

Labour market change

Recent developments in the state of the middle classes



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Recent developments in the state of the middle classes



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Country codes

EU28

AT	Austria	FI	Finland	NL	Netherlands
BE	Belgium	FR	France	PL	Poland
BG	Bulgaria	HR	Croatia	PT	Portugal
CY	Cyprus	HU	Hungary	RO	Romania
CZ	Czechia	IE	Ireland	SE	Sweden
DE	Germany	IT	Italy	SI	Slovenia
DK	Denmark	LT	Lithuania	SK	Slovakia
EE	Estonia	LU	Luxembourg	UK	United Kingdom
EL	Greece	LV	Latvia		
ES	Spain	MT	Malta		

Introduction

The middle classes, however they are demarcated, have typically been defined in terms of their position between the upper and lower classes. Previously, much social research focused on the plight of the lower classes, while more recently the extraordinary growth in the income and wealth of the most affluent has led to a specific interest in the very rich. Furthermore, research on inequality has usually focused on the two extremes by using various measures to compare the top and bottom. Even when overall measures of income inequality such as the Gini coefficient are used, it is largely movements of the two extremes, not of the middle, that drive overall income inequality. For example, Palma (2011) showed that the middle income groups' share of national income had been rather stable in most countries over time.

While the distributional focus on the middle classes has been rather limited, both economists and political scientists emphasise the importance of this group for both economic development and political stability, as 'it contributes to economic growth, as well as to social and political stability' (Pressman, 2007, p. 181). The middle classes typically include professionals, managers and senior civil servants, and thus represent significant human capital. They are also a vital source of effective demand. Keynes (1936), for example, emphasised that stable consumption by the middle classes is needed to spur secure investment. The clearest empirical evidence of the deep and close relationship between economic development and the size of the middle classes is found in recent global developments: there has been rapid economic change in China, India and other parts of Asia and these countries account for a rapidly increasing share of the middle classes globally, while the European and North American middle classes have stagnated from a global perspective (see Milanovic, 2016; Kharas, 2017).

The middle classes are also seen as a bulwark against political instability. This notion goes back as far as Aristotle, while Malthus (1830) stated that 'our best grounded expectations of an increase in the happiness of the mass of human society are founded in the prospect of an increase in the relative proportions of the middle parts'. More recently, Kahneman and Deaton (2010) provided evidence that a larger middle class means a happier population. The link between large middle classes and political stability is reflected in political parties' tendency to orient their election campaign messages to the middle of the political spectrum. There is also strong evidence to support the median voter theorem, which suggests that a majority-rule voting system will select the outcome

most preferred by the median voter. However, this theorem presupposes a clear single continuum along which voter preferences are aligned, for example by income or some clearly identifiable sociological concept of class. If in fact voter preferences become multidimensional or fragment into exclusive groups, the political orientation towards the (economic) interests of the middle class becomes blurred and fragmented. There is also debate about whether electorates' rationale is predominantly based on their economic self-interest or whether their choices reflect elements of their identity, such as nationality, ethnicity, religion, gender or region. Hence, research should consider whether the recently perceived decline in trust and security is a result of distributional shifts in the aftermath of the Great Recession (2007–2009) or reflects a rise in the importance of identity in politics. The initial trigger of discontent may have been economic, but it may subsequently have been rationalised by blaming the 'others'. Emerging alternative political parties may have stimulated and exploited such an attribution of blame.

The concept and measurement of class has a long and hotly debated history in the social sciences. The two primary sociological approaches to the stratification of individuals in society are the Weberian approach, which focuses on life opportunities, and the Marxist one, which focuses on resources and power. The best-known operationalisation of these traditions – indeed a synthesis of the two – was the class scheme developed by Erikson et al (1979). In the European context, this was further refined by Rose and Harrison (2007, 2010) and led to the European Socioeconomic Classification (based largely on occupation). This classification was used in a Eurofound (2017a) study of social mobility in Europe. Another approach is to define class by income. Both approaches involve conceptual advantages and disadvantages, but to discuss them here would be lengthy and perhaps not particularly enlightening: the definition of income chosen in this report is ultimately based on the pragmatic criterion of data availability.

Another significant piece of recent research on the middle classes is *Under pressure: The squeezed middle class* (OECD, 2019). Chapter 1 of the present report draws upon the definition posited there, although the original paper covers a much longer period than this report does, beginning in the mid-1980s, and considers different countries. It finds that the size of the middle class has declined, from 64% of the population to 61%. Finland, Germany, Luxembourg and Sweden are the EU Member States showing the largest decline. The other main empirical finding is that the middle classes'

real purchasing power has diminished, especially among the more recent cohorts, due to a marked increase in the price of goods and services particularly associated with a middle-class lifestyle, including decent housing, high-quality education and good and accessible healthcare.

This report first traces the size of the middle class in the EU between 2004 and 2015 using Eurostat's SILC survey. It then analyses life satisfaction by income quartile using Eurofound's European Quality of Life Surveys.

1 Recent trends in size of the middle classes

Eurofound has identified an upward trend in income inequalities across a majority of European countries as a result of growing unemployment during the Great Recession (Eurofound, 2017c). It is important to use a wide range of indicators to capture the impact of the crisis on European labour markets properly, moving away from composite indicators of inequality, such as the Gini coefficient: information on income and wage levels provides a more comprehensive picture of the negative impact of the crisis in European societies.

Real income levels were negatively impacted by the Great Recession across almost all European countries. As a result, growth in household disposable income slowed down or reversed. This negative trend tended to be greater among less affluent individuals, hence the increasing income inequalities in most countries.

In this context, it is relevant to analyse the impact of the crisis at different points along the income spectrum and take this as a basis for defining different income classes. This will shed light on the extent to which the crisis altered the composition of these income classes. While there is evidence that lower income groups were negatively affected by the Great Recession, there is less detailed evidence on the extent to which it affected middle income groups, a subject that has been a major focus of public debate in recent years. The analysis here uses the most up-to-date EU-SILC data and defines classes on the basis of common predefined income levels. This is in line with the income-based approach discussed above. As Table 1 shows, the distinction is made between three income classes (lower, middle and upper) by means of predetermined thresholds expressed as a percentage of the median household disposable income in each European country. This report describes the evolution of the population shares that fall into each of those classes.

Table 1: Thresholds used for the definition of the income classes

Income class	Lower	Middle	Upper
Share of median household disposable income	<75%	75–200%	>200%

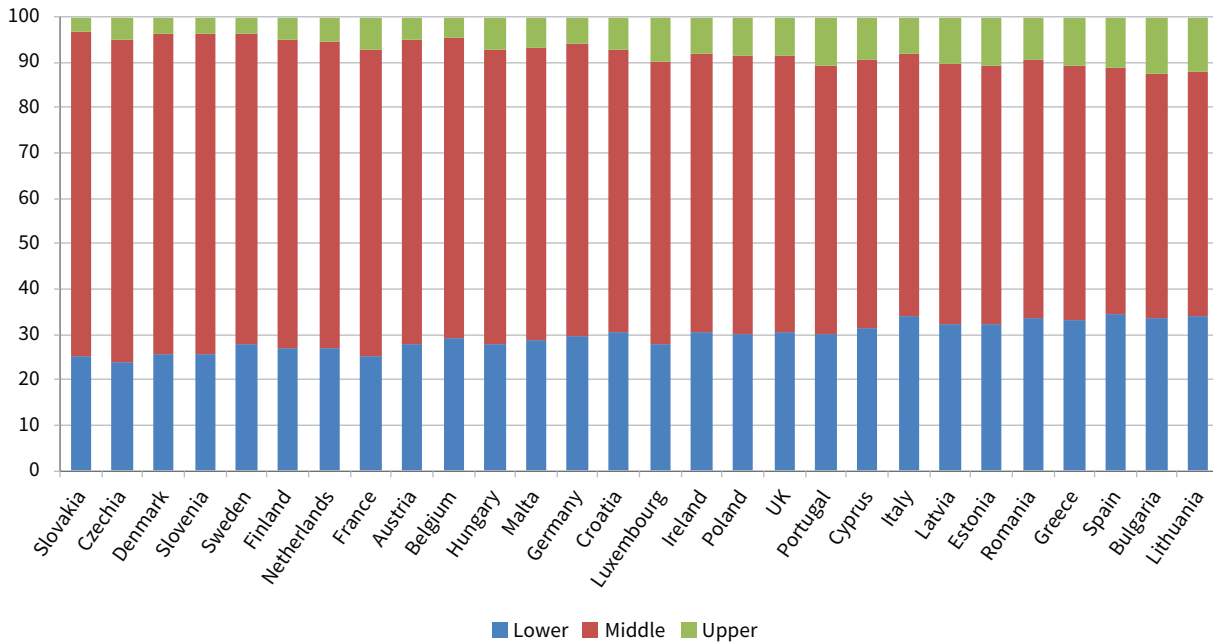
Source: Authors' own compilation

This study therefore defines the middle class in each country as people whose household disposable income is between 75% and 200% of the national median disposable income. Any income-based definition of the middle class will involve a significant degree of arbitrariness and this may influence the results. For instance, the OECD (2008) defines the middle class as those occupying the middle three quintiles of the real income distribution, while the German Institute for Economic Research (DIW Berlin) selects those households with an equivalised disposable net income of between 70% and 150% of the median across countries. A recent study by the ILO used 60–200% of the median as the reference instead (Vaughan-Whitehead et al, 2016). This report partially follows the ILO approach, but the lower bound of the middle class is set at 75% instead of 60%. This is because 60% of the median income is generally used as the poverty line and it is deemed appropriate to have some gap between the poverty line and the lower endpoint of the middle class (Horrigan and Haugen, 1988; Ravallion, 2010). A similar approach is used by Atkinson and Brandolini (2011).

Figure 1 presents an overview of the size of the different income classes across European countries, using the most recent data (2015). The size of the European middle classes varies significantly among European countries, from around 50% to around 70% of the population. The size of the middle class is largest in Scandinavian countries (around 70%), somewhat smaller in Continental countries (around 62–66%) and Ireland and the United Kingdom (UK) (61%) and significantly smaller in Mediterranean and Baltic countries (53–59%). Central and eastern European countries occupy very diverse positions, ranging from those with some of the largest middle classes in Europe (Slovakia, Czechia and Slovenia) to those with some of the smallest (Bulgaria and Romania).

The cross-country differences in the size of the middle classes are mirrored by the differences in the sizes of the other classes: those countries characterised by larger middle classes tend to have smaller lower and upper income classes. On the one hand, lower income classes range from above 30% in Mediterranean and Baltic countries to around 25% in the Scandinavian countries and Czechia, Slovakia and Slovenia. On the other hand, the relative magnitude of the cross-country divergences in the size of the upper class are larger, ranging from around 10% in most Mediterranean and Baltic states to below 5% in Scandinavian countries and Slovenia, Slovakia, and Czechia.

Figure 1: Size of the different income classes, 2015 (%)

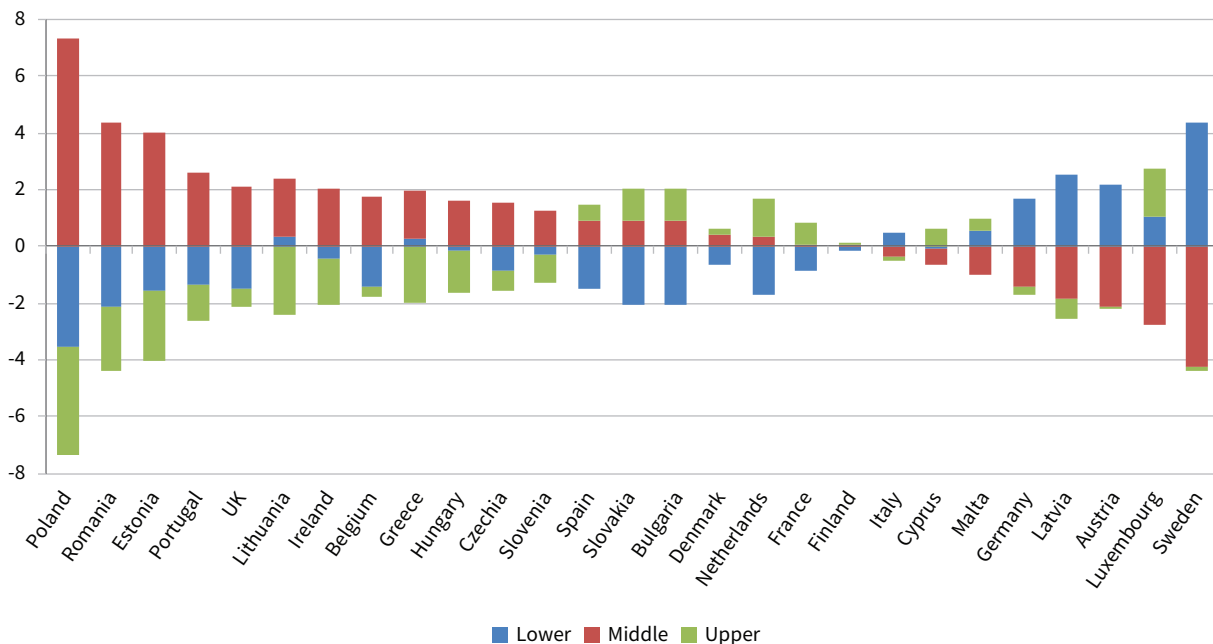


Source: EU-SILC

The evolution of the size of the middle class over time against the background of the Great Recession is particularly interesting. Data on the changes in the size of the three income classes are presented below, with the period between 2004 and 2015 split into three sub-periods that correspond to the main changes in the business cycle. Before the crisis, against a background of widespread economic growth and job creation, the middle classes expanded in around two-thirds of

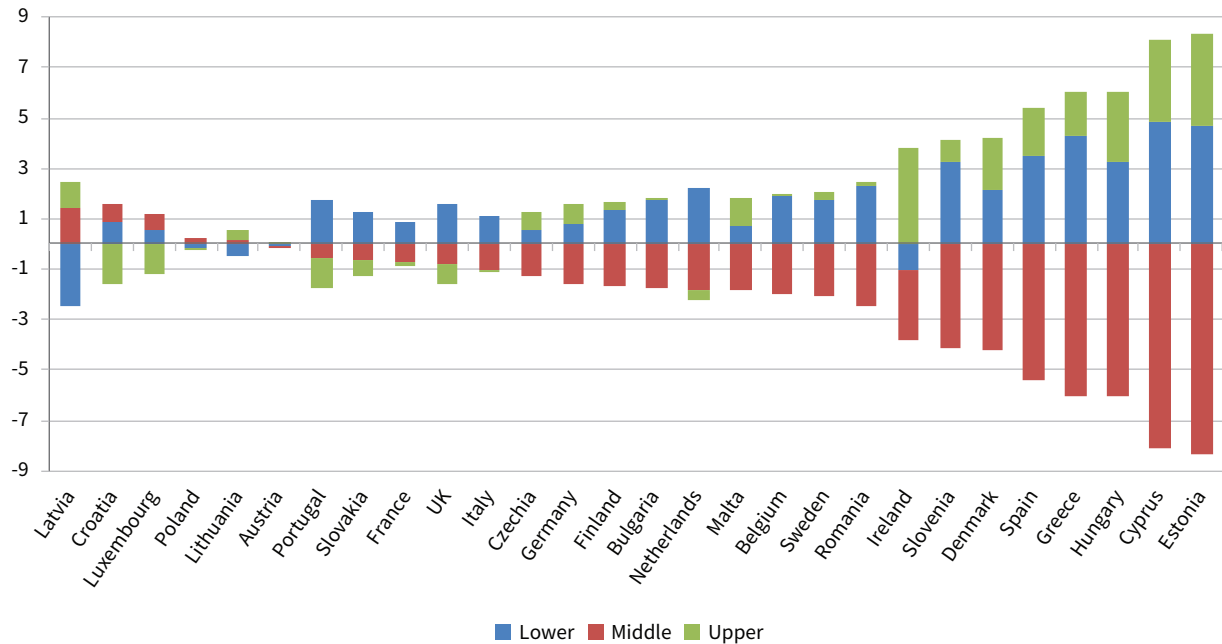
Member States, notably in several Baltic states, eastern European and Mediterranean countries and Ireland and the UK (see Figure 2). This development was generally linked to a reduction in both the lower and upper income classes, although the reductions in the latter are more significant due to their much smaller size. However, over the same period, the size of the middle class declined in around one-third of European countries. This reduction was notable in Austria,

Figure 2: Change in the size of the different income classes, 2004–2008 (percentage points)



Source: EU-SILC

Figure 3: Change in the size of the different income classes, 2008–2013 (percentage points)



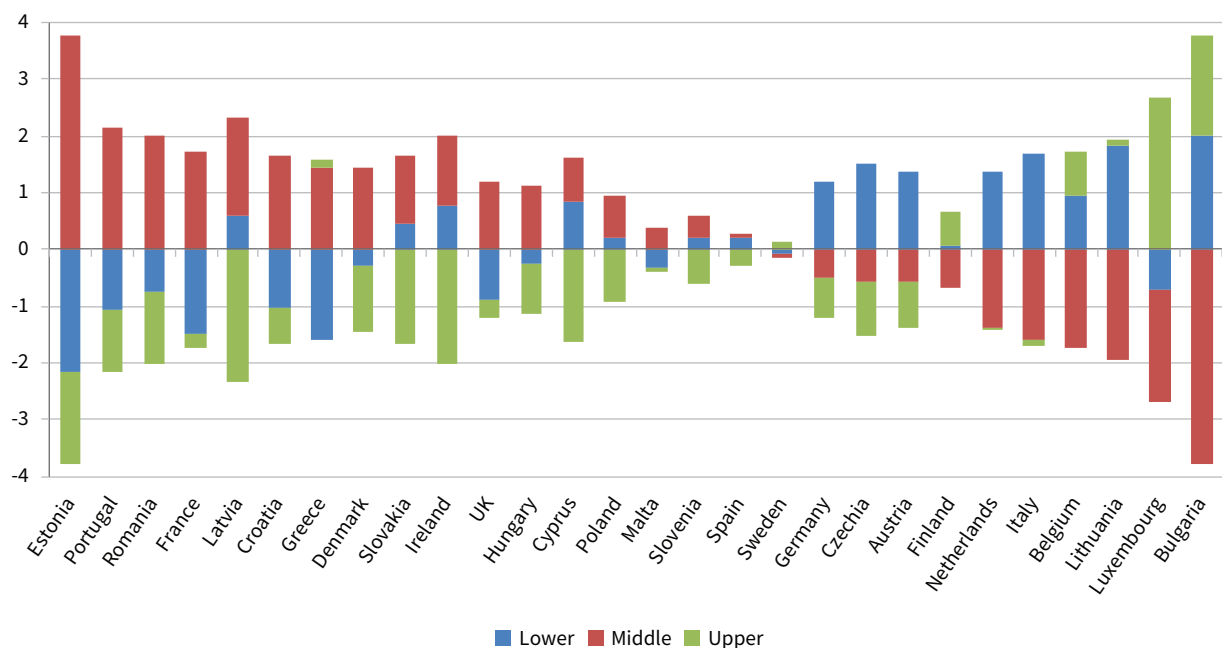
Source: EU-SILC

Germany, Luxembourg and Sweden, linked to a significant expansion of the lower income class in all cases except Luxembourg.

The Great Recession had a negative impact on household disposable income levels, which either fell or grew more slowly than before the crisis. This trend occurred in almost all EU Member States (see Eurofound, 2017c) and explains why the size of the middle class declined in most Member States between

2008 and 2013 (see Figure 3). In most cases, this change was paralleled by an expansion in the size of the lower income class. The reduction in the size of the middle income class was especially relevant in some of the Member States hardest hit by the crisis, such as certain Mediterranean countries (Cyprus, Greece and Spain especially) and eastern European countries (Estonia, Hungary, Romania and Slovenia). However, the middle classes also declined notably in Scandinavian countries.

Figure 4: Change in the size of the different income classes, 2013–2015 (percentage points)



Source: EU-SILC

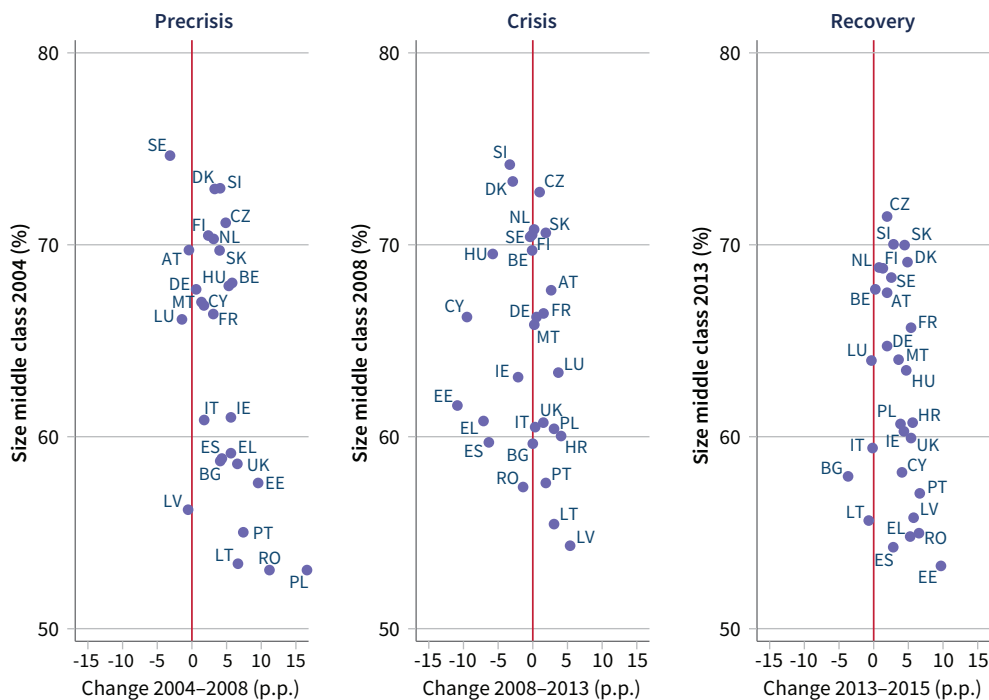
The only countries where the middle classes did not contract were Croatia, Latvia, Lithuania, Luxembourg and Poland. This middle class ‘squeeze’ can be linked to a downward impact of the crisis on income levels, resulting in a larger expansion in the lower income class than the upper income class (although the latter did increase in most countries, and increased more than the former in Ireland, Malta and Czechia).

Yet the most recent available data show a reversal of that trend in many Member States (see Figure 4). Between 2013 and 2015, the size of the middle class expanded again in almost two-thirds of Member States. It did so very significantly in some eastern European countries (Croatia, Estonia, Hungary, Latvia, Romania and Slovakia) and Mediterranean countries (Greece and Portugal), as well as in Denmark, Ireland and the UK. In many cases, this expansion of the middle classes can be explained by a larger reduction in the size of the upper income class than the lower income class, as it occurred before the emergence of the crisis. On the other hand, the middle classes continued to diminish in several

countries (more significantly in Belgium, Bulgaria, Italy, Lithuania, Luxembourg and the Netherlands); in most of these countries, this was paralleled by an expanding lower class, reflecting a continuation of the negative impact on income levels exerted by the crisis.

The changes seen in the size of the middle class over the last decade have gone hand in hand with an interesting process of convergence between Member States (see Figure 5). Most of the countries that were initially characterised as having a relatively large middle class reported a decline in its size between 2004 and 2015, and in some cases (Austria, Germany and Sweden) this was consistent across the three sub-periods. In those countries with smaller middle classes at the beginning of the period, notable expansions took place: this occurred throughout the period in Poland and with the exception of the period 2008–2013 in Croatia, Ireland, Latvia, Portugal, Romania and the UK.¹ As Figure 5 shows, this process of convergence took place during the pre-crisis years, and then it was halted.

Figure 5: Change in the size of middle classes over the three sub-periods (percentage points)



Source: EU-SILC

¹ However, the size of the middle class contracted significantly in the Mediterranean countries of Greece, Italy and Spain (as well in Bulgaria), which had relatively small middle classes at the beginning of the period.

2 Quality-of-life differences between income groups

This section reviews data – from Eurofound’s European Quality of Life Survey (EQLS) – on life satisfaction by income quartile. The middle two income quartiles could be considered as the middle class; however, tracing the trajectories of the higher middle class (that is, the upper middle income quartile – Q3) and the lower middle class (the lower middle income quartile – Q2) separately offers an opportunity to consider to what extent their experiences are similar or different. In other words, there is an opportunity to explore whether there are any signs of split, or polarisation, within the middle. This promises to be particularly interesting since the different income groups fared quite differently during the Great Recession.

Overall dynamics of life satisfaction

Figure 6 and Table 2 show changes in life satisfaction for different income quartiles between 2003 and 2016. The greatest increase (that was statistically significant) occurred between 2003 and 2007, especially in the highest quartile. There has been little change in average life satisfaction since then: 7.0 in 2007, 7.1 in 2011 and 7.1 in 2016. A number of countries followed a pattern of ‘crisis and recovery’, with life satisfaction levels falling or stagnating between 2007 and 2011, then improving in 2016.

Box 1: Measuring life satisfaction in the EQLS 2016

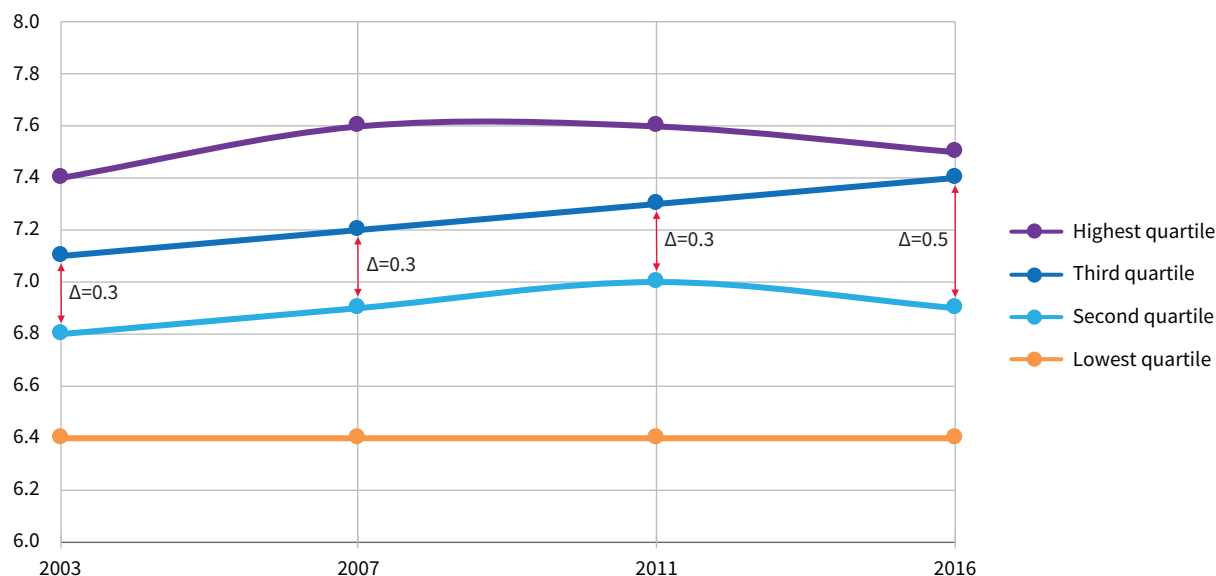
Carried out every four years², Eurofound’s unique, pan-European survey examines both the objective circumstances of European citizens’ lives and how they feel about those circumstances and their lives in general. The EQLS 2016, interviewed nearly 37,000 people in 33 countries – the 28 EU Member States and five candidate countries.

Questions address a wide range of topics, including: living conditions, trust in institutions, sense of social inclusion or exclusion, and perceived quality of public services and of local neighbourhoods.

One of the measures examined is life satisfaction. Respondents are asked to rate how satisfied they are with their lives on a scale of 1 to 10 (1 being ‘very dissatisfied’ and 10 being ‘very satisfied’).

² The survey has been conducted in 2003, 2007–2008, 2011–2012. The latest survey took place in 2016.

Figure 6: Trends in life satisfaction in the EU, by income quartile



Note: Ratings are for 27 Member States in 2003 (without Croatia) and for 28 Member States from 2007 onwards.

Source: EQLS 2003; EQLS 2007; EQLS 2011; EQLS 2016 (Q4: 'All things considered, how satisfied would you say you are with your life these days? Please tell me on a scale of 1 to 10, where 1 means very dissatisfied and 10 means very satisfied.')

Table 2: Trends in life satisfaction in the EU, by income quartile

Income quartile	Life satisfaction, EU				Change over time				
	2003	2007	2011	2016	2007–2003	2011–2007	2016–2011	2016–2003	2016–2007
Highest quartile	7.45	7.57	7.58	7.52	0.12**	0.01	-0.06*	0.07**	-0.05
Higher middle (Third quartile)	7.15	7.23	7.29	7.35	0.08**	0.06	0.07**	0.21**	0.12**
Lower middle (Second quartile)	6.81	6.92	7.00	6.88	0.11**	0.09**	-0.12**	0.07*	-0.04
Lowest quartile	6.42	6.37	6.42	6.40	-0.05	0.05	-0.02	-0.02	0.03

Notes: Ratings are for 27 Member States in 2003 (without Croatia) and for 28 Member States from 2007 onwards.

Minor discrepancies between specific estimates (in first four columns from the left) and the differences (in last four columns on the right) may appear due to rounding.

The statistical significance of the difference between the quartile estimates over time is assessed by comparing means, with two-sided tests assuming equal variances (* p-value < 10% and ** p-value < 5%).

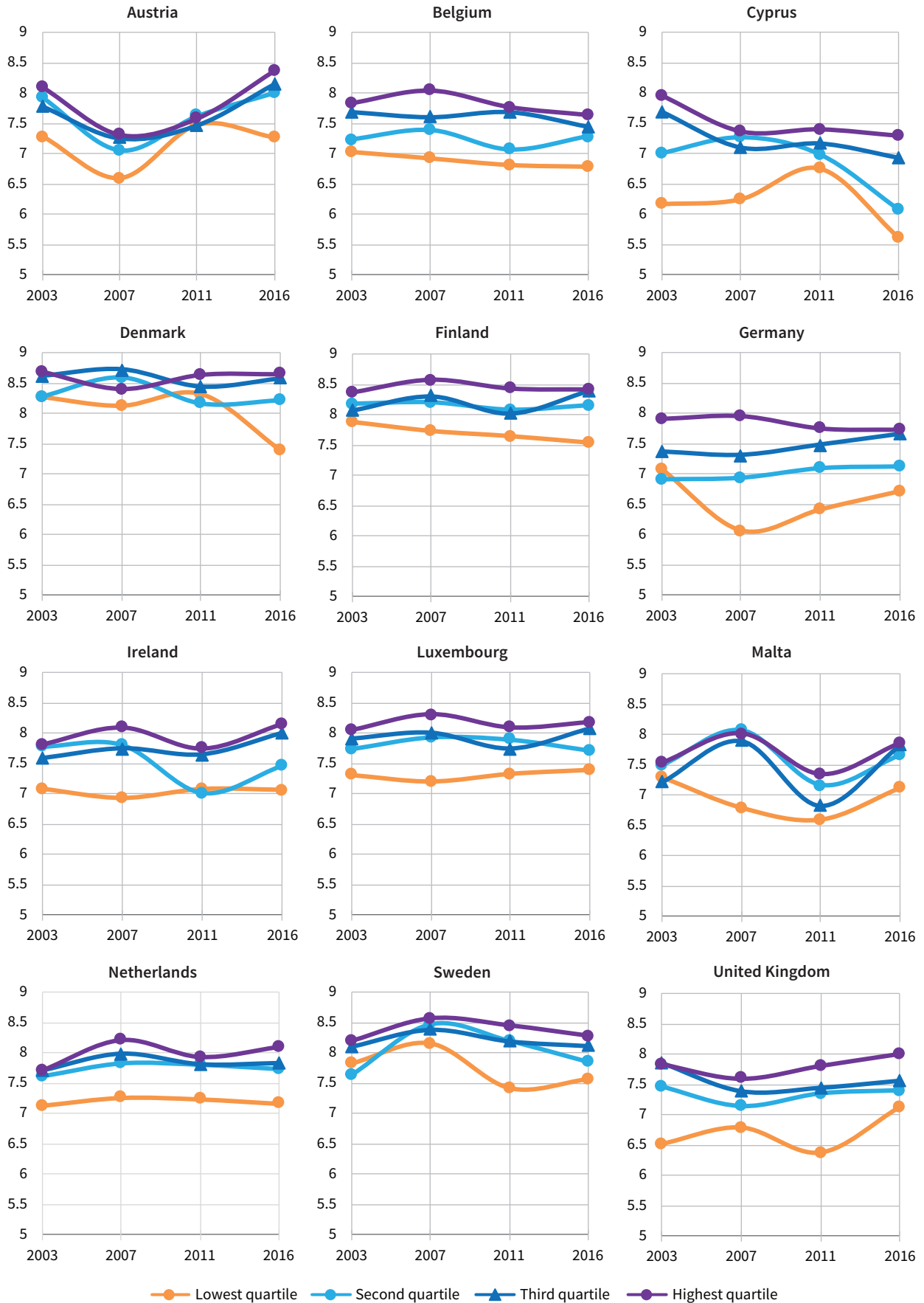
Source: See Figure 6

Income quartiles were not always uniformly affected, with some experiencing larger changes than others (see Figure 7). In Estonia, Finland, Greece, Malta, Slovakia and Sweden, life satisfaction decreased for all income groups between 2007 and 2011. In the context

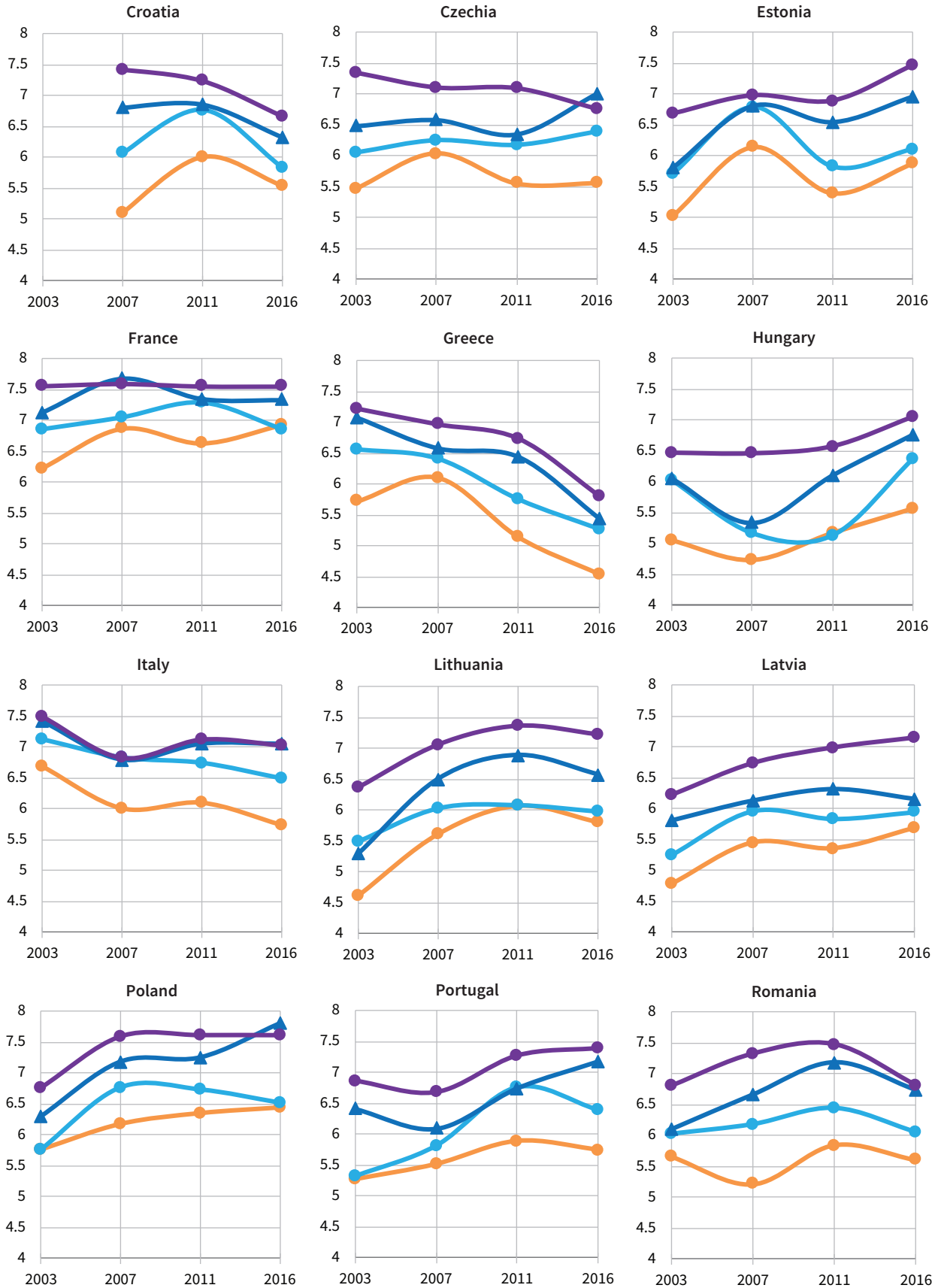
of the economic recovery achieved by 2016, it is concerning that the decline in life satisfaction continued in some countries, as was the case for all income quartiles in Greece.

Figure 7: Life satisfaction by income quartile, 2003–2016, by country

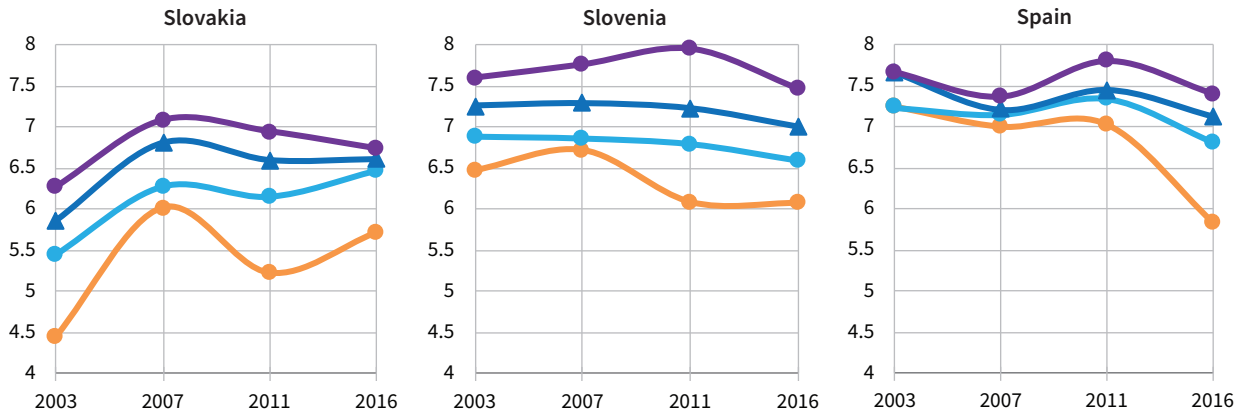
Countries with high levels of life satisfaction



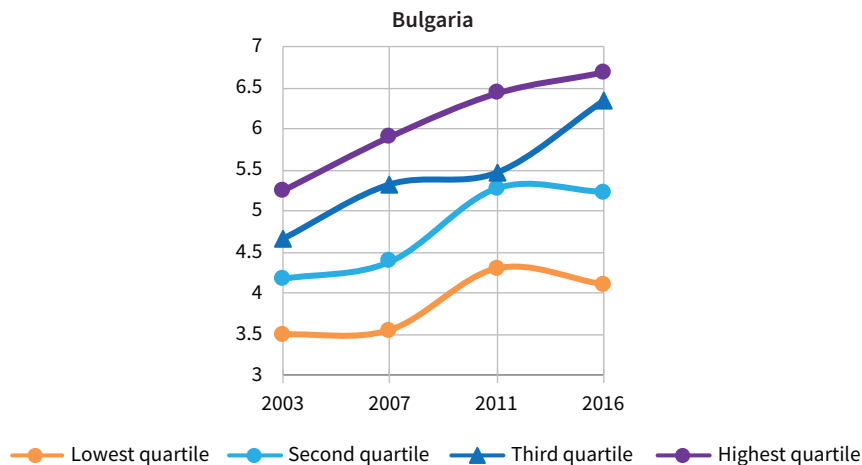
Countries with medium levels of life satisfaction



Countries with medium levels of life satisfaction (cont'd)



Countries with low levels of life satisfaction



Note: Country estimates fall into slightly different ranges of the scale used (1–10); thus for the purpose of Figure 7, they are grouped into 'high, medium and low' levels of satisfaction, dependent on the interval displayed on the vertical axis (i.e. 5–9, 4–8 and 3–7).

Source: See Figure 6

Emergence from the crisis: The success story of the higher middle class

Across the EU, the higher middle class (Q3) seems to have been on a consistent trajectory of rising life satisfaction throughout the four EQLS editions. The lower middle class (Q2) had been on the same track in 2003, 2007 and 2011, but slipped back in 2016 and thus diverged from the higher middle class. This pattern of a post-2011 split of the middle – an increase in life satisfaction for the higher middle class and a decline in life satisfaction for the lower middle class – is also a prevailing tendency across the Member States: between 2011 and 2016, life satisfaction for the higher middle class increased in 11 countries and declined in 6. For the lower middle class, life satisfaction increased in 4 countries and declined in 8 (see Table A1).

Those in the higher middle class enjoyed an improvement in quality of life post-2011 relative to the other income quartiles. Their living conditions and trust in institutions improved more, and their sense of social exclusion decreased more than for other income quartiles (Eurofound, 2017b, p. 106). The higher middle class seems to have experienced upward convergence towards the levels of quality of life reported by the top income group (Q4).

In contrast, the lower middle class diverged from the higher middle class as life satisfaction decreased post-2011. While life satisfaction tends to be higher for groups with higher income, income groups in some countries have defied this trend in the past. However, the hierarchy seems to have been more clearly established by 2016, when life satisfaction for the third quartile was higher than for the second quartile in all EU countries.

Between 2011 and 2016, the difference in life satisfaction between the second and third quartiles increased in most countries, but especially in Bulgaria, Cyprus, Hungary, Poland and Portugal (see Table A2). In 2016, the higher middle class had significantly higher life satisfaction than the lower middle class in 20 Member States – more countries than in the past (see Table 4). To sum up, these findings suggest that polarisation between the middle classes spread across the Member States over time.

Importantly, there has been no improvement in life satisfaction for the lowest income quartile (Q1) in the EU as a whole. Post-2011, it increased in 6 and declined in 6 countries, with no significant change in the remaining 16 Member States. Moreover,

the bottom income quartile has generally seen the smallest absolute increase in average quality ratings of public services, while the middle income groups have seen the largest increases. In this respect, the middle income quartiles experienced ‘upward convergence’ by achieving similar scores to those of the top income quartile, while the gap between the bottom and top income quartiles increased.

(Eurofound, 2017b, p. 106)

Across the EU there was an increase in life satisfaction for the highest income quartile from 2003 to 2007, no significant change from 2007 to 2011 and a decline post-2011 (though to a lesser extent than for the lower middle quartile). A post-2011 decline in life satisfaction for the highest income quartile was recorded in six countries, while an increase was seen in five. The decline in the satisfaction of the highest quartile contributed to the overall decline experienced in 2011–2016 by all income groups in Croatia, Greece and Spain.

Previously, Eurofound has suggested that the crisis may have had a delayed effect, the assumption being that certain factors help maintain quality of life for a certain time and thus cushion against the effects of the crisis,

but these are eventually depleted or become unavailable. Austerity policies, the reduction of social protection and the removal of public services could also be factors. The middle class could be susceptible to such policy changes due to finding themselves in a ‘twilight zone’, being too affluent to be eligible for support but not affluent enough to secure the living standard to which they aspire (Eurofound, 2019).³ The data on life satisfaction suggest that the lower middle class could be more severely affected by this than the higher middle class.

Overall, these findings suggest that there are reasons to differentiate middle income groups – because their experiences differ – and to monitor any potential trend and the extent of polarisation in the future. Such a focus should complement the attention that recent studies have predominantly paid to inequality, and particularly the gap between top and bottom income groups.

The reasons for a minor decline in life satisfaction for the highest income quartile merit further reflection. Evidence from recent research on inequality shows that the concentration of wealth at the very top of the income and wealth distribution has been increasing. However, the wealthiest individuals may not be sufficiently represented in surveys to allow for reliable analysis. Furthermore, the highest quartile may be more diverse than the small minority of the richest (for example, the top 1%): the wealth and incomes of those who are not in the very top of the highest quartile may no longer be sufficient to provide them with continued protection and comfort. On the other hand, and as a positive finding, the number of Member States in which life satisfaction of the lowest income quartile declined over a recent period is rather limited: it includes countries where the recession lasted longer, and where the decline in subjective well-being continued across all income quartiles in 2016 (that is, countries where the decline was not exclusive to the lowest income quartile).

³ Eurofound referred to the ‘twilight zone’ effect when reporting on access to healthcare in particular.

3 | Conclusions

In 2015, the size of the middle classes in Member States varied between 50% and 70% of the population. It was largest in the Scandinavian countries, somewhat smaller in Continental countries, Ireland and the UK and significantly smaller in Mediterranean and Baltic countries. Central and eastern European countries varied greatly, from the very large middle classes found in Czechia, Slovakia and Slovenia to the very small ones reported in Bulgaria and Romania.

The middle class declined in size in most European countries between 2008 and 2013 and, in most cases, this went hand in hand with an expansion of the lower income class. This reduction in the size of the middle class was especially pronounced in some of the peripheral Member States hardest hit by the crisis, such as Greece, Ireland, Portugal and Spain.

However, the most recent available data show a reversal of the trend seen in many European countries during the recession years. Between 2013 and 2015, the middle class expanded again in almost two-thirds of Member States and very significantly in some eastern countries (Croatia, Estonia, Hungary, Latvia, Romania and Slovakia) and Mediterranean countries (Greece and Portugal), as well as in Denmark, Ireland and the UK. In many cases, this expansion of the middle classes can be attributed to a larger reduction in the size of the upper income class relative to the lower income class.

The changes seen in the size of the middle class over the last decade have been accompanied by an interesting process of convergence between European countries.

Most of the countries that were initially characterised as having a relatively large middle class reported a decline in its size between 2004 and 2015, and in some cases (Austria, Germany and Sweden) this was consistent across the three sub-periods. In the countries with smaller middle classes at the beginning of the period, notable expansions took place: this occurred throughout the period in Poland and with the exception of the period 2008–2013 in Croatia, Ireland, Latvia, Portugal, Romania and the UK.⁴ As Figure 5 shows, this process of convergence took place during the pre-crisis years, and was then halted.

The EQLS results suggest that the rising tide of recovery has not lifted everyone's quality of life to the same extent. In particular, there is a lack of progress in quality of life for the bottom income group, in terms of both life satisfaction and the perceived quality of public services, for example, which did not increase for the bottom income group compared with others.

There was evidence of a clear divergence between the higher-middle and lower-middle income quartiles after the Great Recession. There is also some polarisation within the spread of the middle class across the Member States over time, with the gap in life satisfaction between the middle two income quartiles increasing in many countries. These gaps became statistically significant in more countries between 2007 and 2016. These findings suggest that monitoring and analysing the situation of the middle classes in Europe should go hand in hand with a focus on the dynamics in the middle, in addition to the recent studies on inequality between the top and bottom of income distribution.

⁴ However, the size of the middle class contracted significantly in the Mediterranean countries of Greece, Italy and Spain (as well in Bulgaria), which had relatively small middle classes at the beginning of the period.

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Annexes

Table A1: Life satisfaction by income quartile, 2011–2016

	EQLS 2011				EQLS 2016				Difference between 2016 and 2011			
	Income quartile				Income quartile				Income quartile			
	1	2	3	4	1	2	3	4	1	2	3	4
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean				
Austria	7.5	7.6	7.5	7.6	7.3	8.0	8.2	8.4	-0.2	0.4*	0.7**	0.8**
Belgium	6.8	7.1	7.7	7.8	6.8	7.3	7.4	7.6	0.0	0.2	-0.3*	-0.1
Bulgaria	4.3	5.3	5.5	6.4	4.1	5.2	6.3	6.7	-0.2	0.0	0.8**	0.3
Cyprus	6.8	7.0	7.2	7.4	5.6	6.1	6.9	7.3	-1.1**	-0.9**	-0.2	-0.1
Czechia	5.6	6.2	6.4	7.1	5.6	6.4	7.0	6.8	0.0	0.2	0.7**	-0.3*
Germany	6.4	7.1	7.5	7.8	6.7	7.1	7.7	7.7	0.3*	0.0	0.2	0.0
Denmark	8.3	8.2	8.5	8.6	7.4	8.2	8.6	8.7	-0.9**	0.1	0.1	0.0
Estonia	5.4	5.8	6.5	6.9	5.9	6.1	7.0	7.5	0.5**	0.3	0.4**	0.6**
Greece	5.1	5.8	6.4	6.7	4.5	5.3	5.5	5.8	-0.6**	-0.5**	-1.0**	-0.9**
Spain	7.0	7.3	7.5	7.8	5.8	6.8	7.1	7.4	-1.2**	-0.5**	-0.3*	-0.4**
Finland	7.6	8.1	8.0	8.4	7.5	8.2	8.4	8.4	-0.1	0.1	0.4**	0.0
France	6.6	7.3	7.4	7.6	6.9	6.9	7.3	7.6	0.3*	-0.4**	0.0	0.0
Croatia	6.0	6.8	6.9	7.2	5.5	5.8	6.3	6.7	-0.5*	-0.9**	-0.5**	-0.6**
Hungary	5.2	5.1	6.1	6.6	5.6	6.4	6.8	7.1	0.4	1.2**	0.7**	0.5**
Ireland	7.1	7.0	7.6	7.8	7.1	7.5	8.0	8.2	0.0	0.4**	0.3**	0.4**
Italy	6.1	6.7	7.0	7.1	5.7	6.5	7.0	7.0	-0.4**	-0.2*	0.0	-0.1
Lithuania	6.1	6.1	6.9	7.4	5.8	6.0	6.6	7.2	-0.3	-0.1	-0.3*	-0.1
Luxembourg	7.3	7.9	7.7	8.1	7.4	7.7	8.1	8.2	0.1	-0.2	0.3**	0.1
Latvia	5.4	5.8	6.3	7.0	5.7	5.9	6.2	7.2	0.3	0.1	-0.2	0.2
Malta	6.6	7.2	6.8	7.4	7.1	7.7	7.8	7.9	0.5**	0.5**	1.0**	0.5**
Netherlands	7.2	7.8	7.8	7.9	7.2	7.7	7.8	8.1	-0.1	-0.1	0.0	0.2
Poland	6.4	6.7	7.3	7.6	6.4	6.5	7.8	7.6	0.1	-0.2	0.6**	0.0
Portugal	5.9	6.8	6.7	7.3	5.7	6.4	7.2	7.4	-0.1	-0.4*	0.4**	0.1
Romania	5.8	6.4	7.2	7.5	5.6	6.1	6.7	6.8	-0.2	-0.4	-0.4**	-0.7**
Sweden	7.4	8.2	8.2	8.5	7.6	7.9	8.1	8.3	0.1	-0.3**	-0.1	-0.2
Slovenia	6.1	6.8	7.2	7.9	6.1	6.6	7.0	7.5	0.0	-0.2	-0.2	-0.5**
Slovakia	5.2	6.2	6.6	6.9	5.7	6.5	6.6	6.7	0.5*	0.3	0.0	-0.2
UK	6.4	7.4	7.4	7.8	7.1	7.4	7.6	8.0	0.7**	0.1	0.1	0.2
EU28	6.4	7.0	7.3	7.6	6.4	6.9	7.4	7.5	0.0	-0.1**	0.1**	-0.1*

Number of countries with statistically significant change in life satisfaction of specific income quartiles:

Increase in life satisfaction	Total number of countries	6	4	11	5
	Number of countries by significance level		3*, 3**	1*, 3**	11**
Decrease in life satisfaction	Total number of countries	6	8	6	6
	Number of countries by significance level		1*, 5**	2*, 6**	3*, 3**

Notes: Life satisfaction is measured on a 10-point scale. The statistical significance of the difference between the 2016 and 2011 estimates for each quartile is assessed by comparing means, with two-sided tests assuming equal variances, with the Bonferroni correction (* p-value < 10% and ** p-value < 5%).

Source: EQLS 2011–2012; EQLS 2016

Table A2: Differences in life satisfaction between middle income quartiles

	Difference in life satisfaction between Q3 and Q2				Change in the difference between Q3 and Q2 over time, in points				
	2003	2007	2011	2016	2007–2003	2011–2007	2016–2011	2016–2003	2016–2007
Poland	0.5**	0.4**	0.5**	1.3**	0.1	0.1	0.8	0.8	0.9
Bulgaria	0.5**	0.9**	0.2	1.1**	0.5	0.7	0.9	0.6	0.2
Cyprus	0.7**	-0.2	0.2	0.9**	0.8	0.3	0.7	0.2	1.0
Estonia	0.1	0.0	0.7**	0.8**	0.0	0.7	0.1	0.8	0.8
Portugal	1.1**	0.3	0.0	0.8**	0.8	0.3	0.8	0.3	0.5
Romania	0.1	0.5**	0.7**	0.7**	0.4	0.3	0.1	0.6	0.2
Czechia	0.4*	0.3	0.2	0.6**	0.1	0.2	0.4	0.2	0.3
Lithuania	-0.2	0.5**	0.8**	0.6**	0.7	0.3	0.2	0.8	0.1
Italy	0.3	0.0	0.3**	0.5**	0.3	0.3	0.2	0.2	0.6
Ireland	-0.2	-0.1	0.6**	0.5**	0.1	0.7	0.1	0.7	0.6
Germany	0.4**	0.4**	0.4**	0.5**	0.1	0.0	0.1	0.1	0.2
EU28	0.3**	0.3*	0.3*	0.5**	0.0	0.0	0.2	0.1	0.2
France	0.3*	0.6**	0.1	0.5**	0.4	0.6	0.4	0.2	0.2
Croatia	-	0.7**	0.1	0.5**	-	0.6	0.4	-	0.3
Slovenia	0.4	0.4**	0.4**	0.4*	0.1	0.0	0.0	0.0	0.0
Hungary	0.0	0.2	1.0**	0.4*	0.1	0.8	0.6	0.4	0.2
Luxembourg	0.2	0.1	-0.2	0.4**	0.1	0.2	0.5	0.2	0.3
Denmark	0.3**	0.1	0.3**	0.4**	0.2	0.2	0.1	0.0	0.2
Spain	0.4**	0.1	0.1	0.3	0.4	0.0	0.2	0.1	0.3
Sweden	0.5**	-0.1	0.0	0.3*	0.5	0.1	0.3	0.2	0.3
Finland	-0.1	0.1	-0.1	0.2**	0.2	0.2	0.3	0.3	0.1
Latvia	0.6**	0.2	0.5**	0.2	0.4	0.3	0.3	0.3	0.0
Malta	-0.3	-0.2	-0.3	0.2	0.1	0.2	0.5	0.4	0.3
Greece	0.5*	0.2	0.7**	0.2	0.3	0.5	0.5	0.	0.0
UK	0.4**	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.1
Belgium	0.5**	0.2	0.6**	0.2	0.2	0.4	0.5	0.3	0.1
Austria	-0.1	0.2	-0.1	0.2	0.3	0.3	0.3	0.3	0.0
Slovakia	0.4*	0.5**	0.4**	0.1	0.1	0.1	0.3	0.3	0.4
Netherlands	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Number of countries with statistically significant differences between Q2 and Q3									
	2003 (N)	2007 (N)	2011 (N)	2016 (N)					
$\alpha = 5\%$	12	9	14	17					
$\alpha = 10\%$	16	10	15	20					

Notes: Life satisfaction is measured on a 10-point scale. Colour coding indicates the magnitude of difference between Q2 and Q3 at a given point of time: red means that Q3 exhibits (much) higher life satisfaction levels than Q2; green means that Q3 demonstrates lower life satisfaction levels than Q2. The statistical significance of the difference between Q2 and Q3 in a given year is assessed by comparing means, with two-sided tests assuming equal variances (* p-value < 10% and ** p-value < 5%).

Source: EQLS 2003; EQLS 2007–2008; EQLS 2011–2012; EQLS 2016

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This report maps developments in the size of the middle class in the EU between 2004 and 2015 using Eurostat's SILC survey, and analyses life satisfaction by income quartile (using Eurofound's European Quality of Life Surveys). Before the crisis, the middle classes had expanded in around two-thirds of Member States. The crisis resulted in a decline in the size of the middle class in most EU Member States between 2008 and 2013 – especially in some of the Member States hardest hit by the crisis. However, between 2013 and 2015, the size of the middle class expanded again in almost two-thirds of Member States. In terms of quality of life, the middle class experienced a consistent rise in life satisfaction between 2003 and 2011. However, post-2011, there was divergence – an increase in life satisfaction for the higher middle class and a decline in life satisfaction for the lower middle class.

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