5 % respectively). Despite this, the percentage of people reporting a chronic disease was close to the EU average (32.0 %). This could be explained by the relatively low life expectancy (77.8 years in Croatia and 74.1 years in Lithuania — several years under the EU average) and a low mean equivalised net income (around 7 000 PPS) in the two countries.

Meeting one's medical needs was problematic in a very small number of EU Member States, and therefore not generally related with the percentage of people in bad health

With a growing (and near-universal) access to healthcare only a small share of EU residents (3.6 %) declared themselves unable to afford their medical needs for financial reasons or due to other barriers such as distance and waiting time, which was 1.4 percentage points lower than in 2005 (5.0 %). In Slovenia, the Netherlands, Austria, Spain, Malta and Luxembourg, less than 1 % of the population reported an inability to meet medical needs for financial reasons or due to other barriers in 2013. However, in Latvia and Romania 13.8 % and 10.4 % of the population respectively reported such an inability.

Figure 13: Bad or very bad self-perceived health versus self-reported unmet needs for medical examination (too expensive or too far to travel or waiting list), by country, 2013
(% of population)



Source: Eurostat (online data codes: hlth_silc_02 and hlth_silc_08)

Two major country groups stand out from Figure 13. The first, located on the right-hand section of the graph includes Romania, Greece, Bulgaria, Poland, Estonia and Italy. These EU Member States presented the highest shares of people facing incapacity to meet some of their medical needs (for the reasons cited above) as well as the highest shares of people reporting a negative health condition close to or above the EU average (comprised between 9.1 % in Romania and 15.6 % in Estonia).

The second group, on the left-hand section of the graph, incorporates most remaining EU Member States (except Portugal, Hungary, Lithuania and Croatia). The countries in this group reported shares of unmet needs and of bad or very bad health which tended to be below or at a reasonable distance from the EU average. Indeed, in this group, the percentage of people in bad or very bad health ranged from 3.6 % in Ireland to 12.7 % in the Czech Republic.

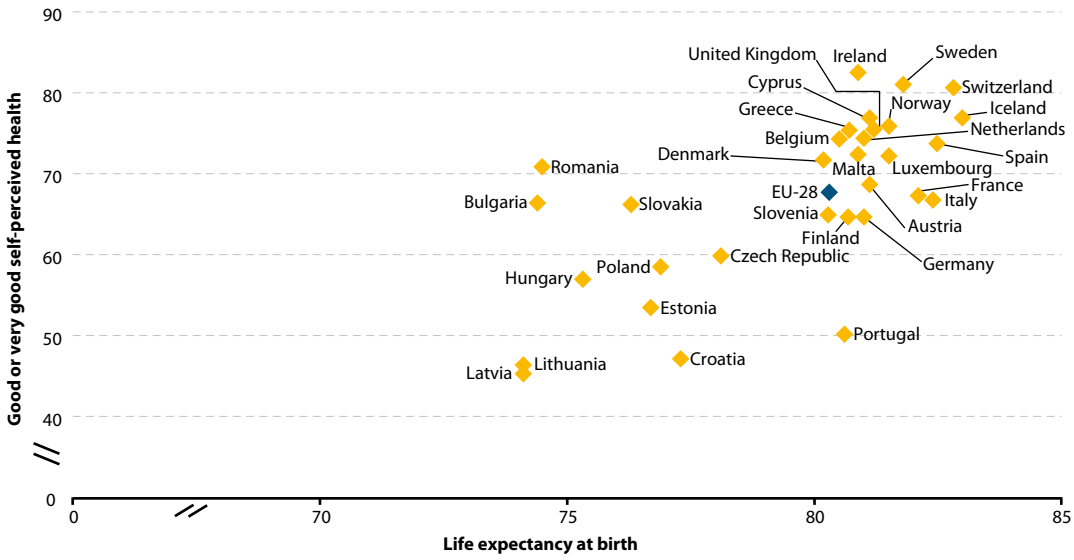
Portugal, Hungary, Lithuania and Croatia displayed some of the lowest shares of people reporting unmet medical needs (between 2.4 % and 3.3 %) together with some of the highest shares of people reporting bad or very bad health, reaching 24.7 % in Croatia.

Therefore, meeting one's medical needs alone did not appear to impact the way EU residents assessed their health condition. Country differentials should thus be ascribed to other factors already mentioned. To some extent, the responses regarding unmet needs for healthcare and self-perceived health may also have been affected by cultural attitudes and policy debates ([30]).

Strong correlation between self-perceived health and life expectancy

Life expectancy in the EU increased by 1.8 years from 2005 to 2012, reaching 80.3 years (Figure 2). While reflecting declining mortality rates at all ages ([31]), this can be attributed to almost universal access to healthcare, as well as other factors such as lifestyles, education and rising standards of living.

Figure 14: Good or very good self-perceived health versus life expectancy, by country, 2013
(self-perceived health: % of population; life expectancy: mean number of years)



Source: Eurostat (online data codes: hlth_silc_02 and demo_mlexpec)

([30]) OECD, *Health at a glance: Europe 2012* (2012), p. 90.
([31]) *Source:* Eurostat (hlth_cd_aro).

While more than two thirds of EU residents (67.7 %) perceived their health as being good or very good in 2013, Figure 14 highlights a positive relation between life expectancy and the assessment rates on health status. Hence, the EU Member States with the highest life expectancy figures — appearing in the top-right section of the graph — also reported high shares of residents with a good or very good self-perceived health. Conversely, the EU Member States in the bottom-left part of the graph (mostly eastern EU Member States), reported low life expectancy figures as well as low shares of good or very good self-perceived health. In Portugal the registered life expectancy was higher than the EU average (80.9 years) however only half of Portugal's residents reported good or very good health, which is substantially lower than the EU average. Slovak, Bulgarian and Romanian respondents, for whom life expectancy did not exceed 77 years, by comparison reported more positively about their health: the shares of people feeling in good health ranged from 66.2 % in Slovakia to 70.8 % in Romania.

Self-perceived health and life satisfaction

The next section examines how self-perceived health and overall life satisfaction may be linked at country level. General life satisfaction is based on an overall cognitive assessment of an individual's life in a broad sense, and refers to an evaluation of all subjectively relevant life domains, such as the financial situation, housing, health, education, environment, security, etc. It is therefore considered an overall measure of subjective well-being ([32]).

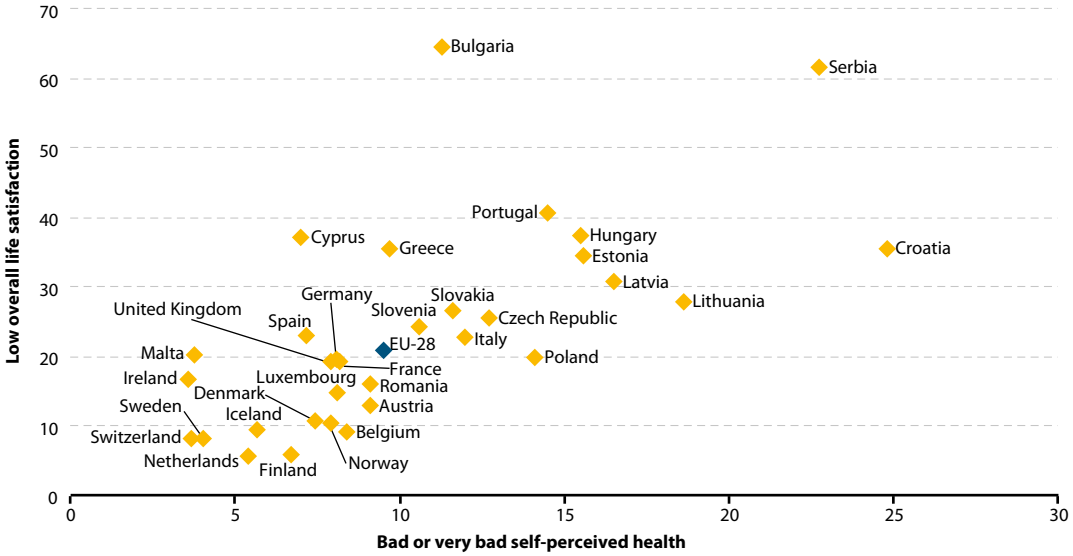
Self-perceived health was strongly associated with overall life satisfaction

In 2013, similar proportions of EU residents reported low (21.0 %) or high (21.7 %) overall satisfaction with their life, whereas the remainder (57.4 %) declared a medium satisfaction). On the other hand, around 9.5 % of EU residents reported bad health (Table 1).

When considering these two aspects at country level (Figure 15), there appears to be a connection between bad health and low life satisfaction, with an equal number of EU Member States over and under the EU average both in terms of assessment of health status and of overall life satisfaction. Only a few eastern and southern EU Member States deviated from this. Among them, Bulgaria showed an extreme proportion of people with low life satisfaction (64.2 %) which could not only be ascribed to the share of its population feeling in bad or very bad health (11.3 %). To a much lesser extent, people living in Cyprus, Greece and Spain displayed a similar pattern. There could therefore be a whole set of determining factors affecting life satisfaction beyond perceived health status alone). The northern EU Member States and Belgium exhibited some of the smallest shares of people with both negative life satisfaction and health assessments. The pattern in Croatia was the complete opposite, as illustrated by its stand-alone position at the right end of the scale.

([32]) Life satisfaction represents a report of how a respondent evaluates or appraises his or her life taken as a whole. It is intended to represent a broad, reflective appraisal the person makes of his or her life. The term life is intended here as all areas of a person's life at a particular point in time (these days). The variable therefore refers to the respondent's opinion/feeling about the degree of satisfaction with his/her life. It focuses on how people are feeling 'these days' rather than specifying a longer or shorter time period. The intent is not to obtain the current emotional state of the respondent but for them to make a reflective judgement on their level of satisfaction. See chapter 9 'Overall life satisfaction'.

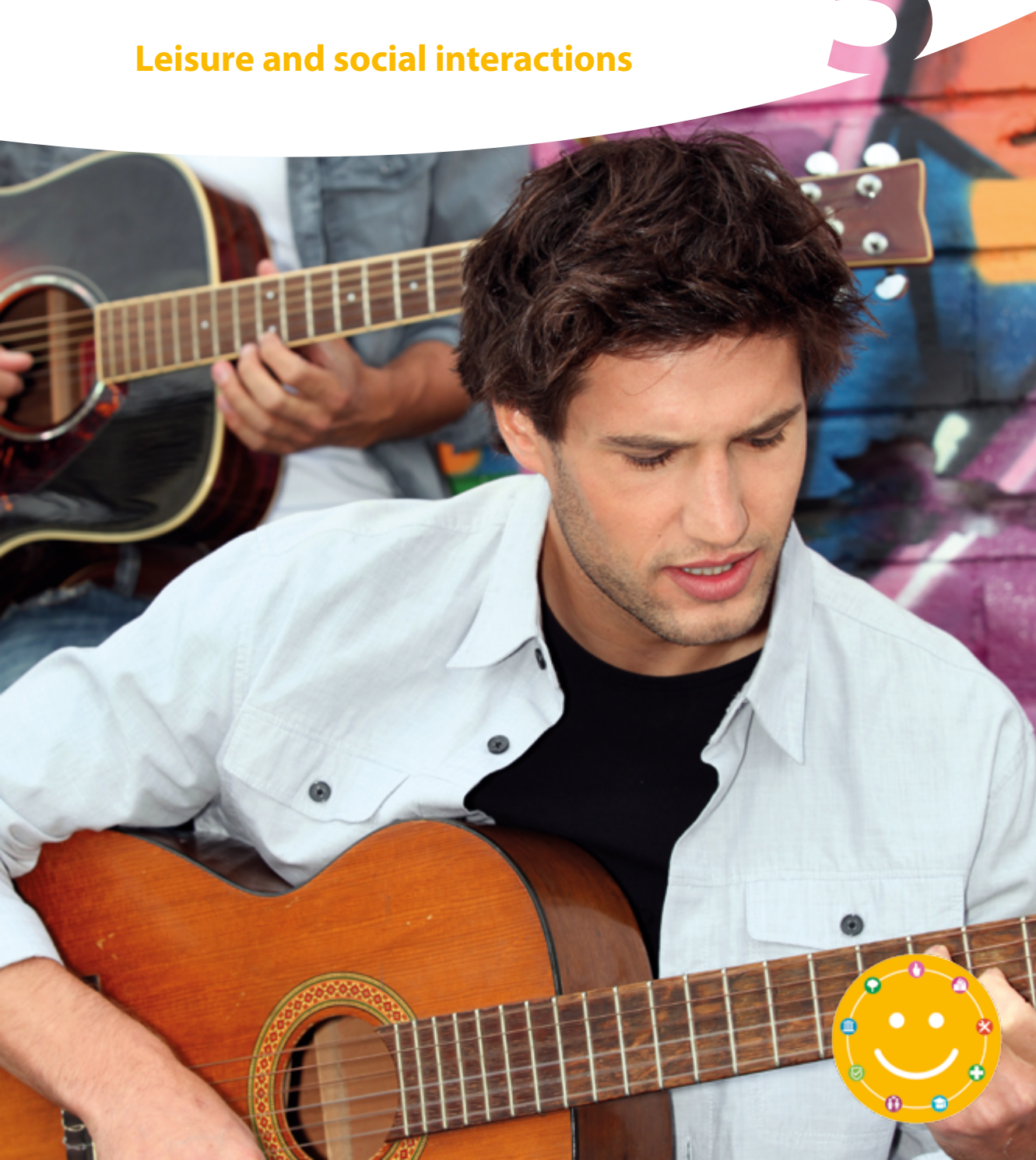
Figure 15: Bad or very bad self-perceived health versus low overall life satisfaction, by country, 2013
(% of population reporting a low life satisfaction and a bad or very bad health)



Source: Eurostat (online data codes: hlth_silc_02 and ilc_pw01)

5

Leisure and social interactions



Introduction

A social life, in which people can enjoy a balance between work and private interests, spending sufficient time on leisure and social interactions, is highly associated with life satisfaction (1). Being able to engage in social activities is important for an individual's psychological balance, hence well-being. Having someone to rely on in case of need was chosen as a headline indicator for the United Nations World Happiness report, highlighting its importance for an individual's well-being.

This chapter is split into two main parts, focusing first on leisure and second on social interactions. In the first part, the analysis examines first the contextual situation of time use in the European Union (EU), by looking at the extent to which EU residents participate in recreational and cultural activities (measured through their spending on this type of goods and services). It then explores how satisfied people are with their time use, studying also the differences between socio-demographic groups such as age categories, gender, income terciles, household types, labour statuses, occupational categories and education levels. This evaluation is followed by an examination of the potential link between, on the one hand, working time and expenditure on recreation and culture (as a proxy for participation in this kind of activities) and, on the other hand, satisfaction with time use at country level.

The second part focuses on social interactions, starting with an analysis of people's ability to benefit from support from others when needed. Satisfaction with personal relationships is then examined, including by different socio-demographic characteristics which may have an influence on it. The last part considers the possible association between the ability to get help from others when needed or to discuss personal matters, and satisfaction with personal relationships (2).

Current times are marked by economic difficulties and while ensuring the sustainability of public finances is a goal of EU policies, individuals are facing hardships to make ends meet (3) and political disinterest seems to be gaining ground (4). In this context, social support is extremely relevant, and examining how the residents of the EU participate in recreation and culture and assess their personal relationships, provides important complementary information regarding other determining factors of well-being.

(1) European Commission, Eurofound, *Quality of life in Europe*, Subjective well-being, *3rd European quality of life survey* (2013).
(2) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).
(3) See chapter 1 'Material living conditions'.
(4) See chapter 7 'Governance'.

EU POLICIES RELATED TO LEISURE AND SOCIAL INTERACTIONS

Our subjective perception of well-being, happiness and life satisfaction is fundamentally influenced by our ability to engage in and spend time on the activities we like. The importance attributed by modern societies to recreational and cultural activities and work-life balance underlines the role leisure and social interactions play in quality of life. This importance is reflected in family-friendly policies which the EU is developing to remedy 'work and family imbalance' ([5]). One example is the EU working time directive ([6]) which aims to guarantee that working hours meet minimum standards applicable to all workers throughout the EU (in respect of, among others, weekly rest, annual leave and aspects of night work). The EU is also financing projects focussing on work-life balance in families and for working women, as well as fostering family-friendly workplaces, engaging fathers and promoting the financial well-being of families ([7]).

Several EU policies have an impact on the quality and availability of leisure activities proposed to the public. The EU seeks to preserve Europe's shared cultural heritage (Article 167 of the Treaty on European Union) — in language, literature, theatre, cinema, dance, broadcasting, art, architecture and handicrafts, and to help make it accessible to others with initiatives such as the Culture Programme. To this end, it has also developed policies on the audio-visual and media market, including the Audio-visual Media Services (AMS) Directive 2010/13, the Creative Europe framework programme on culture and media, as well as provisions for supporting public service broadcasting (Protocol No 29 of the Treaty on European Union). In 2011, the Commission adopted a strategy to develop the European dimension in sport.

Leisure and social interactions in a quality of life perspective

Leisure and satisfaction with time use

Being able to benefit from leisure activities is expected to be associated with life satisfaction, and so does enjoying balanced and satisfactory time use ([8]). The residents of the EU devoted about EUR 1 300 or 8.5 % of household expenditure to recreation and culture in 2012, highlighting the importance attached to these. This was EUR 1 200 in 2005, or 9.3 % of total household budget highlighting a small decrease in the percentage over the last years.

Available figures indicate that in 2013 almost half of the population (49.2 %) reported a medium satisfaction level with its time use, one fourth (28.1 %) a low satisfaction level and another fourth (22.7 %) a high satisfaction. On a scale from 0 to 10 (where 0 corresponds to the lowest and 10 to the highest grade of satisfaction ([9])) this represented a mean satisfaction of 6.7, the second lowest rating registered across all of the well-being domains (satisfaction with financial situation being the lowest, at 6.0). Satisfaction with time use is strongly associated with age, the younger and older age groups reporting the highest means (between 7.2 and 7.6). The gender effect is minor, with a mean satisfaction at 6.8 for men and 6.7 for women. The people who were best-off in terms of income or education were equally or less satisfied with their time use.

([5]) OECD, *Between Paid and Unpaid Work: Family Friendly Policies and Gender Equality in Europe* (2006), p. 10.
([6]) Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003 concerning certain aspects of the organisation of working time.
([7]) European Platform for Investing in Children — Work-related Family Issues.
([8]) See chapter 9 'Overall life satisfaction'.
([9]) Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6-8 and high satisfaction to 9–10.

Due to the different time availability it grants, the labour status has an impact on satisfaction with time use. Hence, retired people, those in training or education and part-time employees reported a greater satisfaction level (7.6 to 6.6) with time use than full-time and self-employed persons (6.3 and 6.1 respectively). High shares of time spent on leisure (as a percentage of the total expenditure) and low average weekly working time were associated with a more positive average assessment of time use in some EU Member States, while in others the link was more loose.

Social interactions and satisfaction with personal relationships

Having rewarding social relationships and having someone to rely on in case of need or to discuss personal matters, also enhances overall life satisfaction: hence, 40.8 % of people who declared having social support in case of need reported high levels of life satisfaction; the share was 18.6 % amongst those who did not ([10]). Nonetheless, on average 6.7 % of residents reported not being able to get such support, a share which exceeded 10 % in several EU Member States. This lack of support was more prevalent amongst migrants, especially for those coming from outside the EU borders.

A majority of EU residents (49.2 %) reported a medium level of satisfaction with their personal relationships; low satisfaction was reported by 11.7 % and high satisfaction by 39.1 %. This represents a mean satisfaction level of 7.8, the highest rating of a well-being domain. As could be observed with time use, satisfaction with relationships and age were slightly related. The mean satisfaction level with one's personal relationships was highest amongst the younger generations (16–24 years and 25–34 years) and also amongst people older than 65, with a mean close to or exceeding 8.0. The gender effect was negligible, with men less satisfied than women by a mere 0.1 point (7.8 versus 7.9). Belonging to the third, richest, income tercile engenders a slightly higher satisfaction on average (mean at 7.6, 7.9 and 8.0 in the first, second and third resp. category of income) in the same way as being a tertiary graduate (mean at 7.6, 7.9 and 8.0 in the first, second and third category resp. of educational attainment).

The effects of supportive relationships and the level of trust in others on satisfaction with personal relationships are clear. With a mean at 7.9, people who could count on others for help when needed and who have someone to discuss personal matters with were much more satisfied with their relationships than those who could not (with an average at 6.3–6.4). Moreover, people who have little trust in others reported a mean satisfaction at 7.0, versus 7.7 amongst those with a medium trust in others and 8.3 amongst those with a high trust level.

([10]) In 2013, 93.3 % of EU residents declared being able to get help in case of need and 6.7 % declared not being able to do so. See chapter 9 'Overall life satisfaction'.

INDICATORS TO MEASURE LEISURE AND SOCIAL INTERACTIONS

Leisure has both a quantitative aspect (i.e. the mere availability of time that we can spend on activities we like) and a qualitative one: access to these activities is as important as the time we have to devote to them. Social interactions, i.e. interpersonal activities and relationships, apart from satisfying a primeval human need for existence in a social milieu (loneliness being a factor that is detrimental to quality of life), also constitute a 'social capital' for individuals. However, there is more to quality of life than mere satisfaction derived from social interactions with friends, relatives and colleagues and engaging in activities with people. The quality of social interactions also encompasses our need to engage in activities for people, the existence of supportive relationships, interpersonal trust, the absence of tensions and social cohesion.

The leisure sub-dimension within the quality of life framework covers the quantitative and qualitative aspects of leisure, as well as access assessment. Data used in this chapter are primarily derived from the EU-SILC survey. Carried out annually, it is the main survey that assesses income and living conditions in Europe, and the main source of information used to link different aspects of quality of life at household and individual level:

- Quantity of leisure concerns the availability of time and its use (including personal care), including satisfaction of people with the amount of time they have to do things they like (a satisfaction with time use indicator was included in SILC 2013 ad-hoc module).
- Quality of and access to leisure are measured for the moment with indicators on self-reported attendance of leisure activities that people are interested in, for example cinema, theatre or cultural centres. Other indicators on the topic are to be collected in the SILC 2015 ad-hoc module.

The social interactions topic focuses on activities with people, activities for people, supportive relationships and social cohesion, using indicators collected as part of the EU-SILC 2013 and 2015 ad-hoc modules on subjective well-being and social and cultural participation:

- Activities with people (including feeling lonely) are measured in terms of the frequency of contacting, meeting socially/getting together with friends, relatives or colleagues (SILC 2006/2015 ad-hoc module) and satisfaction with personal relationships (collected in SILC 2013 ad-hoc module).
- Activities for people concern involvement in voluntary and charitable activities, excluding paid work (SILC 2006 ad-hoc module, which will be repeated in 2015).
- Assessment of the existence of supportive relationships is based on the proportion of people indicating that they have someone to rely on for help in case of need (data available from SILC 2006 ad-hoc module, and repeated in the 2013 and 2015 ad-hoc modules) and to discuss on personal matters (collected in SILC 2013 and 2015 ad-hoc modules).
- Social cohesion (covering interpersonal trust, perceived tensions and inequalities) is measured using an indicator on trust in others (collected in 2013 ad-hoc module)).

Data used in this chapter for the indicators on satisfaction with time use, satisfaction with personal relationships, supportive relationships and trust in others derive almost exclusively from the 2013 ad-hoc module.

Data on final consumption expenditure (including for recreation and culture) comes from National accounts (nama_co3_c).

Leisure in the European Union

Participation in recreational and cultural activities is expected to contribute to an individual's well-being and overall life satisfaction ([11]). Culture and entertainment are important activities which EU residents did not seem to abandon so easily when they had to make important spending reductions ([12]), although price is the second main barrier in access to culture, after lack of time ([13]). The section below analyses the weight of recreational and cultural activities in the final consumption expenditure of EU residents, as a proxy indicator for participation in leisure activities.

Spending on recreational and cultural activities in total household expenditure has decreased

Figure 1 presents the evolution over time of household expenditure on recreation and culture. Since 2005, while total household expenditure increased by 14.1 % ([14]), reaching EUR 14 600 per inhabitant in 2012, the portion spent on recreation and culture ([15]), EUR 1 300, only grew by 8.3 %. In 2012, it was making up 8.7 % of the total final consumption expenditure of households; compared with 9.3 % in 2005 and 9.1 % in 2008, reflecting a continuous drop over the period considered. Recreation and culture played a non-negligible role in the daily life of individuals, by occupying the fourth place in the household budget, after constrained expenses such as housing, water, electricity, gas and other fuels (24.1 %), transport and food and non-alcoholic beverages, both at 13.0 % in 2012 ([16]).

In 2012, the main part of a household's recreation and culture budget was devoted to recreational and cultural services (37.9 %), followed by other recreational items and equipment, gardens and pets (21.8 %), audio-visual, photographic and information processing equipment 16.1 %), newspapers, books and stationery (13.8 %). Package holidays made up 6.9 % of the total budget and other major durables 3.4 %. At EUR 500 per capita in 2012 against EUR 400 in 2005, recreational and cultural services ([17]) nonetheless constituted a minor share of total consumption expenditure in 2012 (3.3 % versus 3.1 % in 2005).

([11]) European Commission, Eurofound, *Quality of life in Europe, Subjective well-being, 3rd European quality of life survey* (2013).

([12]) The question asked to respondents was: Q4. If you had to reduce your spending on leisure activities when you were on holiday in 2009, on which kind of leisure activity did you make the most important reduction? Reference population: those who went on holiday or took a short trip in 2009, and not planning any other holiday or short trips in 2009, % EU-27. (The answers were: 38.0 % did not have to reduce spending, 23.0 % reduced spending on restaurants and cafés, 17.0 % on shopping, 9.0 % on cultural activities and entertainment, 4.0 % on beauty and wellness, 3.0 % on sport and other activities, 3.0 % on other and 3.0 % did not know). Source: Flash Eurobarometer 281, Europeans and tourism (2009). See also Eurostat, Cultural statistics (2014), p. 193.

([13]) The question asked to respondents was: QA8: Sometimes people find it difficult to access culture or take part in cultural activities. Which of the following, if any, are the main barriers for you? (multiple choice). ('Too expensive' was answered by 29.0 % of respondents, preceded by 'Lack of time at 42.0 %). *Source*: Flash Eurobarometer 67.1 (2007). See also Eurostat, *Cultural statistics* (2014), p 149.

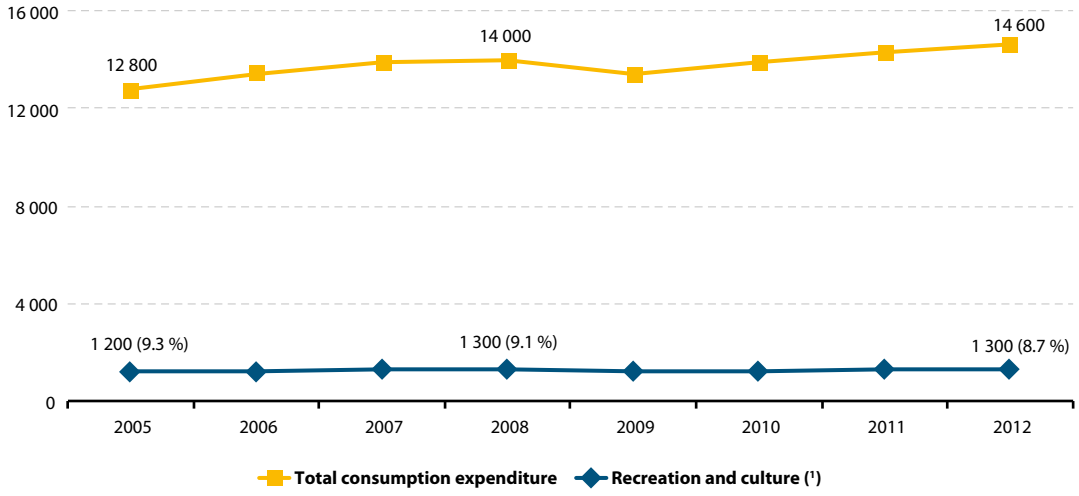
([14]) Pushed by a sharp (25.0 %) growth of expenditure on housing, water, electricity, gas and other fuels over the period.

([15]) Recreation and culture — 09: 09.1 — Audio-visual, photographic and information processing equipment; 09.2 — Other major durables for recreation and culture; 09.3 — Other recreational items and equipment, gardens and pets; 09.4 — Recreational and cultural services; 09.5 — Newspapers, books and stationery; 09.6 — Package holidays. See Classification of Individual Consumption According to Purpose (COICOP).

([16]) Final consumption expenditure of households by consumption purpose — COICOP 3 digit — aggregates at current prices. *Source*: Eurostat (nama_co3_c).

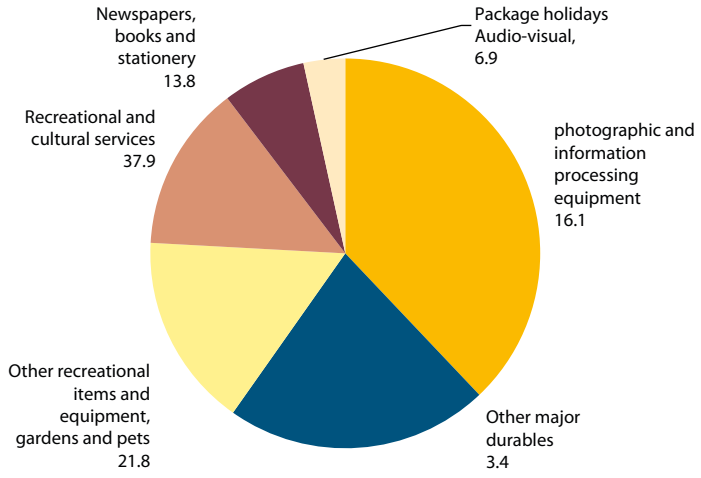
([17]) Recreational and cultural services includes: 09.4.1 — Recreational and sporting services (S), 09.4.2 — Cultural services (S) which includes: cinemas, theatres, opera houses, concert halls, music halls, circuses, sound and light shows; museums, libraries, art galleries, exhibitions; historic monuments, national parks, zoological and botanical gardens, aquaria; hire of equipment and accessories for culture, such as television sets, video cassettes, etc.; television and radio broadcasting, in particular licence fees for television equipment and subscriptions to television networks; services of photographers such as film developing, print processing, enlarging, portrait photography, wedding photography, etc. Includes: services of musicians, clowns, performers for private entertainments; 09.4.3 — Games of chance(s). See Classification of Individual Consumption According to Purpose (COICOP).

Figure 1: Expenditure on recreation and culture, in total household expenditure, EU-28, 2005–12
(EUR per inhabitant)



(1) The figures between brackets represent the share of expenditure on recreation and culture in total household expenditure.
Source: Eurostat (online data code: nama_co3_c)

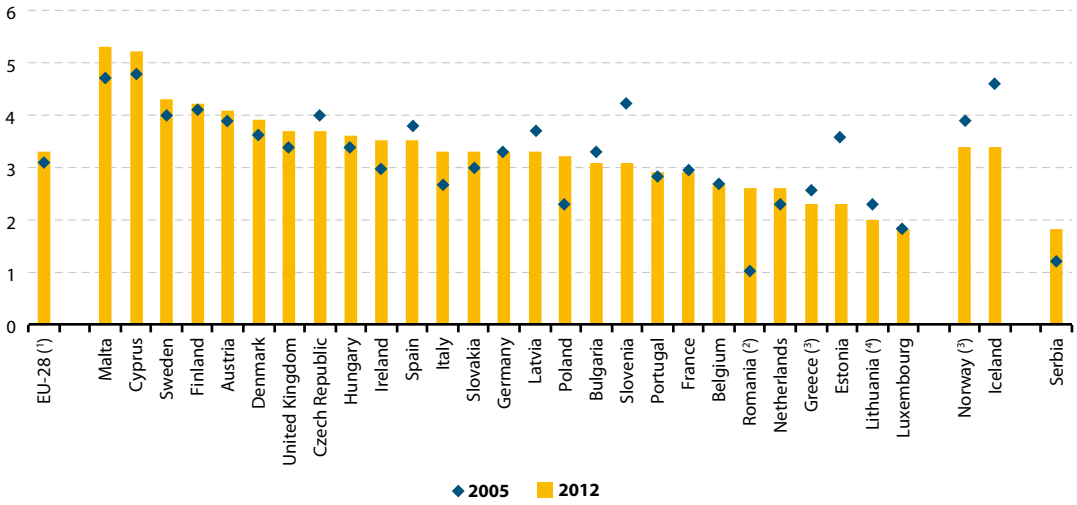
Figure 2: Expenditure on recreation and culture, by consumption purpose, EU-28, 2012
(%)



Source: Eurostat (online data code: nama_co3_c)

Access to culture, tends more and more to be recognised as a basic right, in the same way as education, health and other fundamental rights. The 1948 Universal Declaration of Human Rights does not call for the recognition of this right as such but stipulates in its Article 27 that everyone has the right to freely participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits. However, this participation is not universal and varied by EU Member State, as shown in Figure 3.

Figure 3: Expenditure on recreational and cultural activities, in total household expenditure, by country, 2005 versus 2012
(% of total consumption expenditure)



(1) Excluding Lithuania, Bulgaria, Romania and Greece.
(2) 2010 instead of 2012 data.
(3) 2011 instead of 2012 data.
(4) 2009 instead of 2012 data.
Source: Eurostat (online data code: nama_co3_c)

In 2012, the population in Luxembourg spent the smallest share of its household budget on recreational and cultural activities (1.8 %, identical to 2005), followed by Lithuania at 2.0 % (against 2.3 % in 2005). The biggest shares were spent in Malta and Cyprus, at respectively 5.3 % and 5.2 %. This represented an increase since 2005 when the shares were respectively 4.7 % and 4.8 %. Apart from these two exceptions, it was generally the households in northern EU Member States (Sweden, Finland and Denmark) and Austria that devoted the greatest proportions of their budgets on recreational and cultural activities, at around 4.0 % of total household expenditure. Almost all EU Member States experienced a downward trend or a slight increase (below 1.0 %) since 2005, ranging from – 1.2 percentage points in Estonia to + 0.9 percentage points in Poland. The only EU Member State not to follow this pattern was Romania which recorded a 1.6 percentage point growth on expenditure for recreational and cultural activities.

This indicator is expressed in relative terms as a percentage of the total and may therefore be influenced by factors like price variations, including for other consumption items (housing, food and so on), but also the availability of cultural goods and services (the supply side). This aspect is important to keep in mind when making cross-country comparisons.

In absolute terms, available figures for 2012 show that most eastern EU Member States and the Netherlands, were spending less on recreational and cultural activities, as opposed to most northern, western and southern EU Member States. On average, every Swedish citizen spent EUR 900 on such activities in 2012, versus EUR 100 in Bulgaria, Lithuania and Romania ([18]).

Overall satisfaction with time use

By being able to engage in recreational and cultural activities, and spending time on one's own areas of interest, a balanced and satisfactory use of time is expected to contribute to an individual's overall life satisfaction ([19]). Time use may encompass all types of activities, whether related to work or not. This may, on the one hand, consist of paid and unpaid work and commuting time but also domestic labour, including caring for children, cooking/housework, and caring for elderly or disabled people, and, on the other hand, engaging in social or cultural activities, in physical or sports activities, volunteering, political activities, using the internet, attending religious services, etc.

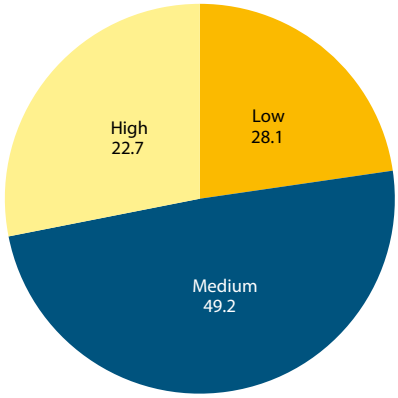
TIME USE

Time use refers to the respondent's opinion/feeling. The respondent should make a broad, reflective appraisal of all areas of his/her time use in a particular point in time (current). By default, the things the respondent likes doing are essentially a self-defined and a self-perceived concept.

In the EU as a whole, a majority of residents (49.2 %) reported in 2013 medium satisfaction with their time use; 28.1 % declared low satisfaction and 22.7 % high satisfaction with it (Figure 4). On a scale of 0 to 10 (where 0 corresponds to the lowest and 10 to the highest grade of satisfaction ([20]) this represented a mean satisfaction of 6.7, the second lowest rating registered across all of the life domains for which satisfaction was measured on the same scale ([21]).

([18]) *Source*: Eurostat (nama_co3_c).
([19]) See chapter 9 'Overall life satisfaction'.
([20]) Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6–8 and high satisfaction to 9–10.
([21]) Satisfaction with financial situation (6.0) being the lowest and satisfaction with personal relationships being rated the most positively (7.8) across all satisfaction items.

Figure 4: Satisfaction with time use, EU-28, 2013
(% of population by satisfaction level)



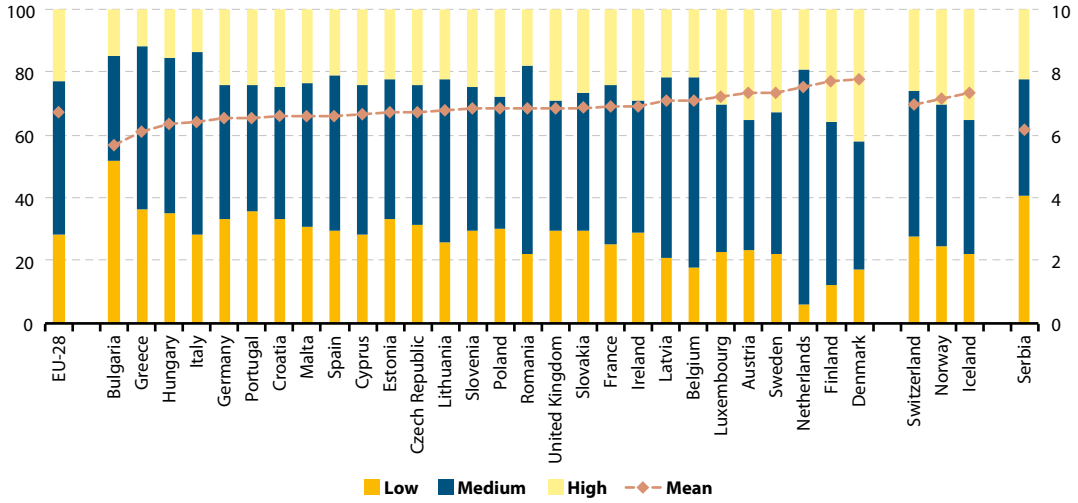
Source: Eurostat (online data code: ilc_pw01)

Among the EU population, 23 % reported a high satisfaction with their time use in 2013.

As shown in Figure 5, the gap between the least and most satisfied population in the EU Member States was 2.1 points rating, the same as for job satisfaction and meaning of life, and the lowest compared with all other satisfaction items ([22]). Hence, with the lowest mean across all EU Member States, Bulgaria (5.7), appears at the left end of the scale, while Denmark occupies the right end, with a mean at 7.8, just after Finland at 7.7. These EU Member States recorded the highest shares of people with a high satisfaction with their time use and some of the lowest shares of people with a low satisfaction. They also tended to report the most positively on overall life satisfaction ([23]). The Netherlands, which was the next most positive, displays a very specific pattern, where the high mean (7.5) is to be ascribed to a considerable proportion of residents with a medium satisfaction (75.2 %) and a very modest share of residents with a low satisfaction (5.9 %).

([22]) At country level, the gap between the mean recorded by the least and most satisfied (total) populations reached 3.9 for satisfaction with financial situation and 3.2 for overall life satisfaction, satisfaction with recreational or green areas and satisfaction with living environment.
([23]) See chapter 9 'Overall life satisfaction'.

Figure 5: Satisfaction with time use, by country, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data code: ilc_pw01)

Satisfaction with time use by different socio-demographic characteristics

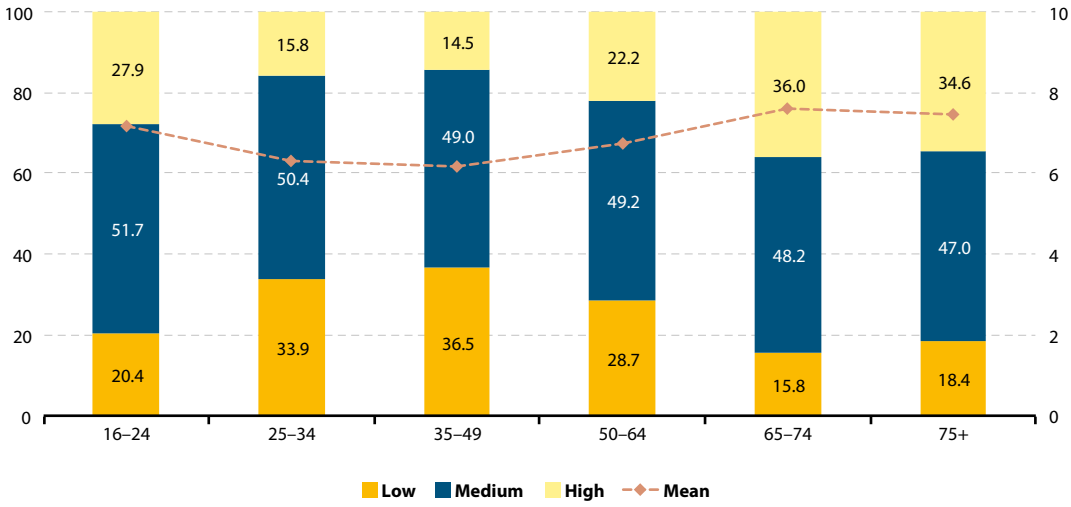
How is the socio-demographic background associated to satisfaction with time use?

The next section examines how the level of satisfaction of EU residents with their time use varies for different socio-demographic groups such as age categories, sex, income terciles and other.

Satisfaction with time use was highest amongst the younger and older populations

As Figure 6 shows, satisfaction with time use was strongly associated with age. The older age groups (65 +) were the most satisfied, with a mean satisfaction of 7.5–7.6, followed by the youngest (16–24-year-olds), rating on average their satisfaction at 7.2, in 2013. There could be several influencing factors behind these differentials across age groups. For the younger (16–24) and elderly (as from 65), the amount of free time could be a positive factor for the time use satisfaction, as they are not yet or no longer at work, and do not have dependent children either. The working age population, meaning those aged 50–64 (6.7), and even more those aged 25–34 (6.3) and 35–49 (6.2) had the lowest average satisfaction with time use. In particular for the last two age groups, high amounts of unpaid work (spent on childcare and housework) and sometimes less financial resources could reduce their opportunities to engage in cultural or social/leisure activities, hence decreasing their satisfaction with time use. Amongst the active age groups, those being 50–64 recorded a higher mean, probably thanks to a better established career and less childcare responsibilities that granted a higher budget of both money and time for 'recreational' activities.

Figure 6: Satisfaction with time use, by age group, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data code: ilc_pw01)

Modest gender effect on satisfaction with time use

Figure 7 indicates a very slight gender effect on satisfaction with time use, with a mean at 6.8 for men and 6.7 for women. The explanation might be that although women were more often working part-time than men ([24]), unpaid work, linked to time spent on household duties and caring for children, was still to a large extent undertaken by them. This so-called 'double shift' tends to limit their free time ([25]), explaining their slightly higher share of reported low satisfaction (28.7 % versus 27.5 % for men).

The income situation had a minor impact on satisfaction with time use

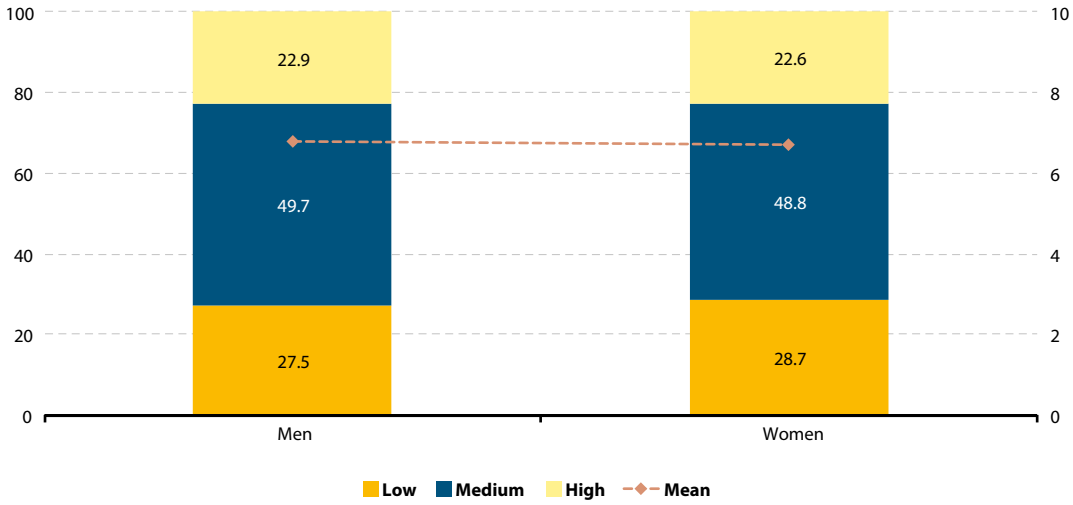
As can be seen in Figure 8, the relation between income level (measured through the income tercile a person belongs to on the basis of the distribution at the country level) and satisfaction was quite limited.

Having a better financial situation did not grant people a distinctively higher satisfaction with their time use. People in the top tercile averaged 6.8, the same as those in the second tercile and only slightly higher than those in the bottom one, with a mean of 6.6. Major differences were seen in the uneven distribution of people with a low satisfaction level, who were less present amongst those in the top tercile (26.6 %), than amongst those in the bottom tercile (30.4 %).

There were important differences in income levels at country level ([26]) and the way in which they translated into satisfaction with time use.

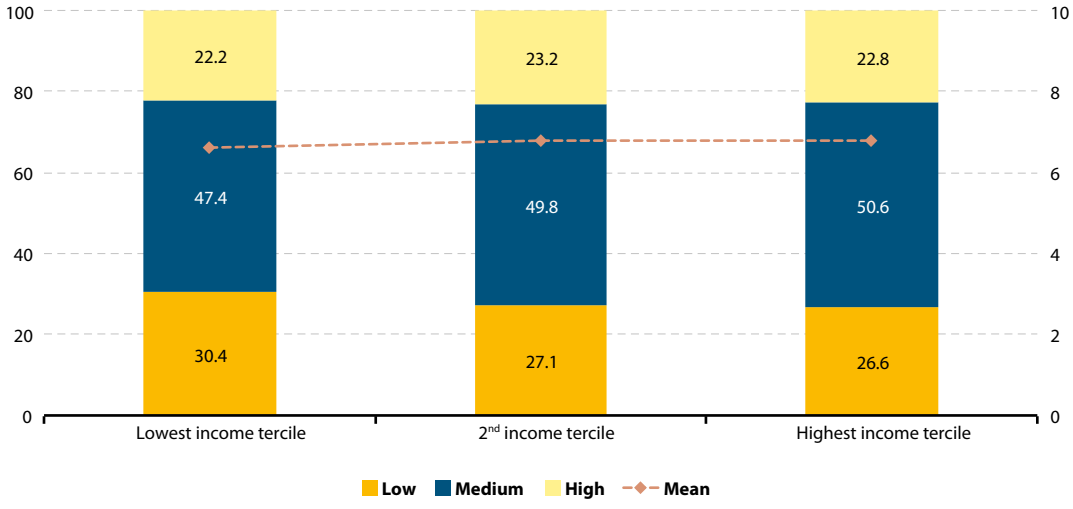
([24]) Around 9 % of men versus 32 % of women were part-time workers amongst total employment of the 15–64 age group. *Source*: Eurostat, EU-LFS (lfsq_eppga).
([25]) EU-27 (2005). *Source*: Eurostat, *Reconciliation between work, private and family life in the European Union* (2009), p. 46; Eurofound, European Working Conditions Surveys — EWCS).
([26]) See chapter 1 'Material living conditions'.

Figure 7: Satisfaction with time use, by sex, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



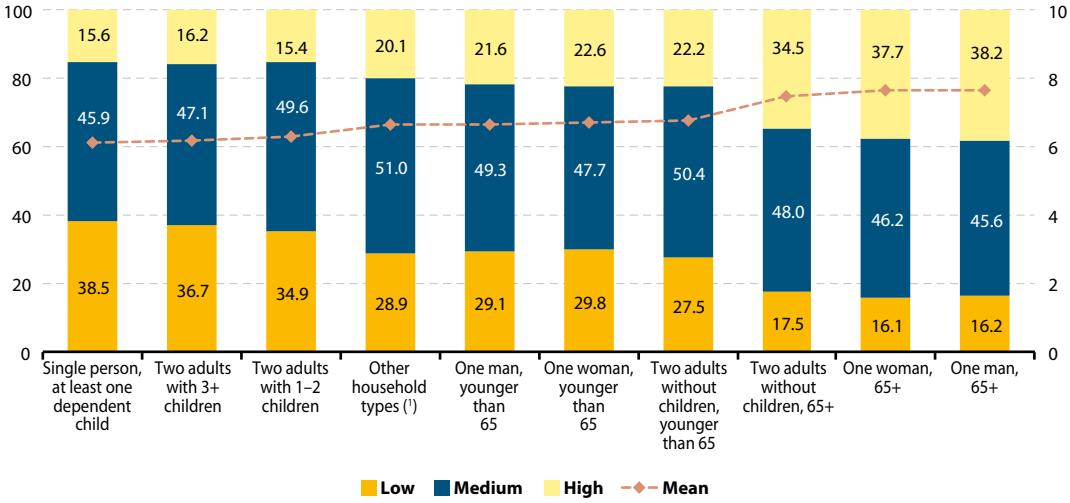
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 8: Satisfaction with time use, by income tercile, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

Figure 9: Satisfaction with time use, by household type, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other household types' refers to 3 or more adults with and without dependent children.
Source: Eurostat (EU-SILC)

Older households without children were the most satisfied with their time use

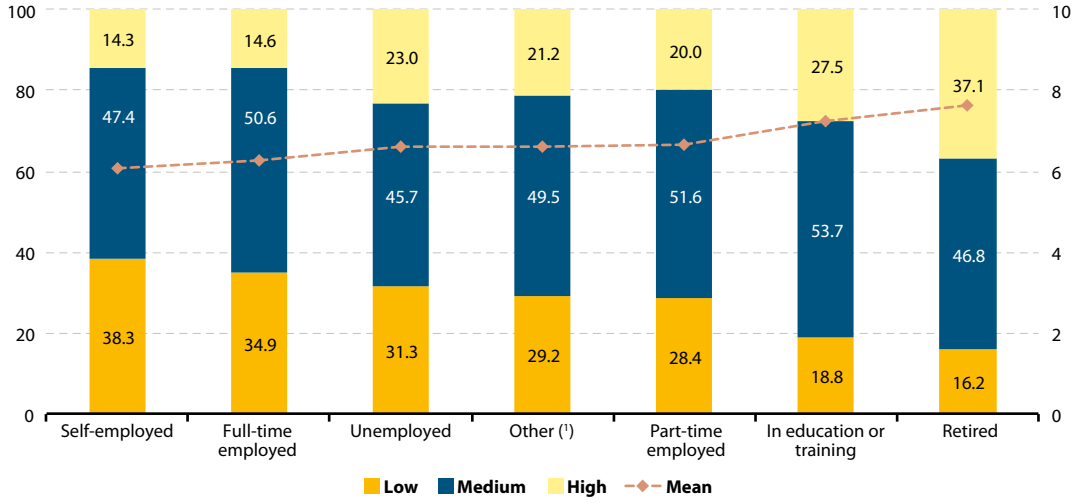
Figure 9 shows that the older households that have most probably exited the labour market and do not have dependent children either, had the highest mean satisfaction with their time use, at 7.7 for both single men and women aged over 65 and 7.5 for two adults of the same age group. At the other end of the scale, households with children, whatever their composition, were the least satisfied, with means comprised between 6.1 and 6.3. The least satisfied in 2013 were single parents, who were under high time pressure. In between, younger households without children had an average satisfaction with time use of about 6.7–6.8.

Satisfaction with time use varied depending on the labour status

Figure 10 highlights quite distinct satisfaction patterns across classes of labour status.

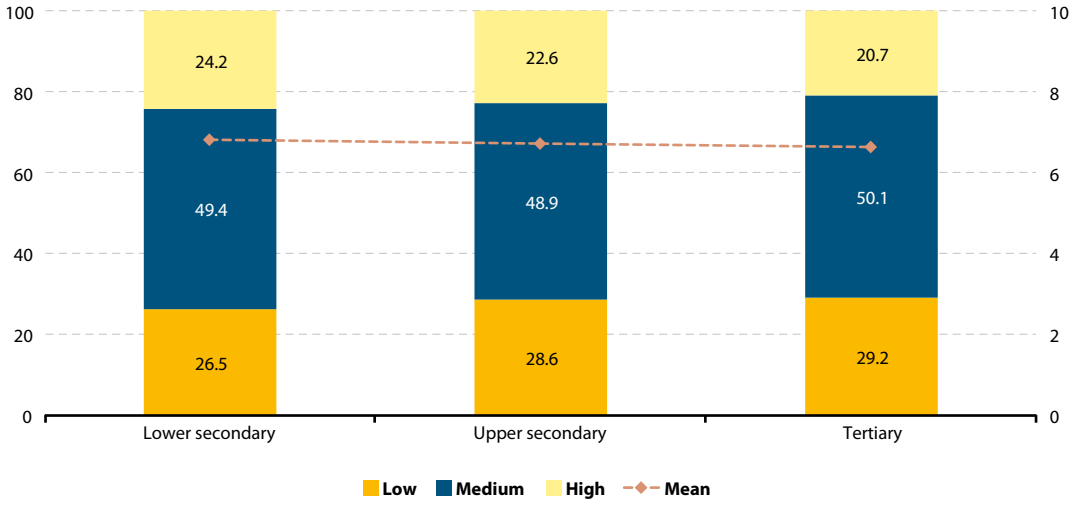
In terms of time availability, retired people, those in training or education, part-time employees and the unemployed had a greater satisfaction with time use than people in the other two categories (i.e. full-time employees and self-employed persons). The lack of childcare responsibilities probably also played a role, as retirees and students had a higher satisfaction with time use than the unemployed and part-time employees.

Figure 10: Satisfaction with the time use, by economic status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other' includes people permanently disable/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

Figure 11: Satisfaction with time use, by educational attainment, EU-28, 2013 (1)
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) Lower secondary: pre-primary, primary and lower secondary education (ISCED levels 0–2); Upper secondary: upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4); tertiary: first and second stage of tertiary education (ISCED levels 5 and 6).
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

The effect of education on satisfaction with time use was weak

There was a weak connection between educational attainment and satisfaction with time use as indicated in Figure 11. With a mean of 6.8, the least educated were more satisfied with their time use than people in the groups of more educated people (6.7 amongst upper secondary and 6.6 amongst tertiary education holders). This finding was a bit unexpected. Education being related to income levels, it was however also associated with more demanding jobs, involving higher levels of responsibilities, leaving little time for private life and entertainment for the workers concerned.

This pattern was mirrored in the levels of satisfaction with time use recorded. Hence, the highest share of people with a low satisfaction and the smallest share of people with a high satisfaction were found amongst the tertiary graduates. This pattern was reversed for the people with lower levels of education.

How do some factors influence satisfaction with time use?

This section analyses how satisfaction with time use may vary at country level in parallel with the average amount of time which EU residents usually spend at work in a week ([27]) and the budget they devote to leisure as a percentage of the total ([28]).

Available figures show that, in 2013, EU residents did not rate their time use very positively, at 6.7 (see Figures 4 and 5), which was one of the lowest ratings amongst all satisfaction items. They were working on average 37.2 hours a week in their main job; persons in employment in the Netherlands had the shortest working hours (30.0 hours), while in Greece they were the longest (42.0 hours). The EU Member State in which households spent the largest part of their 2012 budget on recreational and cultural services was Malta (5.3 % of total household expenditure) which was about three times as much as in Luxembourg (1.8 %, the lowest).

The analysis below will show that EU Member States registering the highest shares of spending on leisure and the lowest working time did not systematically report the most positively on time use although there was a link between these two items and satisfaction with this domain.

Although these factors certainly played a role, other determining factors were cultural attitudes and traditions or the socio-economic context, which translate into higher or lower propensities to devote time (and money) on and to participate in out-of-work activities, hence influencing the degree of satisfaction with time use.

([27]) The number of hours actually/usually worked in the main job during the reference week includes all hours including extra hours, either paid or unpaid, but excludes the travel time between home and the place of work as well as the main meal breaks (normally taken at midday). Persons who have also worked at home during the reference period are asked to include the number of hours they have worked at home. Apprentices, trainees and other persons in vocational training are asked to exclude the time spent in school or other special training centres. Employed persons are persons aged 15 and over who performed work, even for just one hour per week, for pay, profit or family gain during the reference week or were not at work but had a job or business from which they were temporarily absent because of, for instance, illness, holidays, industrial dispute, and education or training.

([28]) Recreational and cultural services in total final consumption expenditure of households. Total final consumption expenditure is the sum of final consumption expenditure by all residential units. Final consumption expenditure (ESA95, 3.75–3.99) consists of expenditure incurred by residential institutional units on goods or services that are used for the direct satisfaction of the individual needs or wants or the collective needs of members of the community. Final consumption expenditure may take place on the domestic territory or abroad. In the system of national accounts, only the following sectors incur in final consumption: households, non-profit institutions serving households (NPISH) and general government. See Final consumption expenditure of households by consumption purpose — COICOP 3 digit — aggregates at current prices (nama_co3_c).

Table 1: Usual weekly hours of work in main job, expenditure on recreational and cultural services in total final consumption expenditure of households and mean satisfaction with time use reported by EU residents, by country, 2012

	Average time spent working in main job (employed persons aged 15 and over)	Recreational and cultural services in total final consumption expenditure of households (1)	Mean satisfaction with time use (respondents aged 16 and over)
	(weekly hours)	(%)	(scale from 0 to 10)
EU-28	37.2	3.3	6.7
Belgium	37.2	2.7	7.1
Bulgaria	40.7	3.1	5.7
Czech Republic	40.5	3.7	6.7
Denmark	33.6	3.9	7.8
Germany	35.3	3.3	6.5
Estonia	38.8	2.3	6.7
Ireland	35.4	3.5	6.9
Greece	42.0	2.3	6.1
Spain	38.0	3.5	6.6
France	37.5	2.9	6.9
Croatia	39.8	:	6.6
Italy	36.9	3.3	6.4
Cyprus	39.8	5.2	6.7
Latvia	38.8	3.3	7.1
Lithuania	38.1	2.0	6.8
Luxembourg	37.1	1.8	7.2
Hungary	39.5	3.6	6.3
Malta	38.4	5.3	6.6
Netherlands	30.0	2.6	7.5
Austria	37.1	4.1	7.3
Poland	40.7	3.2	6.8
Portugal	39.3	2.9	6.5
Romania	40.0	2.6	6.9
Slovenia	39.6	3.1	6.8
Slovakia	40.7	3.3	6.9
Finland	36.9	4.2	7.7
Sweden	36.3	4.3	7.3
United Kingdom	36.5	3.7	6.9
Iceland	39.5	3.4	7.4
Norway	33.7	3.4	7.2
Switzerland	35.1	:	7.0
Serbia	6.2	1.8	6.2

(1) Data from 2012 except for Lithuania (2009), Romania (2010), Bulgaria, Greece and Norway (all 2011). The EU-28 average hence excludes Lithuania, Romania, Bulgaria and Greece.

Source: Eurostat (EU-SILC)

Working time had a decreasing impact on average satisfaction with time use at country level

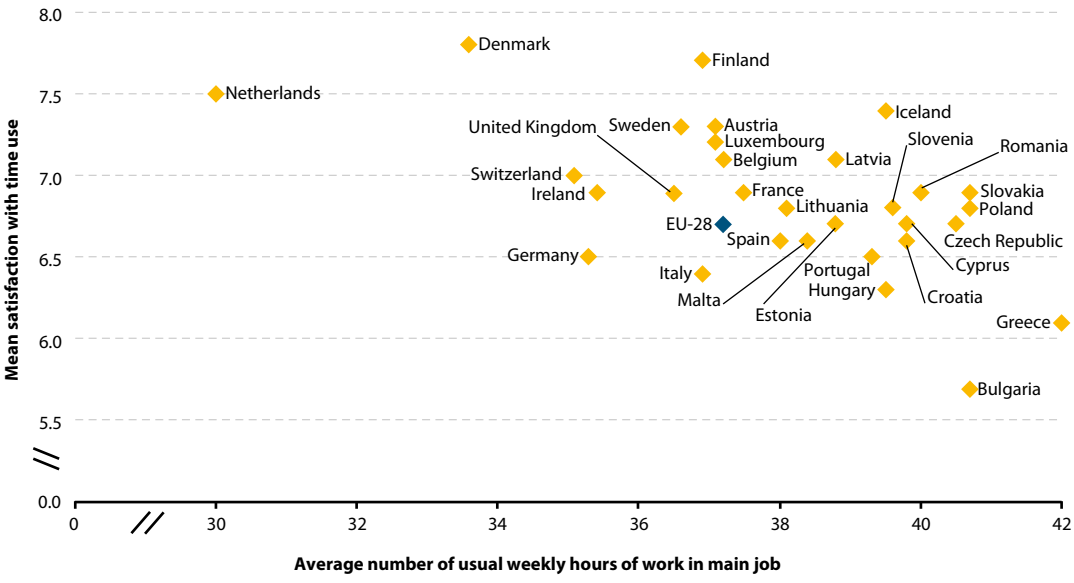
The average number of weekly hours spent at work impacted on the balance between work and private life and the amount of free time granted to workers, hence their opportunities for leisure activities, whichever they may be. Figure 12 indicates a clear link between satisfaction with time use and working time, which seems to have a declining effect on satisfaction. This type of link between the two items was the most visible in EU Member States such as Hungary, Portugal, Spain, Malta and Ireland (as well as Switzerland and Norway), which were almost aligned on a straight line passing through the EU average and joining the Netherlands and Greece. These last two EU Member States registered the highest and lowest numbers of usual working hours per week (30.0 versus 42.0 hours). Denmark, which surpassed the Netherlands on working time (33.6 hours per week), also exceeded it on satisfaction with time use (7.8, the highest rating). Although working a bit less than the Greek residents (40.7 hours), Bulgarian residents tended to be less satisfied (5.7 mean, the lowest).

In the other EU Member States, the connection can be observed as well albeit with diverse impacts of working time on satisfaction.

Loose relationship between spending on recreation and culture as a percentage of the total expenditure and satisfaction with time use

Household expenditure on leisure is expected to reflect cultural attitudes, the availability (supply) of leisure and cultural events, their price and the capacity to afford such spending in one's household budget. As it is a relative indicator (a percentage of the total spending,) it may be also be influenced by prices of other consumption items, especially amongst the constrained ones (housing and food).

Figure 12: Working time versus satisfaction with time use, by country, 2013
(number of hours worked by employed persons; mean rating by respondents aged 16 and over)

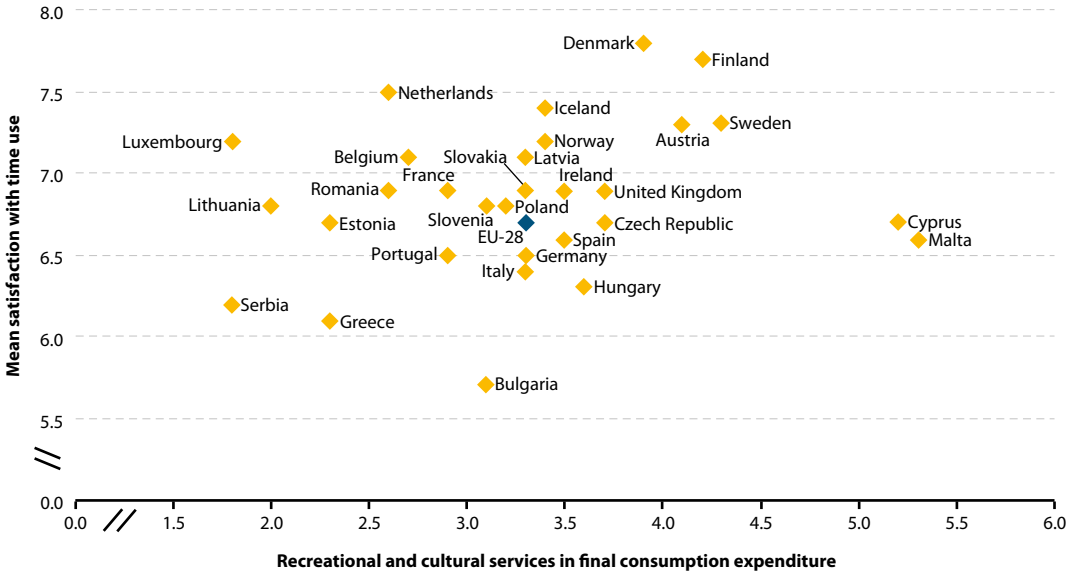


Source: Eurostat (online data codes: lfsa_ewhuis and ilc_pw01)

As shown in Figure 13, satisfaction with time use and spending on recreation and culture are not closely associated. EU Member States whose residents spent most on such budget items, such as Finland (4.2 %) and Denmark (3.9 %), also recorded the highest mean ratings of satisfaction with time use (7.7 and 7.8). The opposite was true in Bulgaria and Greece, where households were not devoting more than 3.1 % of their budget on recreation and where the average satisfaction with time use was the most modest, at 5.7 and 6.1 respectively. Several EU Member States were not following this pattern and no clear link could be established between the two items. This was the case for Luxembourg, whose residents were quite satisfied with their time use (7.2) despite spending the most moderately on leisure (1.8 %), and the Netherlands where a mere 2.6 % of the household budget was allocated to leisure but residents reported to be highly satisfied with time use (7.5 mean, one of the highest). Households in Cyprus and Malta, on the contrary, devoted quite an important proportion of their budget to leisure (over 5.0 %), but reported comparatively less positively on satisfaction with time use (with a mean of around 6.6–6.7).

Most other EU Member States showed a rather loose association between the two items. Several of them, such as Lithuania, Estonia, Romania, France and Belgium, reported more positively on satisfaction (with means comprised between 6.7 and 7.1) than what their households spent on leisure would potentially suggest (less than 3.0 % of their budget). In Hungary, where households had a higher share of leisure expenditure (3.6 %) than in the aforementioned EU Member States, residents rated their satisfaction with time use at only 6.3.

Figure 13: Recreational and cultural services in total final consumption expenditure versus satisfaction with time use, by country, 2013 (1)
(% of total household expenditure; mean rating by respondents aged 16 and over)



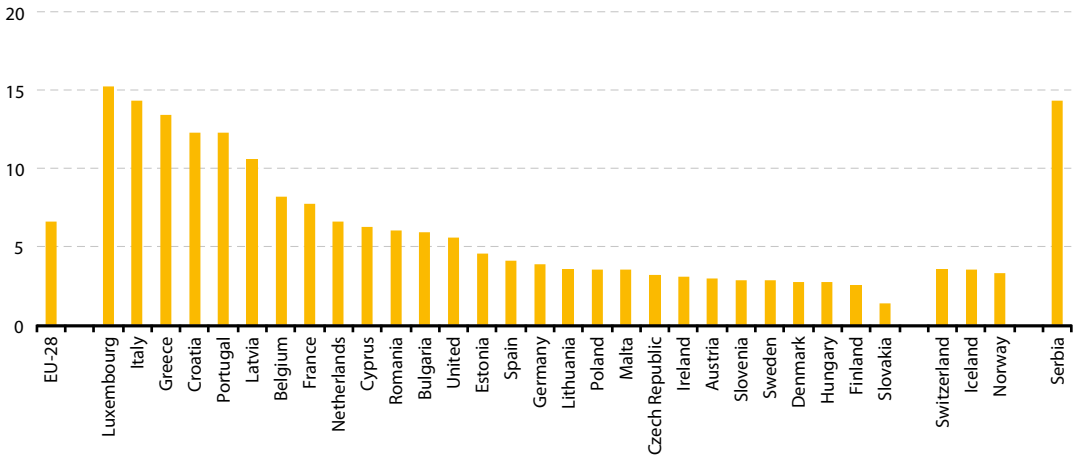
(1) Data from 2012 except for Lithuania (2009), Romania (2010), Bulgaria, Greece and Norway (all 2011). The EU-28 average hence excludes Lithuania, Romania, Bulgaria and Greece.
Source: Eurostat (online data codes: nama_co3_c and ilc_pw01)

Social interactions in the European Union

Social interactions are essential elements for an individual's well-being. Having more time to spend on social interactions (and leisure activities) is amongst the strongest drivers of well-being ([29]). Similarly, strong family bonds and social relationships (as well as being married) can protect against having a physical or mental health problem, illness or disability ([30]). Having relatives, friends or neighbours able to provide moral or other types of support enhances overall life satisfaction ([31]): about twice the proportion of people who can receive such support, reported high levels of life satisfaction compared with those who cannot. The section below will look at the ability of EU residents to rely on someone when they need help (social support).

Most EU residents reported that they could count on relatives, friends or neighbours in case of need in 2013. As illustrated in Figure 14, 6.7 % of the EU population declared not being able to rely on supportive relationships and a majority of EU Member States recorded shares below that level.

Figure 14: Not having anyone to rely on in case of need, by country, 2013
(% of population not having anyone)

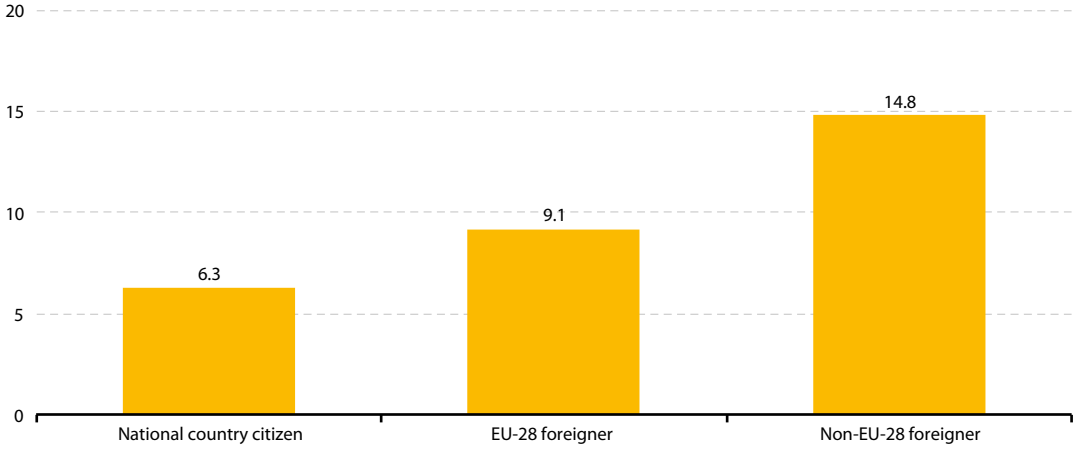


Source: Eurostat (online data code: ilc_pw06)

([29]) European Commission, Eurofound, *Quality of life in Europe, Subjective well-being, 3rd European quality of life survey* (2013), p. 78 and p. 94.
([30]) See previous footnote.
([31]) See chapter 9 'Overall life satisfaction'.

Even so, in a few EU Member States more than 10 % of the population declared not to have anyone to rely on in case of need (Latvia, Portugal, Croatia, Greece and Italy), a value that went up to 15 % in the case of Luxembourg. At the other end of the scale, Slovak and Finnish residents reported a widespread access to support (98.6 % and 97.5 % respectively). The reasons for these important gaps between EU Member States were probably more related to cultural factors or the structures of the population and the households than to economic factors such as income (Figure 20). The lack of social support was more prevalent amongst migrants, especially those coming from outside the EU. Hence, 6.3 % of national residents reported not having anyone to rely on in case of need, versus 9.1 % for foreigners coming from another EU Member State and 14.8 % for the non-EU foreigners (Figure 15).

Figure 15: Not having anyone to rely on in case of need, by citizenship, 2013
(% of population not having anyone)

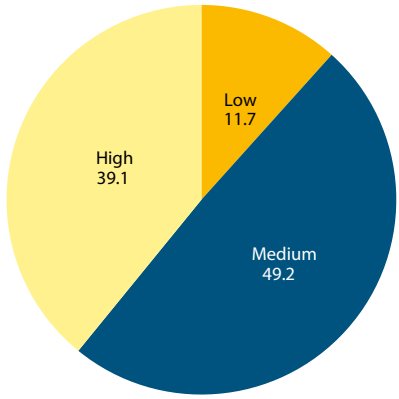


Source: Eurostat (EU-SILC)

Overall satisfaction with personal relationships

Social interactions contribute greatly to an individual's well-being and overall life satisfaction ([32]). In the EU as a whole, a majority of residents (49.2 %) reported a medium level of satisfaction with their personal relationships; 11.7 % declared to have a low level of satisfaction and 39.1 % a high level of satisfaction (Figure 16). On a scale of 0 to 10 (where 0 corresponds to the lowest and 10 to the highest grade of satisfaction ([33])), this represents a mean satisfaction of 7.8, the highest rating registered across all of the life domains for which satisfaction is being measured on the same scale.

Figure 16: Satisfaction with personal relationships, EU-28, 2013
(% of population by satisfaction level)



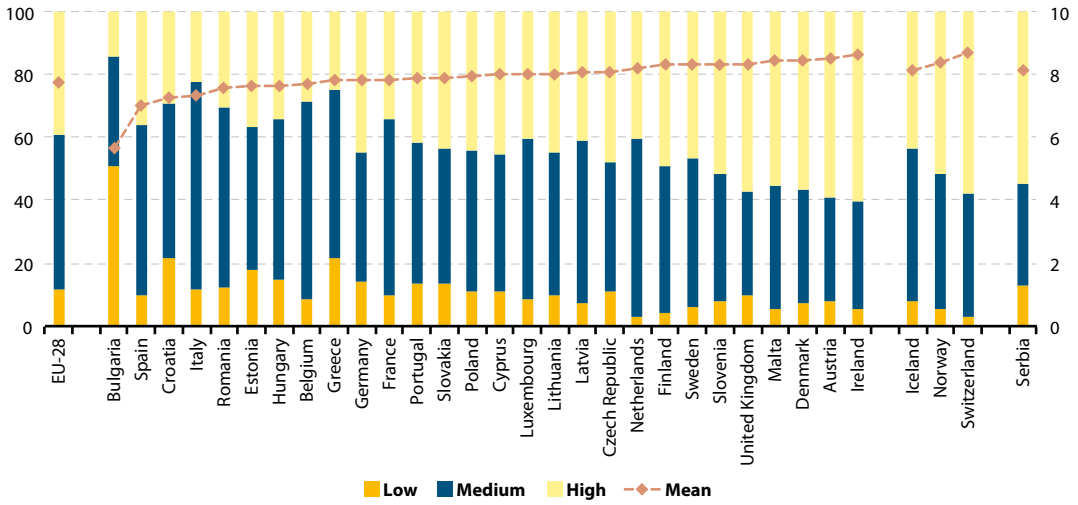
Source: Eurostat (online data code: ilc_pw01)

Personal relationships corresponded to the quality of life domain where EU residents reported on average the highest satisfaction level in 2013, namely 7.8 on a scale of 0 to 10.

A cross-country analysis illustrated in Figure 17 shows that Bulgarian residents on average assessed the quality of their relationships the most negatively (with a mean of 5.7) while the Irish assessed it the most positively (with a mean of 8.6). The Irish residents were followed very closely by the residents of Austria and Denmark, both at 8.5, and several other EU Member States from mainly eastern and northern parts of the EU, all at 8.0 or more. Bulgaria was also the country which appeared at the lower end of the scale on overall life satisfaction whereas the opposite was true for Austria and Denmark ([34]).

([32]) See chapter 9 'Overall life satisfaction'.
([33]) Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6–8 and high satisfaction to 9–10.
([34]) See chapter 9 'Overall life satisfaction'.

Figure 17: Satisfaction with personal relationships, by country, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Satisfaction with personal relationships by different socio-demographic characteristics

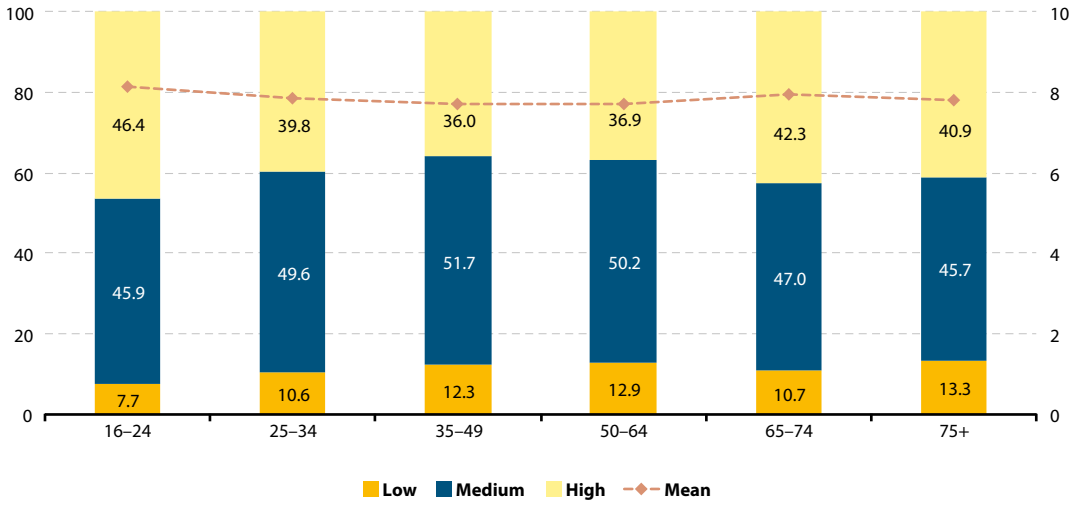
How was the socio-demographic background associated to satisfaction with personal relationships?

The next section examines how the level of satisfaction with personal relationships of EU residents varied for different socio-demographic groups such as age categories, sex, income terciles and others.

The younger and older populations were the most satisfied with relationships

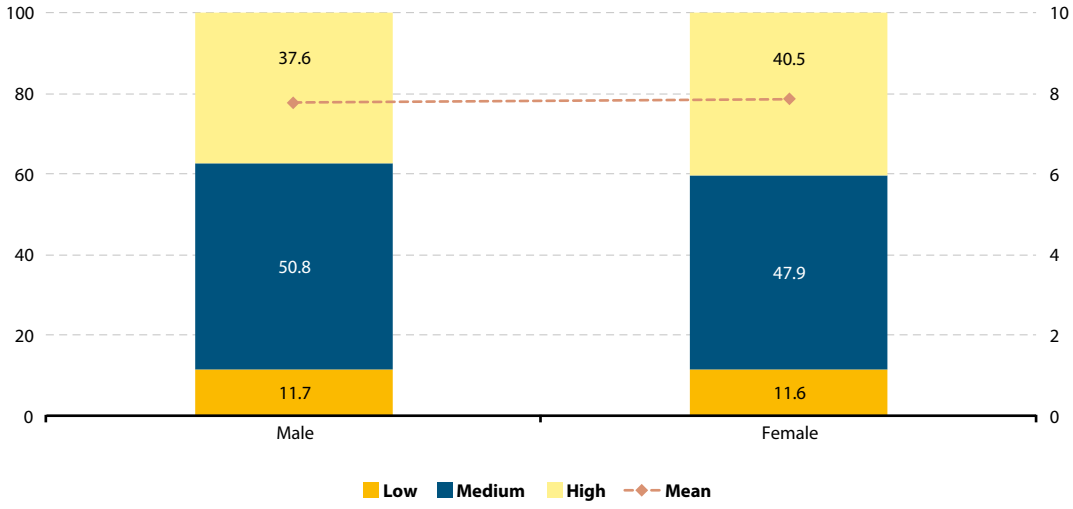
Figure 18 shows that, satisfaction with relationships and age were strongly linked. The average degree of satisfaction with one's personal relationships was highest amongst the younger generations (aged 16–24 and 25–34) with mean ratings of 8.1 and 7.9 respectively and amongst those aged over 65, with a mean rating of 8.0 (which declined to 7.8 as from the age of 75). In between, the working age population (aged 35–64, who often had dependent children registered a mean satisfaction of 7.7, which was lower than for the younger and older age groups. These two intermediate age groups (35–49 and 50–64), by spending a lot of time on the development of their career and on childcare, probably tended to have fewer opportunities to develop personal relationships outside the work and close family spheres, which might explain their slightly reduced satisfaction compared with the younger and older generations.

Figure 18: Satisfaction with personal relationships, by age group, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 19: Satisfaction with personal relationships, by sex, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

At EU level, 46 % of the young people aged 16–24 and 42 % of the people aged 65–74 were highly satisfied with their personal relationships in 2013.

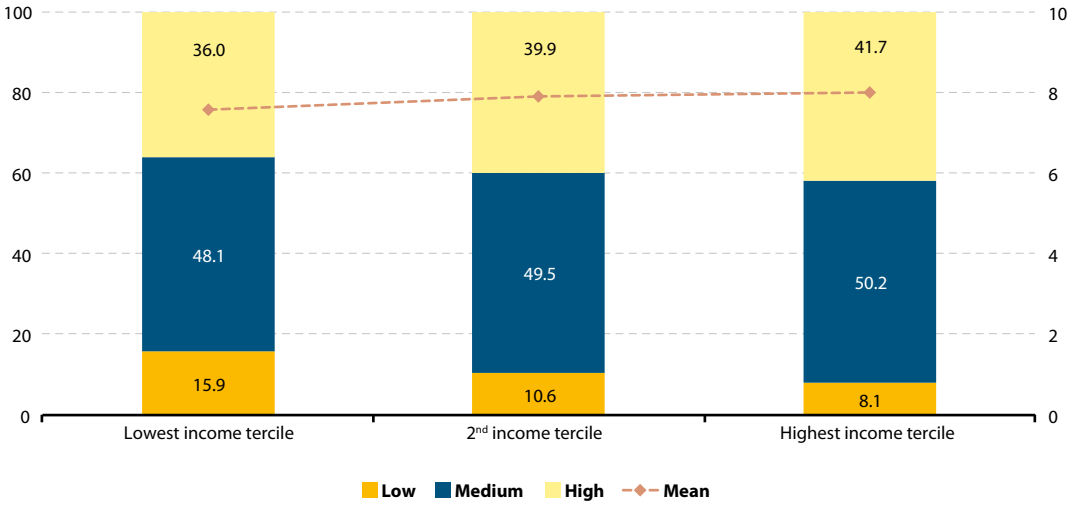
Slight gender effect on satisfaction with personal relationships

Figure 19 indicates a slight gender effect on satisfaction. Men's mean satisfaction with personal relationships stood at 7.8 while women's stood at 7.9. The slightly higher values for women, who were more satisfied with their personal relationships than men (40.5 % compared with 37.6 %), might have been related to a potentially higher investment in this area of their life.

Limited impact of income on satisfaction with personal relationships

As can be seen in Figure 20, the relation between income level (measured through the income tercile that the person belongs to on the basis of the distribution at the country level) and satisfaction was slightly stronger for personal relationships than for time use, although it remained quite limited. With a mean of 8.0, people in the top tercile were more satisfied with their relationships than people in the lowest and second tercile (by 0.4 and 0.1 points respectively). This is reflected in the shares of people reporting a low satisfaction which was 8.1 % in the highest tercile, against 10.6 % in the second tercile and 15.9 % in the lowest. These differences may be due to the fact that lower income renders maintaining social relations more difficult to a certain extent. The income levels associated with the terciles vary quite a lot across EU Member States ([35]).

Figure 20: Satisfaction with personal relationships, by income tercile, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

([35]) See chapter 1 'Material living conditions'.

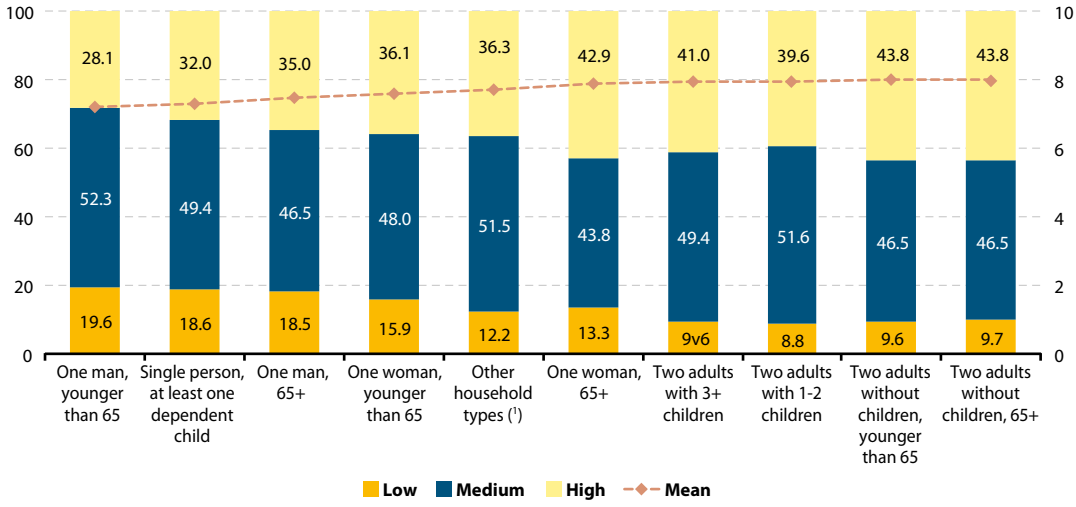
Two-adult households are the most satisfied with their personal relations

As highlighted in Figure 21 people who did not live in a one-person household reported a higher satisfaction with personal relationships than those who did.

Households consisting of two adults without children were slightly more satisfied with their personal relationships than couples with children (respectively 8.0 and 7.9 mean rating), but the difference was very small and the proportion of people with a low level of satisfaction was similar, even slightly lower for two adults with 1–2 children. Living in a two-adult household was associated with a higher satisfaction with personal relations, as opposed to living alone.

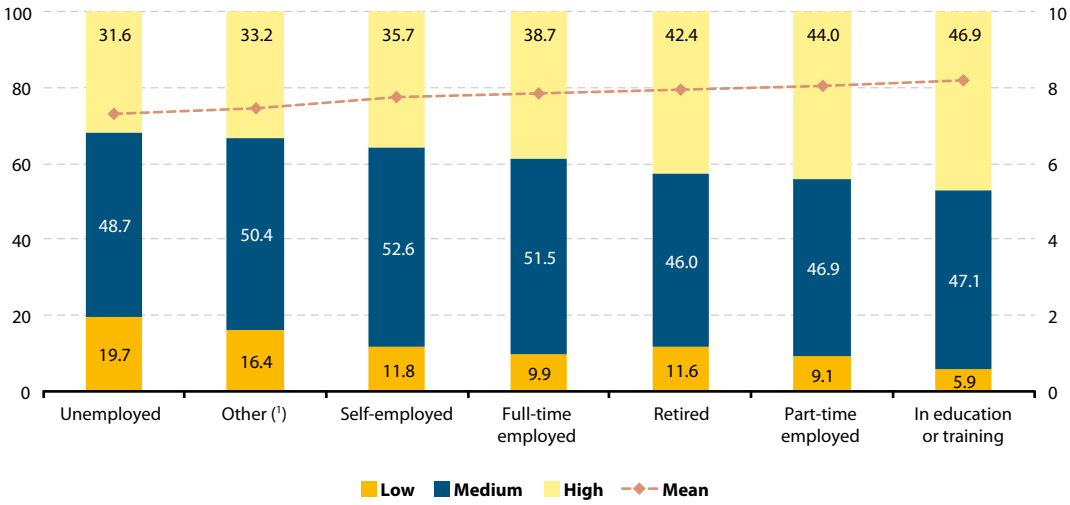
All one-person households, except older single women, were less satisfied with personal relations, with a mean rating between 7.2 for men under 65 years old and 7.6 for younger women living in a one-person household. What is important to note for one-person households is that men living by themselves were less satisfied with their personal relations than women in the same age group, and that those older than 65 were more satisfied than younger people of the same sex. Consequently, single women aged over 65 recorded the same average as couples with children (7.9). However, low levels of satisfaction were significantly more prominent amongst older women living by themselves compared with couples who had children (13.3 % versus 8.8 % and 9.6 %).

Figure 21: Satisfaction with personal relationships, by household type, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other household types' refers to 3 or more adults with and without dependent children.
Source: Eurostat (EU-SILC)

Figure 22: Satisfaction with personal relationships, by economic status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other' includes people permanently disable/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

The labour status has a quite distinct impact on satisfaction with personal relationships

Figure 22 highlights quite distinct satisfaction patterns across classes of labour status. The unemployed, who are often also socially excluded, reported the lowest average satisfaction with their relationships, at 7.3. They were followed by the self-employed at 7.7. The self-employed were quite often managing one-person enterprises, hence working on their own; moreover, they had a greater share of working time performed outside usual working hours, hence limiting their social and private life.

The next two categories consisted of full-time employed and retired people, both with a mean rating of 7.9. The higher rating of the full-time employed could be the result of their ability to build a network of interesting relationships through their work sphere, on the one hand, and on the other hand, to be socially-included in civil society through their job and income. For the retired, it may be their greater time availability that allows them to pursuit opportunities to develop and maintain personal relationships.

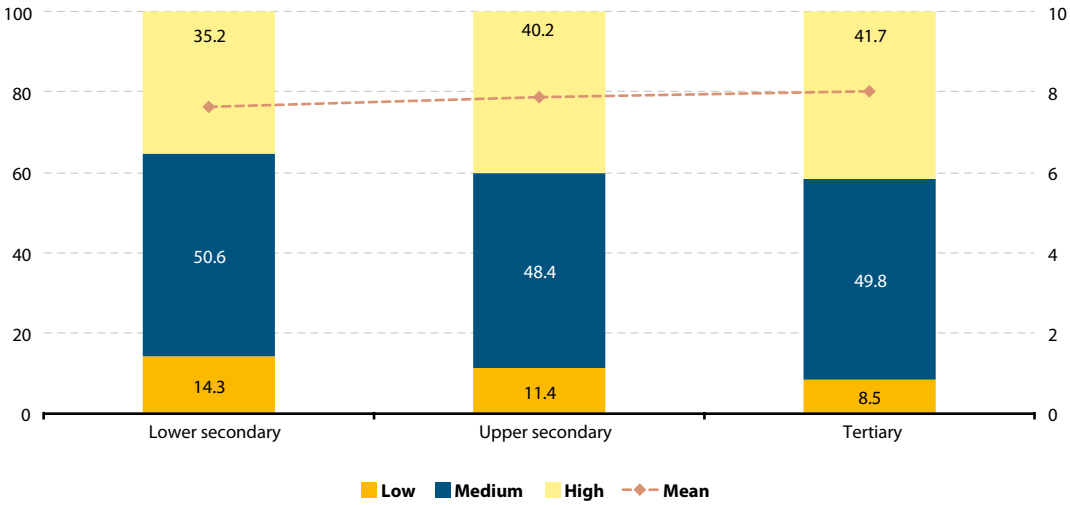
At the end of the scale, students and people in training (who do not participate in the labour market) appeared to have a slightly higher level of satisfaction than people working part-time.

Slight effect of education on satisfaction

A clear relation between educational attainment and satisfaction with one's personal relationships can be observed in Figure 23, although the effect is rather small.

The population with the lowest level of education level reported a mean satisfaction with their personal relationships at 7.6, which was 0.3 points less than for people with upper secondary and 0.4 points less than for those with tertiary education. This pattern was also reflected in the low and high levels of satisfaction with relationships recorded: only 8.5 % of the tertiary educated reported a low level of satisfaction with their personal relationships (as opposed to 14.3 % for those with the lowest level of education) and as many as 41.7 % of them reported a high satisfaction.

Figure 23: Satisfaction with personal relationships, by educational attainment, EU-28, 2013 ([1])
(left axis: % of population by satisfaction level; right axis: mean rating)



([1]) Lower secondary: pre-primary, primary and lower secondary education (ISCED levels 0–2); Upper secondary: upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4); Tertiary: first and second stage of tertiary education (ISCED levels 5 and 6).
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Social interactions and satisfaction with personal relationships

How was social support associated with satisfaction with personal relations?

The section below analyses how social interactions may translate to degrees of satisfaction of an individual with their personal relationships. Such interactions may take the form of the ability to get help from others, whether relatives, friends or neighbours, to talk with them about personal matters, or the trust one may place in others in general.

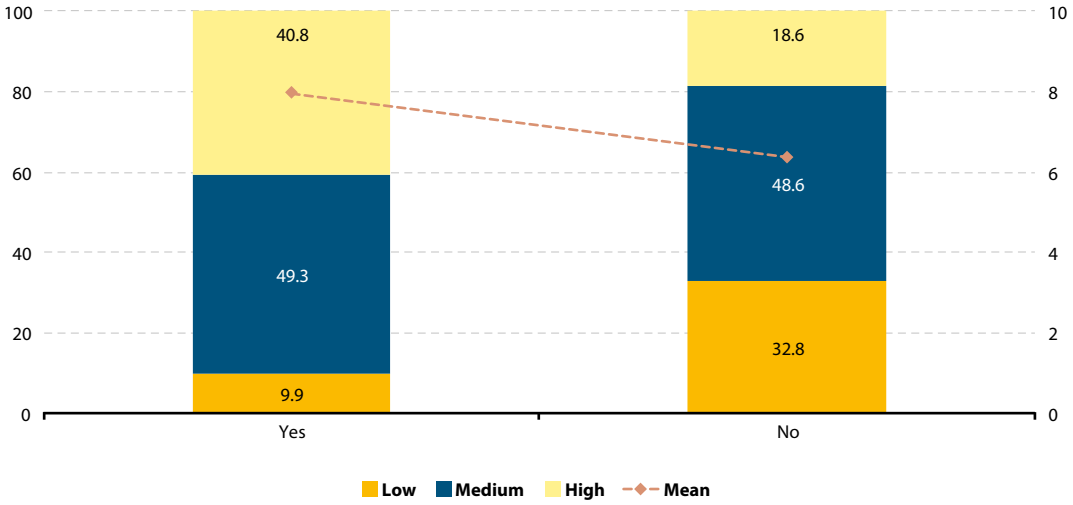
Satisfaction with personal relationships related strongly to the ability to ask for help from others…

In 2013 about 93.3 % of EU residents reported being able to ask for help from others whereas 6.7 % reported not being able to do so (Figure 15). This ability clearly influenced their level of satisfaction with their personal relationships which reached an average of 6.4 amongst those who could not benefit from this help and 7.9 amongst those who could, as illustrated in Figure 24. The shares of people reporting a low or high level of satisfaction reflect this pattern. Indeed, 32.8 % of those who could not get help declared to have a low satisfaction, which is three times as much as amongst those who could (9.9 %). For high satisfaction, it was 18.6 % for the former versus 40.8 % for the latter.

…and with the possibility of having someone to discuss personal matters

More than nine out of ten EU residents (92.9 %) reported having someone with whom they can discuss with about personal matters. Against this background, the lack of supportive relationships —

Figure 24: Satisfaction with personal relationships, by availability of social support in case of need, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

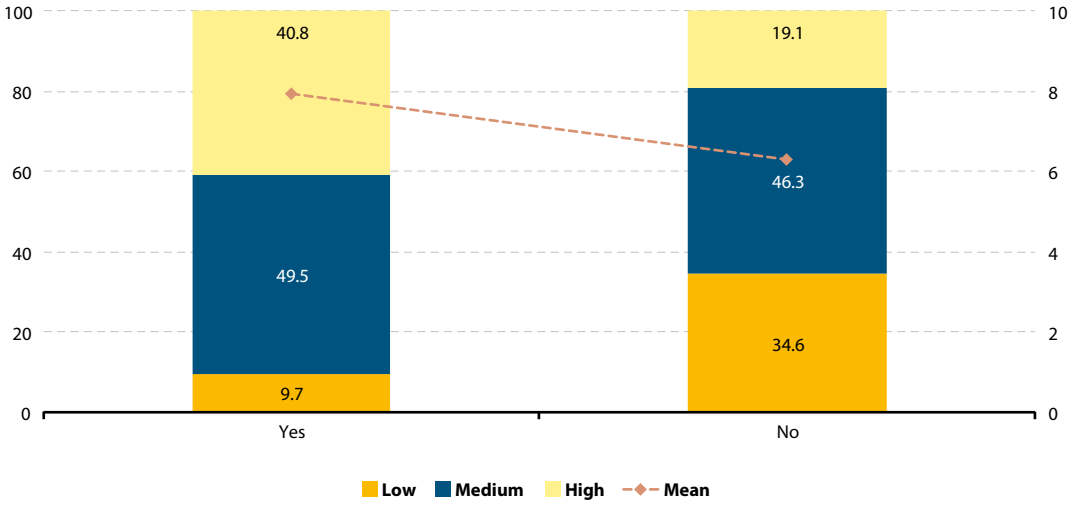
in the same way as what could be observed for the ability to ask for help — again seemed to translate negatively into people's satisfaction with their personal relationships, as those who did not have someone with whom they could discuss personal matters reported a mean satisfaction of just 6.3 (as opposed to 7.9 for those who did).

This finding is mirrored in the distribution of low and high levels of satisfaction. Furthermore, among those who did not have someone with whom to discuss personal matters, 34.6 % declared a low level of satisfaction with personal relationships, which was three times higher than the corresponding rate (9.7 %). of those who did. The latter were also twice as likely to report a high satisfaction level compared with the former (40.8 % versus 19.1 %).

Satisfaction with personal relationships increased in parallel with trust in others

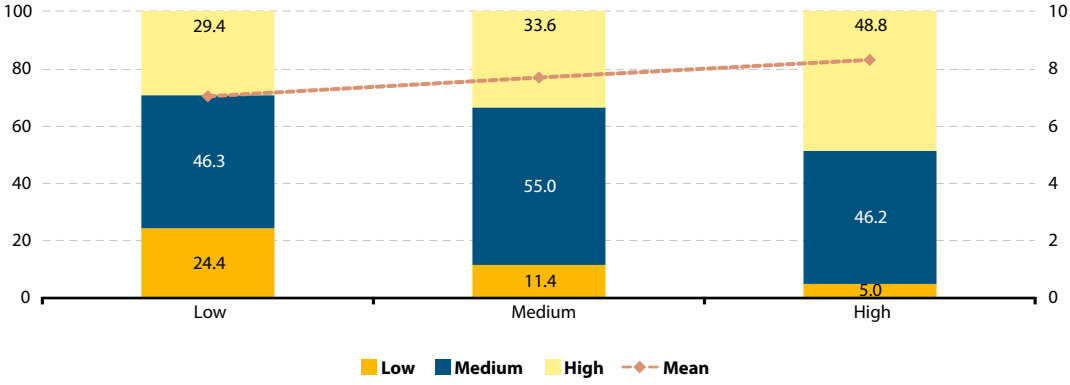
Figure 26 indicates that satisfaction with personal relationships increased together with trust in others. People who, for objective or subjective reasons, had little trust in others were also much less satisfied with their relationships. Their mean relationship satisfaction was 7.0, as compared with 7.7 amongst those who had a medium trust in others and 8.3 amongst those who tended to trust them fully. This was even more evident when analysing the share of people with a low level of satisfaction, which varied from 5.0 % for those with a high level of trust in others to 24.4 % for those with a low level of trust.

Figure 25: Satisfaction with personal relationships, by ability to discuss personal matters, EU-28, 2013 ([1])
(left axis: % of population by satisfaction level; right axis: mean rating)



([1]) The variable refers to the presence of at least one person the respondent can discuss personal matters with. The potential is of having somebody to discuss personal matters with whether the respondent needs it or not.
Source: Eurostat (EU-SILC)

Figure 26: Satisfaction with personal relationships, by level of trust in others, EU-28, 2013 ([1])
(left axis: % of population by satisfaction level; right axis: mean rating)



([1]) The variable is of a general nature. It does not refer to a specific group of people. A 0 rating means the respondent does not trust any other person; a 10 rating means that the respondent considers that most people can be trusted. Low trust refers to 0–4 ratings, medium trust to 5–6 and high trust to 7–10. Thresholds differ from those taken the satisfaction items as the same distributional approach was followed, with the aim of grouping 20 % the EU population into the 'low' category, 60 % into the 'medium' one and the remaining 20 % into the 'high' category. Trust is different in nature from the satisfaction items as it refers to an external 'object', while the former items reflect one's personal sphere, and as such receives a lower rating.
Source: Eurostat (EU-SILC)

6

Economic and physical safety

Introduction

This chapter focuses on the sixth dimension of the '8+1' quality of life indicators framework, economic and physical safety. Security is a crucial aspect of citizens' lives. Being able to plan ahead and overcome a sudden deterioration in their economic and wider environment has an impact on their quality of life. Insecurity of any kind is a source of fear and worry which can have a negative impact on the general quality of life. It implies uncertainty regarding the future which may have a negative impact on the present. The economic crisis has shown how important economic safety is for the quality of life of Europeans, as the feeling of vulnerability can drastically reduce the sense of personal freedom.

For statistical purposes, it is useful to distinguish between two major categories: economic and physical safety. Statistics on economic safety measure the risks that could potentially cause material living conditions to suddenly deteriorate, and a household's capacity to be protected from this. Statistics on physical safety focus on risks that might threaten physical safety. Both aspects will therefore be discussed separately in this chapter.

The concept of economic safety covers aspects such as wealth, debt, and job insecurity. In order to measure a household's wealth, indicators measuring the wealth accumulated by the household should be used. However, comparable data does not exist for all EU Member States. The ability to face unexpected expenses, complemented by having (or not having) arrears (1) (as an indicator of debt) is therefore used as a proxy variable.

Physical insecurity includes all the external factors that could potentially put the individual's physical integrity in danger. Criminal actions and accidents are only the most obvious examples and a significant proportion of people are confronted with violence in everyday life. Regarding the topic of 'physical personal safety', crime is measured using both administrative data on national homicide rates based on police records and EU-SILC survey data on the percentage of persons reporting crime, violence or vandalism in their neighbourhood. These are complemented by an indicator measuring feelings of safety. Both aspects — the subjective perception of insecurity and the objective lack of safety as measured by crime statistics — play an important role.

This analysis will first focus on physical safety before describing the subjective indicator regarding feelings of security, taking also into consideration how different socio-economic groups (such as age categories, gender and income terciles) evaluate their level of physical safety. Following this, the relationship between the assessment indicator and objective measurements belonging to the same domain will be examined. The second part focuses on economic security. As mentioned, the emphasis will be on the inability to face unexpected expenses (also analysed by socio-demographic breakdowns). However, the association of the indicators 'inability to face unexpected expenses' and 'being in arrears' with the satisfaction and financial situation of the household will also be looked into (2).

By analysing objective information together with subjective assessments, this chapter once more underlines that quality of life is influenced by both an individual's/household's objective security and the subjective perceptions of how safe people feel. This is particularly true for the dimension 'economic and physical safety' for which the subjective perception is especially relevant.

(1) People who are in arrears may not be able to pay their mortgage/rent payment, utility bills or hire purchase instalments on time because of financial reasons.
(2) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).

WHAT DO ECONOMIC AND PHYSICAL SAFETY ENTAIL?

There are different risks that may unexpectedly and adversely affect a household's material conditions or a person's physical safety. For the purposes of statistical measurement, two categories of safety were distinguished: economic and physical safety. Economic safety and vulnerability refer to economic aspects as expressed through wealth, debt, and income/job insecurity. Physical and personal safety covers the following aspects:

- the homicide rate;
- the self-reported existence of crime, violence or vandalism in one's area; and
- the perception of physical security.

Physical and economic safety in a quality of life perspective

46.4% of European residents reported feeling fairly safe when walking alone at night in 2013, while 28.4% reported feeling very safe and 25.2% very or a bit unsafe. More women than men feel unsafe and older EU residents report lower figures for physical safety than younger age groups. Europeans felt safer in less populated areas when walking alone in their neighbourhood at night.

Living in neighbourhoods that are exposed to crime, violence or vandalism generally decreases the feeling of physical safety. The perceived exposure to crime etc. in the neighbourhood is related to the subjective assessment of physical safety, both at country and individual level.

Among the EU population, 28% felt very safe when walking home at night, while 25% felt unsafe.

Regarding economic safety, young people aged 16–24 (46.2%) followed by those aged 25–34 (43.8%) recorded the highest rates of inability to face unexpected expenses. Overall, however, economic safety tends to increase with age in the EU though this varies significantly between countries. Living in single-parent or single-female households is associated with higher rates of inability to pay for unexpected expenses. Unsurprisingly, the highest shares of inability to pay for unexpected expenses were recorded amongst the unemployed population, while the lowest shares were observed for the self-employed. When looking at the relationship between the proportion of people with low financial satisfaction and the proportion of people unable to face unexpected expenses and of those in arrears, a clear positive association can be observed.

EU POLICIES RELATED TO ECONOMIC AND PHYSICAL SAFETY

The subjective perception of threat and the resulting feelings of insecurity undermine quality of life, in addition to experiencing these objective adverse conditions. To address this, the European Council endorsed the EU Internal Security Strategy ('Towards a European Security Model') at its meeting in March 2010. The strategy sets out the challenges, principles and guidelines for dealing with security threats related to organised crime, terrorism and natural- and man-made disasters. The Commission adopted a communication with proposed actions for implementing the strategy in 2011–14 ('The EU Internal Security Strategy in Action: Five steps towards a more secure Europe' COM final 0673/2010).

The concept of economic safety is mainly addressed by European policies on the safety net provided by the welfare state. The Social Protection Committee (SPC) is an EU advisory policy committee established by the Treaty on the Functioning of the EU (Article 160), and monitors the development of social protection policies in Member States.

Physical safety

How safe people are — how safe people feel

Physical safety refers to being protected from situations that put a person's physical security at risk, such as crimes, accidents or natural disasters. A perceived lack of physical safety may affect subjective well-being more than the actual effects of a physical threat. Homicide accounts only for a small percentage of all deaths, but its effect on people's emotional lives is very different from the effect of deaths related for instance to medical conditions. Consequently, the effects of those crimes that affect a person's physical safety are socially magnified and affect the quality of life not only of those close to the victim, but also of many others who then feel unsafe or afraid.

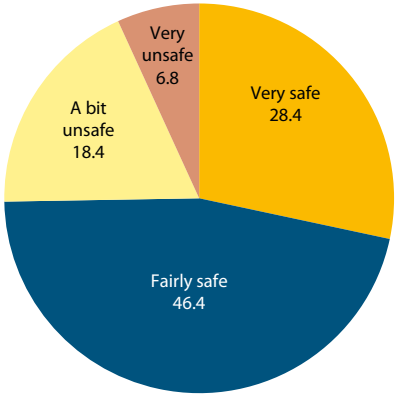
The quality of life framework provides indicators for both aspects (subjective and objective) of physical security. For instance the homicide rate gives an objective picture of physical integrity in society. This is the most harmonised EU indicator on crime available. However, homicide is a rare event and as such it needs to be complemented by further information concerning other types of crime which are more frequent. Since police records for other crimes have not been adequately harmonised up to now, EU-SILC is used as a source to provide information on crime, violence or vandalism in the neighbourhood. The 'feelings of safety' indicator adds relevant information on perceived lack of safety in the neighbourhood.

Perceived physical safety of individuals

When asked how safe they felt when walking alone in their area at night, nearly half of EU residents aged 16 or more (46.4 %) replied 'fairly safe' in 2013. 28.4 % of them replied that they felt very safe, while 25.2 % replied that they felt a bit or very unsafe (Figure 1).

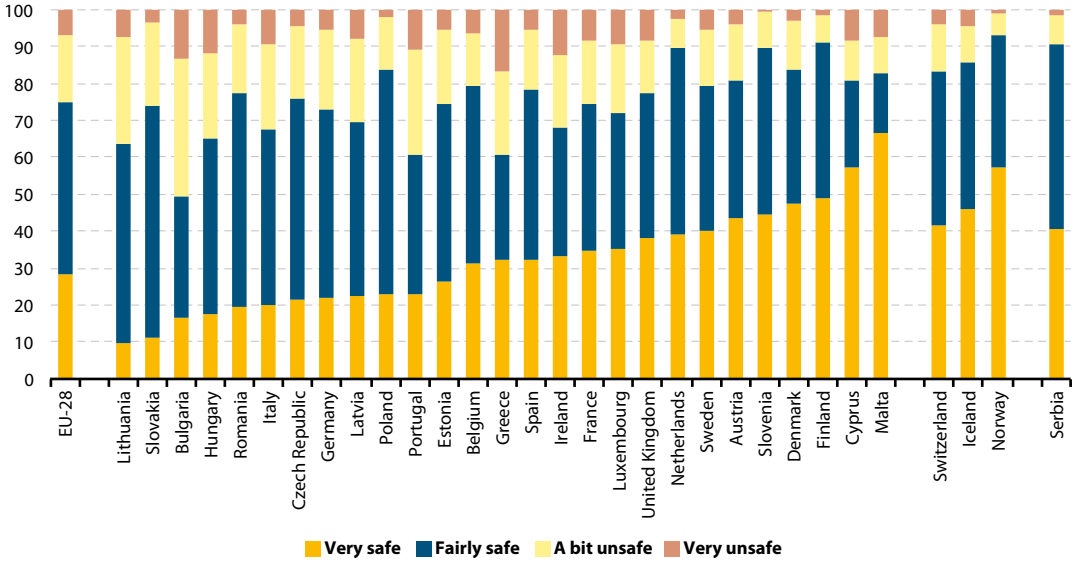
The highest proportions of people who felt very safe (Figure 2) were recorded in Malta and Cyprus (66.4 % and 57.1 % respectively) and at some distance, Finland (49.0 %), Denmark (47.7 %), Slovenia (44.7 %) and Austria (43.4 %). On the other hand, only 9.8 % of Lithuanian residents and 11.0 % of Slovak residents felt very safe in their area when walking alone at night. Bulgaria recorded the highest proportion of people rating their physical security at a low level (a bit or very unsafe) (78.5 %), followed by Greece (40.0 %) and Portugal (39.1 %).

Figure 1: Feelings of safety when walking alone at night, EU-28, 2013
(% of population by physical security level)



Source: Eurostat (EU-SILC)

Figure 2: Feelings of safety when walking alone at night, by country, 2013 (1)
(%)



(1) No data available for Croatia.
Source: Eurostat (EU-SILC)

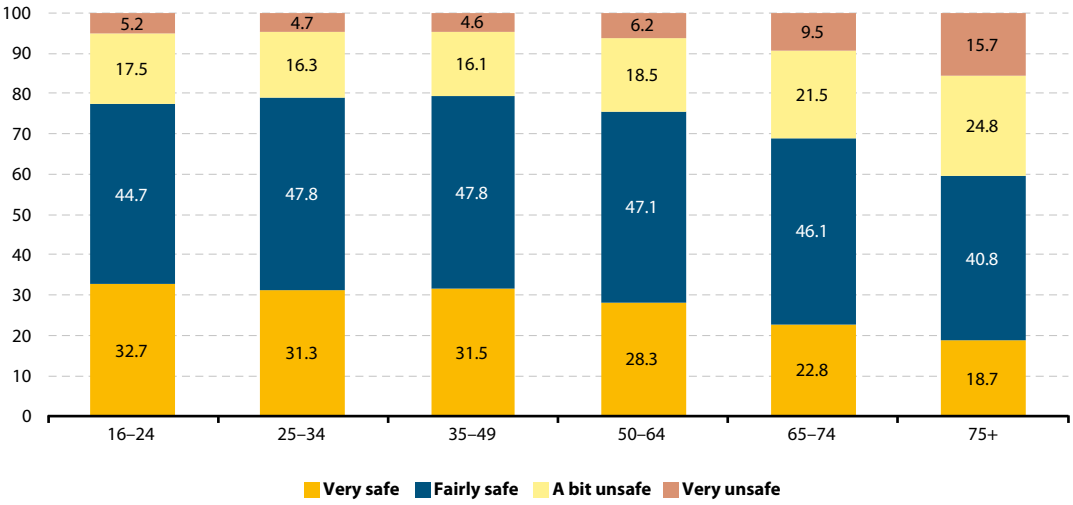
Does perceived physical security vary among socio-demographic groups?

Self-assessed physical safety, by its very nature, is subjective. It may be influenced by personal experiences, as well as opinions from others, which are processed by an individual relative to their own beliefs and attitudes. In the context of safety, the media also plays a crucial role in shaping personal views of safety in society. This perception may of course vary depending on a set of socio-demographic characteristics such as age, sex or income, but also on their exposure to crime, violence or vandalism, which may lead to different levels of awareness regarding the existence of this problem. The analysis below details how such factors relate to how European citizens perceive their physical safety.

Physical safety was highest among young and middle aged people and lowest for people aged 75+

As can be seen in Figure 3 physical security is partly associated with age. The illustration shows that there were no significant differences between the younger and middle age groups (16–24/25–34/35–49). However starting from the age of 50, perceived insecurity increases per age group. For the group 50–64 the proportion of people who felt a bit or very unsafe (24.7 %) was higher than but still comparable with that of the younger age groups. For those between 65 and 74 (31 %) and particularly for the 75+ group (40.5 %) the shares were significantly higher.

Figure 3: Feelings of safety when walking alone at night, by age group, EU-28, 2013
(%)

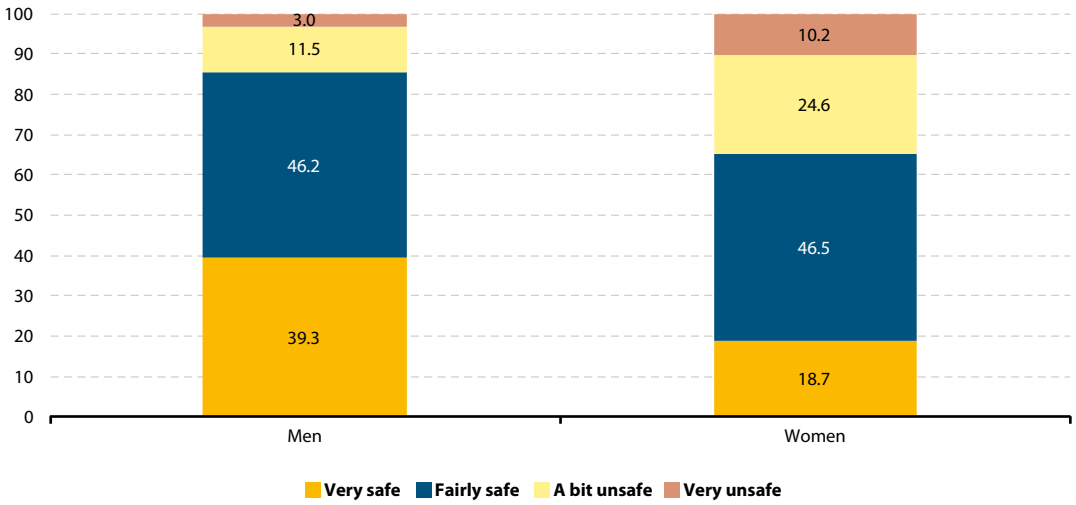


Source: Eurostat (EU-SILC)

Gender significantly affected the perception of physical security

As shown in Figure 4, there were significant differences of perceived physical safety between men and women. While 85.5 % of men reported feeling very or fairly safe, the same held true for only 65.2 % of the female population. On the other hand, 34.8 % of women felt a bit or very unsafe although the same was true for only 14.5 % of men. Again, these differences were observed throughout all countries.

Figure 4: Feelings of safety when walking alone at night, by sex, EU-28, 2013
(%)



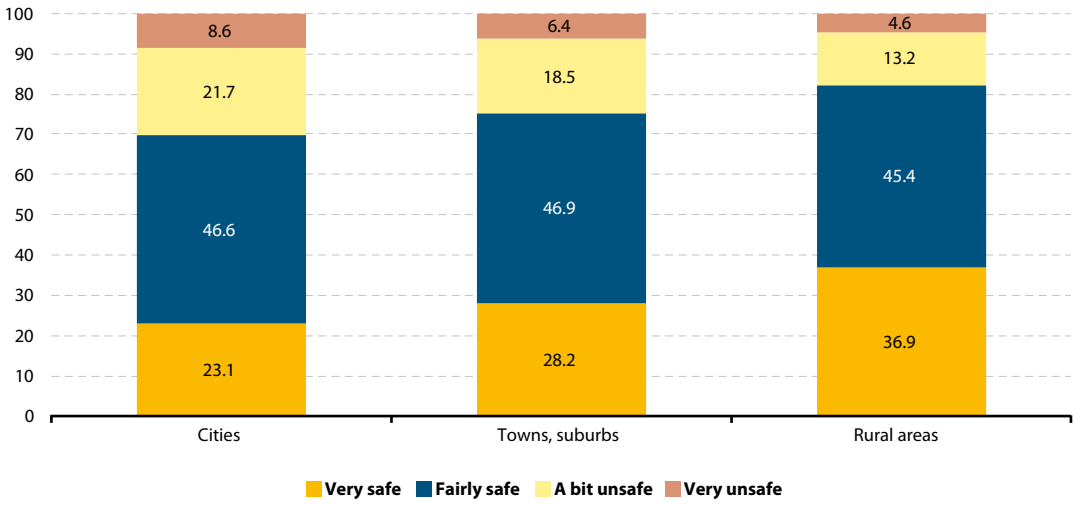
Source: Eurostat (EU-SILC)

The biggest differences were observed in Sweden, where 35.8 % of the female population and only 5.7 % of the male population reported feeling a bit or very unsafe. The differences were lowest in Bulgaria (45.4 % versus 54.8 %), Slovakia (21.4 % versus 30.3 %) and Slovenia (5.7 % versus 14.8 %).

People living in sparsely populated areas felt safer

Figure 5 illustrates perceptions of physical safety by degree of urbanisation. It can immediately be seen that there were only slight differences in the perception of physical safety between people in cities and suburbs/towns. Moreover, people in rural areas reported by far the highest proportion of people feeling very safe (36.9 %) compared to people in cities and towns/suburbs (23.1 % and 28.2 % respectively). Of EU residents living in urban areas, 30.3 % felt a bit or very unsafe, which was nearly twice the proportion in rural areas (17.8 %). These figures illustrate that the less an area was urbanised, the safer Europeans felt when walking alone in their neighbourhood at night.

Figure 5: Feelings of safety when walking alone at night, by degree of urbanisation, EU-28, 2013 (%)



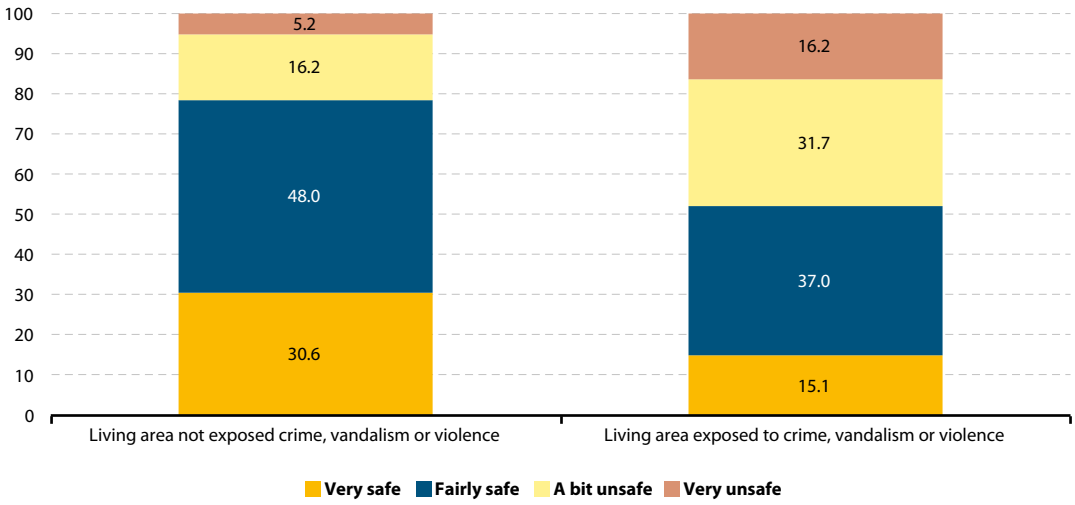
Source: Eurostat (EU-SILC)

Among the EU population living in rural areas, 37 % felt very safe when walking alone at night, while this share was 23 % and 28 % in cities and suburbs/towns respectively.

People who lived in neighbourhoods that were exposed to crime, violence or vandalism had a higher probability of feeling unsafe

The indicator of the presence of crime, violence or vandalism in the area is meant to assess if this kind of behaviour (which violates prevailing norms, specifically, cultural standards prescribing how humans ought to behave normally) is present in the neighbourhood in which the person lives, in a way that poses problems to the household. The data in Figure 6 shows that persons who reported the existence of these kinds of problems in the area in which they lived in tended to also feel less safe when walking alone at night. Almost half (47.9 %) of the population reporting the existence of crime in their area felt either very or a bit unsafe when walking alone in the dark, while the same was true for only 21.4 % of those who did not identify these kinds of problems in the vicinity of their dwelling. Clearly, facing crime-related problems in their area can have a negative impact on safety feelings.

Figure 6: Feelings of safety by self-reported characteristics of living area, EU-28, 2013
(%)



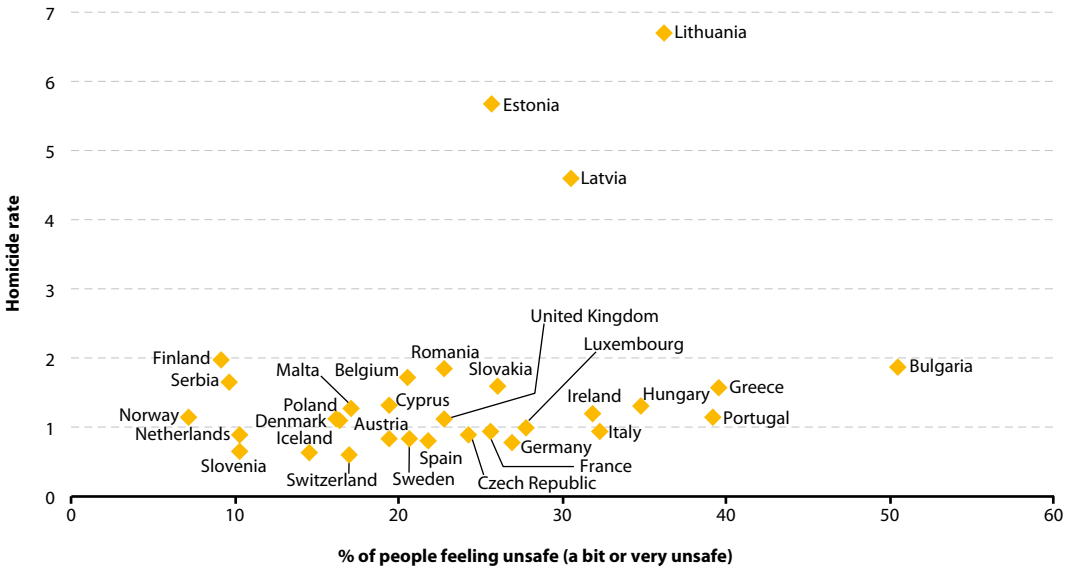
Source: Eurostat (EU-SILC)

Homicide figures are more comparable than other crime data available in Europe and are generally reported because of their seriousness. In addition, definitions vary less between countries than those for other types of crime. Hence, homicide data can be used as a proxy indicator of physical safety. However, there are limitations in using this indicator, as the data may to some extent depend on police procedures for declaring homicides and the promptness and quality of medical interventions.

For statistical purposes, homicide is defined as the intentional killing of a person, including murder, manslaughter, euthanasia and infanticide. It excludes death by dangerous driving, abortion and assisted suicide. Attempted homicide is also excluded. In contrast to other offences, the number of victims are counted and not the number of cases.

Figure 7 illustrates the association between the homicide rate and the proportion of people feeling a bit or very unsafe. Homicide rates were relatively low throughout the EU. Most country figures range between 0.6 and 2.0 homicides per 100 000, the exceptions being the Baltic Countries with homicide rates between 4.6 in Lithuania and 6.7 in Latvia. The proportion of people feeling unsafe, on the other hand, varied widely between countries (from 9.1 % in Finland to 50.6 % in Bulgaria). No real pattern emerged when examining the association of both items. The Baltic countries also recorded high proportions of people feeling unsafe, but shares were higher in Greece and Portugal, where homicide rates were comparable to the EU average. Finland, on the other hand, had the lowest proportion of perceived physical insecurity, but homicide rates were as high as in Bulgaria.

Figure 7: Average homicide rate (in 100 000), 2010–12, versus the percentage of people feeling a bit or very unsafe, by country, 2013
(y-axis: % of people feeling a bit or very unsafe, x-axis: number of homicides per 100 000 inhabitants)

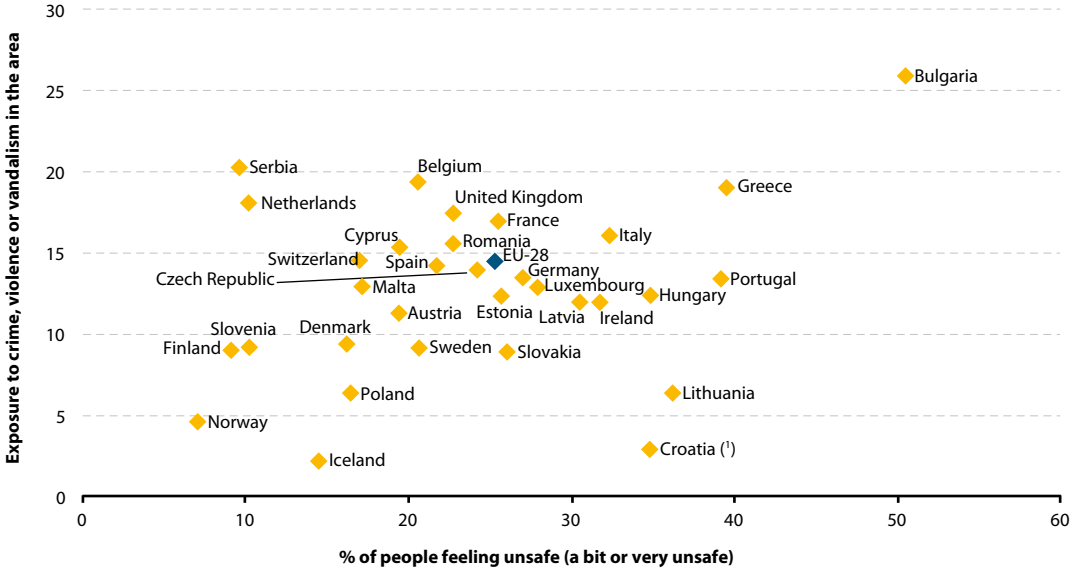


Source: Eurostat (Crime statistics and EU-SILC)

The relationship between the percentage of people reporting crime, violence or vandalism in their area and the proportion of people feeling a bit or very unsafe in the countries is shown in Figure 8. With the exception of Norway at one end (having the lowest proportion of people feeling a bit or very unsafe and one of the lowest rates of people reporting crime, vandalism or violence) and Bulgaria at the other (having the highest proportion of low perceived physical safety and of people reporting crime, vandalism or violence in their area), no association can be identified. On average in the EU-28, 25.3 % of the population reported a low level of physical safety, while 14.5 % declared being exposed to crime, violence or vandalism in the area. However, some countries showed quite a contradictory picture, such as Belgium or the Netherlands with comparatively high proportions of people reporting crime, vandalism or violence in the area, but only a small percentage of people feeling a bit or very unsafe (10.1 %). The contrary was true for Lithuania with a comparatively low percentage of people living in areas with crime, violence or vandalism (6.4 %), but a quite high proportion of people with low subjective physical security (36.2 %). Previous research suggests that a contrasting juxtaposition of crime rates from police registers and subjective perceptions of the exposure to crime has its limits, as population groups with low victimisation rates are particularly afraid of crime (the fear of victimisation paradox) ([3]).

([3]) e.g. Schwind, H.-D., *Kriminologie — eine praxisorientierte Einführung mit Beispielen*, (2009), Heidelberg: Kriminalistik Verlag or Herbst, S., *Untersuchungen zum Viktimisierungs-Furcht-Paradoxon*, (2011), Baden-Baden: Nomos.

Figure 8: Self-reported crime, violence or vandalism in the area and low safety feelings, by country, 2013
(y-axis: % of people feeling a bit or very unsafe, x-axis: % of people declaring being exposed to crime, violence or vandalism where they live)



(1) No data on physical security.
Source: Eurostat (online data code: mddw03)

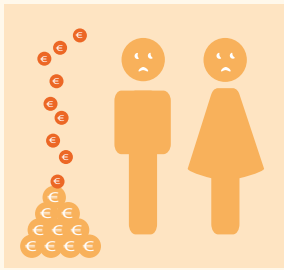
Economic safety

The capacity to face economic shocks

Economic safety embraces many aspects, both subjective and objective. Economic safety is distinguished from income poverty and material deprivation (which are indicators reflecting the current situation) and indicates the future. This means that economic safety has a profound psychological dimension, which is based on the current situation of a household/individual and the expectations on how the situation will evolve in the future.

In the following section, two aspects of economic safety are discussed: first, the distribution of economic risks as described by the ability of the household to face unexpected expenses (hereafter referred to as 'unexpected expenses') is examined. The respective question in EU-SILC is 'Can your household afford an unexpected required expense and pay through its own resources?', whereby an unexpected expense can refer for instance to surgery, funeral, major repair in the house, replacement of durables like washing machine, car and others. The term 'own resources' means that the household does not ask for financial help from others, debits its own account in the required period, and that the situation regarding potential debts is not deteriorated.

As illustrated in Figure 9, the EU's population had higher rates of people unable to pay for unexpected expenses in 2013 (39.4 %) than in 2008 (34.3 %). The proportion drastically went up in those countries that were most struck by the economic crisis such as Estonia (+ 22.3 percentage points), Greece (+ 20.5 percentage points), Lithuania (+ 18.1 percentage points), Portugal (+ 17 percentage points) and Ireland (+ 15.4 percentage points), while it significantly decreased in Malta (– 10.0 percentage points), Austria (– 5.5 percentage points) and Finland (– 2.2 percentage points).

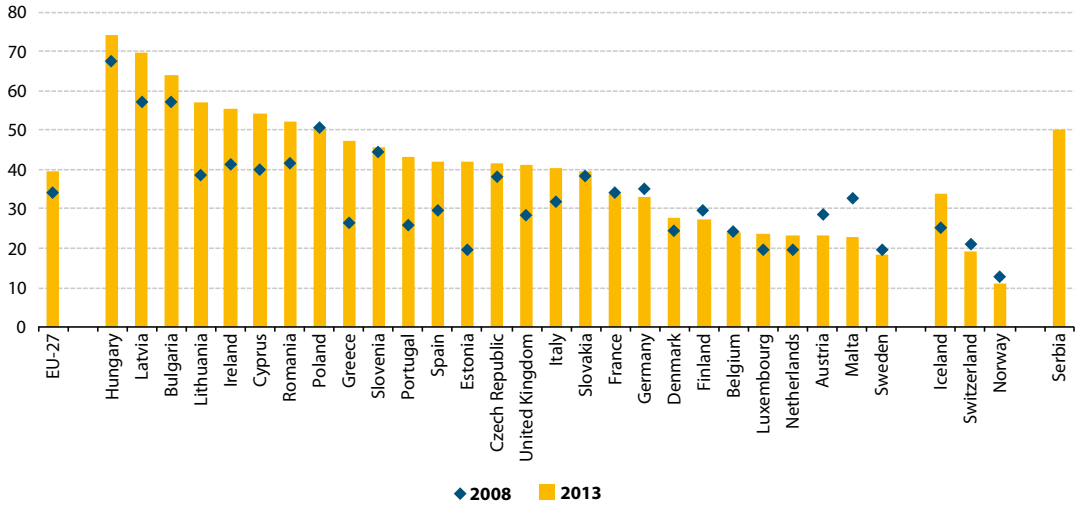


Almost 40 % of the EU population were unable to pay for unexpected expenses in 2013.

Another important element for the economic safety of an individual is job security. In the 'Quality of life Framework' this element is measured with an indicator regarding the likelihood of losing one's job. In a flexible labour market, the probability of high fluctuation is a factor that might also increase feelings of unsafety and thus have an impact on the evaluation of economic risks. In this context, EU-SILC provides information on labour market transitions, based on the longitudinal component of the survey. The same persons are interviewed for 4 years in a row, and this allows the calculation of an indicator regarding the percentage of persons who transitioned from employment to unemployment from year N–1 to year N.

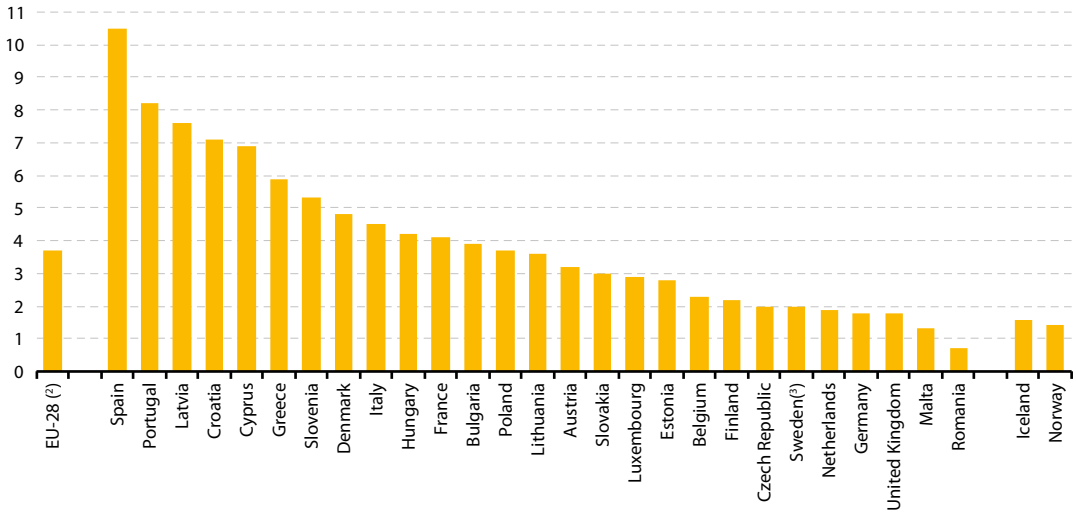
Figure 10 illustrates the percentage of the population who changed their labour market status from being employed in 2011 to being unemployed in 2012. The highest rates of people becoming unemployed were observed in Spain (10.5 %), Portugal (8.2 %), Latvia (7.6 %) and Croatia (7.1 %). At the other end of the spectrum were Romania (with a marginal change rate of about 0.7 %), Malta (1.3 %) and Germany (1.8 %).

Figure 9: Inability to face unexpected expenses, by country, 2008 and 2013
(% of population)



Source: Eurostat (online data code: ilc_mdes04)

Figure 10: Percentage of the population employed in 2011 who became unemployed in 2012 , by country ([1])
(% of population)



([1]) No data available for Ireland.
([2]) Estimated value.
([3]) 2011 data.
Source: Eurostat (online data code: ilc_lvhl30)

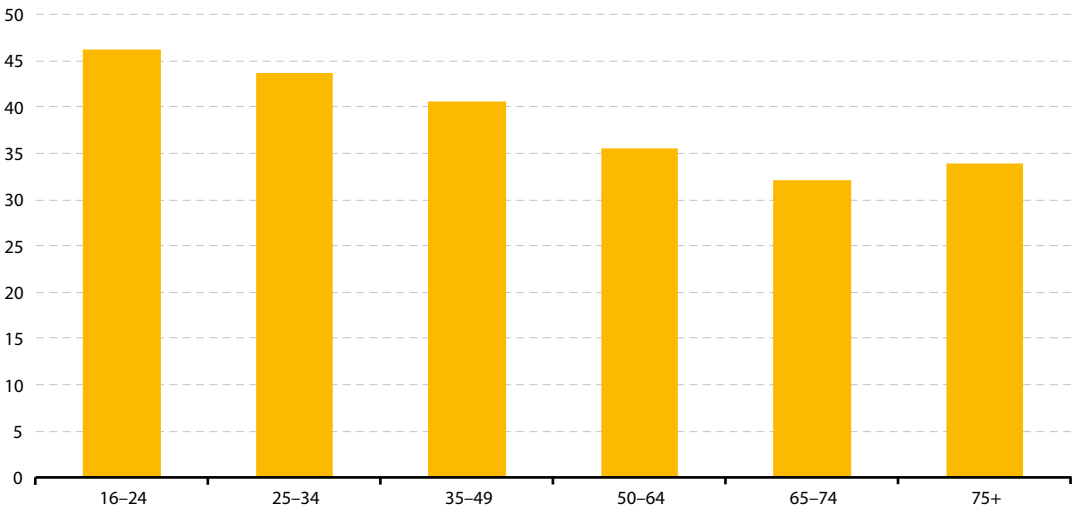
How does economic safety vary among socio-demographic groups?

Economic safety is unequally distributed among different socio-demographic groups. People with safe jobs and regular incomes will have a more positive view than unemployed people or people who cannot participate in the labour market due to illness or other limitations. One-person households with small pensions will have a higher probability of not being able to cope with economic risks than two person households with double income. In the following, the focus will be on those groups who are particularly exposed to economic risks in the EU. The analysis is performed mainly at the EU level, but country specificities will also be discussed.

The capacity to face unexpected expenses was lowest among middle-aged people and highest for people in the young and old age groups

As can be seen in Figure 11 the capacity to face 'unexpected expenses' increases with age. In particular, the age group 16–24 reported the highest proportion of people unable to face such expenses (46.2 %), while this was the case for 32.2 % of people in the age group 65–74. The proportion of the 75+ in this situation was slightly higher than the age group 65–74, which might be associated with a high proportion of single-female households in this age group ([4]) living from a widow or minimum pension and thus reflects a typical cohort effect ([5]). In general it can be said that economic safety (measured by the ability to face 'unexpected expenses') increases with age, except for the age group 75+, and is highest for those being 65–74 (though still 35.8 % within this age group are at risk when faced with unexpected expenses).

Figure 11: Inability to face unexpected expenses, EU-28, 2013
(% of population)

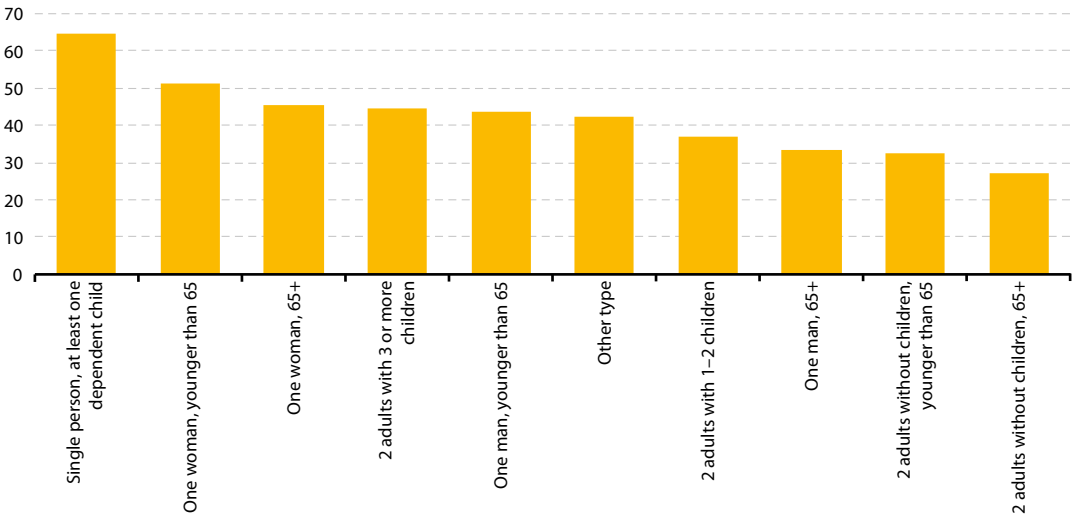


Source: Eurostat (EU-SILC)

([4]) 22.3 % of people aged 65+ or older are female single-households (for the group 75+ the proportion is even higher).
([5]) It is a cohort or generation effect because many women of this age groups lived in a male bread-winning household with one income and are now widows who live on minimum pensions.

The pattern of this age-specific shape is however not the same for all EU Member States. In the Nordic EU Member States (i.e. Denmark, Finland and Sweden) the proportion of people being incapable of facing unexpected expenses decreases with age at a more pronounced rate than on average in the EU, although there is a very slight increase in the oldest age group. However, in Belgium, Germany and the Netherlands the risks are highest in the middle aged groups 25–34 and 35–49. In the southern EU Member States Greece, Italy, Spain and Portugal proportions are highest amongst the youngest and oldest age groups. In Bulgaria and to some extent Romania, the inability to face unexpected expenses increases with age. Finally, the inability to face unexpected expenses is more or less evenly distributed among the age groups in Croatia (with a slight u-tendency), Poland and Slovenia as well as in the Baltic countries.

Figure 12: Inability to face unexpected expenses, by household type, EU-28, 2013
(% of population)



Source: Eurostat (EU-SILC)

Economic safety was highest among couples older than 65 without children and lowest for one-parent households

Household composition has an important impact on how economic risks are spread as is shown in Figure 12. Generally, one-person households had higher risks than two-person households but with some differences across sub-groups. The lack of safety was highest for single-person households with children (64.5% as EU-28 average, varying from 38.9% in the Netherlands to 89.9% in Hungary).

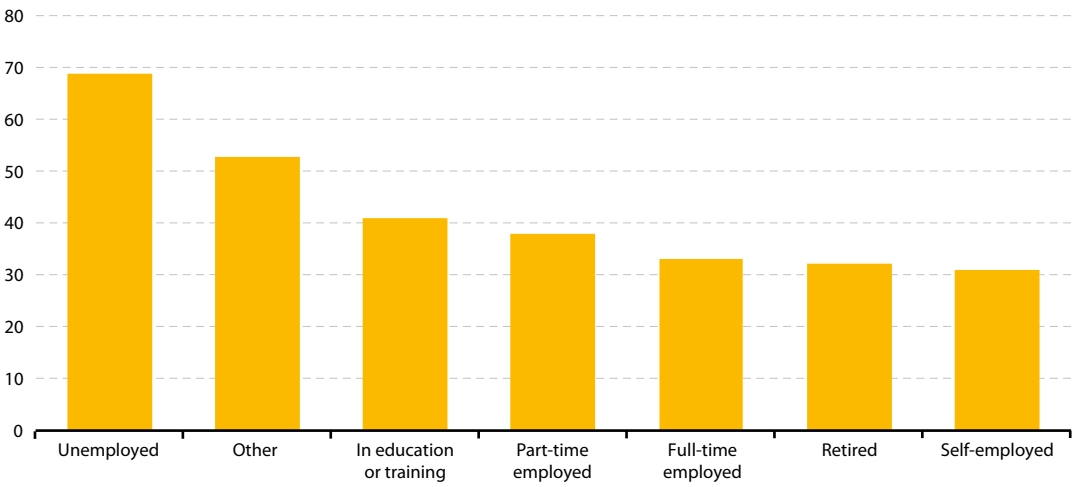
Additionally more than half of the single-female households reported being unable to face unexpected expenses (45.6 % for age group 65+ and 51.3 % for age group <65). The lowest proportions were observed for two adult households aged 65+ (27.3 %) and younger than 65 (32.6 %).

Reasons for this distribution can be seen in the precarious situation of single-adult households with children, where one person alone is responsible for both household income and care-giving responsibilities. Many single parents therefore have an even stronger economic pressure. Older 2 adult households on the other hand, who have already paid their credit liabilities and in many cases live in owned apartments or houses might be dependent on low pensions as well. The difference is, however, that they can count on a fixed income and/or wealth (which on average is highest in older ages) and are thus in a better position to cope with economic risks.

Highest proportion of persons unable to pay for unexpected expenses among unemployed people, lowest for the self-employed

As can be seen in Figure 13, it is of interest that Europeans who are self-employed showed the lowest proportion of inability to face unexpected expenses (30.8 %) as this group is often confronted with entrepreneurial risk and uncertainty. However, it might also be that this group has generally more assets available to count on. Unsurprisingly, unemployed Europeans reported the highest risk, as 69 % of persons belonging to this group were not capable of facing unexpected expenses. As can be seen in Table 1 with the exception of the Nordic EU Member States (Denmark, Finland and Sweden) and the Netherlands, in all other EU Member States the rates of unemployed people unable to pay for unexpected expenses were clearly above 50 %.

Figure 13: Inability to face financial unexpected expenses, by labour status, EU-28, 2013
(% of population)



Source: Eurostat (EU-SILC)

Table 1: Inability to face unexpected financial expenses, by selected labour status, by country, 2013
(% of population)

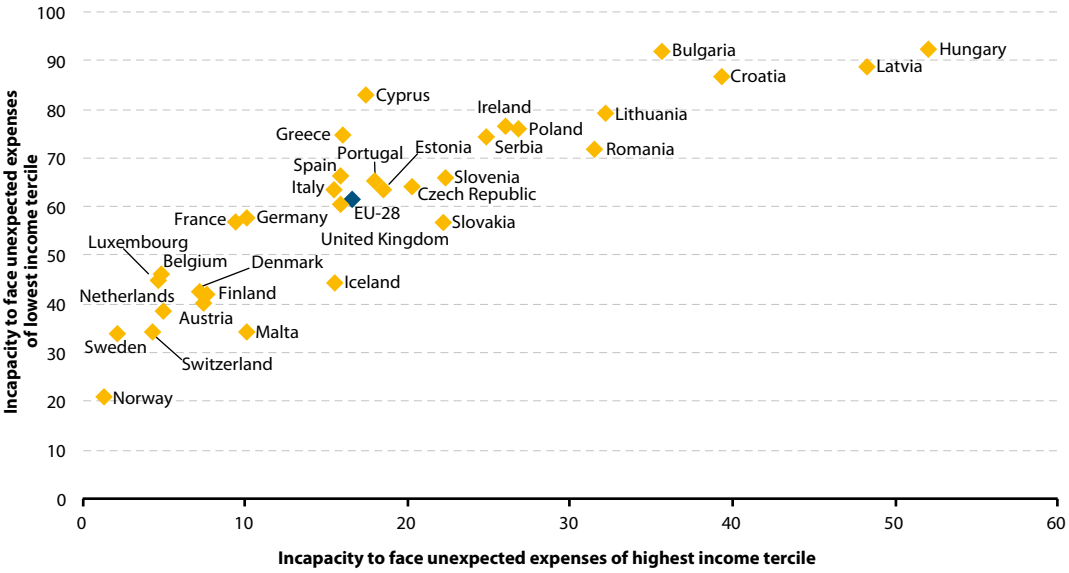
	Unemployed	Full-time employed	Part-time employed	Self-employed
Belgium	57.6	16.2	22.1	11.0
Bulgaria	85.8	52.4	71.9	42.1
Czech Republic	77.2	38.6	43.5	25.0
Denmark	63.5	20.6	29.3	14.8
Germany	83.0	31.1	36.1	23.8
Estonia	73.1	35.5	37.9	23.4
Ireland	80.0	40.8	58.0	35.0
Greece	67.0	31.9	57.8	39.5
Spain	65.6	30.1	50.6	29.3
France	59.4	29.5	38.2	21.5
Croatia	77.4	55.7	64.0	49.7
Italy	67.0	33.0	43.5	31.2
Cyprus	73.0	44.8	59.1	58.6
Latvia	85.7	62.7	76.2	47.3
Lithuania	82.3	44.6	61.6	42.5
Luxembourg	59.4	22.4	27.9	16.9
Hungary	91.5	72.6	79.9	56.9
Malta	49.6	17.3	27.1	15.6
Netherlands	46.6	17.0	19.9	14.8
Austria	62.3	19.1	17.2	10.4
Poland	71.9	43.5	59.1	35.4
Portugal	61.5	37.1	55.6	32.5
Romania	75.7	38.0	76.7	60.2
Slovenia	69.1	40.4	50.2	29.7
Slovakia	61.9	33.5	44.8	24.3
Finland	54.3	23.7	30.9	14.6
Sweden	48.8	11.3	21.4	6.0
United Kingdom	71.9	32.4	41.8	29.7
Iceland	56.8	28.8	37.8	18.7
Norway	45.9	7.4	13.3	9.7
Switzerland	47.4	17.8	20.5	13.9
Serbia	68.3	37.6	46.4	42.5

Source: Eurostat (EU-SILC)

As Figure 14.a demonstrates, there is a clear relationship between the proportion of people in the lowest income terciles who were unable to pay for unexpected expenses and that of people in the highest income group. This is of interest, because it provides insights on inequality within a country. However, the figure shows that high rates for people in the low income group are associated with high rates for those with high incomes, which was particularly the case in most eastern EU Member States (Hungary, Latvia, Croatia, Bulgaria, Lithuania and Romania). On the other hand, in the Nordic EU Member States but also in Austria, Belgium, Luxembourg and Malta (as well as in Norway and Switzerland) both income groups had comparably low rates of inability to face unexpected expenses.

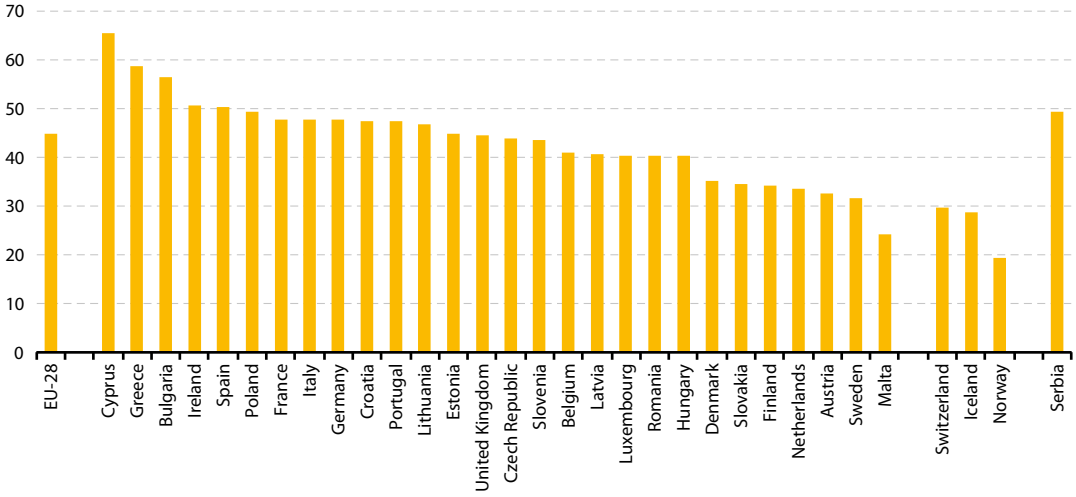
While this illustration does not say anything about the income distribution within the countries, it highlights the dispersion of economic risks between the two different groups. So far, one might conclude that if inability to pay for unexpected expenses is observed as a widespread problem within the country, it applies to all groups of society proportionally.

Figure 14.a: Inability to face unexpected expenses of the lowest and highest income tercile, by country, 2013
(y-axis: % lowest income tercile who would have problems with unexpected expenses, x-axis: % of highest tercile unable to face unexpected expenses)



Source: Eurostat (EU-SILC)

Figure 14.b: Differences between lowest and highest income tercile (inability to face unexpected expenses), by country, 2013
(percentage points)



Source: Eurostat (EU-SILC)

Financial satisfaction and economic insecurity

This section examines the assessment of the financial situation of the household by European residents. This is achieved by comparing the degrees of low satisfaction of the entire population to the proportion of the population which is exposed to economic risks as measured by the (in) ability to face unexpected expenses and the share of people who are in arrears, (which means they could not pay their mortgage/rent payment, utility bills or hire purchase instalments on time because of financial reasons).

The inability to face unexpected expenses tended to be associated with low financial satisfaction

In 2013, 39.7 % of persons living in EU Member States declared not being able to pay expenses which are unexpected. Virtually the same proportion, 37.6 %, declared a low level of satisfaction with the financial situation of the household (0–5 on a scale of 0–10). Compared to this, the problem of arrears is less widespread — only 14.5 % of European citizens are in such a situation.

The Nordic EU Member States but also Austria, Belgium, Luxembourg and the Netherlands generally tend to have lower proportions of people having a low satisfaction with the financial situation, while high proportions are observed in some of the eastern EU Member States (Bulgaria, Latvia, Croatia) as well as Greece and Portugal.

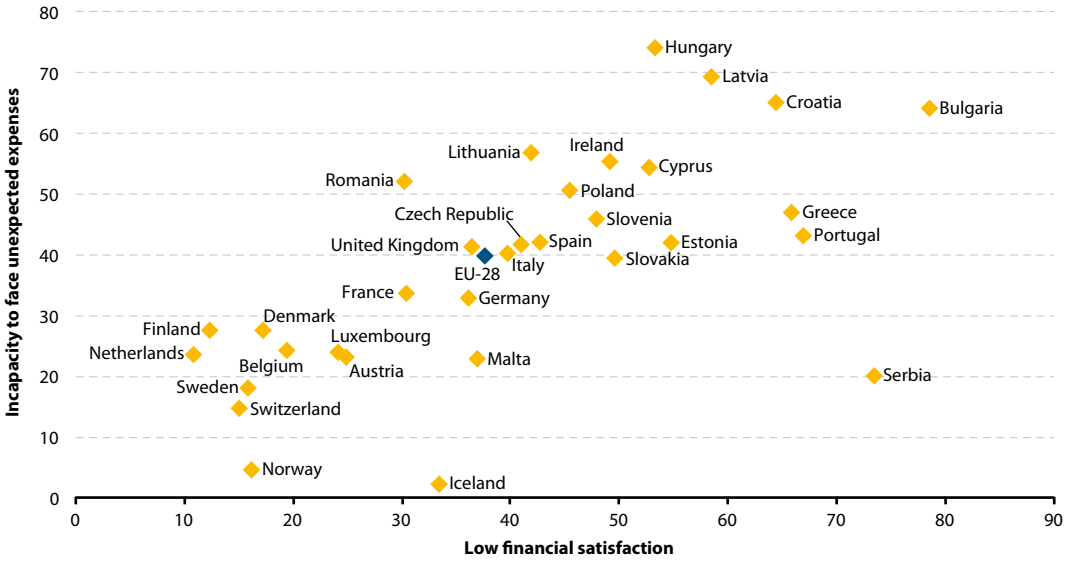
As Figure 15 illustrates, there is a strong positive relationship between the proportions of people with a low financial satisfaction and those who cannot pay for unexpected expenses. These relationships can be better observed with the formation of three main clusters of countries along the correlation line. In particular, the first group consists of Austria, Belgium, Luxembourg, Switzerland, the Netherlands and the Nordic EU Member States. These countries present relatively low proportions of people unable to face unexpected expenses (between 18.2 % in Sweden and 27.6 % in Denmark) and low rates of 'low financial satisfaction' (from 10.9 % in the Netherlands to 24.9 % in Austria).

A second group of countries which can be identified around the EU-28 average consists of the United Kingdom, Spain, Italy, Germany, the Czech Republic, Poland, Slovenia, Slovakia and Estonia, where proportions for both indicators lie roughly between 35 % and 55 %.

Finally, the third cluster consists of those countries with very high rates of 'inability to face unexpected expenses' and also of people with a low level of financial satisfaction such as Latvia, Croatia and Bulgaria.

Of course, there are also some outliers which do not belong in any of the groups around the correlation line. Such countries are for instance Greece and Portugal which had average rates of inability to face unexpected expenses (47.1 % and 43.2 %) but very high proportions of people with low financial satisfaction (65.9 % and 67.0 %). On the other hand, Romania had a comparatively low rate of people with 'low financial satisfaction' (30.2 %) but a proportion unable to face unexpected expenses clearly above the EU average (52.1 % versus 39.7 %). The opposite was true for Malta, where the rate of people with 'low financial satisfaction' was close to EU average at 36.9 % and the proportion of people unable to face unexpected expenses was at 22.8 %.

Figure 15: Low financial satisfaction versus inability to face unexpected expenses, by country, 2013
(y-axis: % of people unable of facing unexpected expenses, x-axis: % of population with low financial satisfaction)



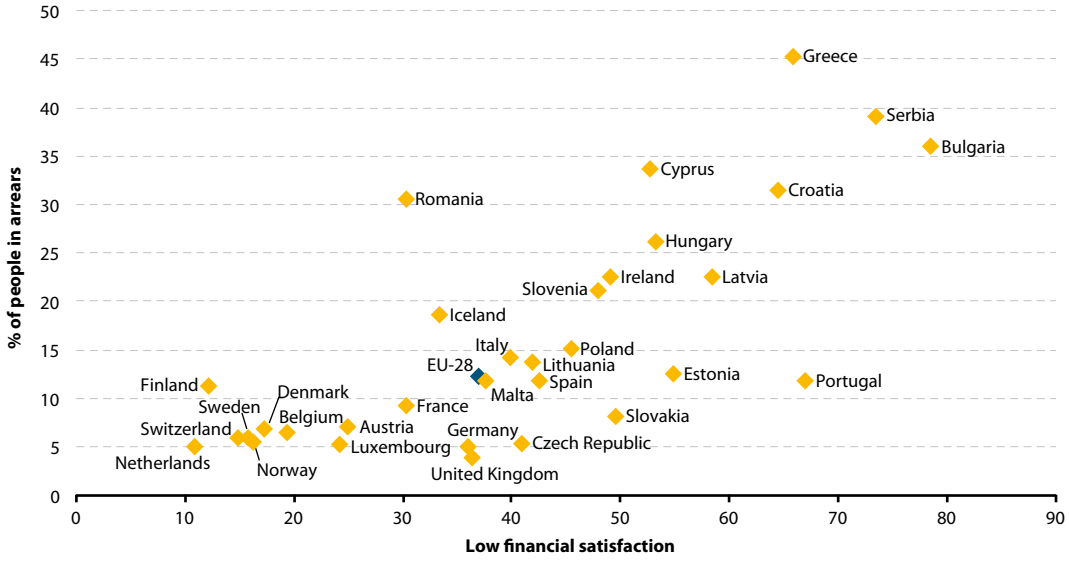
Source: Eurostat (EU-SILC)

Clear connection between being in arrears and financial satisfaction

The relational pattern is quite similar for the two variables contrasted in Figure 16, namely people in arrears and the proportion of people with low financial satisfaction. The extreme points are the Netherlands on the one hand with the second lowest rate of people in arrears and a very modest rate of low satisfaction and Bulgaria and Greece on the other hand, where both rates are among the highest.

Three countries are worth mentioning because the association is quite opposite to the EU tendency. These are the United Kingdom, Romania and Portugal. In particular, the United Kingdom reported the lowest proportions of people in arrears (3.9 %), but a share of people with low financial satisfaction which is close to the EU average (36.4 % in the United Kingdom vs 37.6 % in the EU-28 respectively). However, Romania reported a very high proportion of people being in arrears (30.5 %) but a comparably moderate share of people with low financial satisfaction (30.2 %). Finally in Portugal, 67 % of residents reported a low financial satisfaction, while the proportion of those being in arrears was 11.8 %, exactly the same as the EU average.

Figure 16: Low financial satisfaction versus being in arrears, by country, 2013
(y-axis: % of people in arrears, x-axis: % of population with low financial satisfaction)



Source: Eurostat (online data code: ilc_mdes05)

7

Governance and basic rights

Introduction

The quality of democratic institutions and the elimination of discrimination constitute important aspects of the quality of life of European Union (EU) residents in the public or civic sphere. EU residents distancing themselves from political life and the empowerment of women in society still remain a challenge. In that context, an analysis of how institutions are perceived and the evolution of the gender pay gap (GPG) appear to be very relevant to assess EU 'governance' within a quality of life perspective.

This chapter will first examine one aspect of discrimination across genders through measurement of the progress achieved in reducing the GPG. Next, the relationship which EU residents have with their political institutions will be studied through the evolution of the voter turnout in national and EU parliamentary elections over the last decades and the trust in institutions. The chapter will analyse the level of trust of EU residents in three major institutions (the police, the legal system and the political system) and their trust in others, including how it differs amongst various socio-demographic groups (such as age, sex, levels of education, etc.). Lastly, the article will focus on how these various trust items may relate to overall life satisfaction ([1]).

EU POLICIES RELATED TO GOVERNANCE AND BASIC RIGHTS

Respect for human rights for every individual everywhere has been of particular importance for numerous governments since the second half of the 20th century. The experience of World War II has led to the adoption of the Universal Declaration of Human Rights ([2]) in 1948.

The importance of human rights is highlighted in Article 2 of the Treaty on European Union, which states that 'The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail'.

The Charter of Fundamental Rights of the EU brings together in a single document the fundamental rights protected in the EU across six areas: dignity, freedoms, equality, solidarity, citizens' rights, and justice. After its solemn proclamation in 2000, the Charter became legally binding with the entry into force of the Treaty of Lisbon in December 2009. In the area of discrimination, there are two long-standing directives (Racial Equality Directive and Employment Framework Directive), and in July 2008 the European Commission adopted a Communication that presents a comprehensive approach to stepping up action against discrimination and for promoting equal opportunities.

Gender equality and democratic institutions are some of the challenges of sustainable development too. In 2012, in its outcome document to the Rio+20 conference ([3]), the United Nations (UN) acknowledged their importance. The EU Sustainable Development agenda ([4]) itself aims to develop a socially-inclusive society, actively including the most disadvantaged, namely through fight against gender inequalities ([5]). It also makes provisions for good governance, on the basis of principles such as policy coherence and effectiveness, openness and public participation ([6]).

([1]) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).
([2]) http://www.un.org/en/documents/udhr/index.shtml
([3]) Resolution adopted by the General Assembly of the United Nations, on 27 July 2012 — The future we want — A/RES/66/28.
([4]) http://ec.europa.eu/environment/eussd/. See also European platform against poverty and social exclusion.
([5]) 12 million more women than men are living in poverty in the EU. *Source*: Eurostat, EU-SILC.
([6]) These principles are derived from the 2001 White Paper on European Governance.

Governance in a quality of life perspective

A lot remains to be done to reduce gender inequalities in Europe. While it has narrowed over the last decade, following a drop during the global financial and economic crisis and stagnation since 2010, the gap between women's and men's hourly earnings still stood at 16.4 % in 2013. Participation in civil society measured through the voter turnout in national and European parliamentary elections showed signs of erosion, reflecting a general disinterest towards political life. In 2013, 67.9 % of voters cast their vote in national elections throughout the EU, 10 percentage points less than in 1990, 3.4 percentage points less than in 2000 and 3.6 percentage points less than in 2004. Participation in European Parliament (EP) elections dropped even more sharply, by 14 percentage points since 2004, to less than 50 % of voters in 2014 (42.5 %) ([7]).

GENDER PAY GAP

The unadjusted Gender Pay Gap (GPG) represents the difference between average gross hourly earnings of male paid employees and female paid employees as a percentage of average gross hourly earnings of male paid employees. The population consists of all paid employees in enterprises with 10 employees or more in NACE Rev. 2 aggregate B to S (excluding O) — before reference year 2008: NACE Rev. 1.1 aggregate C to O (excluding L). The GPG calculated by Eurostat is unadjusted, i.e. not adjusted for individual characteristics that may explain part of the earnings difference, because it aims to give a general picture of gender inequalities in terms of pay. The GPG indicator is calculated within the framework of the data collected according to the methodology of the Structure of Earnings Survey (EC Regulation: 530/1999). It replaces data which was based on non-harmonised sources.

In that context, the average trust of EU residents in three major institutions (the police, legal and political systems) was rated quite differently. On a scale of 0 to 10 (where 0 corresponds to the lowest and 10 to the highest level of trust), residents tended to trust the police more (because of its proximity to them), with a mean at 6.0, than the legal system (4.6 mean) and the political system (3.5 mean). Trust in others, was more positively assessed by residents, with a mean at 5.8.

TRUST IN OTHERS AND TRUST IN INSTITUTIONS

The variables on trust are of general nature and refer to the respondent's opinion/feeling.

The trust in others does not refer to a specific group of people. On the scale of 0 to 10, 0 means 'You do not trust any other person' and 10 represents the respondent's feeling that 'Most people can be trusted'.

For trust in institutions (the police, the legal system, the political system), 0 means 'No trust at all' and 10 'Complete trust' in the concerned institution. The term political system refers to a complete set of institutions, interest groups (such as political parties, trade unions), the relationships between those institutions and the political norms and rules that govern their functions. The term legal system refers to the entire system for interpreting and enforcing the laws and not to a specific legal entity within the country. Trust in the legal system is supposed to measure, for example, opinions and attitudes towards the effectiveness and efficiency of the institutions such as the courts, the fairness of its procedures and decisions, and the extent to which the sentences given out reflect the values and desires of citizens. The term police refers to the police as an institution.

([7]) The data analysed for European Parliamentary elections starts in 2004, when the 10 Member States that joined the EU on 1 May 2004 (Bulgaria, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia), first participated in such elections.

The age of respondents had a slight influence on trust in the political and legal systems, which was a bit higher at younger and older ages. Trust in the police increased in parallel with age. Men and women trusted institutions in almost the same way, with a mere 0.1 point difference depending on the institution. Trust in the political and legal systems was, by about 0.6 points, higher amongst people belonging to the highest income tercile than amongst those in the lowest. For trust in the police, it was about 0.5 points. The divide between low educated people and tertiary graduates reached a 1.3 points rating (for the legal and political systems). For trust in the police, the gap was more moderate (0.5 points). The unemployed were by far the least trustful people, whatever the institution, with a mean that was as low as 2.4 or 3.6 for trust in the legal and political systems (as opposed to 4.2 and 5.2 for people in education or training). The gap was 1.1 points for trust in the police, the retirees being the most trustful with a mean of 6.2.

Trust in others followed quite similar patterns as trust in institutions. Men and women were equally trustful, at 5.8. People in the highest income tercile had a mean trust in others at 6.1, exceeding that of the least well-off people by 0.6 points. The impact of education was stronger, as the most educated recorded a mean of 6.3, against 5.6 for the group of the least educated. The financial insecurity and probable lack of support experienced by single-person households with dependent children led them to the lowest mean rating for trust in others (5.4), amongst all household types (the most trustful households, consisting of two-adults aged more than 65, without children, having a mean of 6.0). The labour status was the strong influencing factor again, as on average the unemployed were less trustful than people in education or training (5.3 versus 6.3).

Trust in institutions and in others are closely associated with overall life satisfaction, highlighting a divide between northern/western EU Member States (for which both indicators had a relatively high value) and eastern/southern EU Member States (for which both indicators had an average or low value). The relationship was stronger for trust in institutions than for trust in others.

INDICATORS ON GOVERNANCE AND BASIC RIGHTS

The dimension 'governance and basic rights' refers to:

- trust in institutions and satisfaction with public services;
- aspects related to discrimination and equal opportunities (experienced discrimination and gender pay gap (GPG)); and
- active citizenship ('voice and accountability').

The calculations are mainly based on the 2013 ad-hoc module on subjective well-being of EU-SILC. However, some indicators still need to be developed.

Discrimination and equal opportunities across genders

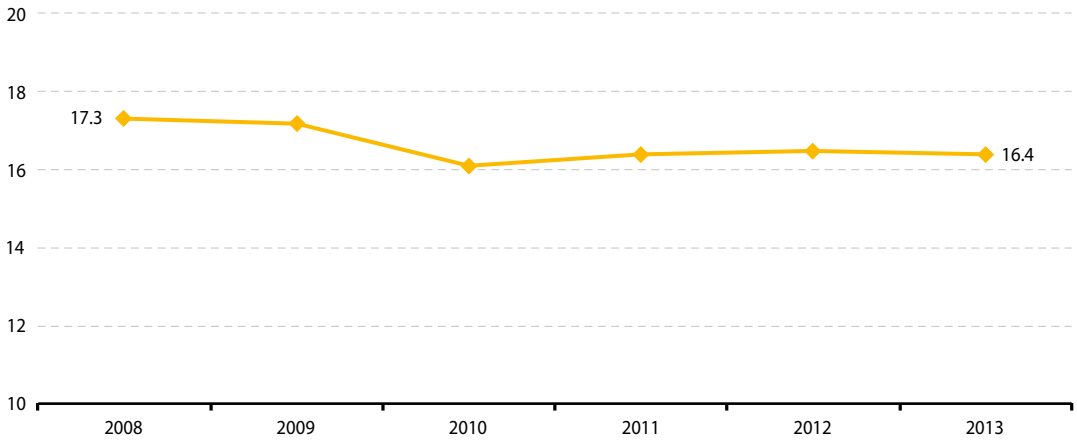
Equality between women and men is an important aspect of quality of life. It is also one of the EU's founding values, going back to 1957 when the principle of equal pay for equal work became part of the Treaty of Rome ([8]).

Gender inequalities in pay were shrinking

Enhancing gender equality, including in terms of earnings, is important to protect women against the risk of poverty to which they are more exposed than men ([9]) and increase their participation in civil society. The GPG is used as a proxy indicator to measure gender equality, but it should be interpreted with caution, as it could be negatively influenced by women's participation in the labour market ([10]). In 2013, the gap between women's and men's hourly earnings was 16.4 %, reflecting a 0.9 percentage point drop since 2008, after declining during the global financial and economic crisis and stagnating since 2010 (Figure 1).

While the gap still persists, this encouraging trend may specifically result from a greater participation of women in education. More explicitly, in 2013, the share of women with a tertiary education degree (and participating in lifelong learning) outweighed that of men and lower proportions of them were found amongst early school leavers ([11]).

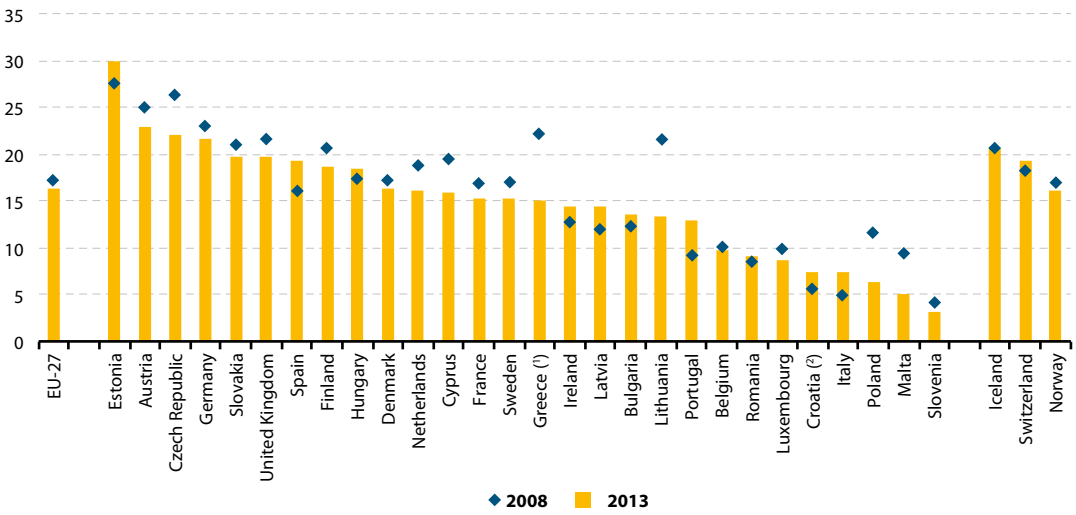
Figure 1: Gender pay gap in unadjusted form, EU-27, 2008–13
(%)



Source: Eurostat (online data code: earn_gr_gpgr2)

([8]) European Commission, Directory General for Justice: Gender equality.
([9]) Women face a higher poverty risk, particularly lone parents and the elderly, when the pay gap becomes a 'pension gap'. *Source*: Strategy for equality between women and men 2010–2015, COM(2010) 491 final, p.5. (Hence, the risk of poverty of the total female population is 25.4 % against 23.6 % for men and 12 million more women than men are living in poverty in the EU. *Source*: Eurostat, EU-LFS (lfsa_eppga) and EU-SILC (ilc_peps01).
([10]) There are various reasons for the existence and size of a GPG and they may differ strongly between EU Member States, e.g. kind of jobs held by women, consequences of breaks in career or part-time work due to childbearing, decisions in favour of family life, etc. Moreover, the proportion of women working and their characteristics differ significantly between countries, particularly because of institutions and attitudes governing the balance between private and work life which impact on the careers and thus the pay of women. *Source*: Eurostat, Gender pay gap statistics.
([11]) *Source*: Eurostat, EU-LFS (edat_lfse_07), (trng_lfse_01) and (edat_lfse_14). See chapter 5 'Education'.

Figure 2: Gender pay gap in unadjusted form, by country, 2008 versus 2013
(%)



(1) 2010 data used instead of 2013.
(2) 2010 data used instead of 2008.
Source: Eurostat (online data code: earn_gr_gpgr2)

A cross-country analysis illustrated in Figure 2 shows that on average, women's earnings have been catching up with those of men in a majority of EU Member States since 2008. Nonetheless, the gap widened in almost one third of the EU Member States for which data was available, such as Portugal, Spain, Latvia, Italy and Estonia (by between 3.8 and 2.3 points). In 2013, women were still earning 3.2 % less than men in Slovenia and up to 29.9 % less in Estonia. No distinctively clear regional differences can be observed although all southern EU Member States except Spain displayed values below the EU average. One of the main reasons for this paradoxical situation (when compared, for example, with other indicators such as the gender gap in employment rates) is that in these countries women with a low level of qualification were more motivated to stay out of the labour market altogether ([12]). Thus, this indicator was influenced by many factors and should not be considered per se as a measure of the degree of (non-)discrimination of women on the labour market.

Gender segregation in occupations is one of the main reasons for the GPG. It affects women far more than men, narrowing their opportunities for career progression. Another reason is that women are more likely than men to trade off time spent on the labour market (paid) to focus on care-giving activities (unpaid). Hence, women tended to be employed in low-paid sectors ([13]) and to be less represented in management positions. As a result, they earned less than men over their lifetime and were entitled to lower pensions ([14]).

([12]) http://people.bu.edu/olivetti/papers/olivettipetrongolo_apr2008.pdf
([13]) New JNCHES Equality Working Group, *The Gender Pay Gap — A Literature Review* (2011), p. 19.
([14]) In October 2014, the proportion of women on the boards of the largest publicly listed companies in the EU Member States reached 20.2 %. *Source*: European Commission, Justice and consumers, *Report on equality between women and men 2014* (2014) pp. 13–17 and p. 21. See also: European Agency for Safety and Health at Work.

Gender stereotypes, which may be affected by traditions and societal norms, but also personality differences, were amongst the determining factors affecting women's educational and professional choices, and the derived opportunities for career development. Family caring responsibilities were also pushing them, voluntarily or not, towards more temporary and part-time positions ([15]) (and more interrupted careers), hence narrower chances for progression ([16]).

EU residents and their institutions

Public participation is one of the policy-guiding principles highlighted in the EU Sustainable Development Strategy. It contributes to a more democratic society through the involvement of residents in civic life and to improving the effectiveness of EU policies ([17]).

Erosion of voter turnout in national and EU parliamentary elections

As Figure 3 shows, voter turnout in national elections was about 10 percentage points lower in 2013 (67.9 %) than in 1990 (77.4 %). The decline was sharper still for European Parliament elections, in which participation dropped by 14 percentage points, to less than 50 % of voters (42.5 %) over the last twenty years. It is however particularly the period until 2000 in which the sharpest drop was registered. This was also partially related to changing the composition of the EU by the two successive enlargements that took place in 2004 and 2007. In particular, in some of the new EU Member States, voter turnout has been extremely low (reaching 13 % in Slovakia for the EP elections of 2014).

WHAT IS THE VOTER TURNOUT?

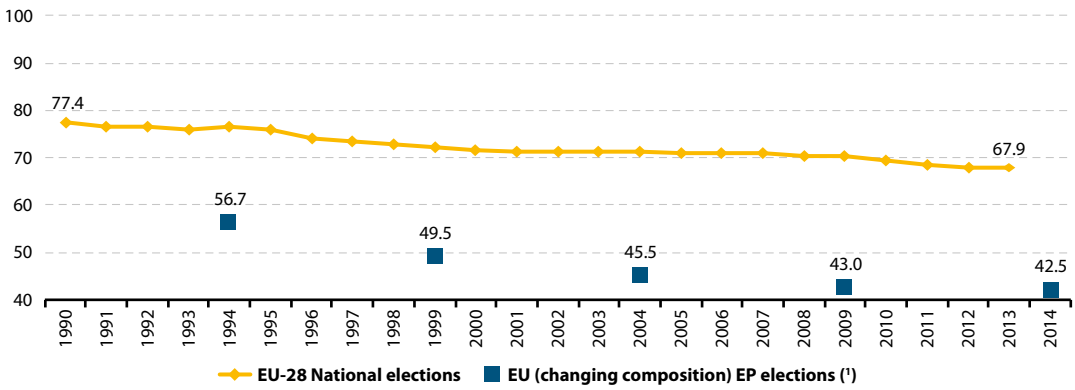
Voter turnout is an indicator of citizens' participation in public affairs both at EU and national levels. The number of those who cast a vote or 'turn out' at an election includes those who cast blank or invalid votes. Turnout is calculated by dividing the number of votes cast by the number of registered voters. In Belgium, Luxembourg, Greece, and Cyprus, voting is compulsory. The indicator presents voter turnout for European Parliament elections and national elections.

For national elections, the indicator refers to parliamentary elections except for Cyprus (presidential elections), France, Portugal and Romania (both parliamentary and presidential elections). The indicator includes an EU average 'turnout'. This was estimated by Eurostat on the basis of the trends observed in each of the EU Member States' national elections.

The calculation of the EU average is based on parliamentary elections for all countries, except for Cyprus (only presidential elections), France, Portugal and Romania (both parliamentary and presidential elections). The indicator is compiled with data from the International Institute for Democracy and Electoral Assistance (IDEA) Voter Turnout Database.

([15]) Hence, in 2013, 14.2 % of women experienced a temporary contract versus 13.2 % of men. *Source*: Eurostat, EU-LFS (lfsa_etpga).
([16]) European Commission, *Sustainable development in the European Union. 2013 monitoring report of the EU sustainable development strategy* (2013), p 122.
([17]) Id. Ibid., p 260.

Figure 3: Voter turnout in national and EU parliamentary elections, EU, 1990–2014 (1)
(%)



(1) The figures for EP elections refer to EU composition at the time of the elections, knowing that it has changed considerably since 1994.
Source: Eurostat — International Institute for Democracy and Electoral Assistance (IDEA) Voter turnout database

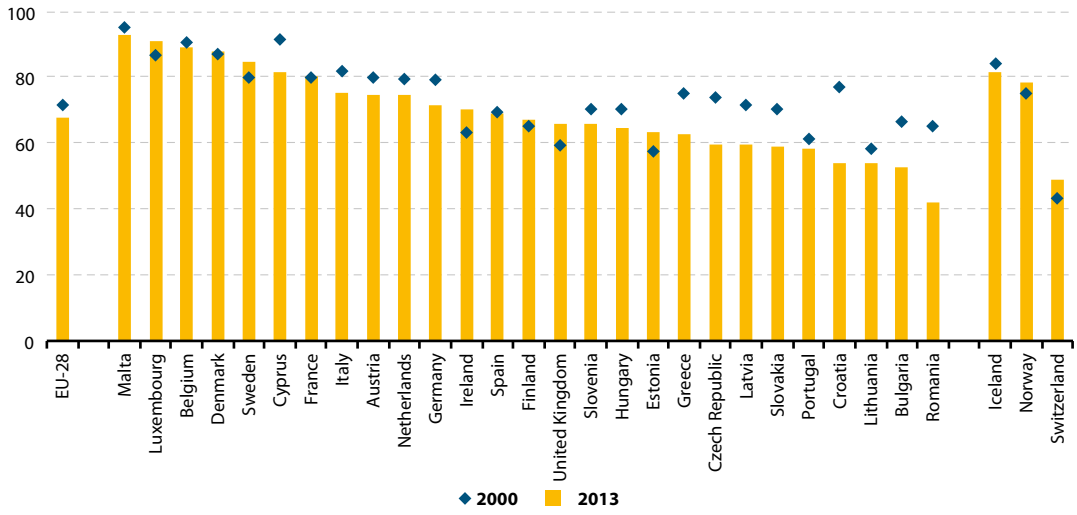
Figures 4.a and 4.b confirm a declining voter turnout in almost all EU Member States since the late 1990s and early 2000s. Less than half of voters registered in Romania (41.8 %) cast a vote in the last (2010 election round) national parliamentary elections, a 23.5 percentage point drop compared with 2000 (65.3 %). In Poland, the last election attracted about half of the voters (48.9 %), however in Romania and most countries, this was 2.7 percentage points more than in 2001 (46.2 %).

At the other end of the scale, more than nine in ten voters participated in the last elections in Malta, a figure which seems to be rather constant over time (slightly decreasing from 95.4 % in 1998 to 93.0 % in 2013). Luxembourg and Belgium (and at a distance, Cyprus), where voting is compulsory, followed Malta. In Greece, where this legal obligation also exists, the last turnout was relatively low (at 62.5 %), highlighting a 12.5 percentage point decline since 2000.

The erosion of voter turnout affecting elections in Europe in recent decades may be a sign of indifference towards and even distrust of the political system and political parties. This translates into a confidence drop in the political system (3.5 on the scale from 0 to 10, where 0 is the lowest trust level and 10 the highest), as illustrated in Figures 5 and 6. Nonetheless, many variables, whether socio-economic, political or institutional, may also influence voter turnout. Among the socio-economic ones, the population structure stands out with its size, concentration, stability and homogeneity. Political variables include the expected outcome of the election (18) (and the previous elections' outcomes) which is also linked to the political fragmentation of the EU Member States (i.e. the number of political parties that participate in the election), and the quality of the electoral campaigns and their cost. Some institutional procedures governing the electoral system in some EU Member States, such as the way in which votes are translated into seats or compulsory voting, would also affect voter turnout to a greater or lesser extent (19)(20) (although the figures for Greece and, to a lesser extent, Cyprus have shown the limits of compulsory voting).

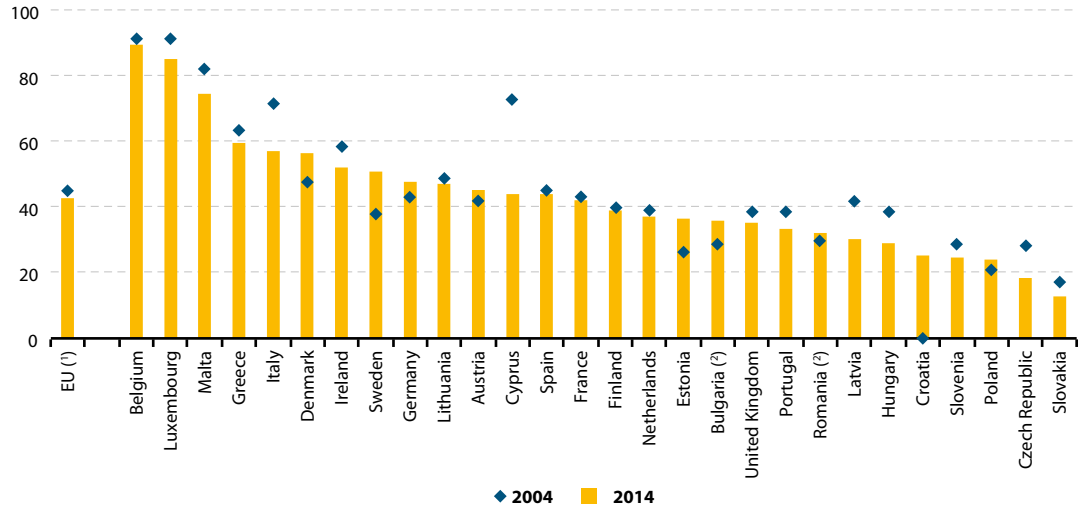
(18) The idea here is that voters in more local elections tend to believe that their chances of affecting the outcome are greater, and hence are more likely to vote. *Source*: Gary W. Cox, *Closeness and turnout: a methodological note*, in 'The Journal of Politics', Vol. 50, No. 3 (Aug. 1988), pp. 768–775.
(19) Delwit, P., *The End of Voters in Europe? Electoral Turnout in Europe since WWII*, in 'Open Journal of Political Science', vol.3 (1), (2013), pp. 44–52.
(20) Geys, B., *Explaining voter turnout: A review of aggregate-level research*, in 'Electoral Studies', vol. 25 (4), (2006), pp. 637–663.

Figure 4.a: Voter turnout in national parliamentary elections, by country, 2000 versus 2013 ([1])
(%)



([1]) 2000 may be 1998, 1999, 2001 or 2002 data; 2013 may be 2010, 2011 or 2012 data.
Source: Eurostat — International Institute for Democracy and Electoral Assistance (IDEA) Voter turnout database

Figure 4.b: Voter turnout in European parliamentary elections, by country, 2004 versus 2014
(%)



([1]) Changing composition.
([2]) 2007 data instead of 2004 data..
Source: Eurostat — International Institute for Democracy and Electoral Assistance (IDEA) Voter turnout database

Figure 4.b signals a slightly less dramatic drop in voter turnout for the EP elections since 2004 and also a much more limited voter turnout in general, compared with national elections. The differential between the two types of elections can exceed 40 percentage points in Slovakia, Slovenia and the Czech Republic.

The participation in EP elections dropped in 20 out of 28 EU Member States including those four where voting is compulsory. The highest decrease in participation rate in EP elections was recorded in Cyprus where a loss of 28.5 percentage points of registered voters occurred since the country first participated in such elections following its accession to the EU. All Member States which joined the EU in recent years (except Malta and Cyprus) displayed values below the EU average. Sweden was amongst the EU Member States which did not follow a downward trend, since participation increased by 13.2 percentage points, but the rate remains relatively modest at 51.1 % in 2014.

In most EU Member States, citizens may see these organisations as distant bodies and may not perceive their impact on their national policies and daily lives. This is also reflected in the low (and declining) confidence in these institutions observed in the last decades in most EU Member States ([21]).

Trust in institutions and trust in others

Trust is a core element of an individual's relationships and of their social interactions. It translates an expectation placed on 'others' which is a function of the degree to which trust has been honoured in an individual's history of prior social interactions, and can have strong implications in many aspects of their life ([22])([23]).

In the current context of disinterest towards political life, Figure 5 compares the mean level of trust with three major institutions represented by the police, the legal and the political systems, and mean trust in others, reported by EU residents. Residents tended to trust the police (6.0 mean) more than their legal (4.6 mean) and political system (3.5 mean, on a scale of 0 to 10 where 0 corresponds to the lowest and 10 to the highest level of trust). This rather negative assessment, in particular as regards trust in the political system, may to some extent explain the declining voter turnout observed above. The differences across institutions may reflect diverging levels of understanding of these institutions, their perceived impact on daily life and proximity, which is probably higher for the police due to their stronger local presence across national territories ([24])([25]).

([21]) The level of citizens' confidence in the European Parliament was 57.0 % in 2004 versus 39.0 % in 2013. For the European Commission, this was 52.0 % (2004) versus 35.0 % (2013); for the European Council, 45.0 % (2004) versus 36.0 % (2012). *Source*: European Commission, Eurobarometer, Level of citizens' confidence in EU institutions (tsdgo510).

([22]) Rempel, J. K., *Trust — The Impact Of Trust In Established Relationships* and Rotter, J. B. *A New Scale for the Measurement of Interpersonal Trust* in 'Journal of Personality' 35 (1967), pp. 651–665.

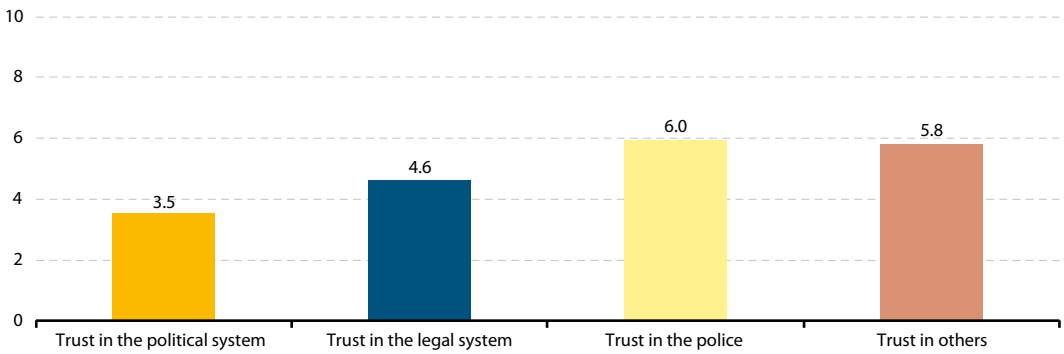
([23]) Roy J. Lewicki and Edward C. Tomlinson, *Trust and trust building* (2003).

([24]) European Commission, Eurofound, *Quality of life in Europe, Subjective well-being, 3rd European quality of life survey* (2013), p. 68.

([25]) Although one of the goals of the EU regional policy is to increase people's quality of life by investing in the efficiency of public administrations and services (including their online availability), hence enhancing proximity of public authorities with citizens. *Source*: *The European Union explained — Regional policy — Making Europe's regions and cities more competitive, fostering growth and creating jobs* (2014) p. 13.

In 2013, EU residents rated on average their trust in others at 5.8 on a scale from 0 to 10.

Figure 5: Trust in institutions and in others, EU-28, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw03)

Trust in others, which may reveal the level of social cohesion of all people living in society, was more positively assessed by the EU residents compared with the trust in the legal and political system, with a mean at 5.8. This figure was nonetheless much lower than the mean satisfaction of individuals with their personal relationships which was valued at 7.8, the highest rating registered across all types of domain satisfaction included in the EU-SILC 2013 ad-hoc module ([26]). However, 'others' does not refer to a specific group of people and may hence encompass personal relationships but also any other people, whether known or unknown. This may explain to some extent the gap between the two ratings.

In general, trust items were rated lower than satisfaction items, which may be linked to the fact that they referred to something external ([27]). Their link to self-esteem was different for the two types of indicators: satisfaction is something the respondent may feel responsible for, and therefore may tend to overrate, while others or institutions can be to a certain extent held responsible for the success or failure of the individual, and therefore trusting others or institutions could be easily underrated.

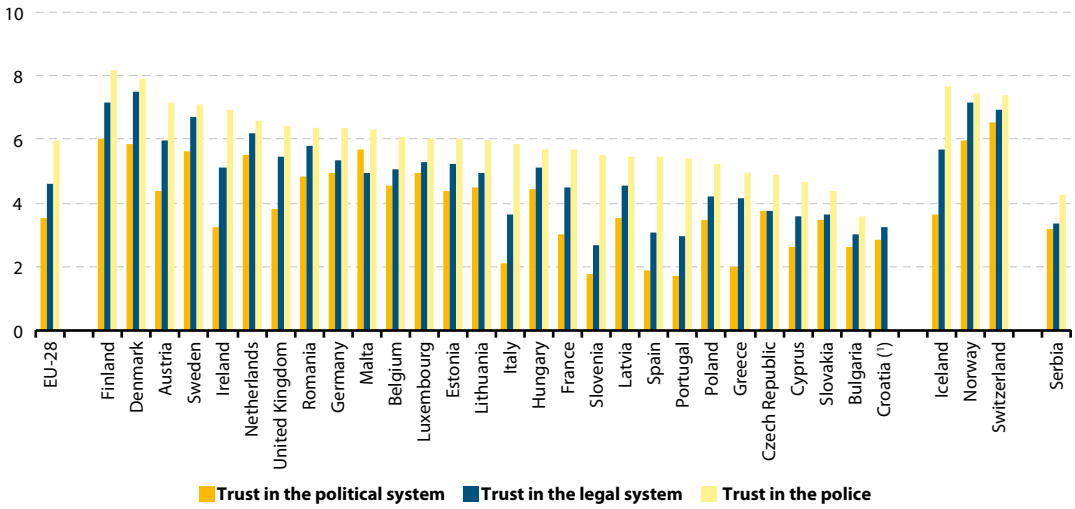
([26]) See chapter 5 'Leisure and social interactions'.
([27]) Idem.

A cross-country analysis (Figure 6.a) shows that the residents of Bulgaria recorded the lowest level of trust in their police (3.6), followed by most other eastern but also southern EU Member States, all of which were below the EU average except Estonia (6.0), Malta (6.3) and Romania (6.4). France also belonged in this group of countries (5.7). At the other end of the scale, Finland displayed the highest mean, at 8.2, with Denmark a close second (7.9).

Trust in the legal system followed quite a similar pattern. Most EU Member States with a low trust rate were found in the central and eastern parts of the EU while most countries with high trust rates were northern EU Member States. Lower levels of trust ranged from a minimum of 2.7 in Slovenia (followed by Portugal and Bulgaria at 2.9 and 3.0) to 7.2 and 7.5 in Finland and Denmark.

Trust in the political system was even lower — the mean did not exceed 6.0 (in Finland, followed by Denmark at 5.9). The lowest means were found in Portugal (1.7), followed by Slovenia, Spain and Greece (where 2.0 was not exceeded). The low means in these last four EU Member States can be seen as the result of the high shares of people who reported having no trust at all (a '0' rating) in the political system of their country. These are principally EU Member States severely hit by the global financial and economic crisis.

Figure 6.a: Trust in institutions, by country, 2013
(mean rating)

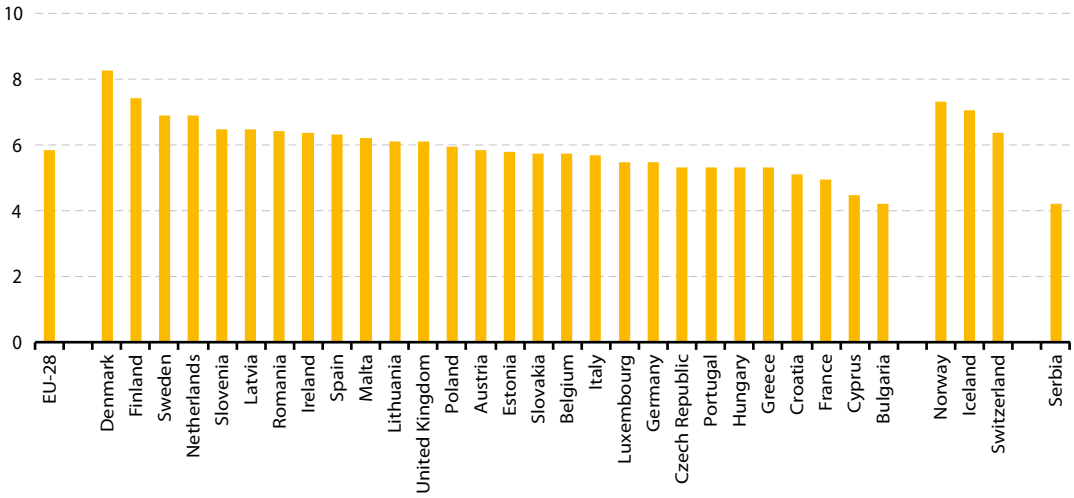


(1) No data on trust in the police.
Source: Eurostat (online data code: ilc_pw03)

The analysis of trust in others illustrated in Figure 6.b shows similar groups of countries displayed at each end of the scale. People in Bulgaria again had the lowest average level of trust, at 4.2, followed by residents from Cyprus at 4.5. At the other end of the spectrum, people in Denmark and Finland tended to be much more likely to trust others, with a mean of 8.3 and 7.4 respectively. With an equal number of EU Member States distributed below and above the EU average, trust in others appeared to be highest in the northern EU Member States — most of which are displayed in the right-hand side of the scale — while trust in the southern EU Member States was mostly low.

While economic, constitutional, cultural and other factors are probably some of the explanation for an EU Member State's trust rating of its institutions, the composition of its population (specifically its age, level of education, composition of its households and working force) is expected to play a role as well, in particular for trust in others.

Figure 6.b: Trust in others, by country, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw03)

Trust in institutions and trust in others by socio-demographic characteristics

How is the socio-demographic background associated to trust of EU citizens in their institutions and in others?

The next section analyses how the trust which EU residents have in their institutions (the police, the legal and political system), may vary depending on socio-demographic characteristics such as their age, gender, income, composition of their household, labour status and level of educational attainment. A similar analysis is done for the variable 'trust in others'. As a general finding, it appears that trust varied less than satisfaction across groups.

Trust varied only slightly across age groups

As Figure 7.a shows, trust in the political system was only slightly linked to age, varying by a mere 0.6 point rating across age groups. The highest mean was recorded amongst those aged 16–24 and 65+ (4.0 and 3.6 respectively). The intermediate age groups registered means between 3.4 and 3.5.

Trust in the legal system was even less connected to age, with only a 0.4 point gap across age groups. The younger (16–24) age group registered the highest mean at 4.9, followed by the 25–34 and 75+ age groups at 4.7 each. In between, the other age groups had means varying by 0.1 point only, at 4.5 to 4.6.

Trust in the police differed in wider proportions, and increased in parallel with the age of respondents. The two younger age groups had an almost identical mean at around 5.7 to 5.8 ([28]). The next two age groups (35–49 and 50–64) had the same mean at 5.9, while it was between 6.2 and 6.4 in the two older groups.

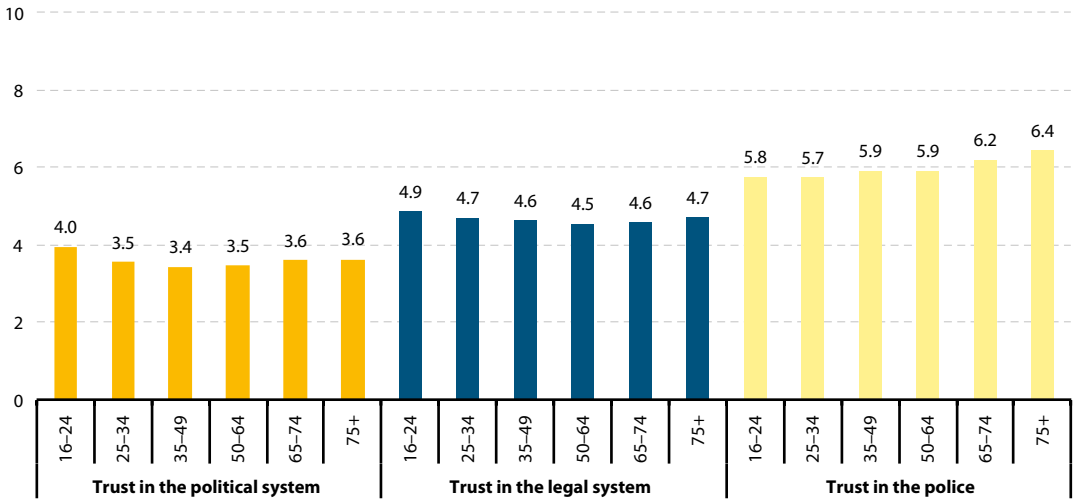
These differences may have quite different origins but, generally, younger people probably tended to have a higher faith in the future due to their high expectations at this early stage of their lives, while older people likely had fewer expectations and the feeling of having met (at least some of) their expectations from society. They also presumably has a better understanding of the workings of the institutions.

Trust in others (Figure 7.b) reiterates a weak association with age. The mean trust reached its maximum value of 6.0 with the younger age group (16–24) and a bit less (5.9) with those aged 65–74, and 75+. The intermediate age groups had an identical mean of 5.8.

The younger and older age groups also had the highest mean satisfaction with their personal relationships. This was in part due to their greater opportunities to develop personal relationships for reasons of time availability, having less family or professional responsibilities ([29]).

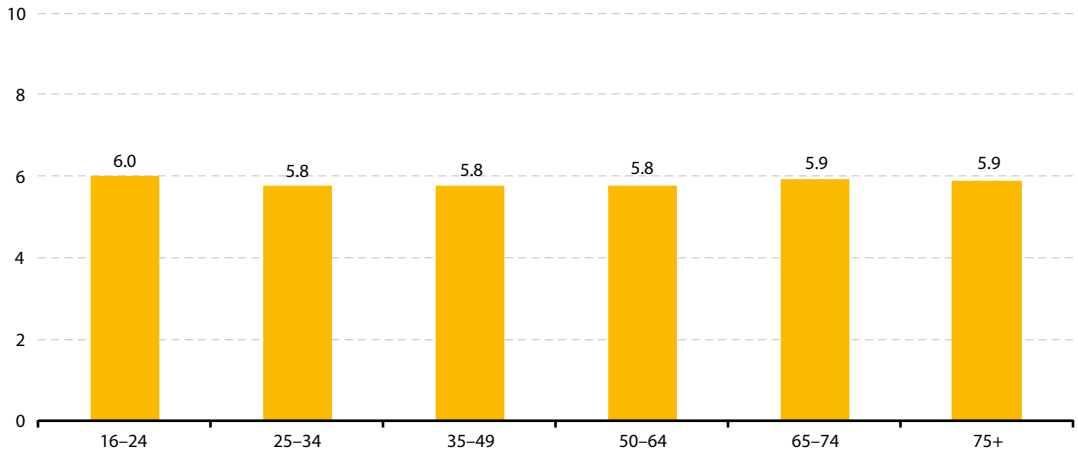
([28]) The ratings are actually only varying by 0.02 point, at 5.75 in the former and 5.73 in the latter.
([29]) *Source*: Eurostat, EU-SILC (ilc_pw01). See chapter 5 'Leisure and social interactions'.

Figure 7.a: Trust in institutions, by age group, EU-28, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw03)

Figure 7.b: Trust in others, by age group, EU-28, 2013
(mean rating)



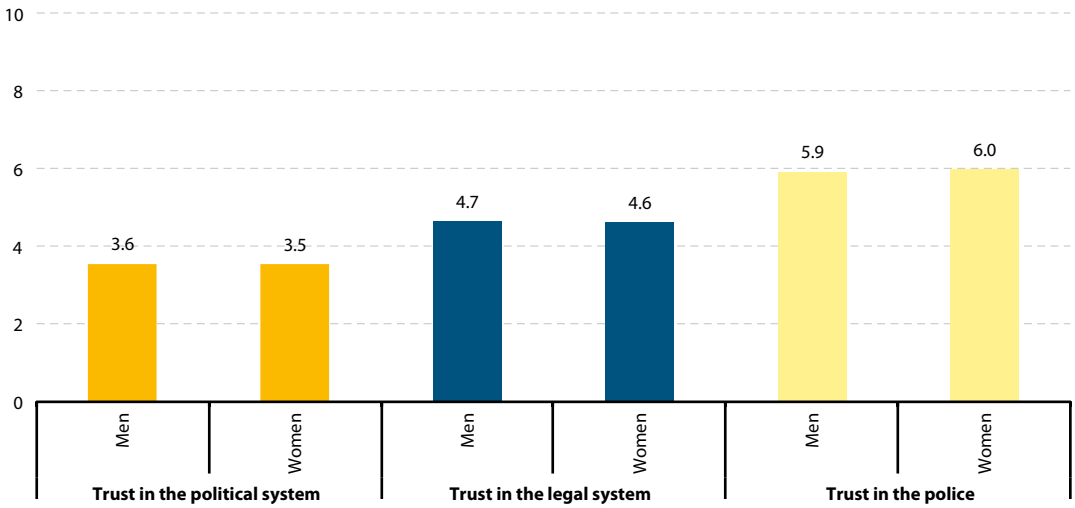
Source: Eurostat (online data code: ilc_pw03)

Men and women reported almost identical levels of trust

Figure 8 shows that the mean levels of trust recorded by male residents within the EU were almost exactly the same as those of female residents, at respectively 3.6 versus 3.5 for the political system, 4.7 versus 4.6 for the legal system, and 5.9 versus 6.0 for the police. Women trusted the police slightly more than men and the other institutions slightly less than them. Trust is linked to expectations which may vary from one individual to another, irrespective of their sex. It is also a question of individual propensity to it, namely as a result of one's personal history and personality characteristics ([30]).

The mean levels of trust in others recorded by male EU residents were exactly the same as those recorded by women: 5.8 ([31]). Trust in others is expected to be explained by the same underlying reasons as trust in institutions.

Figure 8: Trust in institutions, by sex, EU-28, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw03)

([30]) Roy J. Lewicki and Edward C. Tomlinson, *Trust and trust building* (2003).
([31]) This is not illustrated in a graph.

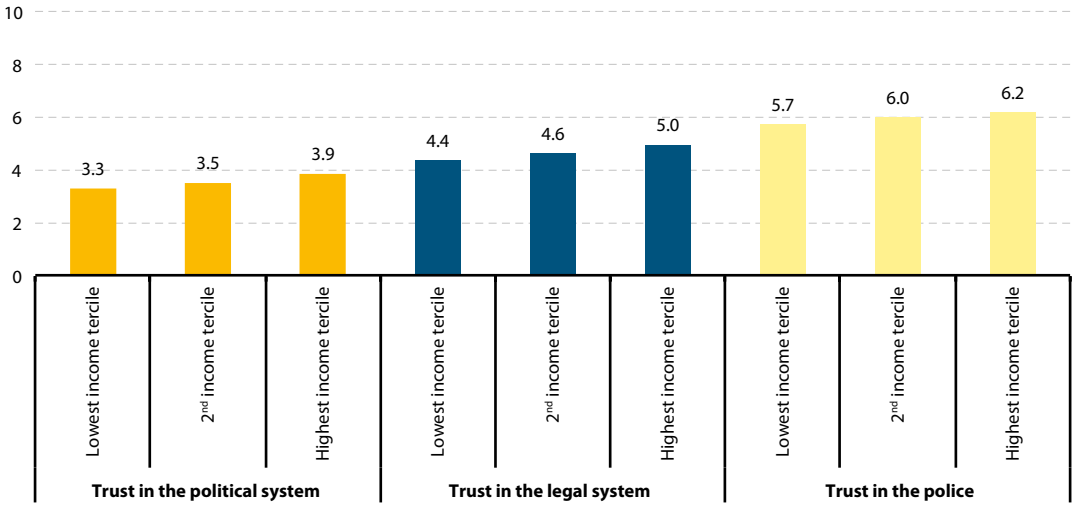
Trust increased with income

As illustrated in Figures 9.a and 9.b, the average trust grew gradually, in parallel with income levels. Across the three institutions, the gap between low-income and high-income earners reached between 0.5 and 0.6 points.

Hence, the level of trust in the political system by people in the lowest income tercile was 3.3, while it was 3.5 and 3.9 respectively by people in the second and the highest income terciles. For trust in the legal system, this was 4.4, 4.6 and 5.0. As usual, trust in the police was recorded higher levels, at 5.7 in the lowest, 6.0 in the second and 6.2 in the highest tercile.

Higher trust in institutions may be linked to a greater knowledge and understanding of how they function by the most financially-advantaged people (who are often also the most educated ones).

Figure 9.a: Trust in institutions, by income tercile, EU-28, 2013
(mean rating)

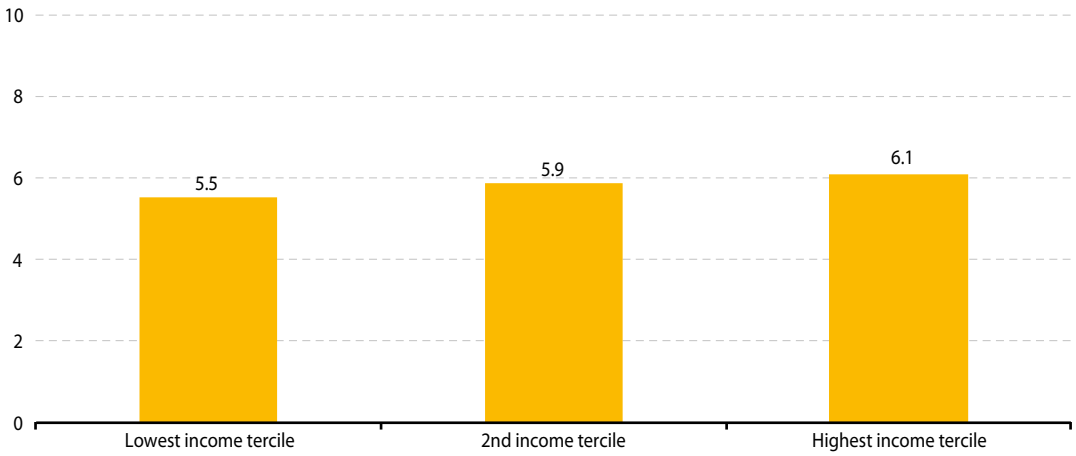


Source: Eurostat (online data code: ilc_pw04)

As illustrated in Figure 9.b, the average trust in others, which was higher than trust in institutions, also grew in parallel with income levels. People in the lowest income tercile expressed a lower level of trust in others (5.5), than people in the second (5.9) and highest (6.1) income terciles. This might be due to a greater capacity amongst people who were better-off to be socially-inclusive and take part in society through more numerous channels that help them developing and maintaining larger and more diverse social networks. As a result, they probably had a higher sense of fulfilled expectations. This was reflected in that the members of the top tercile were also more satisfied with their relationships than those of the lowest and second income terciles ([32]).

([32]) *Source*: Eurostat, EU-SILC (ilc_pw01). See chapter 5 'Leisure and social interactions'.

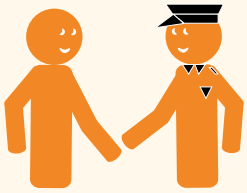
Figure 9.b: Trust in others, by income tercile, EU-28, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw04)

Education had a stronger effect on trust

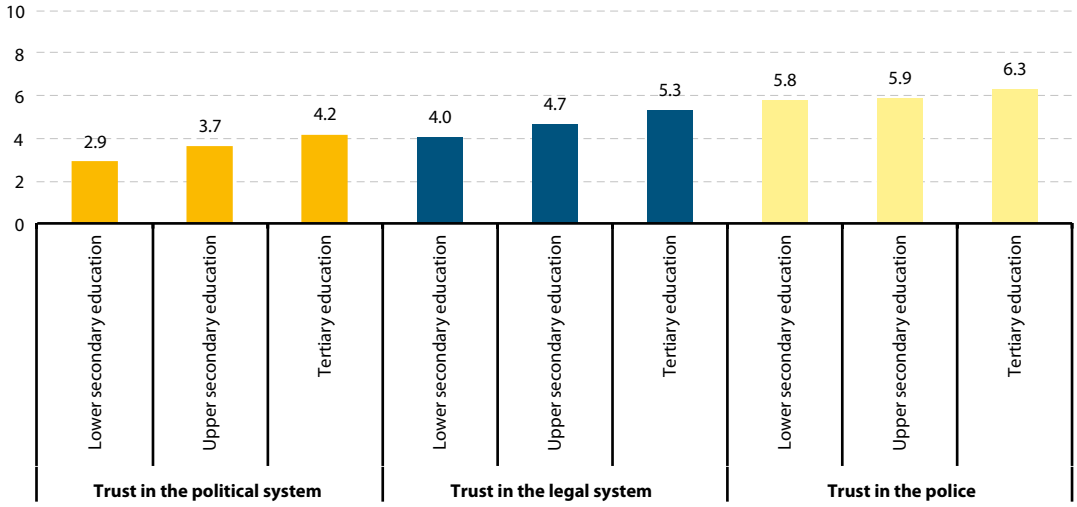
There is a clear relationship between educational attainment and trust in institutions (Figure 10.a). The effect of education is stronger than that of income, in particular for trust in the political and legal systems as indicated by the 1.3 point gap between the means reported by the least and most educated people. Hence, the population with utmost lower secondary education had a mean trust in the political system of 2.9, against 3.7 amongst those who completed secondary education and 4.2 amongst those who completed tertiary education. For the legal, systems, the ratings were 4.0, 4.7 and 5.3 respectively. The mean reported by the least educated was 5.8 whereas it was 6.3 for the most educated (quite close to the means registered in the corresponding analysis by income tercile). It is probably on the same grounds as for income that the explanation behind these patterns is to be sought, education being linked to income levels. Moreover, education is also seen as means of empowering, in that it enables people to make their own choices and accomplish their expectations, which may engender higher levels of trust.



Among the EU population with tertiary education, the level of trust in the police reached 6.3 on a scale from 0 to 10 in 2013.

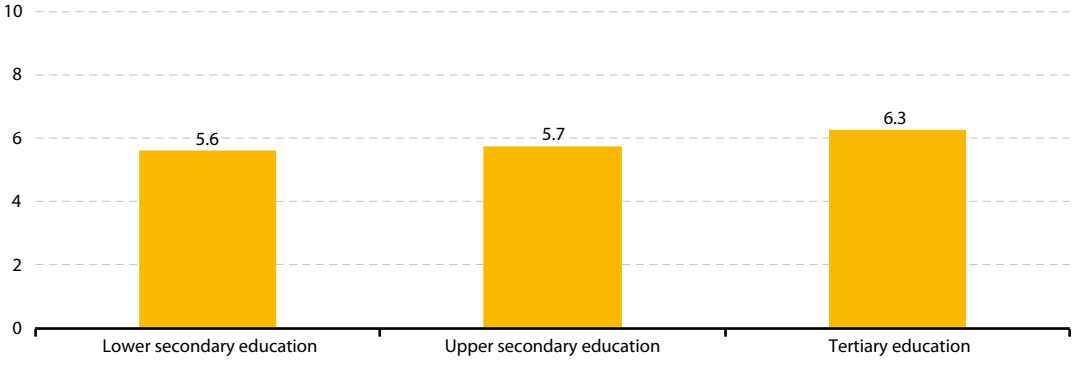
The analysis of trust in others puts again into light a clear relation between educational attainment and trust in others (Figure 10.b). The least educated had a mean trust in others of 5.6. The rating was just slightly higher amongst people having completed upper secondary education (5.7). Those who completed tertiary education reported an average mean of 6.3 in terms of trust in others. The order of these means was identical to the ones reported by income tercile, education and income.

Figure 10.a: Trust in institutions, by educational attainment, EU-28, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw03)

Figure 10.b: Trust in others, by educational attainment, EU-28, 2013
(mean rating)



Source: Eurostat (online data code: ilc_pw03)

Trust in others tended to be lowest amongst the younger single-person households

Figure 11 reveals that the lowest levels of trust were recorded amongst the younger single-person households, with or without children. Their means varied between 5.4 (single persons with at least one dependent child), 5.5 and 5.6 amongst young males (5.5) and young females who live alone.

People living in other household types reported quite homogeneous means ranging from 5.8 to 6.0.

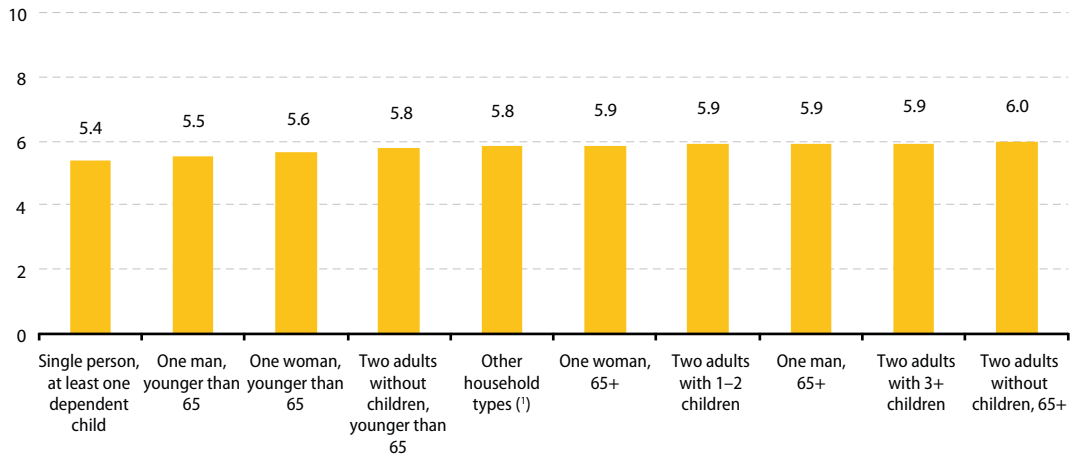
Amongst the household types presented, single persons with dependent children were the most at risk of poverty (31.8 %), just ahead of one-adult households aged less than 65 years (27.5 %) in 2013 ([33]). This financial insecurity may have led to difficult personal situations in which these households did not receive the expected support from others hence reducing their level of trust.

Labour status had a strong effect on trust

Figure 12.a reveals a certain connection between labour status and trust. The unemployed reported the lowest level of trust, with a mean that was more than 1 point lower than that of the most trustful people.

This was particularly true for trust in the political system: here, the average trust score of the unemployed was 2.4 points, while the corresponding average rate amongst people in education or training was almost twice as high (4.2). The self-employed followed with a slightly higher average trust score (equal to 3.3), when compared with that reported by unemployed people. Retirees and employees had a rather homogeneous average trust rate: 3.7 and 4.0 respectively.

Figure 11: Trust in others, by household type, EU-28, 2013
(mean rating)



(1) 'Other household types' refers to 3 or more adults with or without dependent children.
Source: Eurostat (online data code: ilc_pw04)

(33) *Source*: Eurostat, EU-SILC (ilc_li03). See chapter 1 'Material living conditions'.

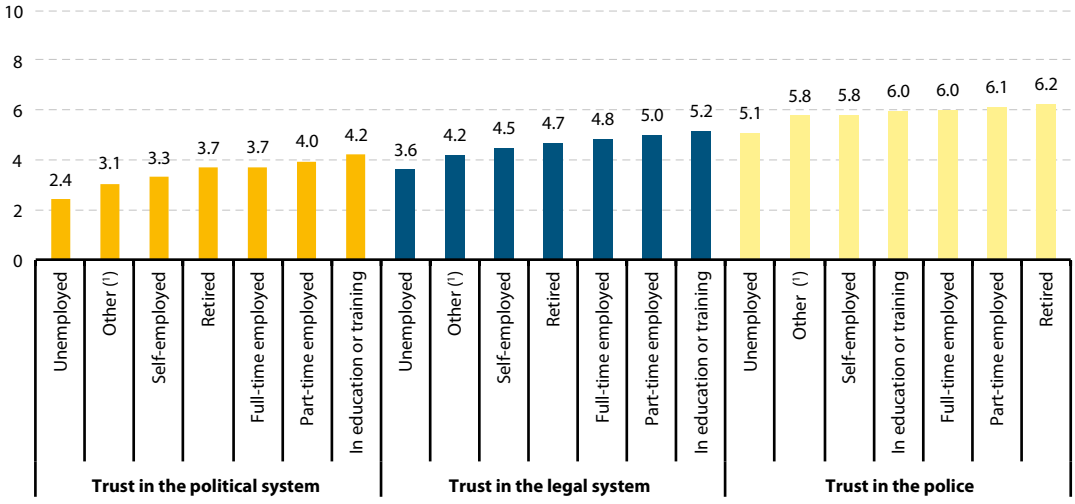
Trust in the legal system followed a very similar pattern, although the means were higher. The unemployed again recorded the lowest degree of trust. The gap here was 1.5 points, with a mean of 3.6 versus 5.2 for the most trustful group (again, composed of people in education or training). The level of trust in the legal system reported by the group of self-employed was on average 4.5. The average trust reported by other groups of people clustered by labour status varied from 4.7 to 5.0.

For trust in the police, the difference between the least trustful (again, the unemployed with a mean of 5.1) and the most trustful (the retirees at 6.2) was more limited, although reaching 1.1 points. The self-employed were the second least trustful group of people with a mean at 5.8, quite close to the means registered in the other categories (the employees and people in education or training), at 6.0 to 6.1.

High trust was hence found mostly amongst categories of people who probably feel they have safer financial and job security (or who are not concerned by job issues yet or anymore) which is also perceived in their tendency to be more satisfied with their financial situation ([34]).

Conversely, those who are jobless probably tend to have little faith in the future and feel that one of their main expectations to society (finding a job) goes unmet. The self-employed may often be facing high professional risk, which might generate feelings of insecurity, as compared with being an employee. This could be the main explanation for their low level of trust. The self-employed are also inclined to interact more directly with institutions than employees and people in the other groups, which might also have an impact on trust.

Figure 12.a: Trust in institutions, by economic status, EU-28, 2013
(mean rating)



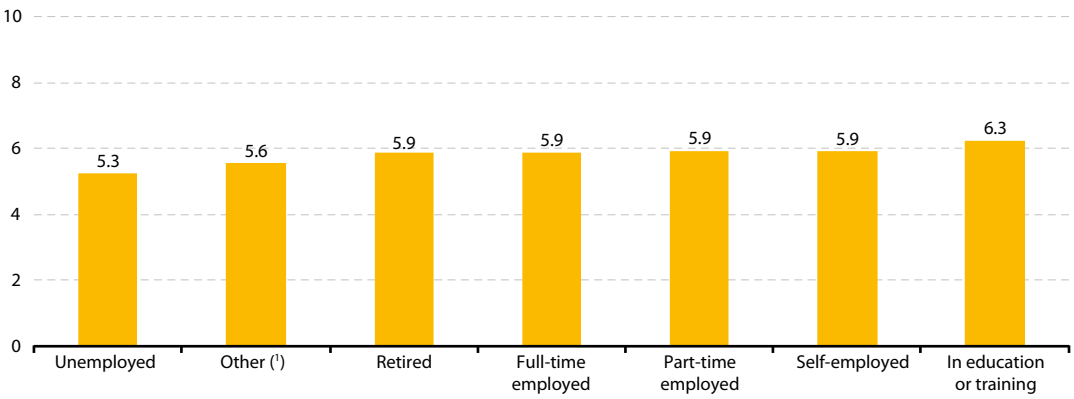
(1) 'Other' includes people permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

([34]) See chapter 1 'Material living conditions'.

People in education or training had on average the highest level of trust in the political and legal systems in the EU-28, namely 5.2 and 4.2 on a scale from 0 to 10 in 2013.

Trust in others (Figure 12.b) shows a similar pattern to trust in institutions, although, the means are more homogeneous (varying by 1 point rating only) and generally higher. With a mean at 6.3, people in education or training recorded the highest levels of trust while people in employment — whatever their specific status — and retired people, recorded a similar mean at 5.9. The unemployed were the least trustful (5.3).

Figure 12.b: Trust in others, by economic status, EU-28, 2013
(mean rating)



(1) 'Other' includes people permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

Trust in institutions and trust in others versus overall life satisfaction

How were the levels of trust in institutions and in others reported by European citizens connected with their overall life satisfaction?

This section will examine the relation between the subjective indicators on overall life satisfaction, on trust in institutions and on others. Life satisfaction is intended to cover a broad, reflective appraisal of all areas relating of a person's existence. It is regarded as a key indicator and reliable measure of subjective well-being backed by international studies and guidelines ([35]).

([35]) Life satisfaction (variable PW010) represents a report of how a respondent evaluates or appraises his or her life taken as a whole. It is intended to represent a broad, reflective appraisal the person makes of his or her life. The term life is intended here as all areas of a person's life at a particular point in time (these days). The variable therefore refers to the respondent's opinion/feeling about the degree of satisfaction with his/her life. It focuses on how people are feeling 'these days' rather than specifying a longer or shorter time period. The intent is not to obtain the current emotional state of the respondent but for them to make a reflective judgement on their level of satisfaction. See E. Diener, *Guidelines for National Indicators of Subjective Well-Being and Ill-Being*.

Table 1 compares the mean overall life satisfaction reported by EU residents (7.1, same as job satisfaction and satisfaction with recreational or green areas) ([36]) with their levels of trust in three institutions — the political system (3.5), the legal system (4.6) and the police (6.0) — and in others (5.8) in 2013.

Table 1: Subjective well-being and trust items, by country, 2013
(mean rating)

	Mean overall life satisfaction	Mean trust in the political system	Mean trust in the legal system	Mean trust in the police	Mean trust in others
EU-28	7.1	3.5	4.6	6.0	5.8
Belgium	7.6	4.6	5.0	6.1	5.7
Bulgaria	4.8	2.6	3.0	3.6	4.2
Czech Republic	6.9	3.7	3.8	4.9	5.3
Denmark	8.0	5.9	7.5	7.9	8.3
Germany	7.3	4.9	5.3	6.4	5.5
Estonia	6.5	4.4	5.2	6.0	5.8
Ireland	7.4	3.2	5.1	6.9	6.4
Greece	6.2	2.0	4.1	5.0	5.3
Spain	6.9	1.9	3.1	5.4	6.3
France	7.0	3.0	4.5	5.7	5.0
Croatia	6.3	2.8	3.3	:	5.1
Italy	6.7	2.1	3.6	5.8	5.7
Cyprus ([1])	6.2	2.6	3.6	4.7	4.5
Latvia	6.5	3.6	4.5	5.4	6.5
Lithuania	6.7	4.5	4.9	6.0	6.1
Luxembourg	7.5	5.0	5.3	6.1	5.5
Hungary	6.2	4.5	5.1	5.7	5.3
Malta	7.1	5.7	4.9	6.3	6.2
Netherlands	7.8	5.5	6.2	6.6	6.9
Austria	7.8	4.4	6.0	7.2	5.9
Poland	7.3	3.5	4.2	5.2	6.0
Portugal	6.2	1.7	2.9	5.4	5.3
Romania	7.2	4.8	5.8	6.4	6.4
Slovenia	7.0	1.8	2.7	5.5	6.5
Slovakia	7.0	3.5	3.6	4.4	5.8
Finland	8.0	6.0	7.2	8.2	7.4
Sweden	8.0	5.6	6.7	7.1	6.9
United Kingdom	7.3	3.8	5.5	6.4	6.1
Iceland	7.9	3.7	5.7	7.7	7.0
Norway	7.9	5.9	7.2	7.5	7.3
Switzerland	8.0	6.6	7.0	7.4	6.4
Serbia	4.9	3.2	3.4	4.3	4.2

([1]) No data on trust in the police.
Source: Eurostat (EU-SILC)

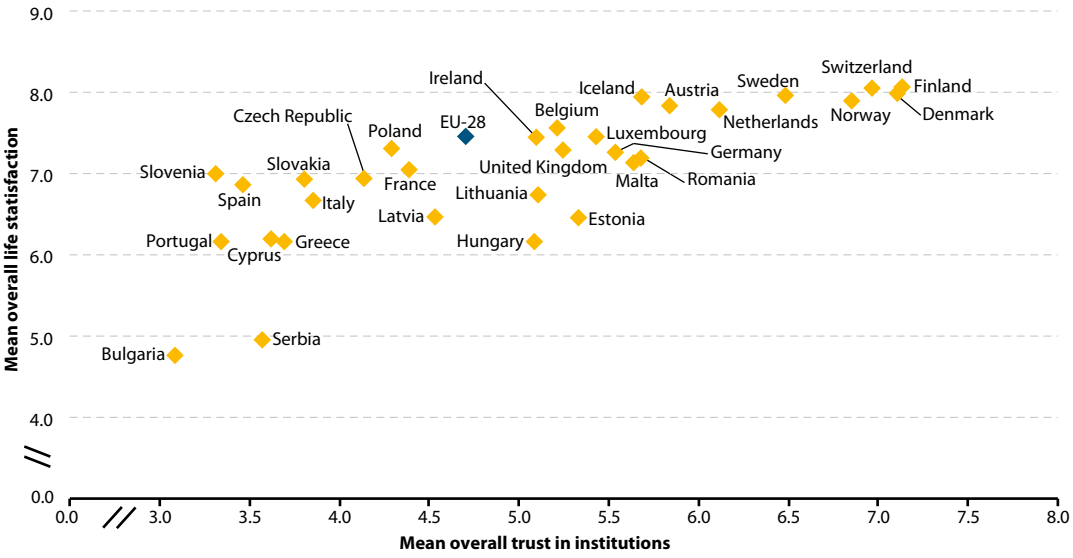
([36]) Overall life satisfaction scored lower than 'satisfaction with personal relationships' (7.8), 'satisfaction with accommodation' (7.5), 'meaning of life' (7.4), 'satisfaction with commuting time' (7.4), 'satisfaction with living environment' (7.3) and before 'satisfaction with time use' (6.7) and 'satisfaction with financial situation' (6.0).

As expected, the EU Member States with a high rate of life satisfaction were also those with the highest trust levels. The reverse was also true but less distinctively. The patterns recorded by individual EU Member States, including those who make up special cases, will be analysed below.

Life satisfaction and trust in institutions were strongly associated

As can be seen in Figure 13, the lower the overall life satisfaction was, the lower the average level of trust in institutions appeared to be. This was true in all EU Member States, with no real exception. A divide between northern/western and eastern/southern EU Member States prevailed however, the most striking examples being Bulgaria as opposed to Finland and Denmark. At the lower left-hand end of the spectrum, Bulgaria recorded the lowest means for life satisfaction (4.8) and of trust in institutions (3.1). Conversely, at the top right-end of the spectrum, Finland and Denmark were recorded the highest means of life satisfaction (8.0) and trust in institution (7.1). These two EU Member States also had very similar ratings of each individual institution (the police being the most trusted one ([37])). Residents of the Baltic countries (Lithuania, Latvia and Estonia) and Hungary were exceptions: their relatively high degrees of overall trust in institutions, comprised between 4.5 in Latvia and 5.3 in Estonia, had a limited impact on their assessments of life satisfaction which were comparatively low (ranging from 6.2 in Hungary to 6.7 in Latvia). With a much lower trust level (3.3 and 3.8), Slovenian and Slovak residents reported more positively on life satisfaction (7.0) (the same applied to Spain with a mean trust of 3.5 and a mean overall life satisfaction of 6.9).

Figure 13: Mean trust in institutions versus mean overall life satisfaction, by country, 2013 ([1]) (mean rating)



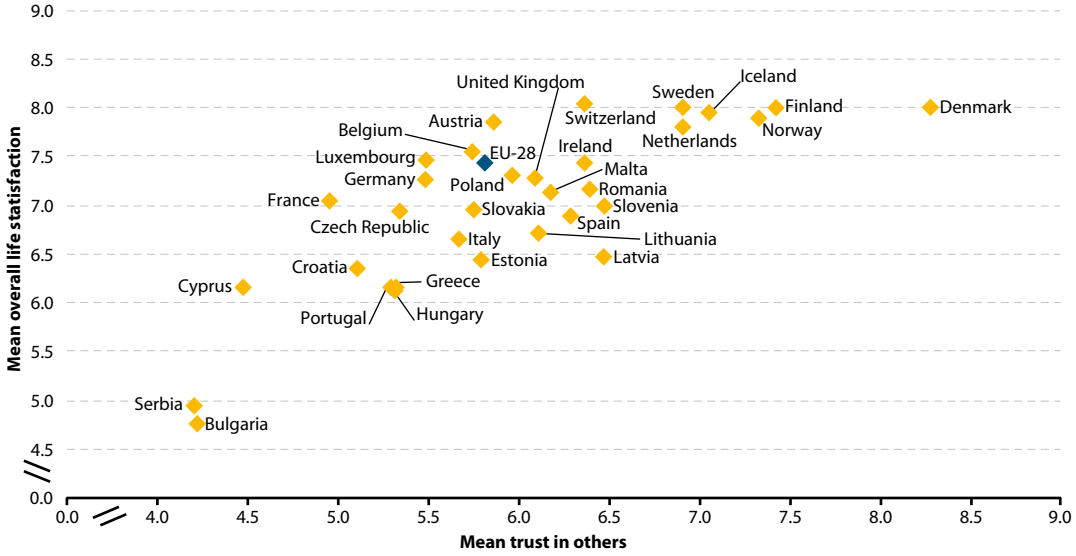
([1]) Overall trust in institutions is the average of the three institutions (political system, legal system, police).
Source: Eurostat (EU-SILC)

([37]) Hence in Denmark, trust in the political system was rated 5.9, trust in the legal system 7.5, trust in the police 7.9. The figures were similar in Finland (6.0, 7.2 and 8.2 respectively).

Life satisfaction and trust in others followed the same pattern

Similarly to trust in institutions, trust in others tended to be lower in EU Member States that also reported a low average level of overall life satisfaction. This was again true for almost all EU Member States, as seen in Figure 14. The divide this time however shows northern EU Member States contrasting with most other EU Member States, although eastern and southern EU Member States still tended to display the lowest means. Hence, Bulgaria registered the lowest mean trust in others, at 4.2, which was quite close to its mean life satisfaction (4.8, the lowest too). On the contrary, Denmark was the EU Member State with the highest mean trust in others (8.3, the next country, Finland, being at 7.4), mean life satisfaction being rated at 8.0 (the same score as in Sweden and Finland). However, EU Member States with the same average trust in others (for example at around 6.5) could have very different average life satisfactions, ranging from 6.5 in Latvia to 8.0 in Switzerland.

Figure 14: Mean trust in others versus mean overall life satisfaction, by country, 2013 (mean rating)



Source: Eurostat (EU-SILC)

8

Natural and living environment

Introduction

There is a strong consensus among European Union (EU) residents about the importance of environmental protection, the most worrying issues being air pollution and water pollution (1). This importance is made clear to policy-makers via opinion polls, social media and interest groups. The living environment affects different facets of people's lives, by impacting their health and well-being. Indeed, pollution has direct adverse effects on fundamental resources such as clean water, but also indirect effects on ecosystems and biodiversity. These may sometimes lead to natural disasters.

Most residents think that environmental issues have a direct impact on their daily life and on the economy (2). Together with economic factors (such as income) environmental preferences may determine their choices, for instance, when selecting their place of residence.

Although environmental indicators are relatively abundant, they are often too specific or focused on the natural environment to be of much use in a quality-of-life perspective. However some provide valuable information, especially when combined with self-reported assessments of the quality of one's environment. Thus, the analysis below focuses on environmental indicators such as air quality and self-reported exposure to noise and pollution, together with the satisfaction of EU residents with their living environment.

The analysis initially provides an overview of the self-reported exposure to any kind of pollution, grime and environmental problems, complemented by a focus on air pollution by particulate matter (PM) in urban areas, measured at the aggregated (country) level (objective indicators). The satisfaction with one's living environment reported by various groups (population divided by age groups, sex, income terciles, labour status, education levels and degrees of urbanisation) will then be examined. Lastly, the analysis compares the proportion of people with a low level of satisfaction with their living environment and the shares of exposure to noise and pollution reported in EU Member States (3).

EU POLICIES RELATED TO NATURAL AND LIVING ENVIRONMENT

The dimension 'natural and living environment' of the Quality of Life Framework refers to environmental aspects of quality of life. Environmental conditions affect human health and well-being both directly and indirectly, while residents value their rights to access environmental resources. Moreover, environmental factors indirectly affect other quality of life aspects, including economic prosperity and inequality, e.g. by directly affecting property prices and housing conditions. Recognising the importance of this dimension, the Sixth Environment Action Programme (EAP) includes environment (and within this topic air pollution) as one of the four main target areas in which more needs to be done. Reducing noise pollution is also an objective in EU policy. The Environmental Noise Directive (2002/49/EC) is one of the main instruments to identify noise pollution levels and to trigger the necessary actions both at Member State and at EU level.

(1) See European Commission, Special Eurobarometer 416 *Attitudes of European citizens towards the environment* (2014), pp. 11–12.
(2) See European Commission, Special Eurobarometer 416 *Attitudes of European citizens towards the environment* (2014), p. 54.
(3) Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained (Excel file at the bottom of each article).

Environment in the quality of life framework

According to the data available at EU level, the reported exposure of people to pollution, grime and other environmental problems has decreased over the last decade. The same can be observed for exposure to noise from neighbours or from the street. However, in 2013, around one out of seven people declared still being exposed to pollution and one out of five to noise. Additionally, in most EU-28 Member States, people at risk of poverty were more exposed to pollution and noise than the non-at-risk population. Following the implementation of EU policies and legislation, the exposure of city dwellers to PM has decreased since 2005, but considerable differences prevail across Member States.

Under these background conditions, on average, about 30 % of EU residents declared a high satisfaction with the living environment and recreational or green areas situated close to their place of residence, 20 % a low satisfaction and the remaining 50 % a medium satisfaction. On a scale from 0 to 10 ([4]), this represents an overall mean satisfaction of 7.3 with the living environment and 7.1 with green areas.

Unsurprisingly, mean satisfaction with the living environment is lower among the population affected by pollution or noise. It differs to various extents depending on the socio-demographic group an individual belongs to. Satisfaction with living environment was merely associated with gender and not strongly influenced by age, although the older age groups tended to declare a higher level of satisfaction. The impact of the labour status is clear: the part-time employed, followed by the retired, were the most satisfied with their living environment and green areas, for different reasons. People with the highest level of education and those belonging to the highest income tercile were also more likely to have a higher level of satisfaction, notably due to a higher capacity to afford better living conditions including a better surrounding environment. Living in sparsely populated areas brings about a slightly higher likelihood of being satisfied with the environment, as these areas are less affected by pollution.

In 2013, while 19.2 % of EU residents declared a low level of satisfaction with their environment, the relationship with the reported levels of exposure to pollution and noise at country level was a loose one. However, in general, northern and western EU Member States tend to have lower proportions of people declaring a low satisfaction with their environment and lower levels of exposure to pollution and noise than eastern and southern EU countries. Environmental satisfaction of the urban population and urban exposure to air pollution by PM followed that rule more strictly, highlighting a clear relationship between these two variables.

([4]) Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6–8 and high satisfaction to 9–10.

INDICATORS RELATED TO NATURAL AND LIVING ENVIRONMENT

The topic 'natural and living environment' covers indicators on exposure to pollution (both self-reported and objectively measured) and to noise or other environmental problems which are primarily derived from EU statistics on income and living conditions (EU-SILC). It also includes indicators related to satisfaction with recreational and green areas and with the immediate living environment which have been developed in SILC 2013 ad hoc module on subjective well-being. The Urban population exposure to air pollution by particulate matter (PM) is a Sustainable Development Indicator (SDI). It is used for the assessment of progress towards the objectives and targets of the EU Sustainable Development Strategy. It is also a Resource Efficiency Indicator, as it has been chosen as a lead indicator presented in the Resource Efficiency Scoreboard for the assessment of progress towards the objectives and targets of the Europe 2020 flagship initiative on Resource Efficiency.

Pollution in the EU

The EU population is less exposed to pollution than a few years ago

Air pollution, grime and noise were among the most common forms of pollution affecting populations in the EU. Exposure to these forms of pollution could have damaged human health and hence affected the quality of life. Air pollutants such as particulate matter can be dangerous to health, especially for people with heart and lung diseases. The particles are small enough to be carried into the lungs ([5]) and cause inflammation.

Noise pollution can have serious direct and indirect health effects such as hypertension, high stress levels, sleeping disorders and, in extreme cases, even hearing loss. Stress and hypertension have been reported as the leading causes of a whole set of health problems ([6]).

Additional forms of pollution, such as grime and other local environmental problems (i.e. smoke, dust, unpleasant smells or polluted water) can also affect human health and the quality of the surrounding environment, and therefore impact the subjective well-being.

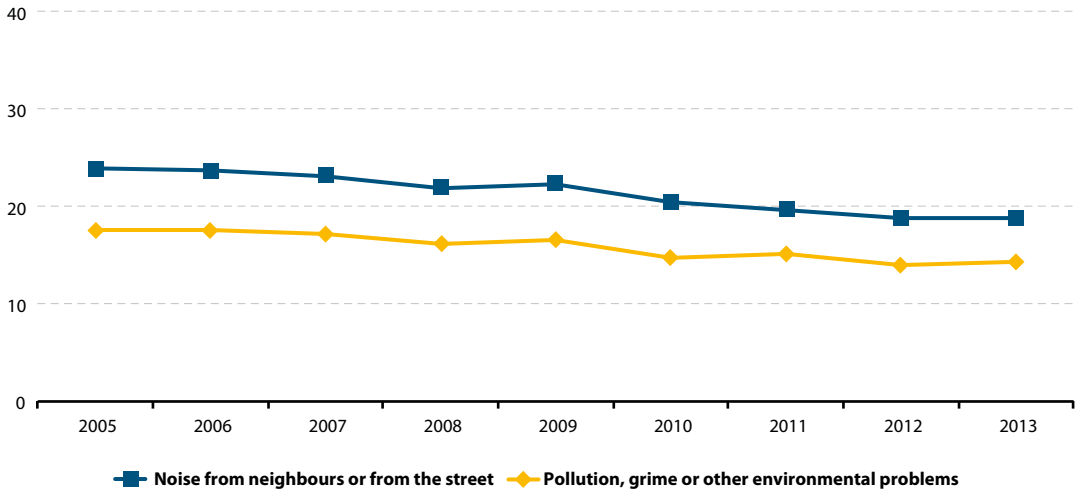
As illustrated in Figure 1, a smaller proportion of EU residents reported being exposed to pollution in 2013 than in 2005. In 2013, around one in seven residents (14.4 %) was still suffering from pollution, grime or other environmental problems ([7]) a decrease from 17.6 % in 2005. At the same time, one in five residents (19.0 %) reported being exposed to noise from neighbours or from the street in their living area, a decrease from 24.0 % in 2005.

DEFINITION OF NOISE FROM NEIGHBOURS AND FROM THE STREET

'Noise from neighbours' is described as noise from neighbouring apartments, staircase or water pipe. 'Noise from the street' is described as noise linked to traffic (street or road, plane, railway), linked to business, factories, agricultural activities, clubs and yard).

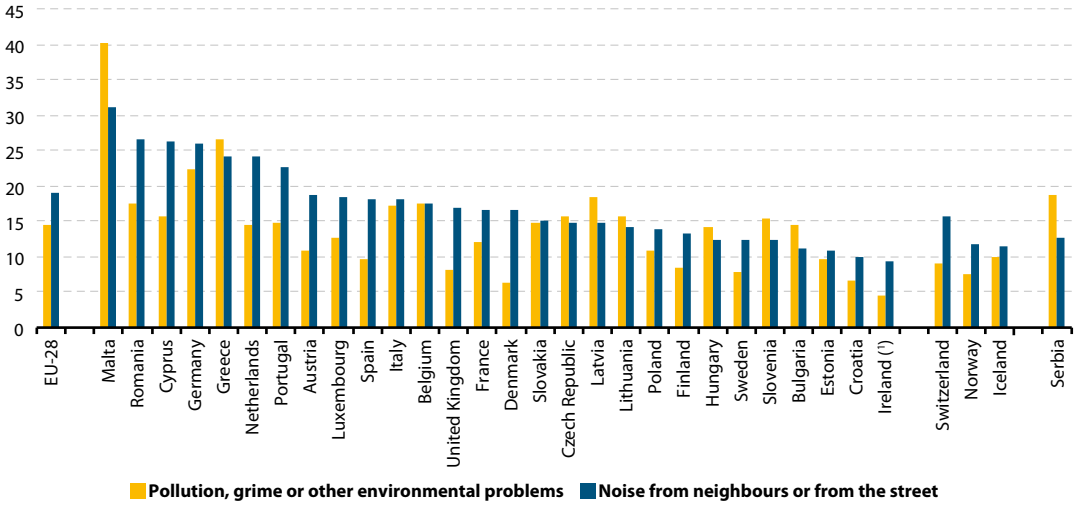
([5]) *What is Particulate Matter? — United States Environmental Protection Agency.*
([6]) *The EU Policy on environmental noise.*
([7]) Pollution, grime or other environmental problems in the local area such as smoke, dust, unpleasant smells or polluted water: no common standards are defined. The local area refers to a place situated close to the place of residence. Examples of problems may include: road dust, exhaust gases of vehicles; smoke, dust or unpleasant smells from factories; unpleasant smells of wastes or sewerage; polluted water from water pipe as well as polluted river. The specific problem may be caused by traffic or industry.

Figure 1: Exposure to pollution, by environmental problem, EU-28, 2005–13 (1)
(%)



(1) EU-27 instead of EU-28 for 2005 to 2009.
Source: Eurostat (online data codes: ilc_mddw02 and ilc_mddw01)

Figure 2: Population exposure to pollution, by environmental problem, by country, 2013
(%)



(1) 2012 data.
Source: Eurostat (online data codes: ilc_mddw02 and ilc_mddw01)

The EU population was less exposed to pollution in 2013 than in 2005 (14 % compared with 18 %) as well as to noise (19 % compared with 24 %).

The values in Figure 1 however, are only averages. The self-reported exposure levels across individual EU Member States varied by a factor of around 10 for pollution and 3.5 for noise exposure (see Figure 2). Malta was an extreme case: 40.3 % of its population declared being exposed to pollution while 31.2 % declared being subjected to noise. At the other end of the spectrum, 4.8 % of Ireland's residents reported being exposed to pollution and about twice as many to noise.

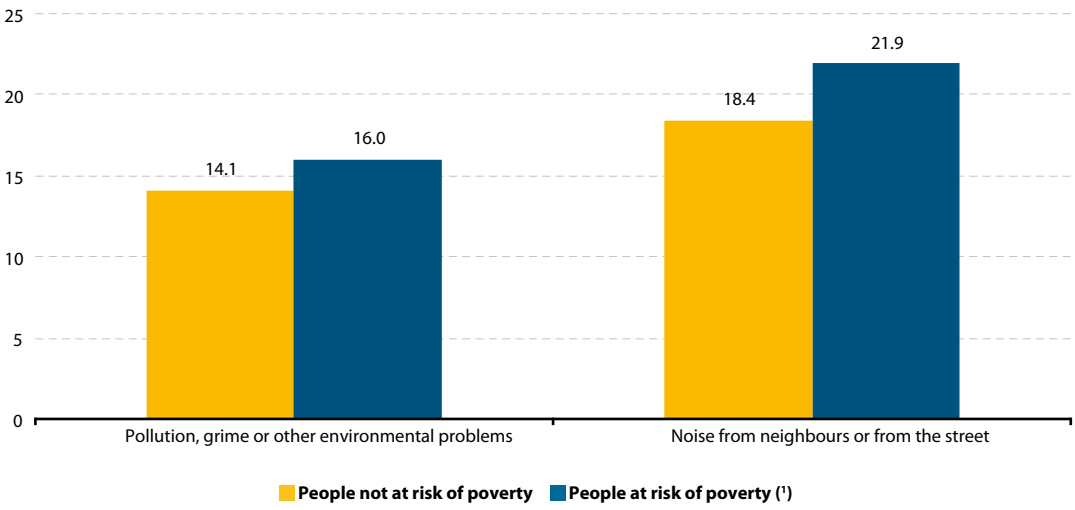
Figure 3 shows that those people at risk of poverty — earning less than 60 % of median equivalised income ([8]) — were on the whole more exposed to pollution, grime and other environmental problems (by 1.9 percentage points) and noise (by 3.5 percentage points) than those not at risk of poverty.

This reflects the fact that in most EU Member States the population at risk of poverty tended to be located in densely populated urban areas with more environmental problems.

There were a few EU Member States where the population at risk of poverty was less exposed to pollution than the population not at risk of poverty. These concerned mainly rural populations living in areas with fewer environmental problems ([9]).

The section below focuses on air pollution by PM, a commonly measured environmental problem affecting urban areas.

Figure 3: Self-reported population exposure to pollution, by income situation, EU-28, 2013 (%)



(1) People at risk of poverty have an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers).
Source: Eurostat (online data codes: ilc_mddw02 and ilc_mddw01)

([8]) See chapter 1 'Material living conditions'.
([9]) See Eurostat, Statistics Explained Income and living conditions by degree of urbanisation (2013).

Pollution by particulate matter has slightly declined in recent years but the 2010 target has not been met

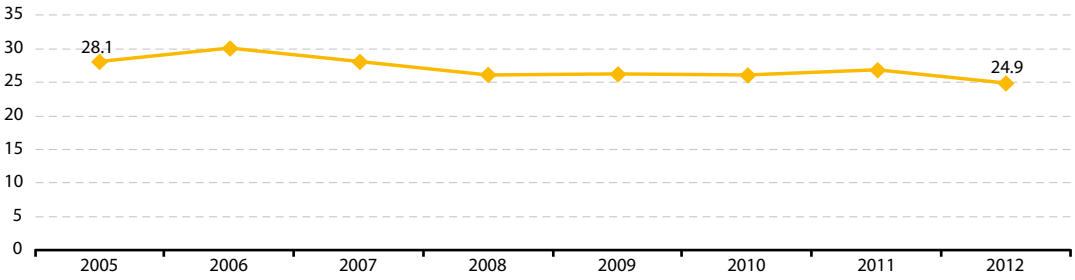
Urban air pollution is usually analysed via indicators measuring exposure to PM and ozone ([10]). PM consists of tiny pieces of solid or liquid matter from both natural and human-made sources emitted into the atmosphere. The leading human-made source of particle pollution is combustion which, in urban areas, mainly originates from diesel engines and industrial, public, commercial and residential heating ([11]). Fine particulates (PM10), i.e. PM whose diameter is less than 10 micrometres, can be carried deep into the lungs where they can cause inflammation and gravely affect people with heart and lung conditions.

Figure 4 illustrates the trend in the exposure levels of the urban population ([12]) to PM since 2005 ([13]).

At 28.1 micrograms per cubic metre (µg/m³) in 2005, PM concentrations have gone through ups and downs over time, peaking at 30.1 µg/m³ in 2006, before starting to decline in 2007 to reach 24.9 µg/m³ in 2012.

The EU average conceals significant variations between EU Member States, with 2012 exposure levels ranging between 11 µg/m³ in Finland and 46 µg/m³ (or four times as much) in Bulgaria (Figure 5). In general, the lowest levels of exposure — below 20 µg/m³ — were recorded in EU Member States that were mostly situated in northern and central parts of the EU, Estonia being an exception. Nonetheless, while all EU Member States (for which data is available) — except France and Poland — managed to reduce exposure levels since 2005, the most remarkable progress was achieved in Hungary (decrease of 10.2 percentage points) and Romania (decrease of 16.4 percentage points).

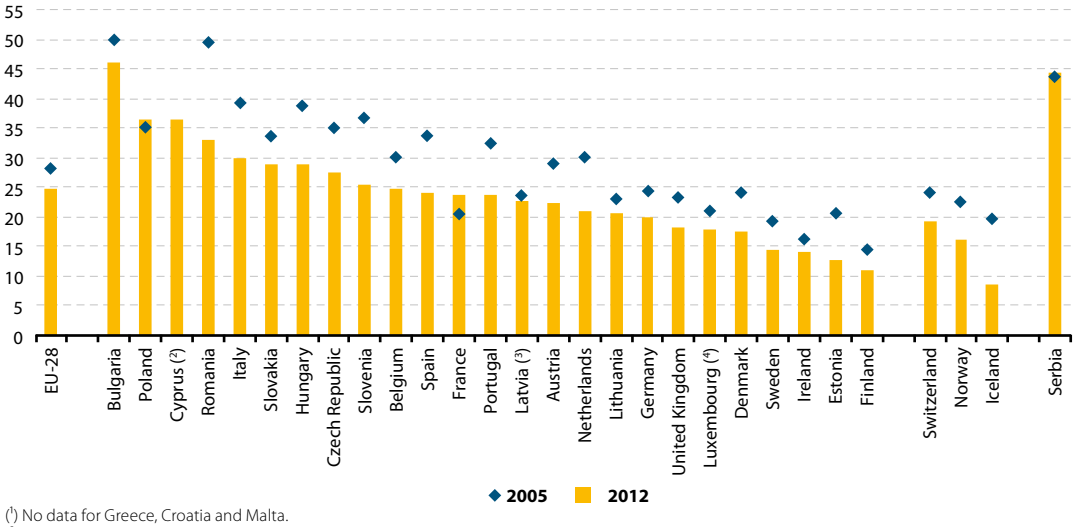
Figure 4: Urban population exposure to air pollution by particulate matter, EU-28, 2005–12
(micrograms per cubic metre/population weighted annual mean concentration of PM10 in µg/m³)



Source: European Environment Agency, Eurostat (online data code: tsdph370)

([10]) Ozone is a substance that caused health problems and damages ecosystems, agricultural crops and materials. *Source*: Eurostat (tsdph380).
([11]) See Eurostat, *Sustainable development in the European Union — 2013 Monitoring report of the EU sustainable development strategy* (2013), Luxembourg, p. 172.
([12]) Selected European cities.
([13]) The indicator shows the population weighted annual mean concentration of particulate matter at urban background stations in agglomerations. Fine and coarse particulates (PM10) are particulates whose diameters are less than 10 micrometres. The population covered is the total number of people living in cities with at least one monitoring station at a background location.

Figure 5: Urban population exposure to air pollution by particulate matter, by country, 2005 versus 2012 (1)
(micrograms per cubic metre)



(1) No data for Greece, Croatia and Malta.
(2) No data for 2005.
(3) 2008 data instead of 2005.
(4) 2006 data instead of 2005.
Source: European Environment Agency, Eurostat (online data codes: tsdph370 and ilc_mddw02)

The EU Member States that managed to decrease their exposure to PM did so by reducing the proportion of diesel-engined road vehicles among city-dwellers, lowering the average age of the car fleet in general, diversifying energy sources (especially for heating) and setting up policies at country level to reduce exposure. At 34.3 %, the proportion of energy consumption derived from renewable energy sources in Finland was very high — more than twice as much as in Bulgaria (16.3 %) and in the EU-28 overall (14.1 %) (14).

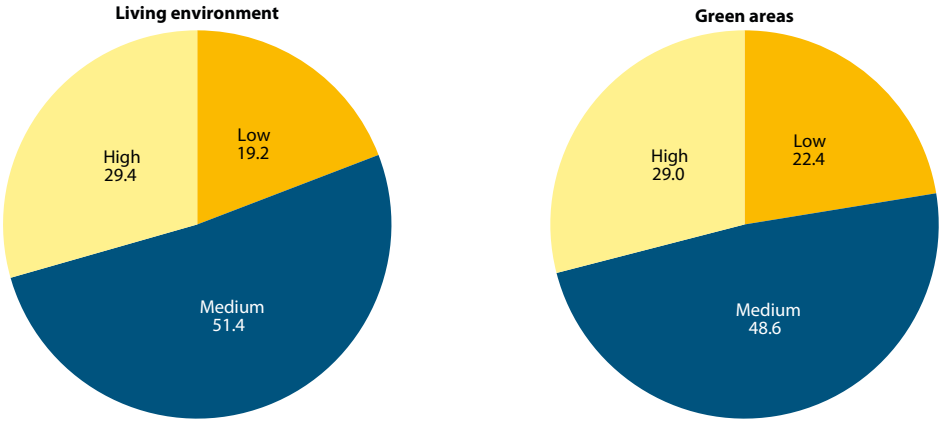
PM concentrations also depend on meteorological and natural conditions. Dry and hot weather lead to stagnant air with high concentrations of pollutants and anomalously cold winters are linked to higher emissions of air pollutants from fuel combustion. Natural sources include dust and sand (blown for instance from North Africa and affecting EU Member States bordering the Mediterranean) as well as smoke from forest fires (15). The 2006 peak for example was partially the result of a severe heat wave during the summer period, and potentially the 'El Niño' phenomenon (16), whose combined effects led to the high PM concentrations recorded that year (17). Moreover, the representativeness of the monitoring stations was limited, making comparisons across EU Member States challenging and thus the indicator difficult to interpret (18). Despite that, the trend was quite robust, and the differences between EU Member States seemed plausible.

(14) *Source*: Eurostat (nrg_ind_335a).
(15) *Source*: Eurostat (tsdph370) — Indicator Profile (ESMS).
(16) El Niño was originally the name used for warmer than normal sea surface temperatures in the Pacific Ocean off the west coast of South America It occurs when the easterly winds die down, in turn allowing for warmer waters normally kept in the western Pacific to drift eastward towards the Americas. The phenomenon is expected to have led to higher temperatures hence higher concentrations of PM.
(17) See Eurostat, *Sustainable development in the European Union — 2013 Monitoring report of the EU sustainable development strategy* (2013), Luxembourg, p. 172.
(18) The number of stations measuring the concentration of pollutants and their location changed in some of the countries. *Source*: Eurostat (tsdph370) — Indicator Profile (ESMS).

Nearly one third of EU residents were very satisfied with the quality of their immediate environment

While the EU residents were less exposed to pollution (including air pollution, grime or other environmental problems in the local area and noise from neighbours or the street) than a few years ago, about half of them declared having a medium satisfaction with their living environment and recreational or green areas situated in the area where they live. Around one in three reported being highly satisfied and one in two reported a low satisfaction with their immediate environment. As a whole this translated into a mean satisfaction with environment and green areas of 7.3 and 7.1 respectively (on a scale of 0 to 10) ([19]).

Figure 6: Satisfaction with living environment and green areas, EU-28, 2013
(%)



Source: Eurostat (online data code: ilc_pw05)

LIVING ENVIRONMENT AND PLACE WHERE THEY LIVE

The term 'living environment' refers to the access to services (e.g. shops, public transport, etc.), the presence of cinema, museums, theatres, etc. in the places where the respondent lives.

The 'place where the respondent lives' refers to the place situated close to the place of residence (where the respondent usually goes shopping, goes for a walk, goes the way home).

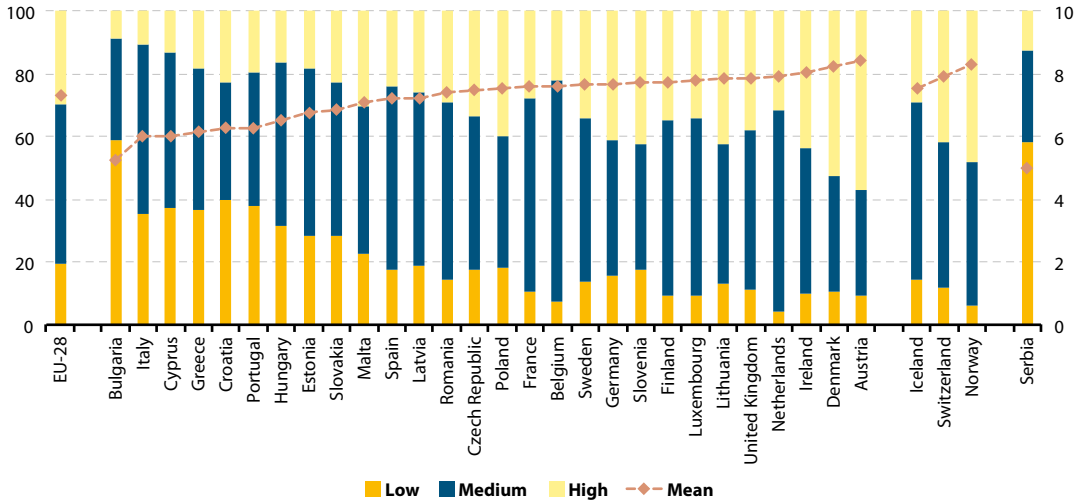
The term 'recreational or green areas' refers to the places where the respondents can walk, cycle, do some recreational activities, etc.

([19]) Where 0 means not at all satisfied and 10 completely satisfied; low satisfaction refers to 0–5 ratings, medium satisfaction refers to 6–8 and high satisfaction to 9–10.

This overall perception of their immediate environment by EU residents conceals some very clear differences between EU Member States (Figure 7.a). National assessments of living environment were rated between 5.2 in Bulgaria (followed by Italy and Cyprus both at 6.0) and 8.4 in Austria (followed by Denmark at 8.2, and Ireland and the Netherlands both at 8.0). Bulgarian residents were also the most likely to report a low satisfaction with their environment (59.0 %), while the Dutch reported the lowest share of people unhappy with their environment (4.0 %). While some EU Member States presented similar means, they displayed quite different distributions in the levels of satisfaction. For instance, the share of Belgian residents reporting either a low (7.5 %) or a high (22.2 %) satisfaction was about half the proportion reported by residents in Germany, Slovenia and Poland, although their means only varied by 0.1 point rating (between 7.6 and 7.7 out of 10).

Satisfaction with green areas ([20]) (Figure 7.b) revealed similar perceptions as with the findings on living environment in most EU Member States. The lowest mean satisfaction was again reported by Bulgarian residents, averaging at 5.2, followed by residents in Croatia, Cyprus and Greece (all below 6.0). At the other end of the scale, the highest mean was recorded by the residents of Sweden (8.4), followed by Denmark, Austria, Finland and the Netherlands (all over 8.0).

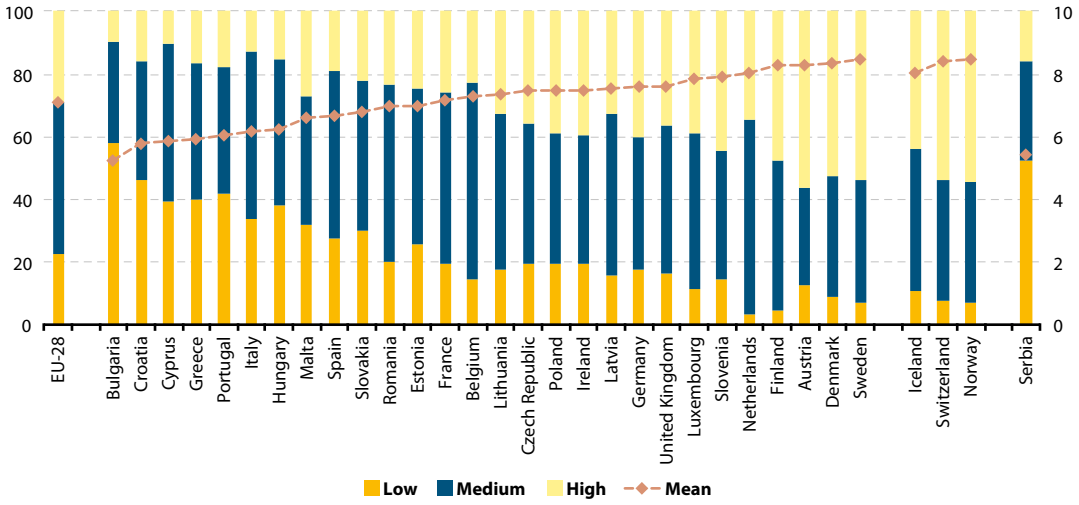
Figure 7.a: Satisfaction with living environment, by country, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

([20]) *Source*: Eurostat, EU-SILC 2013 ad-hoc module on subjective well-being.

Figure 7.b: Satisfaction with green areas, by country, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

In 2013, Austria was the EU Member State which recorded the biggest share of people with high satisfaction with their living environment (57 %) as with their green areas (56 %).

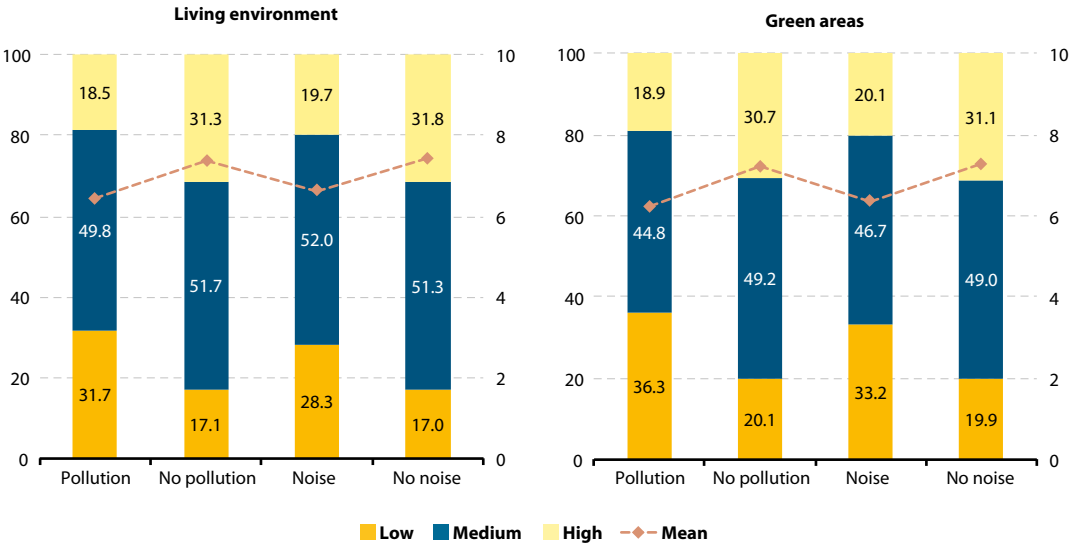
Exposure to pollution and noise reduced the well-being of the population

There was strong evidence to suggest that environmental problems were associated with lower subjective well-being. Figure 8 highlights the connection between the prevalence of environmental problems, such as pollution and noise, on the EU-28 population's perception of their immediate environment.

The mean satisfaction of EU residents with their living environment and green areas was higher among the population not affected by pollution or noise. Average satisfaction among that group tended to be higher by about 1 point rating. When analysing the proportion of people with a low level of satisfaction, the differences were even more striking. The share of people exposed to pollution that reported a low satisfaction with their living environment and green areas was almost double that of those who were not exposed.

Exposure to pollution had a slightly stronger negative effect on the satisfaction with living environment than exposure to noise. However, it is worth mentioning that in 2013 a greater share of the EU population reported being exposed to the latter (19.0 % versus 14.4 % for pollution) (Table 1).

Figure 8: Satisfaction with living environment and green areas, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

Satisfaction with living environment and nearby green areas varied across different socio-demographic groups

This section will analyse how belonging to certain socio-demographic groups (for example age categories, gender, income terciles, labour status, education attainment levels, types of population area) is associated with an individual's satisfaction with their environment.

Satisfaction with one's living environment was lowest among the intermediate age groups

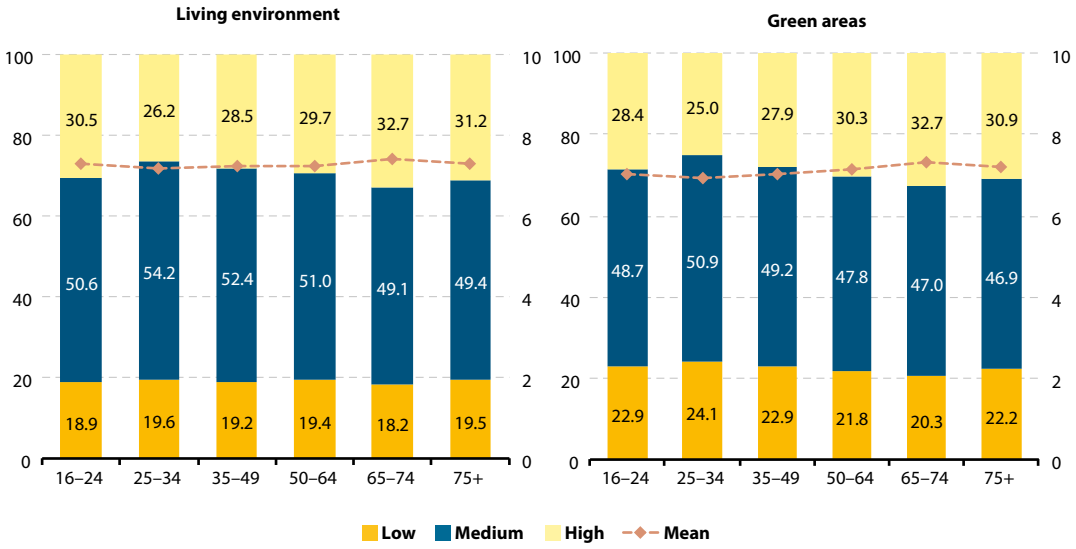
There were no striking differences between satisfaction with the environment and satisfaction with green areas across the different age groups (Figure 9). In particular, the mean environmental satisfaction ranged from 7.2 out of 10 for the population aged 25–34 and 35–49 to 7.4 for the population aged 65–74. Mean satisfaction with green areas ranged from 6.9 out of 10 for the population aged 25–34 to 7.3 for the population aged 65–74.

These figures denoted a lower average degree of satisfaction among the population entering working life and a higher satisfaction among those leaving it. These differentials probably had to be seen relative to diverging financial resources, enabling the older age groups to live in a nicer environment.

As of a certain age (75+) satisfaction declined again, following a trend similar to that observed for overall life satisfaction ([21]).

([21]) See chapters 1 'Material living conditions' and 9 'Overall life satisfaction'.

Figure 9: Satisfaction with living environment and green areas, by age, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Men and women were almost equally satisfied with their living environment and nearby green areas

When looking at male and female average satisfaction with living environment and green areas (Figure 10), it appears that the two genders were almost equally satisfied ([22]). Nonetheless, women tended to be slightly more likely to report a high level of satisfaction.

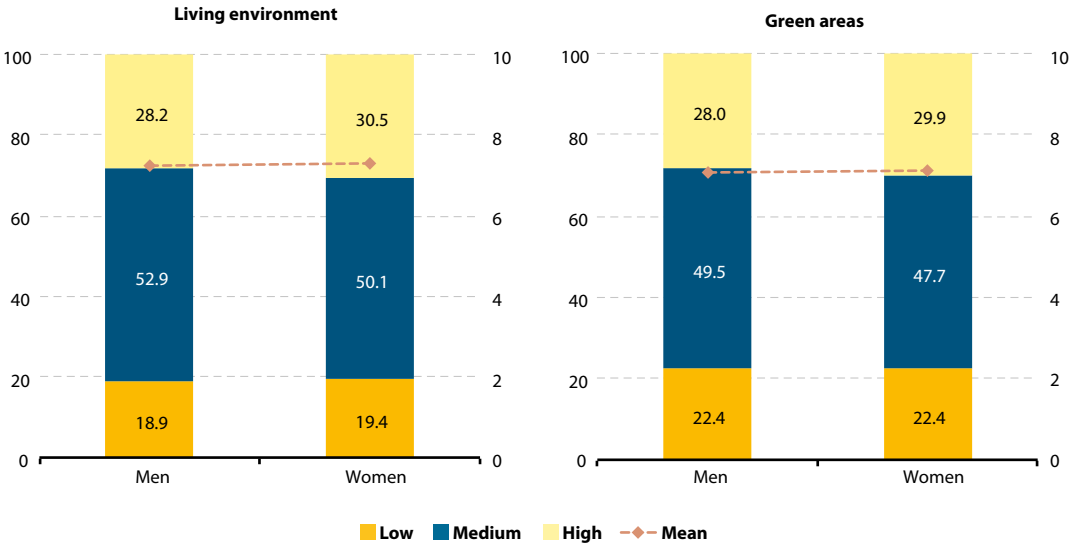
Income levels gave rise to inequalities regarding satisfaction with respondents' living environment and nearby green areas

As can be seen from Figure 11, socio-economic factors such as income had a big impact on the level of satisfaction of EU residents. Indeed, the mean satisfaction with living environment ranged from 7.0 to 7.5 out of 10 for those residents in the lowest and highest income terciles respectively and the mean satisfaction with green areas ranged from 6.8 to 7.4 out of 10 for those people in the lowest and highest income terciles respectively.

With higher disposable income, the population belonging in the highest tercile was able to look back on a larger selection of opportunities when looking for a residence, which was in turn likely to result in a surrounding environment of better quality and superior housing conditions, explaining their higher assessment of environment and green areas.

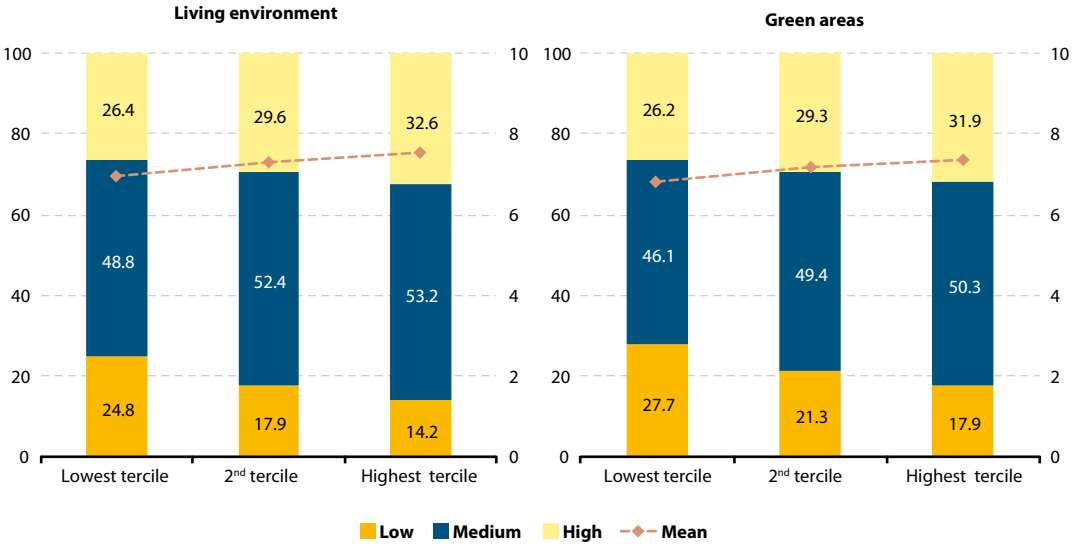
([22]) The difference is a marginal 0.05 point for both environment and green areas; due to figure rounding this difference only appears in environmental satisfaction.

Figure 10: Satisfaction with living environment and green areas, by sex, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 11: Satisfaction with living environment and green areas, by income tercile, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)

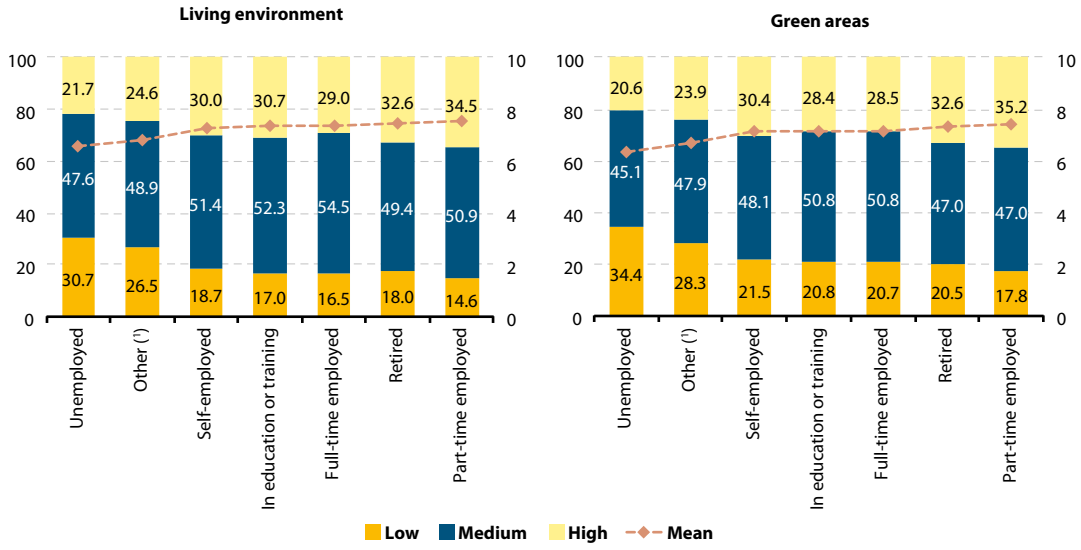


Source: Eurostat (EU-SILC)

Satisfaction with living environment and green areas was highest among the part-time employed and the retired

The impact of the respondents' labour status on their level of satisfaction with the environment and green areas was undeniable, as showed in Figure 12. On average, unemployed people were much less satisfied with their environment and green areas than the other groups, which was probably due to a lack of resources and the ensuing reduced capacity to afford a dwelling in the nicer neighbourhoods. On the other hand, the part-time employed, followed by the retired population, were the most satisfied with their living environment and green areas.

Figure 12: Satisfaction with living environment and green areas, by labour status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)

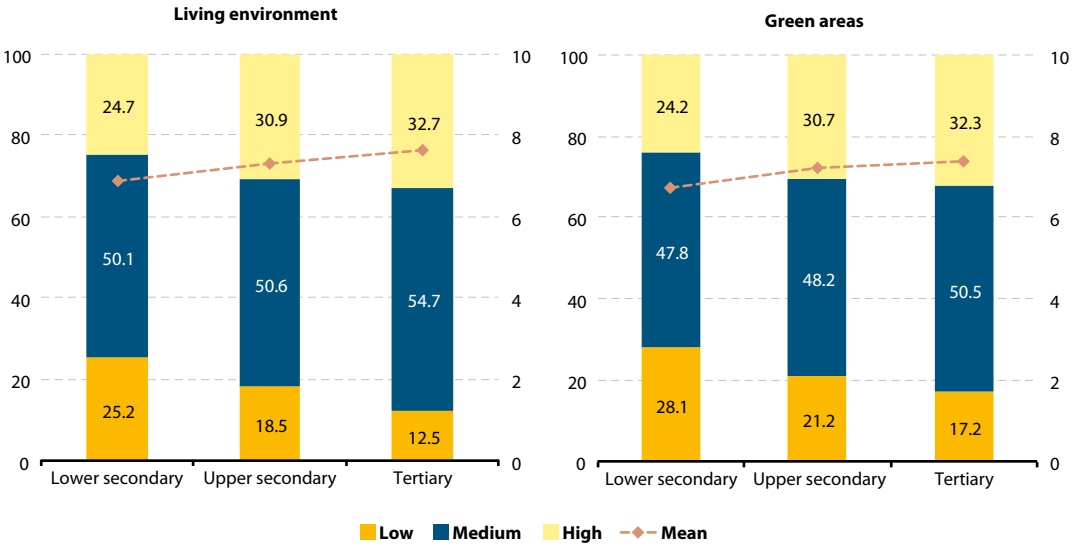


(1) 'Other' includes people who are permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

Education and satisfaction with living environment were closely linked

When looking at satisfaction from an education perspective (Figure 13), tertiary graduates appeared to be the most satisfied, with a mean of 7.6 out of 10 for satisfaction with living environment and a bit less, 7.4 out of 10, for satisfaction with green areas. Conversely, the least educated were also the least satisfied with environment and green areas, at 6.9 and 6.7 out of 10 respectively. Those respondents that had graduated from tertiary education were also quite likely to be more qualified hence hold the better paid jobs which allowed them to opt for a better living environment and housing conditions.

Figure 13: Satisfaction with living environment and green areas, by educational attainment, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

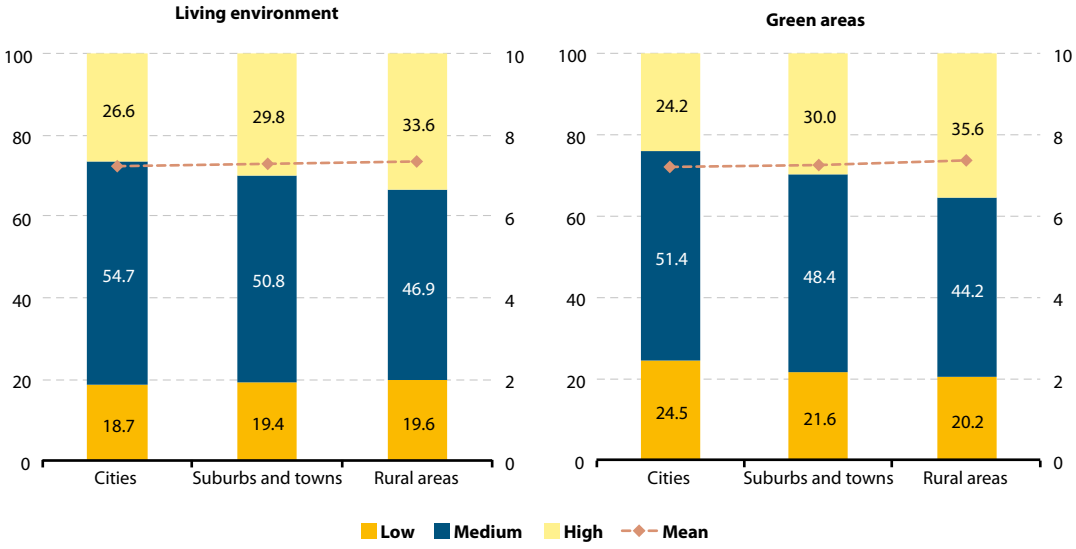
People living in rural areas were more satisfied with their living environment

The EU residents living in the less-densely populated areas, in particular rural areas, or suburbs and towns, had a higher propensity to be more satisfied with their environment and green areas than those living in the most densely-populated city areas (Figure 14). The differential was higher (though by merely 0.2 points) for mean satisfaction with green areas as densely populated regions generally tended to offer fewer green spaces than rural areas ([23]).

High concentrations of population engender higher levels of pollution which may give rise to a wide range of environmental problems, such as excessive water and energy use, high production of wastewater, concentrations of PM above limits, high exposure to noise from traffic or other sources, etc.

([23]) Eurostat, *Eurostat regional yearbook 2014* (2014), p. 27.

Figure 14: Satisfaction with living environment and green areas, by degree of urbanisation, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data code: ilc_pw02)

Relationship between satisfaction with living environment and the magnitude of environmental problems at country level

Table 1 compares the shares of EU residents reporting a low satisfaction with their environment and green areas with the shares of the population exposed to pollution and noise and the average exposure to air pollution by PM10 in urban areas, in 2013.

It appears that the proportions of people having declared being exposed to pollution (14.4 %) or noise (19.0 %) in their living area were lower than the shares of people who indicated a low satisfaction with their living environment (19.2 %) or green areas (22.5 %). The EU urban population was also exposed to air pollution by PM averaging 24.9 µg/m³ which could be seen in conjunction with the residents' overall satisfaction with their environment at 7.3 out of 10 (mean rating, see Figures 6 and 7).

The section below analyses the assessments of the EU residents' living environment, by comparing their levels of low satisfaction with the shares of those who declared being affected by exposure to pollution or noise, and their mean satisfaction with the average levels of exposure to PM10 ([24]) at country level.

([24]) Urban population.

Table 1: Natural and living conditions objective indicators versus low satisfaction with environment and green areas, by country, 2013
(%)

	Low satisfaction with environment	Low satisfaction with green areas	Reporting pollution, grime or other environmental problems	Reporting noise from neighbours or from the street	Average urban population exposure to air pollution by PM10 ([1])
	(% of the total population aged over 16)				(µg/m³)
EU-28	19.2	22.4	14.4	19.0	24.9
Belgium	7.5	14.7	17.5	17.5	24.8
Bulgaria	59.0	58.0	14.5	11.1	45.9
Czech Republic	17.8	19.5	15.8	14.9	27.5
Denmark	10.8	9.0	6.2	16.5	17.4
Germany	15.9	17.9	22.4	26.1	19.8
Estonia	28.5	25.7	9.7	10.8	12.7
Ireland	10.1	19.6	4.6	9.4	14.0
Greece	36.5	40.2	26.5	24.2	:
Spain	17.4	27.4	9.8	18.3	23.9
France	10.7	19.4	12.0	16.7	23.7
Croatia	39.7	46.2	6.8	10.0	:
Italy	35.6	33.5	17.1	18.2	30.0
Cyprus	37.3	39.1	15.7	26.2	36.4
Latvia	19.1	15.6	18.5	14.8	22.8
Lithuania	13.0	17.8	15.6	14.1	20.6
Luxembourg	9.2	11.6	12.6	18.5	17.8
Hungary	31.7	37.9	14.1	12.5	28.8
Malta	22.8	32.0	40.3	31.2	:
Netherlands	4.0	3.2	14.6	24.1	21.0
Austria	9.5	12.9	11.0	18.9	22.4
Poland	18.2	19.5	11.0	14.0	36.6
Portugal	37.8	41.9	14.8	22.7	23.6
Romania	14.6	19.9	17.5	26.5	33.0
Slovenia	17.6	14.7	15.3	12.3	25.4
Slovakia	28.3	29.8	14.7	15.1	28.9
Finland	9.0	4.4	8.4	13.4	11.0
Sweden	13.8	7.1	8.0	12.4	14.3
United Kingdom	11.3	16.5	8.3	17.0	18.1
Iceland	14.2	10.5	9.9	11.6	8.7
Norway	6.1	7.2	7.6	11.7	16.1
Switzerland	12.0	7.7	9.0	15.7	19.2
Serbia	58.4	52.5	18.7	12.7	44.3

([1]) 2012 instead of 2013 data.
Source: Eurostat (EU-SILC)

Exposure to pollution was not strongly correlated with low satisfaction with the environment

Figure 15 displays a comparison between the shares of population who reported exposure to pollution, grime and other environmental problems ([25]) and a low satisfaction with their environment in 2013. These figures show a heterogeneous picture, in which northern and western EU Member States generally tended to report more positively about their environment than southern and eastern EU Member States. The tendency of northern and western EU Member States to evaluate their environmental conditions more positively was reflected in the figures from Ireland, Finland and Denmark whose residents reported very close to or below 10 % for both low satisfaction and exposure. Conversely, the trend in southern and eastern EU Member States to evaluate their environmental conditions more negatively was the most visible in Greece whose residents reported high proportions of low satisfaction with living environment (36.5 %) and exposure to pollution (26.5 %). Malta was an outlier with the highest share of residents having declared to be exposed to pollution (40.3 %) and a comparatively low share of people having stated a low satisfaction with their living environment (22.8 %).

However, the populations that registered the lowest shares of low environmental satisfaction did not systematically record the lowest percentages of exposure to pollution, and vice-versa. Hence, the Netherlands reported the lowest share of population with a low satisfaction with their living environment (slightly under 4 %) while the share of the population that reported exposure to pollution was close to the EU average (14.6 %).

With similar self-declared exposure figures (14.5 %), the Bulgarian residents had a much worse assessment of their environment as almost 60 % of them reported a low level of satisfaction with their living environment. Although less clear-cut, fewer than 10 % of Estonian and Croatian residents declared an exposure to pollution, however close to 30 % and 40 % of them respectively declared a low environmental satisfaction.

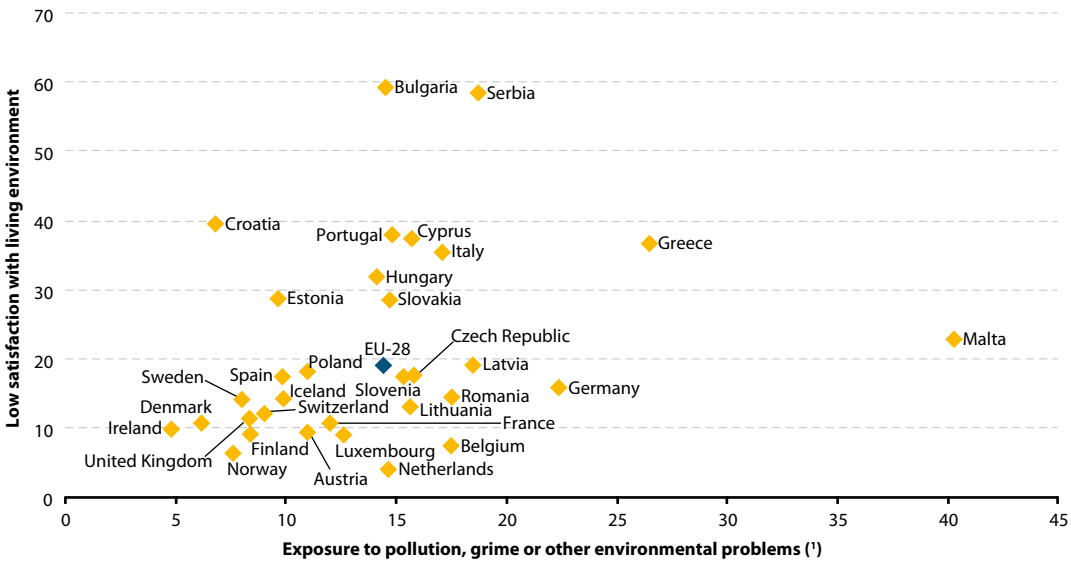
The link between environmental satisfaction and noise exposure was also loose

In 2013, 19.0 % of the EU-28 population (Figure 16) declared being exposed to noise from neighbours or from the street, whether originating from traffic, businesses, factories or other ([26]), which was about 4.5 percentage points higher than exposure to pollution (14.4 %) and just slightly higher than the share of the population having declared a low satisfaction with their environment (19.2 %, see Table 1).

Ireland recorded the smallest percentage of self-reported exposure to pollution (4.8 %) and to noise (9.0 %) in 2013 among the EU Member States. This country also had one of the smallest shares of people with low satisfaction with their living environment (10.13 %).

([25]) In the local area such as smoke, dust, unpleasant smells or polluted water.
([26]) In some countries there is a very limited number of stations (in some cases only one) and the corresponding figures should be interpreted very carefully. The comparability across countries is restricted due to the differences in the quality of the national monitoring station networks. Comparability over time is ensured. See: http://ec.europa.eu/eurostat/cache/metadata/EN/tsdph370_esmsip.htm

Figure 15: Low satisfaction with living environment versus self-reported exposure to pollution, by country, 2013
(%)



(1) Ireland: 2012 data.
Source: Eurostat (online data codes: ilc_pw05 and ilc_mddw02)

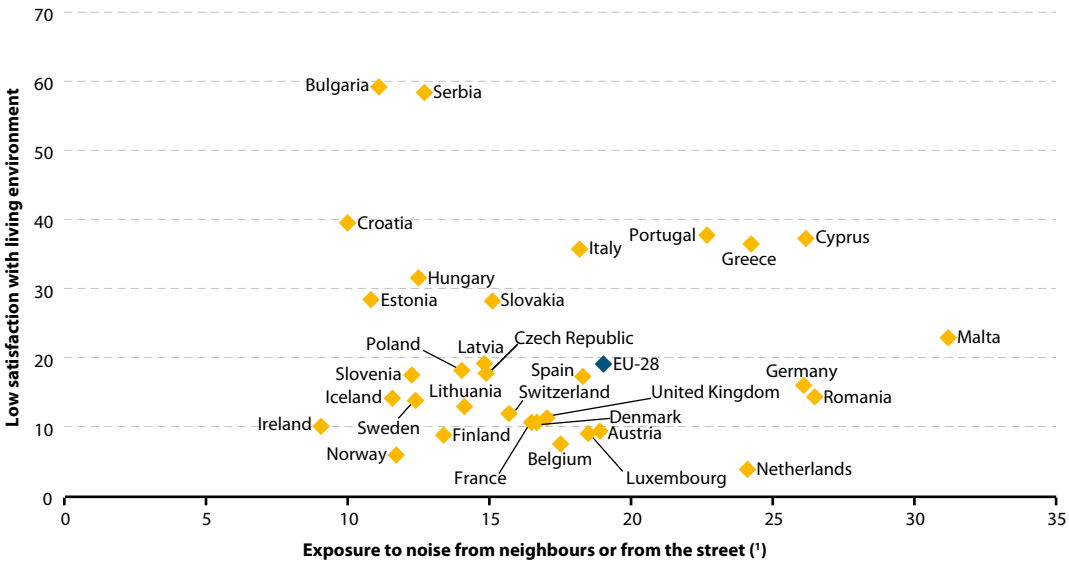
To some extent, EU Member States in Figure 16 are displayed in a rather similar way as in Figure 15. More northern and western EU Member States were situated in the bottom section of the graph reflecting relatively moderate shares of people reporting a low environmental satisfaction and exposure to noise (mostly not exceeding the EU average). On the contrary, more southern and eastern EU Member States were situated in the top section reflecting high shares of people with a low satisfaction, not necessarily associated with high shares of exposure. Ireland was the only country with both the share of people declaring exposure to noise and of low satisfaction approaching 10 %, which was rather low. The opposite was true for three southern EU Member States (Cyprus, Greece and Portugal), for which the proportions of people exposed to noise and also with a low level of satisfaction with their living environment were higher than the average.

Malta once again was an outlier, displaying a low share of people reporting a low satisfaction with their living conditions (22.8 %) despite its high share of reported exposure to noise (31.2 %). To a lesser extent, this pattern was also seen in Germany, Romania and the Netherlands.

Bulgaria was also an exception as its reported share of people with a low satisfaction with their living environment was almost 6 times higher than the share of people exposed to noise (59.0 % versus 11.1 %). Croatia and Serbia displayed quite a similar pattern.

National perceptions differ from country to country. For instance, EU Member States located around (or close to) the Mediterranean Sea (e.g. Italy, Portugal, Cyprus) reported higher levels of noise and lower environmental satisfaction. However other EU Member States such as Germany, Romania and Malta showed no sign of correlation between noise and satisfaction levels. This might mean that noise was not systematically seen as a real or major disturbance. In addition, the degree of perceived disturbance may fluctuate, as levels of noise do, depending on the specific local conditions and time. While cultural differences may have played a role, they may also indicate that environmental satisfaction relies on a more comprehensive set of factors affecting residents' every-day life more deeply.

Figure 16: Low satisfaction with living environment versus population exposed to noise, by country, 2013
(%)



(1) Ireland: 2012 data.
Source: Eurostat (online data codes: ilc_pw05 and ilc_mddw01)

Clear relation between exposure to PM and mean satisfaction with the environment in urban areas

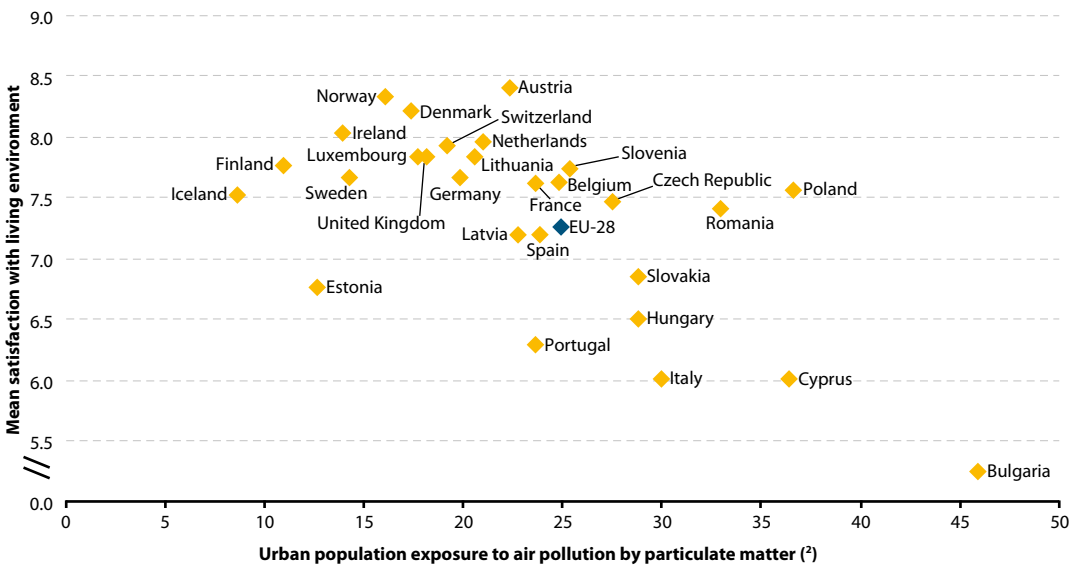
Figure 17 tries to establish a link between the mean satisfaction with environment by EU residents living in (densely-populated) urban areas (mean rating of 7.2 out of 10) and their level of exposure to air pollution by PM (24.9 µg/m³ in 2013, declining from 28.1 µg/m³ in 2005, see Figure 4), and highlights a real link between the two variables.

In the majority of EU Member States, a high mean satisfaction with the living environment reported by the urban population was usually associated with levels of air pollution (as measured by PM10 exposure) below the EU average and vice-versa. This was especially true among Danish and Finnish urban residents (with a mean at 8.6 and 8.2 out of 10 versus an average exposure of 17.4 µg/m³ and 11.0 µg/m³ respectively) as well as among Swedish and Irish urban residents.

The most distinct example of the link at the other end of the spectrum was Bulgaria, which recorded both the lowest mean environmental satisfaction (5.3 out of 10) and the highest average exposure to PM in urban areas (45.9 µg/m³). Cyprus and Italy clearly followed that pattern as well. Estonia, whose residents were slightly more exposed to air pollution than in Finland (12.7 µg/m³), reported a much lower degree of satisfaction (6.8 out of 10). Poland and Estonia did not follow the general pattern as a high mean satisfaction in Poland (7.9 out of 10) was associated with high levels of exposure to PM (36.6 µg/m³), and a low mean in Estonia (6.7 out of 10) was associated with low levels of exposure (12.7 µg/m³).

The analysis of mean satisfaction with living environment in Figure 14 showed a mean varying by 0.1 only depending on the degree of urbanisation. From these findings, one could presume that the populations living in suburbs, towns and rural areas would follow the same pattern as in urban areas.

Figure 17: Mean satisfaction with environment, by urban population versus urban exposure to PM10, by country, 2013 ([1])
(satisfaction: mean rating; urban exposure to PM: µg/m³)



([1]) No data for Greece, Croatia and Malta.
([2]) 2012 instead of 2013 data.
Source: Eurostat (online data codes: ilc_pw01 and tsdph370)

While the link between satisfaction with the living environment and pollution or noise levels may not be very clear, the link between average satisfaction with living environment and urban exposure to PM is more evident. This finding should however be interpreted with caution since PM10 exposure data is not fully reliable.

Nevertheless people are undeniably paying more and more attention to the quality of their urban environment and particularly the air quality. The high visibility of the issue in the media, with a particular focus on the effects on lungs and especially on children's health, may be one of the reasons for this. This awareness, whether mediated or experienced, is expected to influence people's perceptions.

9

Overall life satisfaction

Introduction

This chapter focuses on well-being of people in the European Union (EU). Subjective well-being allows an integration of the diversity of the experiences, choices, priorities and values of an individual. The data used on subjective evaluations and perceptions of different domains were collected for the first time in European official statistics through the 2013 ad-hoc module of EU statistics on income and living conditions (EU-SILC) on subjective well-being. Source data in aggregated format and graphs are available in Excel format through the online publication *Quality of life: facts and views* in Statistics Explained.

Subjective well-being encompasses three distinct but complementary sub-dimensions:

- life satisfaction, based on an overall cognitive assessment;
- affects, or the presence of positive feelings and absence of negative feelings; and
- eudaimonics, the feeling that one's life has a meaning,

as recommended by the OECD guidelines on measuring subjective well-being. In the Eurostat quality of life framework, all three sub-dimensions are covered.

Life satisfaction

Life satisfaction represents how a respondent evaluates or appraises his or her life taken as a whole. It is intended to cover a broad, reflective appraisal the person makes of his or her life. The term 'life' is intended here as all areas of a person's existence (1). The variable therefore refers to the respondent's opinion/feeling about the degree of satisfaction with his/her life. It focuses on how people are feeling 'these days' rather than specifying a longer or shorter time period. The intent is not to obtain the current emotional state of the respondent but to receive a reflective judgement on their level of satisfaction. Veenhoven (1991) notes that 'life satisfaction is conceived as the degree to which an individual judges the overall quality of his/her life-as-a-whole favourably'. This is in line with Pavot and Diener (2008) who define life satisfaction as a 'distinct construct representing a cognitive and global evaluation of the quality of one's life as a whole'. Some economists also discuss the question if satisfaction is the same as utility (2).

While indicators like job satisfaction, satisfaction with the financial situation of the household or satisfaction with the accommodation address certain areas of life, general life satisfaction refers to the individual's evaluation of all subjectively relevant life domains and is therefore considered as an overall measure for subjective well-being.

(1) E. Diener, *Guidelines for National Indicators of Subjective Well-Being and Ill-Being.*
(2) e.g. Lévy-Garboua (2007), Holländer (2001).

Meaning of life — an eudaimonic measure

Meaning of life is a multi-faceted construct that has been conceptualised in diverse ways ([3]). It refers broadly to the value and purpose of life, important life goals, and for some, spirituality. The respondent should be invited to think about what makes his/her life and existence important and meaningful and then answer to the question. It is not related to any specific area of life, but focuses rather on life in general and refers to the respondent's opinion.

In the EU-SILC 2013 ad-hoc module the item 'meaning of life' covers the eudaimonic dimension of subjective well-being. 'Eudaimonic' ([4]) refers to purpose and meaning in life. It is therefore also referred to as the psychological or 'functioning' approach ([5]) to subjective well-being. The meaning of life item intends to capture important factors that are not necessarily measured by evaluative measures such as life satisfaction including purpose, sense of meaning or autonomy. However, as will be seen from the analysis below, the pattern of this item is quite in line with the life satisfaction, though in general people tend to rate their 'meaning of life' higher than their life satisfaction.

Happiness — emotional aspect of well-being

The emotional aspect of well-being refers to people's day-to-day feelings and moods. For this kind of measure, respondents are typically asked to think about their feelings in question (such as happiness or sadness) within a short time period. Large sample sizes and high survey quality should ensure that population estimates are not systematically biased due to temporal variability of moods etc.

In EU-SILC the period on which the respondent should reflect was limited to the last four weeks before the interview. Both positive and negative feelings were measured including happiness, depression, stress and others. In this chapter, however, we will only focus on a question on happiness. Respondents were invited to answer the following question: 'How much of your time over the past four weeks have you been happy?'. They could choose among five answering categories (ranging from 'all of the time' to 'none of the time').

In this chapter overall life satisfaction will have a prominent role as it can be regarded as a key indicator for subjective well-being. First the distribution in general and for different countries will be shown. Then the association of socio-demographic variables such as age, gender, income or household type with overall life satisfaction will be examined. In a further step, the article will look at other relevant variables such as material living conditions and their relation to life satisfaction. In the final part the subjective well-being dimensions (meaning of life and happiness) are covered and it is discussed how they are related to life satisfaction.

([3]) For an overview see Klemke, Elmer Daniel, *The meaning of life* (2000).
([4]) Etymologically, eudaimonia consists of the words 'eu' ('good') and 'daimōn' ('spirit'). It is a central concept in Aristotelian ethics where it was used as the term for the highest human good.
([5]) Nussbaum (1986).

EU POLICIES TARGETING SUBJECTIVE WELL-BEING

Measuring well-being has an inherent appeal: it is arguably the ultimate aim of all EU policies, and the common thread that runs through them all. Promoting the well-being of people in Europe is one of the principal aims of the EU, as set forth by the Treaty on European Union.

Today, in the EU a broad range of outcomes is considered when evaluating the objectives of social and economic policy including subjective measures of quality of life. Many EU bodies but also Member States themselves report on subjective well-being and publish associated reports going beyond GDP as the overall measure of societal performance.

Well-being began to appear more explicitly at the EU policy agenda in 2006 when the Council of the European Union cited the well-being of present and future generations in its European Sustainable Development Strategy as its central goal ([6]). Soon after that, the limits of GDP as a measure of well-being were increasingly discussed at the international level flowing into the 'Beyond GDP' initiative followed by a conference at the European Parliament in 2007. In 2009 the European Commission published its Communication on 'GDP and beyond — measuring progress in a changing world' concluding that EU policies will be ultimately judged on the question if they successfully delivered social, economic and environmental goals ([7]). In the same year, the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz Commission) published its Report. The so-called Stiglitz Report was also the basis for the work of the ESS (European Statistical System) Sponsorship Group on Measuring Progress, Well-being and Sustainable Development which published its report in 2011.

Main statistical findings

On a scale of 0 to 10 nearly 80 % of European residents rated their overall life satisfaction in 2013 at 6 or higher. This represents an average (mean) satisfaction of 7.1, with values ranging from 4.8 in Bulgaria (followed by Portugal, Hungary, Greece and Cyprus, all at 6.2) to 8.0 in Finland, Denmark and Sweden. Women and men were nearly equally satisfied and younger EU citizens were more satisfied than the other age groups. Unemployed and inactive people were on average the least satisfied (5.8) compared with full-time employed (7.4) or people in education or training (7.8), who reported the highest rates of life satisfaction.

Material living conditions, social relationships and health status are clearly related to life satisfaction. Being at risk of poverty or severely materially deprived is of special relevance here. However, it is a poor health status that impacts on life satisfaction most negatively.

The patterns are mostly the same when looking at meaning of life, which is referred to as the eudaimonic aspect of well-being, though all groups rated the purpose of life on average higher than their overall life satisfaction.

All three aspects of subjective well-being are correlated both at country, as well as at individual level, with some exceptions. In general, people who experienced happiness more often in the last 4 weeks also have a higher probability of high scores regarding meaning of life or life satisfaction, though a considerable proportion of 7.1 % of those 'being happy all of the time' reported low levels of life satisfaction.

([6]) Council of the European Union, 2006.
([7]) European Commission, 2009.

EU citizens rated on average their overall life satisfaction at 7.1 (on a scale of 0 to 10) in 2013, with values ranging from 4.8 in Bulgaria to 8.0 in Finland, Denmark and Sweden.

Life satisfaction

Life satisfaction is measured on an 11 point scale which ranges from 0 ('not satisfied at all') to 10 ('fully satisfied'). For better understanding and interpretation and to facilitate analyses, which identify drivers for low and high satisfaction, answer categories were grouped into low, medium and high. As no theoretical or external criteria were available on an international basis, this classification was based on a 20:60:20 distribution at European level. That means having 20 % of answers in the lower part of the scale, 60 % in the middle and 20 % in the higher part, which leads to the definition of the following thresholds: 0–5 as 'low', 6–8 as 'medium' and 9 and 10 as 'high'. The same classification was adopted for all other satisfaction items (like job satisfaction, etc.).

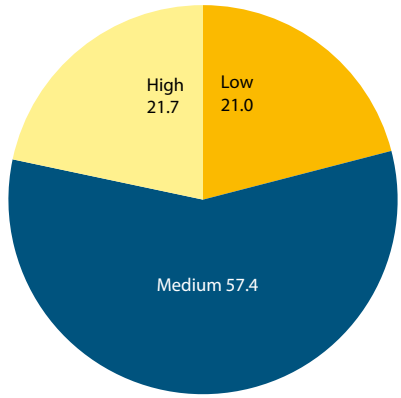
Subjective measures such as life satisfaction and meaning of life today are considered as reliable measures backed by international studies and guidelines. Subjective measures have also turned out to be relatively consistent with objective indicators which function as external validators. Efforts were made to minimise other factors which could cause biases, like for instance mood fluctuations (which should cancel out in large samples ([8])) and question order or phrasing (a standard questionnaire was provided to be used in the interview). Nonetheless, some limits remain when interpreting subjective well-being indicators: social desirability of certain answers and normative expectations such as general answering tendencies (e.g. tendency to avoid extreme alternatives) and not least social ideas and opinions of what it means to be satisfied with one's own life all shape the person's evaluation of her/his overall life satisfaction ([9]).

([8]) The total sample size covering the EU-28 plus Switzerland, Iceland, Norway and Serbia is around 366 650 individuals and ranges approximately from 25 500 in Spain to 5 200 in Denmark and 2 950 in Iceland.
([9]) e.g. Diener & Tov (2011), Tinkler & Hicks (2011), Oguz et al. (2013).

Life satisfaction from a cross country perspective

Figure 1 shows that in 2013 21.7 % of the EU-28 population were highly satisfied with their lives (answering 9 or 10), 57.4 % rated their overall life satisfaction between 6 and 8 and 21.0 % reported a low level of life satisfaction (0–5). One should however bear in mind that the thresholds for life satisfaction levels are defined in this way at European level, as described in the previous paragraph, in order to allow comparisons between countries, socio-demographic groups or different satisfaction items.

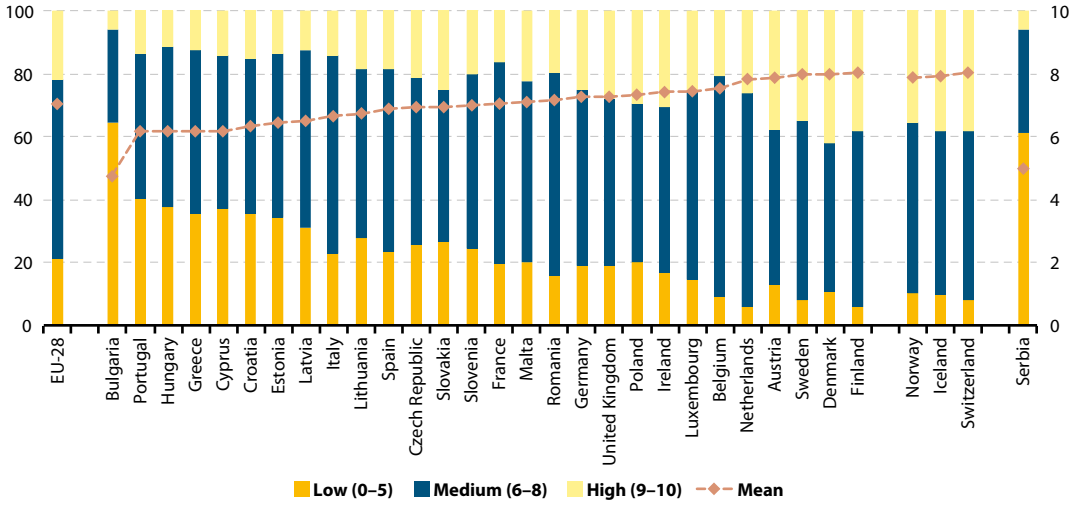
Figure 1: Life satisfaction, EU-28, 2013 ([1])
(% of population by satisfaction level)



([1]) The total population sums up to 100.1 % due to rounding differences.
Source: Eurostat (online data code: ilc_pw05)

Figure 2 shows that the average life satisfaction varied significantly between countries, ranging from 4.8 in Bulgaria to 8.0 in Sweden, Denmark and Finland. Differences between countries in the share of people with low satisfaction were even more remarkable. They ranged from 5.6 % in the Netherlands to 64.2 % in Bulgaria. Proportions of people with high life satisfaction varied from 5.9 % in Bulgaria (followed by Hungary (11.6 %) and Latvia (12.6 %)) to 42.1 % in Denmark. As can be seen in Figure 2 similar averages can reflect different distributions. France and Slovakia reported the same average of 7.0, but Slovakia had much higher proportions of people with both low and high life satisfaction.

Figure 2: Life satisfaction, by country, 2013
(left axis: % of population; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

How is the socio-demographic and economic background associated with life satisfaction?

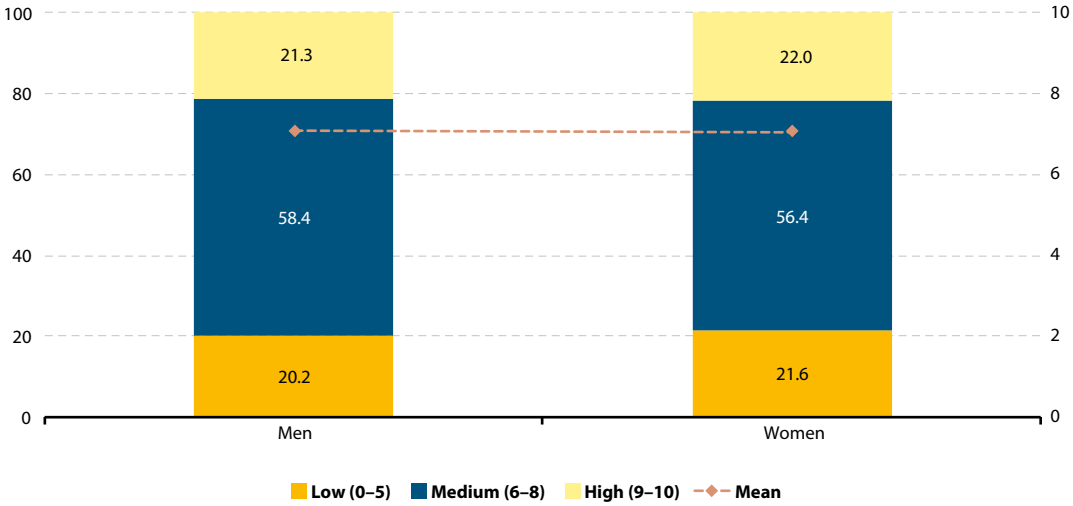
Previous research has shown that subjective well-being as measured through overall life satisfaction is very much shaped by socio-demographic factors such as age ([10]), income ([11]) or education ([12]) which lead to different living situations as well as to different expectations and preferences. The analysis below considers how such factors relate to the level of life satisfaction of EU residents.

Marginal gender effects on subjective well-being

As shown in Figure 3, women rated their overall life satisfaction slightly lower than men (mean of 7.0 versus 7.1). Interestingly, the proportion of women with a high level of life satisfaction (22.0 %) was slightly above that of men (21.3 %). On the other hand, marginally more women than men reported low levels of life satisfaction (21.6 % versus 20.2 %). This might lead to the conclusion that generally speaking, men and women are equal in terms of life satisfaction. However, when controlling for other variables such as income, marital status, labour market position etc. (in a regression analysis), women are still more satisfied with their lives than men ([13]). The difference remains however very small.

([10]) e.g. Helliwell (2008).
([11]) e.g. Boarini et al. (2012), Sacks et al. (2010).
([12]) Cárdenas & Mejía (2008), Salinas-Jiménez et al. (2010), Cuñado & Pérez de Gracia (2012).
([13]) This is also confirmed in other international studies such as Boarini et al. (2012).

Figure 3: Life satisfaction, by sex, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Younger people tended to report higher levels of life satisfaction

As can be seen in Figure 4, life satisfaction was highest among the youngest age group in 2013. It decreased with rising age, with the exception of the age group 65–74, which is for most people the period right after retirement, with averages slightly higher than for those aged between 50 and 64 (7.0 versus 6.9). This 'retirement-effect' can be seen in the majority of the participating countries (Table 1), with the exception of eight (mainly central and southern EU Member States: Bulgaria, Greece, France, Croatia, Italy, Latvia, Poland and Romania), where people in the age group 65–74 did not report higher life satisfaction than those aged between 50 and 64 ([14]). However, in most EU Member States, the youngest age group reported the highest scores of life satisfaction, exceptions being Denmark, the Netherlands, Sweden, the United Kingdom, Switzerland and Norway where people 65 or older were even more satisfied than the young.

The effect of age on life satisfaction is small but statistically significant (also when controlling for other variables). However, it has to be taken into account that health problems in older ages play a crucial role and that age itself is not the driving force here. Cohort effects also have to be taken into account when examining age differences: people of the same age-group in a certain country belong to the same generation, lived their active lives in a certain time and experienced wars and peaceful periods in similar periods of their lives. As a consequence, the fact that people in the age group 65–74 are more satisfied with their lives does not imply that a person who is 58 today has a higher probability to be more satisfied with his/her life when turning 68.

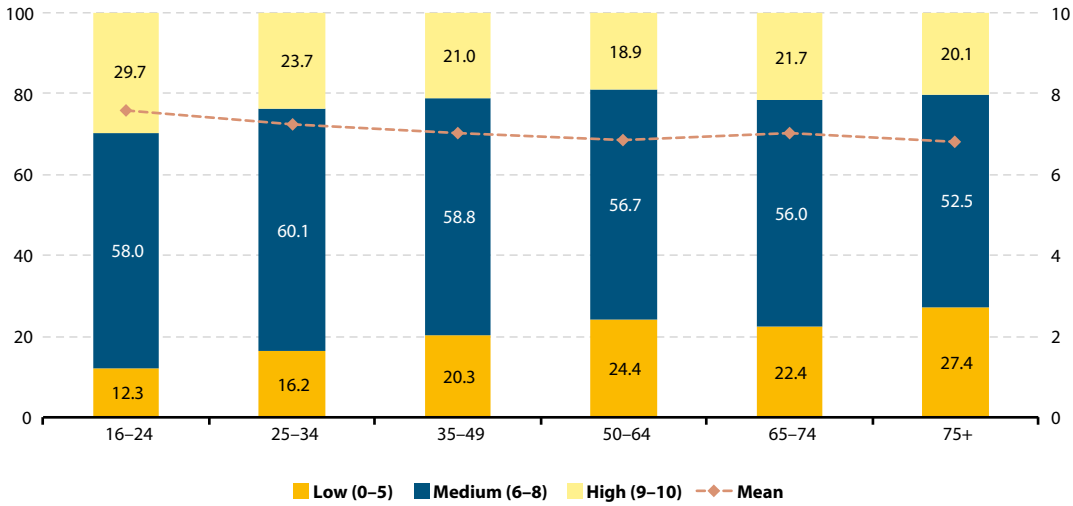
([14]) The official retirement age is currently between 60 (in France) and 65 (e.g. Benelux countries, Germany, Ireland, Spain) in most EU Member States. In some EU Member States (e.g. Austria, Poland, Italy, Greece and the United Kingdom) women can retire 5 years earlier than men.

Table 1: Life satisfaction, by age group and country (mean rating), 2013

	Age group						Total
	16–24	25–34	35–49	50–64	65–74	75+	
EU-28	7.6	7.3	7.1	6.9	7.0	6.8	7.1
Belgium	7.8	7.6	7.6	7.5	7.5	7.4	7.6
Bulgaria	5.8	5.4	4.9	4.6	4.3	3.9	4.8
Czech Republic	7.7	7.3	7.0	6.6	6.6	6.5	6.9
Denmark	8.1	7.8	7.8	7.9	8.6	8.4	8.0
Germany	7.6	7.3	7.2	7.0	7.4	7.5	7.3
Estonia	7.2	7.1	6.5	5.9	6.1	6.0	6.5
Ireland	7.7	7.4	7.2	7.3	8.0	7.8	7.4
Greece	7.0	6.4	6.3	6.0	5.9	5.5	6.2
Spain	7.4	7.1	6.9	6.7	6.9	6.4	6.9
France	7.6	7.3	7.0	7.0	7.0	6.7	7.0
Croatia	7.5	7.2	6.4	6.1	6.0	6.0	6.3
Italy	7.0	6.8	6.8	6.6	6.4	6.3	6.7
Cyprus	6.9	6.4	6.1	5.7	6.1	6.0	6.2
Latvia	7.3	7.0	6.4	6.2	6.1	6.0	6.5
Lithuania	7.8	7.3	6.7	6.3	6.5	6.1	6.7
Luxembourg	7.8	7.7	7.4	7.3	7.4	7.3	7.5
Hungary	7.1	6.7	6.2	5.8	5.9	5.6	6.2
Malta	7.6	7.5	7.1	6.9	7.1	7.0	7.1
Netherlands	7.9	8.0	7.6	7.7	7.9	7.9	7.8
Austria	8.4	8.1	7.7	7.7	7.7	7.6	7.8
Poland	8.1	7.8	7.4	7.0	6.9	6.9	7.3
Portugal	7.5	6.8	6.3	5.7	5.9	5.6	6.2
Romania	8.0	7.5	7.4	6.9	6.7	6.2	7.2
Slovenia	7.8	7.4	7.1	6.6	6.6	6.4	7.0
Slovakia	7.6	7.4	6.9	6.6	6.7	6.1	7.0
Finland	8.2	8.3	8.1	8.0	8.0	7.7	8.0
Sweden	7.9	7.8	7.9	7.9	8.3	8.1	8.0
United Kingdom	7.5	7.3	7.1	7.1	7.7	7.5	7.3
Iceland	8.2	8.0	7.9	7.8	7.9	8.1	7.9
Norway	8.0	7.8	7.8	7.9	8.1	7.9	7.9
Switzerland	8.1	7.9	7.9	8.0	8.4	8.4	8.0
Serbia	6.1	5.5	4.9	4.6	4.8	4.6	4.9

Source: Eurostat (EU-SILC)

Figure 4: Life satisfaction, by age group, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Life satisfaction is higher among couples with children

Figure 5 shows that life satisfaction of people living alone is below the average level of couples (with and without children). Two adults living with children reported the highest levels for life satisfaction (7.4). The lowest average values of life satisfaction, on the other hand, can be observed for one-person households younger than 65 and lone parent households (both 6.6).

Single women aged 65+ most frequently reported a low level of life satisfaction (29.4 %), followed by lone parent households (29.2 %). On the other end of the scale, people living in a couple with three or more dependent children, 28.0 % reported a high and only 15.3 % a low level of life satisfaction.

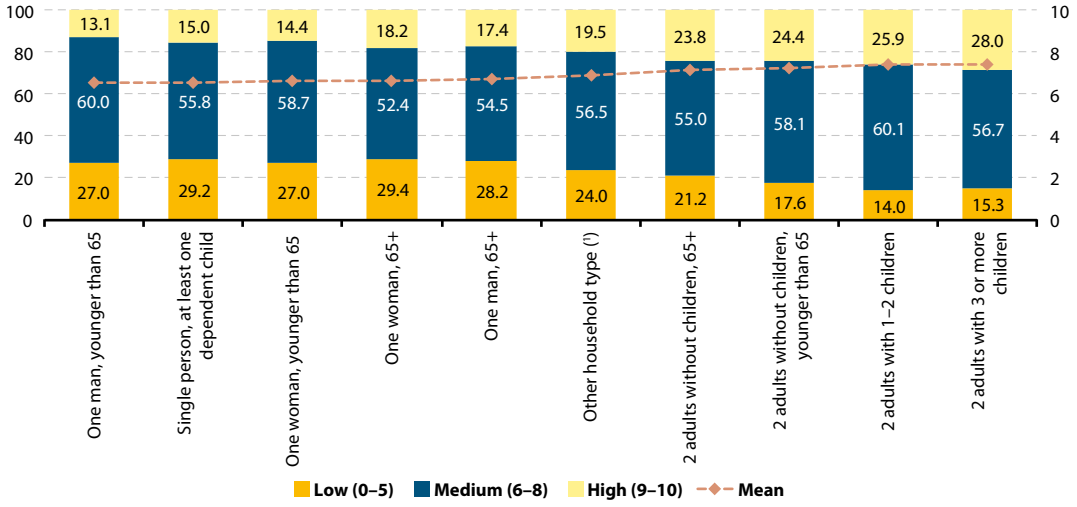
Unemployment is associated with very low life satisfaction

Figure 6 highlights a clear relationship between labour status and life satisfaction. The part of the population which was actively participating in the labour market or preparing to do so, such as those in education or training were more satisfied with their lives on average than the unemployed, retired or other groups.

The lowest level of overall life satisfaction (5.8) was reported by the unemployed, which is 2 points lower than the level of people in education and training (7.8). Within the group of employed, life satisfaction was slightly lower for employees working part-time (7.3) than for their full time counterparts (7.4). Given the high proportion of part-timers not voluntarily choosing this schedule in many countries, the difference between these two groups should not be overstated.

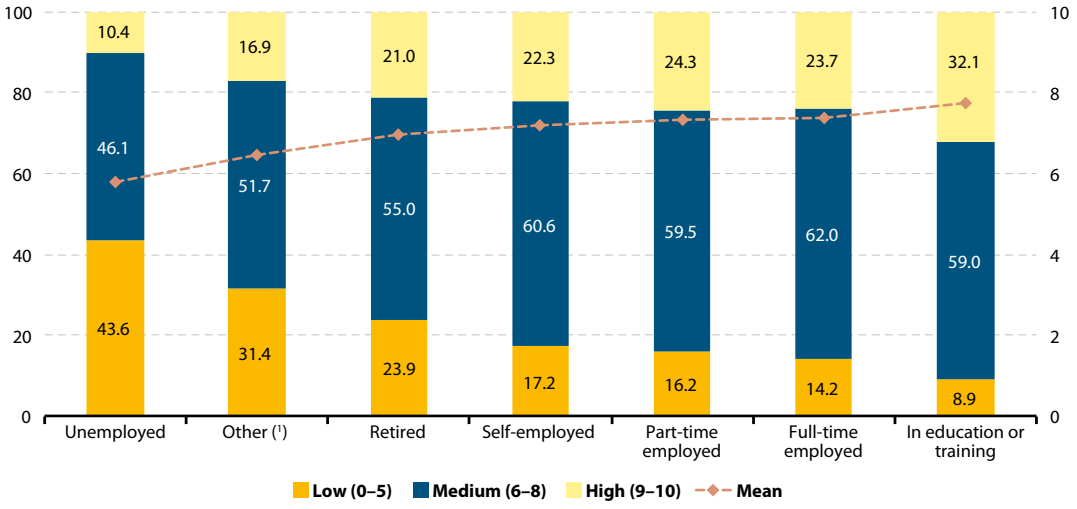
In almost all EU Member States people in education or training reported the highest life satisfaction averages in 2013, exceptions being only Denmark, Finland and Ireland, where people in full-time employment were more satisfied.

Figure 5: Life satisfaction, by household type, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other household types' refers to other households with and without dependent children.
Source: Eurostat (EU-SILC)

Figure 6: Life satisfaction, by labour status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) 'Other' includes people permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

Of all socio-demographic variables unemployment has the most negative impact on life satisfaction. This is true for nearly all EU Member States. EU-wide 43.6 % of this group reported low life satisfaction, and were thus more than three times as likely to rate their life satisfaction low than for instance the full-time employed for which the equivalent was only 14.2 %.

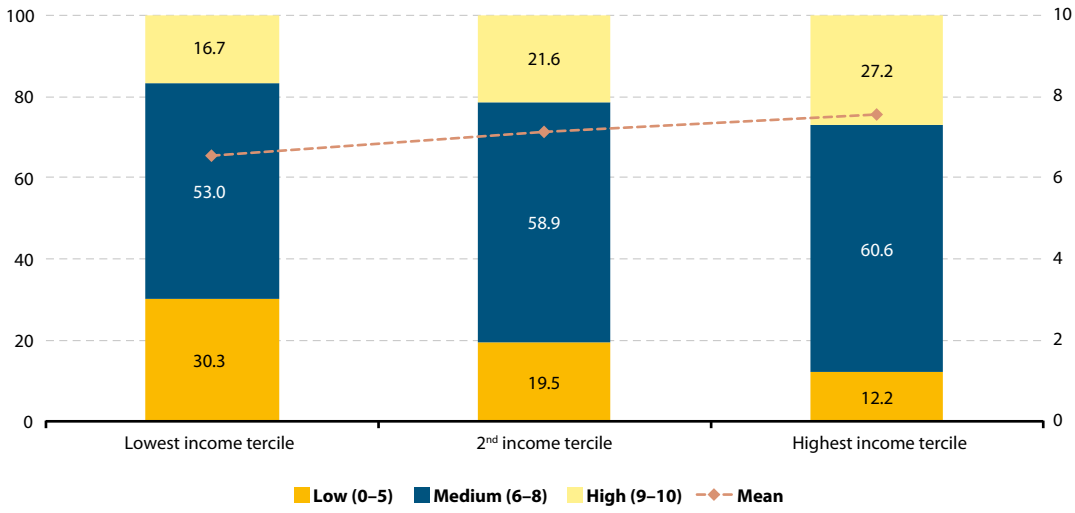
Life satisfaction is clearly associated with income

The analysis of the relationship between income and life satisfaction has a long tradition in empirical research of well-being. First papers date back to the 1970s. One of the first to investigate the empirical relationship between income and life satisfaction, both as regards the individual and at country level, was Easterlin (1974). He observed that wealthier persons were happier than poorer ones in a country and that on average wealthier countries report higher subjective well-being than poorer ones, which is common ground today and has been confirmed by many studies (e.g. Diener (1984), Boarini et al. (2012)). However, it was also shown by Easterlin that despite economic growth, average scores of subjective well-being stayed approximately constant over that period. This could lead to the conclusion that increasing income is generally accompanied by an increase in life satisfaction, but only up to a certain point (also known as rule of diminishing utility e.g. Sacks et al. (2010)).

It emerges also from the data analysed in this article that higher income is related to higher scores of life satisfaction. As can be seen in Figure 7, people in the lowest income tercile had the lowest average score (6.5) compared with the other income groups (2nd tercile: 7.1, highest tercile: 7.5).

Only 16.7 % of persons in the lowest tercile reported that they were very satisfied with life in contrast to 27.2 % of the population in the highest income group. Low life satisfaction was reported by 30.3 % of people in the lowest income tercile compared with 12.2 % in the highest.

Figure 7: Life satisfaction, by income tercile, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



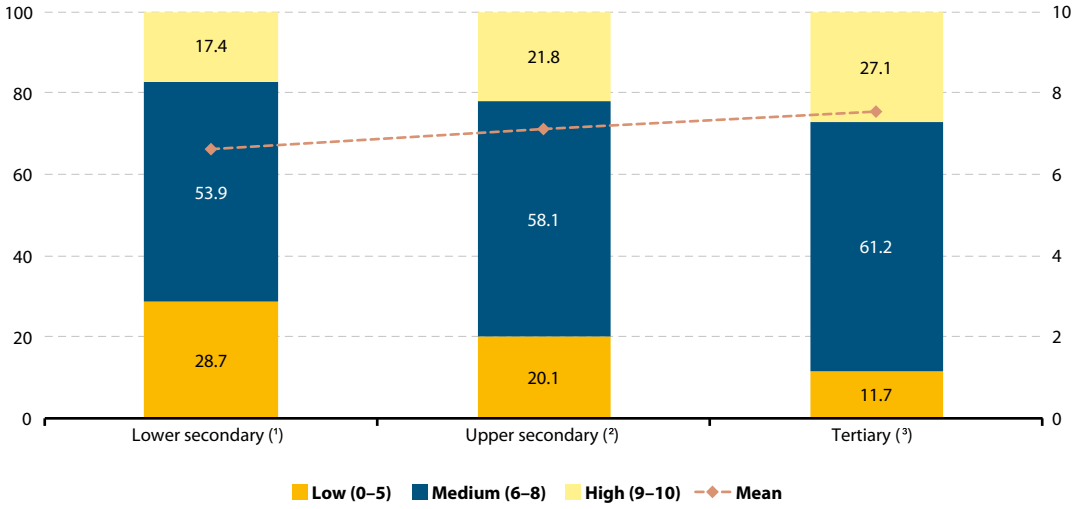
Source: Eurostat (EU-SILC)

Strong effect of education on life satisfaction

Education is not only an economic resource enabling people to get satisfying and better paid jobs. Many people see education as a value in itself. So it would not be surprising if higher educational levels turned out to be positively related with subjective well-being. However, scientific studies draw a diverse picture. Some researchers found a positive relationship between educational attainment and life satisfaction on an individual level ([15]), others found a negative relationship particularly for the older population ([16]). At an aggregated level, Cheung & Chang (2009) provided evidence that life satisfaction is higher in countries where people spend on average more years in education ([17]).

Using EU-SILC data, higher educational attainment seems to engender higher levels of life satisfaction (reflecting differences for life satisfaction from an average of 6.6 for people with at maximum lower secondary education, to an average of 7.6 for those with tertiary education) (Figure 8). This can probably be at least partly accounted for by the fact that higher education leads to better jobs and higher income, which in turn leads to higher life satisfaction.

Figure 8: Life satisfaction, by educational attainment, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



(1) Lower secondary: Pre-primary, primary and lower secondary education (ISCED levels 0-2).
(2) Upper secondary: Upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4).
(3) Tertiary: First and second stage of tertiary education (ISCED levels 5 and 6).
Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

([15]) e.g. Cárdenas & Mejía (2008), Salinas-Jiménez et al. (2010), Cuñado & Pérez de Gracia (2012), Boarini et al. (2013).
([16]) Gong et al. (2011).
([17]) Years of education are predicted by enrolment rates at the secondary and tertiary levels.

These patterns, however, vary significantly between EU Member States. There was for instance no difference in average life satisfaction between people with tertiary and lower secondary education in Sweden in 2013 and only a very marginal difference of 0.1 points in Denmark, while the differences amounted to 2.0 points in Bulgaria or 1.6 points in Hungary and Croatia ([18]).

As already discussed, there are regional patterns of subjective well-being. Most of the countries with lower life satisfaction were in the near past, and still are characterised by a low level of income (as indicated for example by PPS adjusted GDP per capita). Possibly also important is the fact that a significant part of the population, the older generations, had experienced lasting and dramatic reversals in the economic, social, welfare and political circumstances of their lives.

Among the EU population, people with higher education tended to report higher levels of life satisfaction.

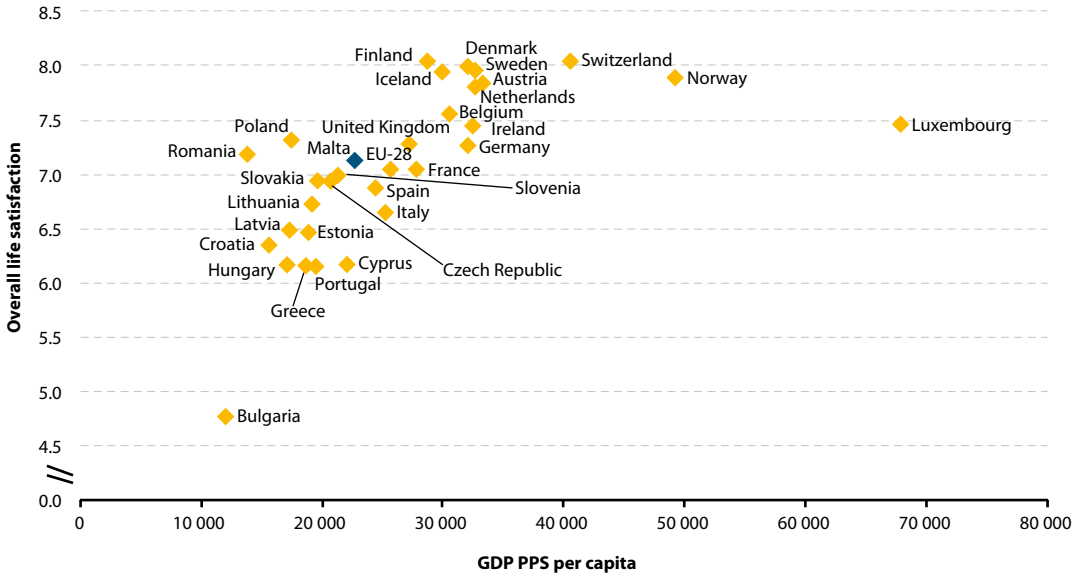
What are other important drivers of life satisfaction?

As the highest levels of satisfaction were recorded in the northern EU Member States and very low levels could be found in eastern and southern EU Member States which suffered strongly from the global financial and economic crisis and/or have a weak economic situation, the question arises if average life satisfaction is associated with the general economic situation of a country. As shown in Figure 10 for most countries there seems to be a positive association between GDP and overall life satisfaction. Outliers can be found at both ends of the distribution of life satisfaction: Luxembourg, Norway and Switzerland show high values of overall life satisfaction but they are not as high as a potential linear relationship between GDP and average life satisfaction would imply. However, other factors may be at play as well, especially in the case of Luxembourg ([19]). On the other end of the scale Bulgaria shows even lower life satisfaction than would be expected from its low GDP. The GDP of Romania is comparable to that of Bulgaria but residents of Romania rate their life satisfaction much higher on average than their Bulgarian counterparts.

As is known from a huge body of literature, life satisfaction is not only associated with socio-economic factors, but also and particularly with living conditions and health. In the following section, some of these relationships will be examined.

([18]) Income and living conditions (ilc), EU-SILC ad hoc modules (ilc_ahm), 2013 — personal well-being indicators (ilc_pwb).
([19]) The GDP per capita of Luxembourg is artificially high, as a high proportion of people working in Luxembourg live abroad in the neighbouring countries, so they contribute to GDP creation but are not counted when distributing it per capita.

Figure 9: GDP per capita and average overall life satisfaction, EU-28 and countries, 2013
(x-axis: GDP p.c. in PPS; y-axis: overall life satisfaction mean rating)



Source: Eurostat (online data codes: ilc_pw01 and nama_10_pc)

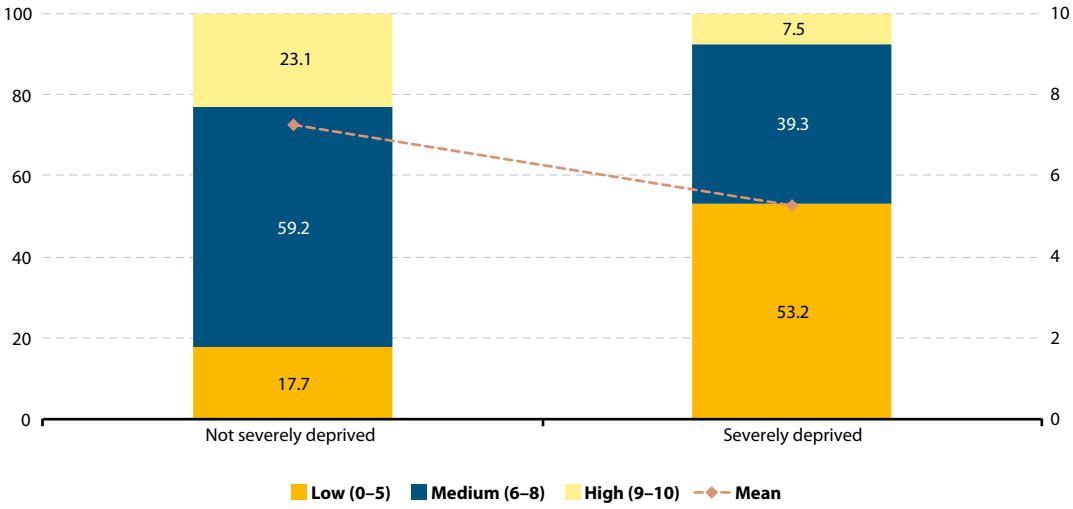
More than half of the severely materially deprived EU citizens report a low level of life satisfaction

Severely materially deprived persons have living conditions greatly constrained by a lack of resources and cannot afford at least four out of 9 items: to pay rent or utility bills; to keep their home adequately warm; to pay unexpected expenses; to eat meat, fish or a protein equivalent every second day; a one week holiday away from home; a car; a washing machine; a colour TV; or a telephone. Together with the 'at-risk-of poverty rate' and the indicator 'low work intensity' severe material deprivation forms the Europe 2020 indicator 'at risk of poverty or social exclusion' ([20]). At EU level, 9.6 % of the population were affected by severe material deprivation in 2013, 16.6 % were at risk of poverty and 10.8 % of the population aged between 0 and 59 lived in households with very low work intensity. Overall, 24.4 % reported at least one of these problems and were thus at risk of poverty or social exclusion.

Figure 10.a demonstrates that there is also a clear relationship between being severely materially deprived and overall life satisfaction, the non-deprived population being on average 1.9 points higher than those severely deprived (7.2 versus 5.3). This difference is mainly due to the particularly low proportion of very satisfied persons (7.5 %) and very high proportion of those with a low level of life satisfaction (53.2 %) among the severely deprived. The risk of monetary poverty, illustrated in Figure 10.b, leads to lower life satisfaction as well, but to a far lesser extent.

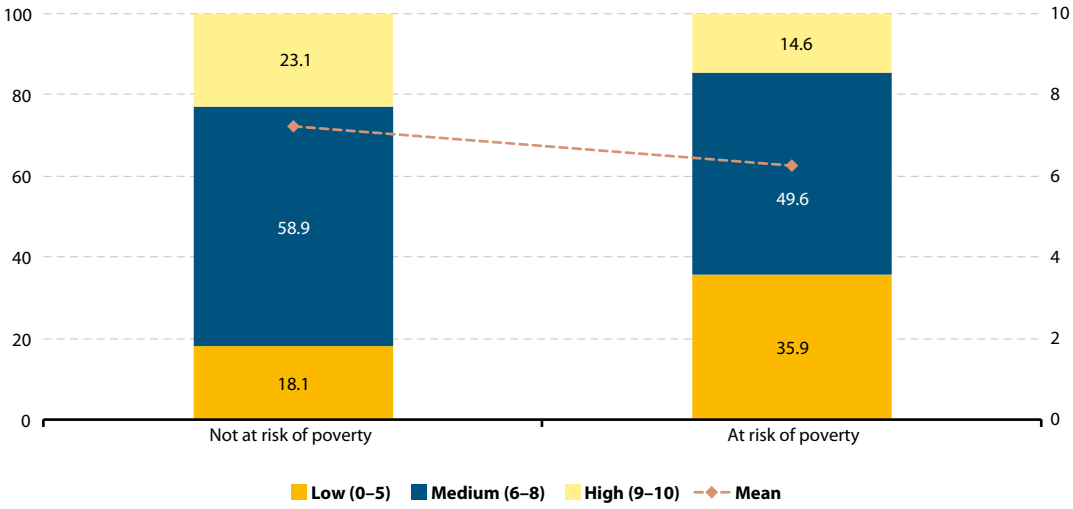
([20]) European Commission (2015): *Smarter, greener, more inclusive? Indicators to support the Europe 2020 strategy* (2015 edition), p.145.

Figure 10.a: Life satisfaction, by material (deprivation) status, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

Figure 10.b: Life satisfaction, by risk of poverty, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)

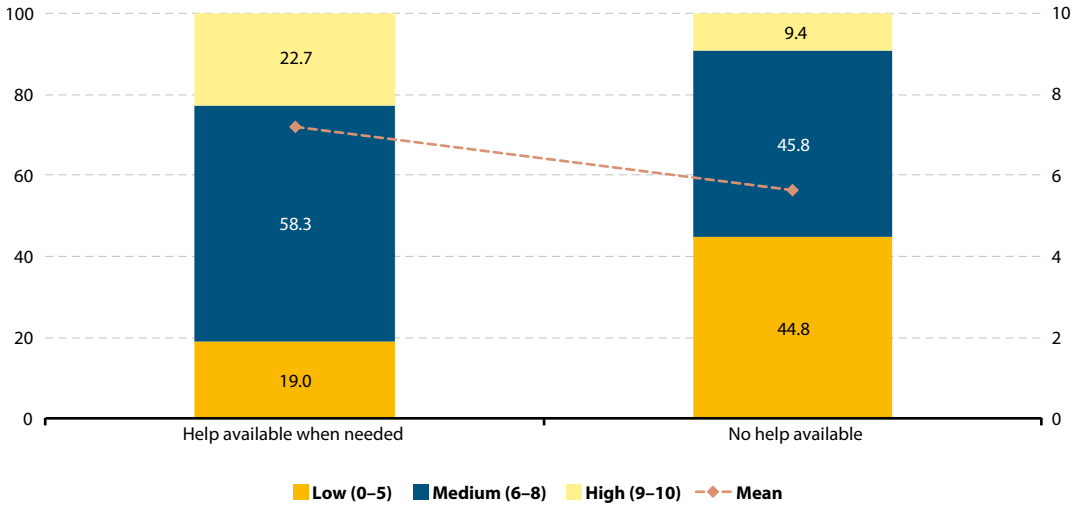


Source: Eurostat (EU-SILC)

Social relationships also have an impact on life satisfaction

As already indicated in the section on household types, supportive personal relationships play an important role in life satisfaction. In the SILC module 2013 they were covered by two items: 'having anyone to discuss personal matters with' and 'getting help from others when needed'. Both items show very similar patterns, as shown in Figure 11 for social support, which is highly associated with life satisfaction. More than double the proportion of people who cannot count on friends or family when help is needed had a low level of life satisfaction in 2013 (44.8 % versus 19.0 %). Only 9.4 % of this group reported high levels of life satisfaction compared with 22.7 % of those who had help available. Fortunately, the share of those who did not have someone to rely on for help or to discuss personal matters with was rather small (6.7 % at EU level for the former and 7.1 % for the latter).

Figure 11: Life satisfaction, by supportive social relationships, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



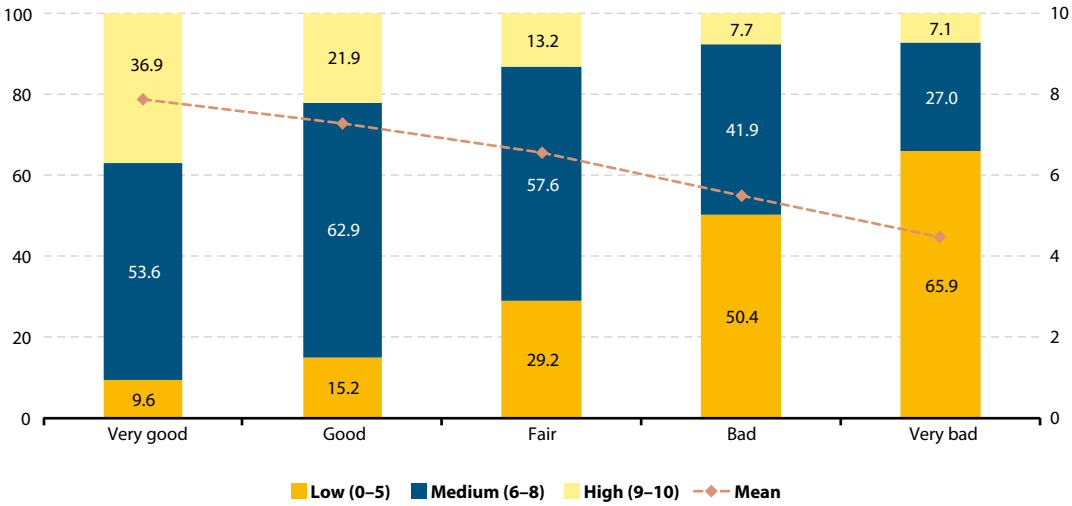
Source: Eurostat (EU-SILC)

Life satisfaction is strongly associated with health

EU-wide, 67.7 % reported a very good or good health status, while 9.5 % of the population perceived their health status as bad or very bad in 2013. As shown in Figure 12 subjective assessment of one's own health is a very good predictor for overall life satisfaction, with the proportion of people with low life satisfaction going up as self-perceived health goes down. The opposite is true for the proportion of people with high life satisfaction. While in the group reporting very good health 36.9 % showed high life satisfaction, there were only 7.1 % with high life satisfaction in the group with very bad health. It seems to be possible to have a good life even in very bad health, although the probability is more than 5 times lower than for those in very good health.

With a proportion of people with low satisfaction of 65.9 % in the group with very bad health, health status is the most notable predictor for general life satisfaction. Nothing, not even unemployment or material deprivation, puts life satisfaction in danger as much as bad health. The average score varied from 7.9 for people who said they were in very good health to 4.5 for those with a very bad health status.

Figure 12: Life satisfaction by subjective health, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (EU-SILC)

Meaning of life and happiness

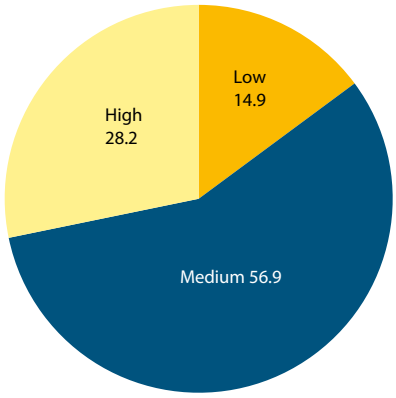
As already mentioned, subjective well-being encompasses three distinct but complementary sub-dimensions: life satisfaction (or evaluation), based on an overall cognitive assessment; affects or the presence of positive feelings and absence of negative feelings and eudaimonics, the feeling that one's life has sense and purpose. Evaluation has already been discussed above. In this part the other two aspects are first analysed and broken down by selected socio-economic variables, and then how the three aspects are interrelated is examined. In addition, the following part is devoted to the question of what is measured by these three different variables and how it relates to the full picture of subjective well-being.

Meaning of life

In the EU-SILC 2013 data we observe that meaning of life shows an almost identical pattern as life satisfaction, with the difference, however, that meaning of life is consistently rated higher by all groups than life satisfaction. This is true when looking at socio-demographic variables but also when comparing life satisfaction and meaning of life broken down by more objective items such as material deprivation or risk of poverty. Nevertheless, the differences in the average rating between the groups who faced a specific disadvantage and those who did not are much smaller for meaning of life than for life satisfaction. One could therefore conclude that the evaluative part of subjective well-being in a way summarises concrete domain specific satisfactions, while the question of a purpose or meaning in life is answered on a more — even if not total — abstract level.

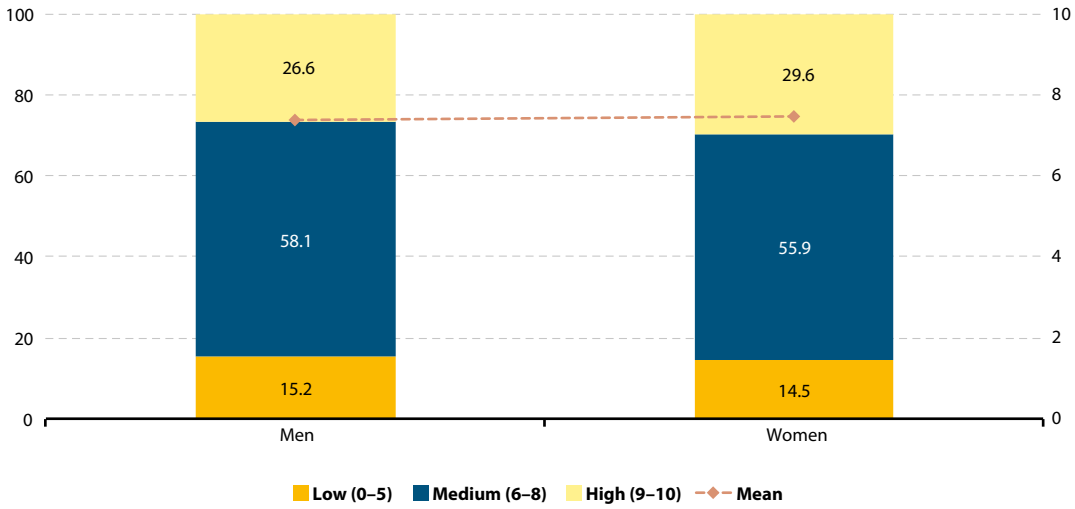
Compared to life satisfaction, people generally were more positive regarding the meaning of life. Figure 13 shows that 28.2 % of the total EU-28 population rated the meaning of life at a high score (9 and 10), 56.9 % assessed it between 6 and 8 and 14.9 % reported a low level of meaning of life (0–5).

Figure 13: Meaning of life, EU-28, 2013
(% of population by level of meaning of life)



Source: Eurostat (online data code: ilc_pw05)

Figure 14: Meaning of life, by sex, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

How are the socio-demographic variables associated to meaning of life?

Women on average reported slightly higher levels of meaning of life than men (which is the other way around than for life satisfaction). Men had an average value of 7.4 and women 7.5. Significantly more women than men reported high levels of meaning of life (29.6 % versus 26.6 %), while there were negligible differences at the bottom of the distribution.

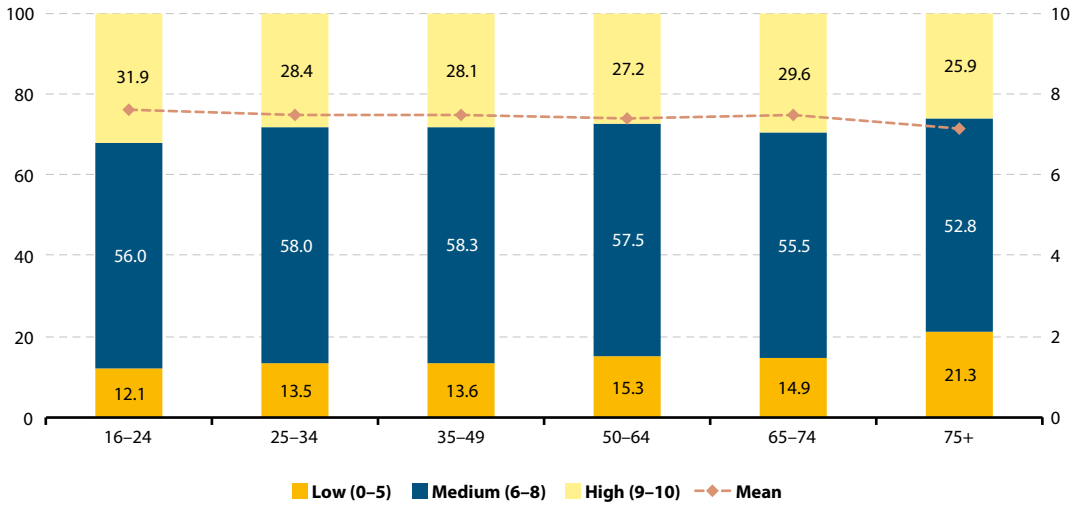
Compared with life satisfaction, the average meaning of life was quite constant across the various age groups in 2013, ranging from 7.4 (age group 65–74) to 7.6 (16–24). The exception, however, was the oldest group of people aged 75 or older who reported an average score of 7.1, showing a significantly lower level of meaning of life.

The proportion of low meaning of life very slightly increases with age, but is by far the highest in the oldest age group (21.3 %). Proportions of high levels are quite constant between the ages 25 and 74 and were most frequently reported by people aged between 16 and 24 (31.9 %).

How are meaning of life and overall life satisfaction related? Do they measure the same or at least a similar construct?

When looking at both items together at country level, it can be observed that EU Member States with the highest average values of life satisfaction recorded similar averages for both items, like Finland (average value of 8.0 for both life satisfaction and meaning of life), Austria (average value 7.8 versus 7.9), the Netherlands (average value 7.8 versus 7.7), Sweden (average value

Figure 15: Meaning of life, by age groups, EU-28, 2013
(left axis: % of population by satisfaction level; right axis: mean rating)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

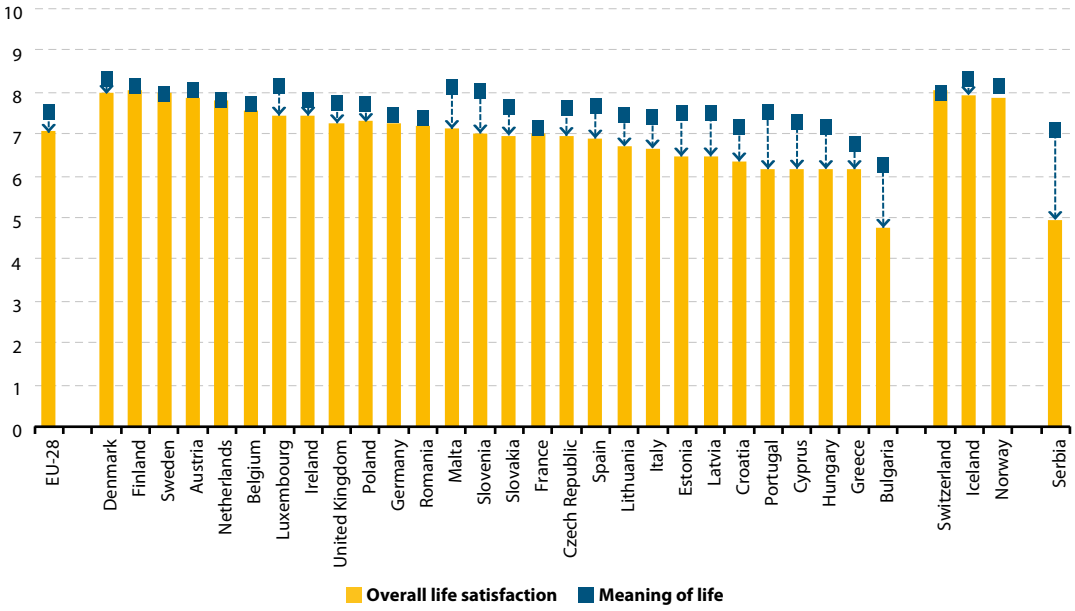
8.0 versus 7.8) and Denmark (average value 8.0 versus 8.2) (Figure 16). In most other EU Member States, people rated the meaning of life significantly higher than life satisfaction. The gap between the two items was larger in EU Member States where life satisfaction was low, with the biggest differences being observed in Bulgaria (1.4 points), Portugal (1.3 points) and Cyprus (1.1 points).

Overall, the eudaimonic aspect of well-being is more concentrated around the average than life satisfaction. As shown above, in most countries the meaning of life is rated higher than general life satisfaction. Figure 17 shows that countries with low average levels of life satisfaction, such as Bulgaria or Greece, also reported comparable low values for meaning of life and the other way round: a higher average for overall life satisfaction is associated with higher rates for meaning of life. Although Figure 17 shows no perfect correlation, the connection is quite strong. There are exceptions as well. Portugal, which was among the countries with the lowest level of life satisfaction (6.2) in

2013, actually had an average value of meaning of life of 7.5 which is above the EU-28 average (7.4). French residents, on the other hand, rated their life satisfaction and their meaning of life at the same level (7.1), equal to the EU average for the former, but among the lowest averages in the EU for the latter.

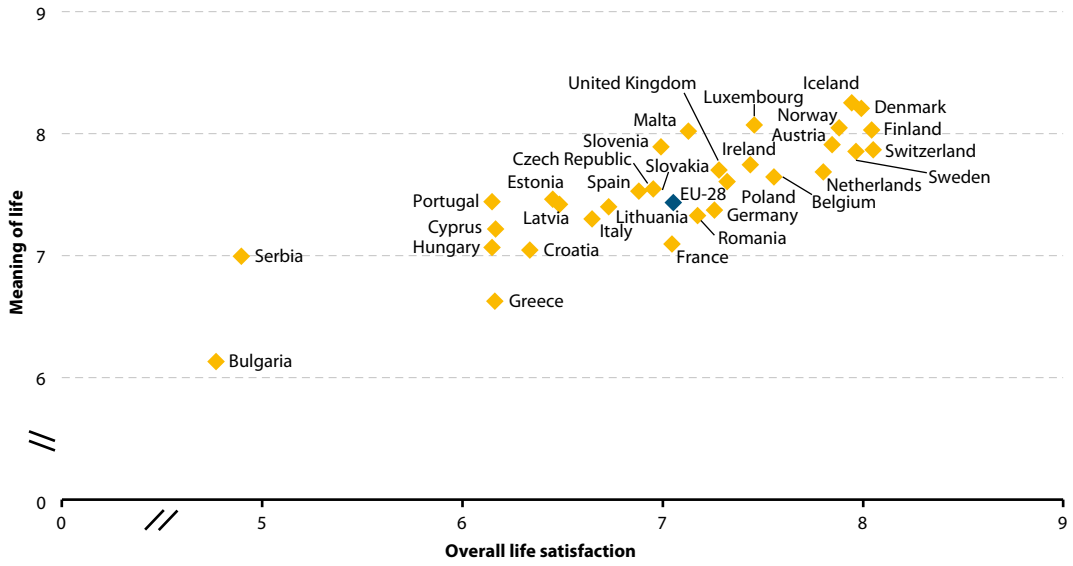
Deviations from the regression line need to be further examined, but might also be due to language specificities (the concepts of 'meaning' and 'satisfaction' being interpreted differently in different languages) or other cultural effects.

Figure 16: Life satisfaction and meaning of life, by country, 2013
(ranked on life satisfaction)



Source: Eurostat (online data codes: ilc_pw01 and ilc_pw05)

Figure 17: Overall life satisfaction and meaning of life, by country, 2013
(x-axis: means for meaning of life; y-axis: means of overall life satisfaction)



Source: Eurostat (online data code: ilc_pw01)

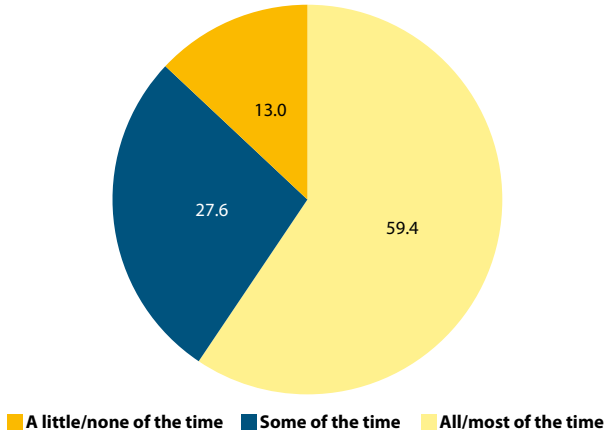
EU residents generally tended to rate their meaning of life higher than their life satisfaction. Additionally, the meaning of life seemed to be less influenced by socio-demographic factors than life satisfaction.

Happiness

Happiness was measured in EU-SILC by the following question: 'How much of the time over the past four weeks have you been happy?' Although this question was asked on a verbal 5 point scale in the EU-SILC 2013 and can thus not be directly compared with life satisfaction, we observe similar patterns regarding differences between various groups. However, the differences between groups who reported disadvantages in a specific domain and those who did not were not as pronounced regarding happiness as for life satisfaction.

Figure 18 shows that nearly 6 in 10 EU residents said that over the last four weeks they were all or most of the time happy. Almost a third of the EU population was happy some of the time and 13 % were happy only a little or none of the time.

Figure 18: Happiness, EU-28, 2013
(% of population by frequency of being happy in the last 4 weeks)

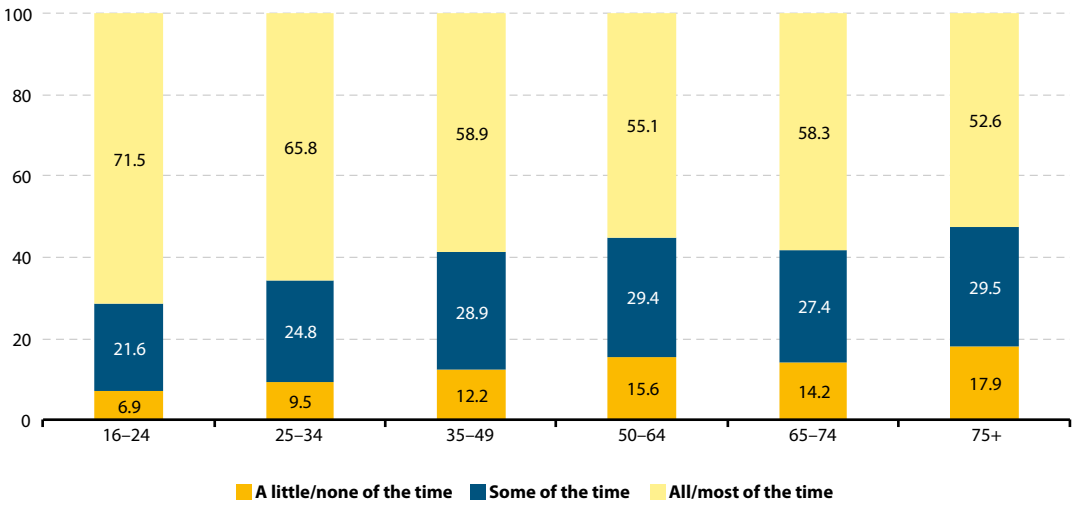


Source: Eurostat (online data code: ilc_pw08)

Frequency of being happy in the last 4 weeks by selected socio-demographic variables

As can be seen in Figure 19, happiness (as for life satisfaction and meaning of life) is highest among the youngest age group (16–24) with a proportion of 71.5 % reporting to have been happy all or most of the time over the last four weeks. It then decreases until the age of 50–64, goes slightly up again between 65–74 and reaches its lowest level in the 75+ group which has the highest proportion of people who were 'happy little or none of the time' (17.9 %).

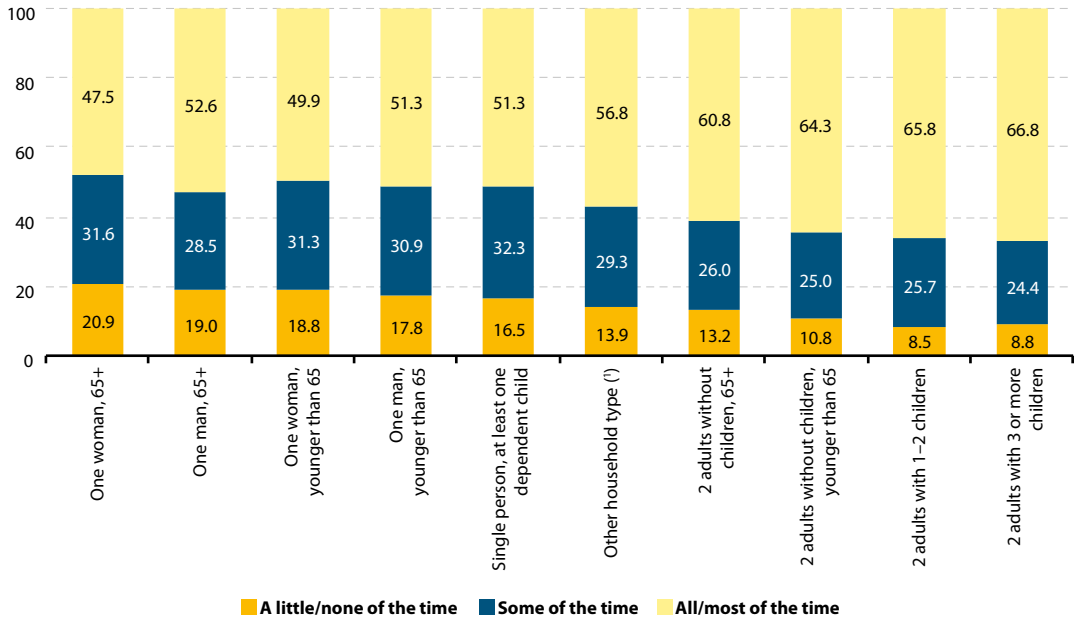
Figure 19: Frequency of being happy in the last 4 weeks, by age group, EU-28, 2013
(% of population)



Source: Eurostat (online data code: ilc_pw08)

Figure 20 illustrates that generally two-adult households (in many cases couples) were happier than people living on their own and that households with children were the happiest (with the exception of single parents who report rather low happiness levels). 66.8 % of people living in households with two adults and three children and 65.8 % with two adults and one or two children were happy all or most of the time. At the other end of the scale, women aged 65 or older living alone were the most often unhappy with a proportion of 20.9 % who said that they were happy little or none of the time (followed by men older than 65 (19.0 %) and female one-person households younger than 65 (18.8 %)).

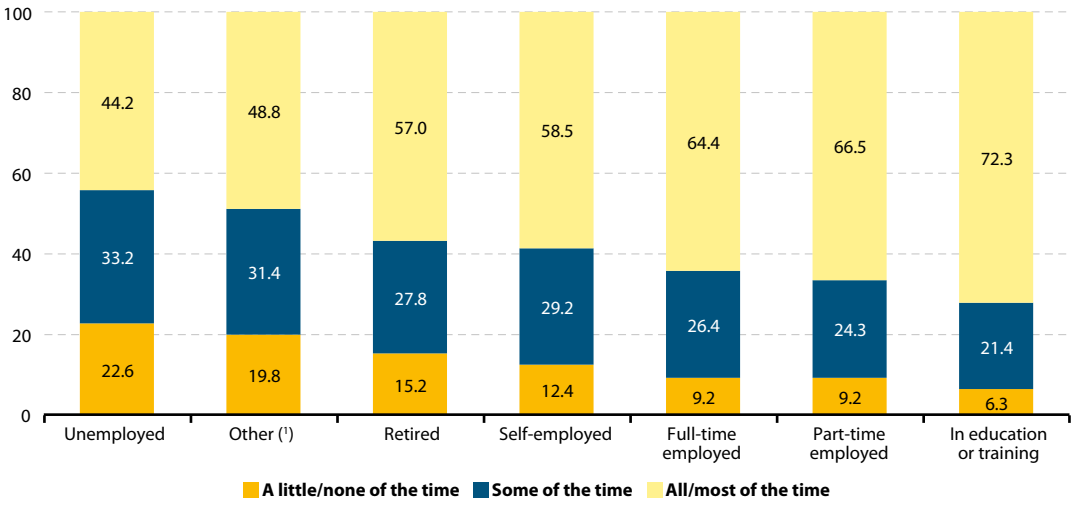
Figure 20: Frequency of being happy in the last 4 weeks, by household type, EU-28, 2013
(% of population)



(1) 'Other household types' refers to 3 or more adults with and without dependent children.
Source: Eurostat (EU-SILC)

People who were in education and training were the most often happy with more than 7 in 10 answered that they were happy all or most of the time over the last four weeks, followed by part-time employees (66.5 %) and full-time employees (64.4 %). Full-time employees consequently reported a slightly lower level of happiness than part-time employees while their life satisfaction was on average slightly higher than for part-time employees. On the other hand, unemployment has not only negative consequences for life satisfaction and meaning of life but also severe impacts on happiness. 22.6 % of the unemployed said that they were happy little or none of the time.

Figure 21: Frequency of being happy in the last 4 weeks, by labour status, EU-28, 2013
(% of population)



(1) 'Other' includes people permanently disabled/unfit to work, fulfilling domestic tasks, in compulsory military community or service.
Source: Eurostat (EU-SILC)

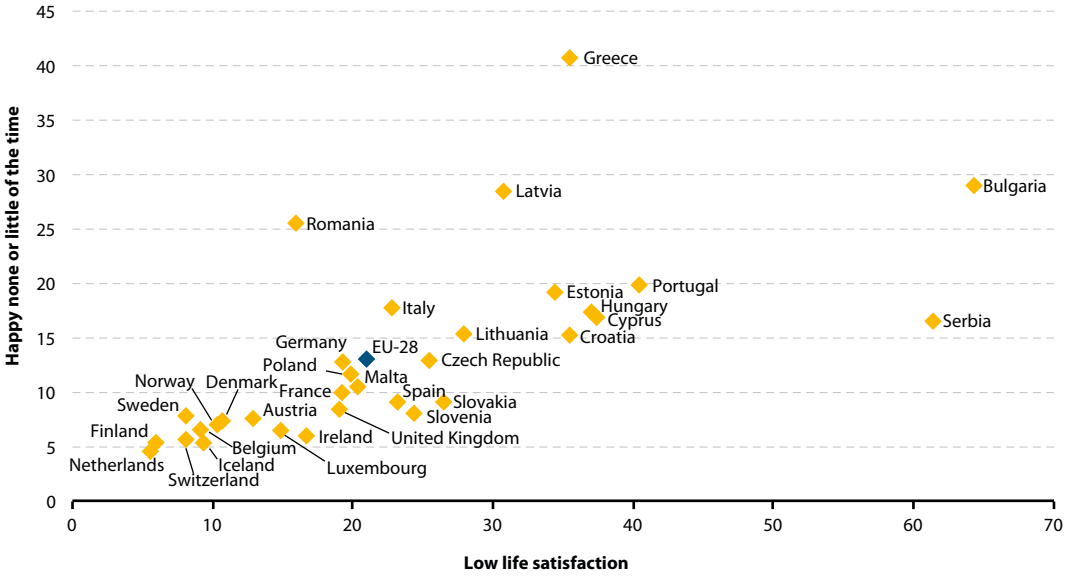
Interrelations of happiness and the other two aspects of subjective well-being

Figure 22 (21) illustrates the relationship between low life satisfaction and low happiness (being happy none or little of the time) showing a fairly linear association, exceptions being Romania, Latvia and Greece, where the proportion of the population being happy little or none of the time was higher than expected. Three main groups can be identified: group 1 containing countries with low proportions in both items, group 2 (including the EU-28 average) with medium levels and group 3 with relative high proportions of low satisfaction and low happiness (including Estonia and Portugal).

The picture is not as clear when looking at the proportion of people 'being happy none or little of the time' and 'low meaning of life' as shown in Figure 23, though the pattern is quite comparable. For instance, the outliers are again Romania, Latvia and Greece. However, the three clear-cut groups disappear. There is one group of EU Member States, including those with proportions of people being happy none or little of the time between 4.6 % in the Netherlands and 8.4 % in the United Kingdom and proportions of low meaning of life ranging from 4.0 % in Finland to 12.9 % in the United Kingdom. The other group of countries displayed proportions of low happiness ranging from 10.0 % in France to 19.7 % in Portugal and low meaning varying from 14.7 % in Poland to 23.8 % in Croatia.

(21) The direction of the axis is to be read as follows: the lower the values the better — low proportions of 'low life satisfaction' and of 'happy none or little of the time' are positive.

Figure 22: Happiness, by overall life satisfaction, by country, 2013
(y-axis: % of population being happy little or none of the time; x-axis: % of population with low life satisfaction)



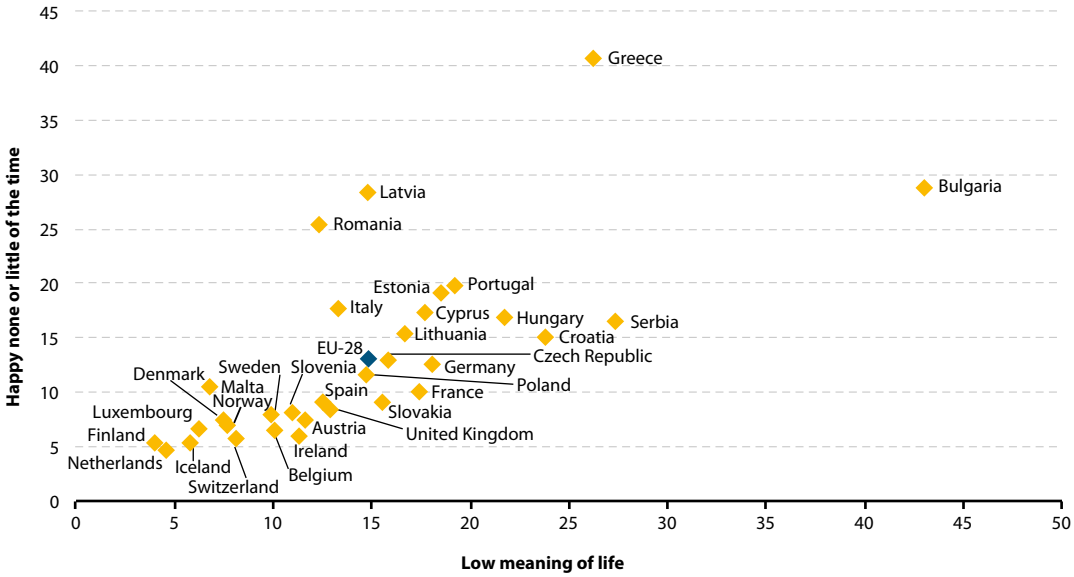
Source: Eurostat (online data codes: ilc_pw05 and ilc_pw08)

Table 2: Meaning of life and life satisfaction, by happiness, EU-28, 2013
(% of population)

Being happy	Meaning of life			Overall life satisfaction		
	Low	Medium	High	Low	Medium	High
All of the time	5.3	42.0	52.7	7.3	44.2	48.5
Most of the time	7.1	59.7	33.2	9.4	62.8	27.8
Some of the time	19.1	63.5	17.4	28.4	63.1	8.6
A little of the time	38.8	50.3	11.0	54.9	41.2	3.9
None of the time	52.7	33.8	13.5	66.8	27.1	6.1

Source: Eurostat (EU-SILC)

Figure 23: Happiness, by meaning of life, by country, 2013
(y-axis:% of population being happy little or none of the time; x-axis: % of population with low meaning of life)



Source: Eurostat (online data codes: ilc_pw05 and ilc_pw08)

It can be concluded that there is an observable relationship between happiness and satisfaction at least at country level. And what about individuals? Were people who had been happy most or all of the time in the last four weeks before the interview highly satisfied with their life? Table 2 shows that in general this was the case: a person who experienced happiness more often in the last 4 weeks had a higher probability of a high score for life satisfaction. 76.3 % of those who reported that they were happy most or some of the time also rated their life satisfaction high. On the other hand, there was a group for which life satisfaction was not associated with happiness. 7.3 % of those who were happy all the time rated their overall life satisfaction between 0 and 5, which is regarded as low. In addition, 6.1 % of those who were happy none of the time reported a high life satisfaction and 13.5 % of people in this group even reported high values regarding meaning of life. So it can be concluded that while life satisfaction does not measure the same as happiness, of course the two are correlated.

Abbreviations and acronyms

Geographical aggregates and countries

EU-28	The 28 Member States of the European Union from 1 July 2013 (Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom)
EU-27	The 27 Member States of the European Union from 1 January 2007 (Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom)

Note that EU aggregates are back-calculated when enough information is available — for example, data relating to the EU-28 aggregate is presented when possible for periods before Croatia joined the EU in 2013 and before the accession of Bulgaria and Romania in 2007, as if all 28 Member States had always been members of the EU.

Units of measurement

:	No data available
%	Percentage
EUR	Euro
pp	Percentage points

Abbreviations

EC	European Commission
EHIS	European Health Interview Survey
ESS	European Statistical System
ET2020	Strategic Framework in Education and Training
EU-LFS	EU Labour Force Survey
EU-SILC	EU Statistics on Income and Living Conditions

GDP	Gross Domestic Product
GPG	Gender Pay Gap
HBS	Household Budget Survey
ICT	Information and Communication Technologies
ILO	International Labour Organization
ISCED	International Standard Classification of Education
NACE	Statistical classification of economic activities
NSI	National Statistical Institute
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PM	Particulate Matter
PPP	Purchasing Power Parities
PPS	Purchasing Power Standard
SDI	Sustainable Development Indicator
SPC	Social Protection Committee
UN	United Nations

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KS-05-14-073-EN-N

ISBN 978-92-79-43616-1

9 789279 436161

Publications Office

doi:10.2785/59737