1. Is the world of work behind middle class reshuffling?

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1. INTRODUCTION

The international debate has recently focused on increased income inequalities and on the adverse effects that such inequalities may have on both social and economic developments (OECD, 2015; IMF, 2015; EC 2013, 2015). According to the OECD (2015) 'income inequality is at its highest level for the past half century'.

Generally, this work on inequalities (with the possible exception of Gornick and Jänti, 2013) has so far concentrated on the differences between the top and the bottom (see, for instance, EC, 2015). The purpose of the present report is to address the question of income inequalities from two different angles: first to identify what elements in the world of work may have contributed to increase inequalities, especially because recent reports have recognized that the roots of inequalities may well lie in the different labour market and industrial relations systems (OECD, 2015). The second characteristic of this work is to tackle inequalities from the perspective of all the different income groups (and not only from those at the two extremes, the bottom and the top) and in particular from the perspective of middle-income groups or what we generally categorize as the 'middle class'. This more comprehensive overview is important in enabling us to better identify whether some categories may have less access to social mobility and, for instance, lead to possible intergenerational or gender gaps. This overview is also relevant on the economic front, given the importance of the middle class for consumption and economic growth (IMF, 2015).

Approaching inequalities from these two different but complementary perspectives – the world of work and middle income groups – also allows us to respond to such questions as: Are increasing inequalities and increased polarization combined with a sort of erosion of the middle class? While the position of the bottom groups seems to have deteriorated over the past decade, especially since the financial and economic crisis of 2007-2008, has this movement also affected middle-income groups? If so, what are the driving forces in the world of work that may have contributed to such an erosion of bottom- and middle- income categories? And what are the policies and institutions in the world of work that will be able to limit and even to reduce inequalities in the future?

In order to do so, this ILO-EC project established a network of high-level experts in 15 countries to explore in detail all the developments that may have characterized jobs and activities, the participation of different groups in the labour market, their employment conditions in terms of types of work contract, their wages and pay packages and systems, their ability to negotiate wages and working conditions through collective bargaining mechanisms and more generally within industrial relations systems and the specific roles of key actors such as employers, trade unions, and national authorities.

In order to identify the links with inequalities, our group of experts needed to examine the evolution of such labour developments and their interaction with different income groups in the long term, over the past 20 years (and for some chapters even earlier); this represents the third 'value-added' of this work. At the same time, periods of crises with the radical changes they sometimes bring can highlight the relationships we attempt to identify between the world of work and different income groups. We thus tried also to distinguish the particular effects of the financial and economic crisis and whether it may have strengthened or, on the contrary, countered some existing long-term trends.

We cover three aspects in particular in this volume. We first analyse trends pertaining to the 'middle class', looking at national developments over time and also in the most recent period; we then identify the most relevant changes in the world of work that may contribute to explaining the trends in the middle class; finally, we try to capture – when possible – some of the effects in both the economic and the social domain of this evolving relationship between the world of work and the role and place of the middle class. In order to do this most exhaustively, we have tried to provide all available data at national level, complemented in this introductory chapter with some cross-country analysis using the database of the European Union Survey on Income and Living Conditions (EU-SILC).

Each national expert presents the main changes and developments in both the middle class and the world of work in his/her country in detail, following a similar structure in each chapter. At the same time, each expert develops the elements that he/she believes are the most relevant for explaining the national story of the link between the world of work and income groups. The purpose of this introductory chapter is to present the overall framework for this work in terms of themes and methodology, then to summarize the main findings and policy issues presented in the different chapters, and to complement them with some comparative data analysis at European level. This allows us to address policy issues that are also discussed in individual chapters.

2. OVERARCHING FRAMEWORK

2.1 The existing literature and current debates: Why do we need to tackle inequalities also from a middle class perspective?

There has recently been a large number of studies on inequalities, especially from the OECD but also the IMF and the European Commission (OECD, 2015; IMF, 2015; EC, 2015). This has helped to put the increasing inequalities at the core of policy debates and led to a number of policy reforms to start to reduce them. At the same time, these debates as well as the existing literature on distribution, focuses generally on inequalities between the top or the bottom, while the middle is often 'forgotten' (Atkinson and Brandolini, 2013).

However, the success and well-being of the middle class is of crucial importance for whole societies as 'it contributes to economic growth, as well as to social and political stability' (Pressman, 2007: 181). A large and healthy middle class provides a large labour force, increases consumption and serves as a sort of 'buffer' between the two extremes, mitigating class struggle and benefiting democracy (Pressman, 2007; Foster and Wolfson, 2010). A number of studies and also articles in the press in Europe and North America have highlighted the importance of maintaining a strong middle class. For the OECD (2015: 26), 'there is consistent evidence that the long-term rise in inequalities of disposable income observed in most OECD countries has indeed put a brake on longterm growth'. For the IMF (2015: 4), 'the income shares of the poor and the middle class are the main engines of growth' and 'stagnant incomes of the poor and the middle class have a causal effect on crises, and thus directly hurt short- and long-term growth' (IMF, 2015: 8). According to Marianne Thyssen of the European Commission (Commissioner of DG Employment, Social Affairs and Inclusion), 'Issues concerning poverty, inequality, and the weakening of the middle class have come to the forefront of the policy debate. It is now recognized that excessive inequality in a society reduces its growth potential'. The middle class that takes nearly all its income from work – while the bottom may also rely on social assistance and the top also benefit from financial market revenues - also contribute substantially to state expenditure in terms of taxes and contributions and are thus also a key element in political stability.

Inequalities between the top and the bottom seem to have been accompanied by a squeeze in the middle. An increasing number of authors argue that in recent decades the distribution has polarized, resulting in a declining middle class (for example, Foster and Wolfson, 2010; Pressman, 2007). At

¹ For recent articles in the United States, see for instance 'America's incredible shrinking middle class', CBS News, 23 March 2015; 'Data point to poorer global middle class', Shawn Donnan and Sam Fleming, Financial Times, ft.com, 8 July 2015; for Canada, see 'The erosion of middle-class jobs and incomes in Canada is finally exposed', Christia Freeland, Financial Post, 30 March 2015; for Europe, see 'Explaining the struggles of the European middle classes', by Evert-Jan Quak, The Broker, 23 April 2015.; and 'Winter of discontent? Why Europe's middle class is revolting, CNBC, 9 October 2015.

² Speech by Commissioner Marianne Thyssen at 'Roundtable with civil society organisations: forging common action to achieve the social triple A for Europe', Brussels, 1 October 2015.

the same time, the study of either the top or the bottom or both does not provide the whole picture of what is going on in terms of distribution. Inequality measured by this top-bottom approach³ implies that a simultaneous regressive transfer from the middle to the top and an equally proportional progressive transfer from the middle to the bottom leave inequality unchanged, while it does not take into account the deterioration of the middle class position. In order to better grasp the distribution of wealth in a society it is thus essential to identify the shift of individuals or/and households across different income groups – and for all income groups – rather than look only at the size of the respective groups that can be the result of many possible different movements.

In this volume we analyse the shift from one income group to the other. The increase in the bottom class – except for new entrants in the labour market – is explained by a shift downward of middle class households, while the increase in the upper group is often the result of the opposite movement, of middle-class households that have managed to move upward. Similarly, a significant decline of the bottom class is explained by households' capacity to improve their income to join the middle class.

For all these reasons it is important to look at what happens at the middle of the income distribution and its relationship to the rest of society. As such, it complements other studies that focus specifically on low incomes (for example, Corlett and Whitakker, 2014; Kumar et al., 2014) and top incomes (for example, Alvaredo et al., 2013) and by doing so contributes to a stronger focus on the effects of work and employment trends – especially considering the strong interaction between the middle class and the world of work.

2.2 How to define and capture the middle class? Combining four different approaches

A key issue in the literature on the middle class is how to define it; any chosen definition will be somewhat arbitrary (Pressman, 2007). The results on the long-term evolution of the middle class will also probably depend on the definition that is adopted. Most often, some type of 'objective' measure is taken to classify the population. This is why most studies on the evolution of the middle class typically approach it from an economic perspective, with classes being defined based on income, asset holdings, expenditures, occupations and so on.

Subjective measures, however, can reveal some interesting findings about class perception; for instance, how people experience their own place in society; whether they consider they belong to the middle class, or rather to the bottom or top of society. Four main approaches can be found in the literature, which we decided to combine in this volume.

2.2.1 The income approach: the dominant criteria

The most common way of defining the middle class is to use income classes and thresholds to identify the 'middle' in the income scale. The middle class is often considered to be either the middle-income deciles or a certain income space around the median. The middle class is generally defined as the income share going to the middle of the income distribution, those in deciles 3 to 8, as these represent the 60 per cent of the population that have an intermediate level of income (that is, they do not belong to either the 20 per cent with the lowest or the 20 per cent with the highest income level). Similarly, the OECD (2008) defines the 'middle class' as the distribution of real income in the middle three quintiles. The German Institute for Economic Research defines the middle class as households with an equivalized disposable net income of between 70 and 150 per cent of the median income. Other approaches fix the middle class at higher levels of the income distribution (Atkinson and Brandolini, 2011). There are thus several possible definitions of the middle class using the income approach.

Our group of experts took the decision to adopt a middle class definition based on the median equivalized household disposable income: 'median' because it allows us to examine the possible

³ Inequality is often measured using the ratio of the income of the top 10 per cent to the income of the bottom 10 per cent.

shift of the middle class;⁴ 'household' in order to take into account the ascent of households with more than one earner in the labour market and also because it seems to be increasingly difficult for a household to belong to the middle class with only one income; 'equivalized' to take into account household composition because belonging to the middle class can clearly be influenced by the number of children or other dependents in the family; and finally 'disposable income' to take into account the role of income redistribution.

We use a five-group classification of the entire distribution, and capture the middle class in terms of three middle-income groups (lower middle class, core middle class and upper middle class), complemented by the two other extremes, namely the lower income group and the upper income group, to be able to compare trends in the middle class with those in the top and the bottom.

It was important to select the income categories that could best represent the middle class and serve as a basis for measuring the – evolving – gap between the middle class and the bottom and top. Our experts' group decided to retain 60 per cent of median income as the threshold below which to place the bottom income group, in order to match the low pay threshold used by the European Union (fixed at two-thirds of median income by the Council of Europe). The top would represent those above 200 per cent of median income, while the middle class would represent the income ranges between those two extremes, that is, between 60 and 200 per cent of median income. We would also distinguish three categories within middle incomes, namely: the lower middle class (60–80 per cent of median income); the core middle class (80–120 per cent) and the upper middle class (120–200 per cent of median income). The top of the distribution begins at 200 per cent of median income, which corresponds to approximately the top 5 per cent wealthiest households.

Table 1 Selected range of income groups (%)

	Bottom	Lower middle class	Core middle class	Upper middle class	Тор
Percentage of median income	Up to 60	60–80	80–120	120–20	Above 200

This approach allows us not only to capture the trends of the middle-income groups as such, but also to identify the shifts from one group to another, especially between the three possible categories of the middle class. The comparative analysis provided in this chapter is based on the SILC database available from 2004 to 2011 for 28 countries, including the 14 countries in our project.

Some chapters complement this analysis of middle-income groups as a percentage of median income by a deciles approach, measuring the middle six, four or two deciles of the income distribution.

Given the difficulty of obtaining continuous time series with data for each year, we decided to track long-term evolution through cut-off points in time. The same classification based on five income groups is used throughout the volume.

2.2.2 The augmented approach: taking on board wealth and capital

For a better grasp of whether the situation of the middle class has progressed or not, the evolution of their incomes is obviously important, but may not reveal the whole story. It is important also to measure the wealth/capital of the middle-class (home ownership, savings, investments, indebtedness and so on) and its evolution over time. Assets, savings and debt are important contributors to the economic perspective on class divisions as well. Owning or renting a good property or owning a small business, for example, have historically always been identified with middle class well-being (Beckett, 2010). Households faced by an income loss but who can smooth

⁴ When the middle class is defined as the middle 60 per cent of the distribution there will always be an equally large middle class because every distribution has a middle one-third. A middle class based on the median will also never cease to exist (there is always a median), but does reflect any polarization trends.

out their consumption by relying on savings and assets, loans or the financial help of others could clearly still be regarded as middle class although their income level may suggest otherwise. By contrast, households that would be considered middle class based on their income may be positioned in the lower classes when all financial resources are accounted for. This shows the value of the augmented approach when combining the incomes approach with information on wealth. As noted in the Belgian chapter on the basis of Scott and Pressman (2011: 333) 'it is now quite common for middle class households to rely on credit to help make ends meet', which might be a sign of a deterioration of their status. On the other hand, access to credit continues to be one advantage of the middle class.

National stories in this volume highlight how a facilitated or restricted access to property and housing may change the position of middle class categories, as shown in the chapters on the United Kingdom and Ireland. The experts in this volume thus complement the income approach by providing information on wealth because income inequality and income distribution are rather different from wealth inequality and wealth distribution (Nolan et al., 2014).

2.2.3 Occupational approach: following professional trajectories

A third dimension addresses the situation of the middle class in terms of professions and categories of jobs generally considered to be characteristically 'middle class'. A number of authors have criticized the definition of social classes exclusively based on income. In particular, Goldthorpe (for example, 2000, 2010) argues that it is also crucial to look at other elements such as economic security, economic stability (in the short run), and economic prospects (for the long term) that are typically all related to the type of job – its human capital requirements, autonomy over the working process and so on. The middle class can thus also be defined in terms of individuals' different opportunities for development and social status, as shown by their occupation in the labour market.

In this respect, the changing structure of jobs and occupations may have affected the probability of whether various types of employees working in different sectors belong to the middle class; this is why national chapters try to take into account also this occupational approach, by providing evidence on occupations, using for instance ISCO categories or nationally-specific classifications, as in France. A number of national chapters also study individual professions or occupations through qualitative case studies. The occupational approach is also useful for studying mobility within the middle class, thus well complementing the income-based approach. We should emphasize, however, that the occupational approach is based on an individual perspective, while the income approach generally takes households as the reference, a difference that often explains the different outcomes between the two approaches to the middle class and its evolution, as emphasized in the chapter on France.

The case studies address the occupational dimension, especially to monitor what has been happening to certain occupations traditionally considered to belong to the middle class, such as teachers, doctors and public administration employees.

In particular, we tried to provide evidence on the phenomenon of 'job polarization' which is described in the literature (Goos et al., 2014, 2009), referring to the fact that typical middle class jobs are vanishing, while high-skilled and low-skilled employment are increasing. This is a consequence of both computerization and offshoring to low-wage countries, as described for instance in the chapter on Belgium.

2.2.4 Perceptual approach: capturing 'relative' position

Finally, presentation of the perceptions of middle class individuals/households complements the three dimensions discussed so far. People typically care a lot about how their own well-being is positioned relative to that of others and attaining a middle class living standard is often considered to be a major accomplishment that is not easily given up (Pressman, 2007). It was thus important in this volume to report also on perceptions of individual households concerning their capacity to retain or attain middle class status.

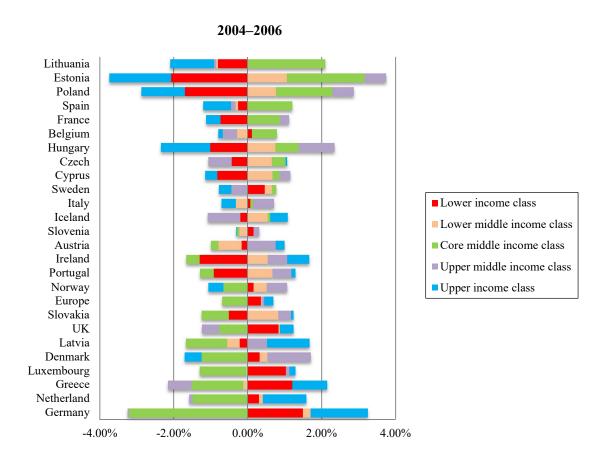
We can see, for instance, in the chapter on Italy how middle class perceptions of growing income insecurity have increased over time, especially among younger generations, compared with results from similar surveys carried out among previous generations. Surveys thus help to capture intergenerational aspects related to the perception of middle class membership and also the contributing factors in the world of work, such as later entry into the labour market, problems of qualifications or of the decreasing value of a higher education.

The chapter on Portugal also highlights the important aspirations of the middle class and how they seem to have been depressed by the recent crisis. Other survey results among the middle class are presented in this volume, for instance in Greece and Germany (see also CREDOC, 2011).

3. INEQUALITIES: WHAT IS HAPPENING TO MIDDLE-INCOME GROUPS?

Because the EU-SILC database provides data from 2004 to 2011 it allows us to monitor the evolution of the middle class before the crisis of 2007–2008, in years representing a period of economic growth, between 2004 and 2006 (Figure 1) and also the changes for the period covering the financial crisis, in years after the crisis, between 2008 and 2011 (Figure 2).

Figure 1 Changes (annualized percentage) in the size of the classes, 2004–2006



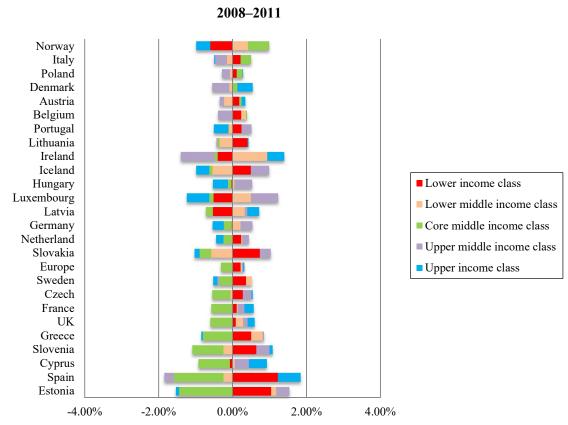


Figure 2 Changes in the size of the classes, 2008–2011

Note: We define here the different classes according to households' position with regard to the median of the net equivalized income, taking all households with at least one person of working age. We also included in the sample households with one working adult even if above working age (pensioner working).

3.1 Before the crisis, a slow erosion of the middle class alongside increased polarization

In the first period – that is, before the financial crisis – 10 countries experienced an increase in the size of their core middle class (represented in green), especially among some relatively recent EU members from Central and Eastern Europe, such as Lithuania, Estonia, Hungary and the Czech Republic and also some older members of the EU, such as Spain, France and Belgium. Three countries experienced a stable core middle class, while 13 countries had experienced an erosion of their core middle class between 2004 and 2006. The most significant erosion was in Germany, the Netherlands, Greece, Luxembourg, Denmark, Latvia, and the United Kingdom. While this was accompanied by a growth of the size of the bottom group, it also led to an increase of the upper group, showing increased polarization.

A typology can be drawn according to the patterns of the different income groups' evolution.

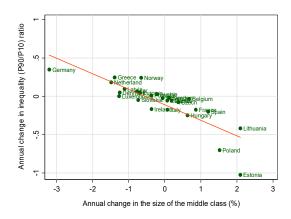
An increase in the size of the middle class seems to be correlated with a decrease in polarization for countries such as Lithuania, Estonia, Poland, Spain, France, Hungary and Cyprus, with a decline in the size of both the richest and the poorest classes (a case of 'decreased inequalities' in typology of table 2). Polarization and slight erosion of the core middle class also characterized the average for Europe in Figure 1.

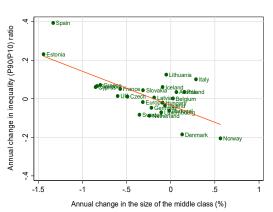
By contrast, a decrease in the size of the middle class seems to be correlated with an increased 'polarization' for countries such as Germany, the Netherlands, Greece, Luxembourg and the United Kingdom. We can observe that for these countries the decrease in the middle class is associated with an increase in the size of the bottom and upper classes. The chapter on the United Kingdom confirms how high inequality appeared well before the crisis, with implications for the middle class.

There does seem to be a direct relationship between polarization and the middle class, the middle class inversely reflecting the evolution of inequalities. Figure 3 clearly shows a direct correlation

Figure 3 Changes in inequalities (P90/P10 ratio) and changes in size of the middle class, 2004–2011







(as shown by the red line and by an R2 of 0.70 for the period 2004–2006) between the trends in inequalities and the size of the middle class. On this basis, we can predict that the recent increase in inequalities in developed countries – but also elsewhere – described recently by several international organizations (OECD, IMF, ILO) must have been accompanied by an erosion of the middle class, although to date this aspect has remained relatively unexplored, with the debate on inequalities focusing more on the lowest and the highest income groups.

3.2 Trends in the middle class influenced by its initial size

Another clear relationship emerges from the data, between the decline in the middle class and its original size.

The size of the core middle class in Europe varies considerably from country to country, as shown in Figure 4. In 2006, the size of the core middle class across Europe ranged from 23 per cent in Latvia to 45 per cent in Sweden. The map of Europe also shows a more substantial middle class in the Nordic countries – Denmark, Iceland, Norway and Sweden – and a smaller middle class in both the south (Greece, Portugal) and in central and eastern Europe (Estonia, Latvia, Romania). These distinctions are consistent with Bigot (2011).

Figure 4 Size of income classes, Europe, 2006

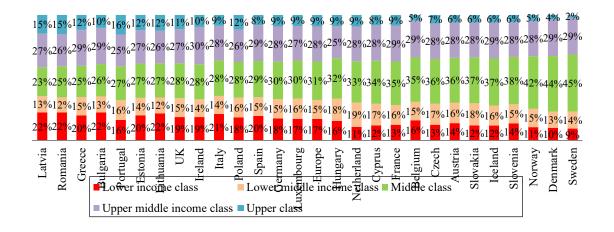
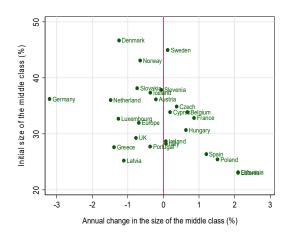
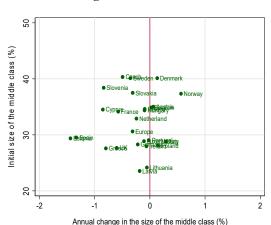


Figure 5 Initial size of the middle class (level at the beginning of the period) and the annual change in size during the period

Change between 2004 and 2006

Change between 2008 and 2011





We can see that countries with a smaller middle class, such as Lithuania, Spain, Poland and Estonia, before the crisis are precisely those that experienced the greatest increase in their middle class (countries having experienced an increase in their middle class are on the right of the vertical red line), while countries with a stronger middle class, such as Germany, Denmark and Norway experienced a decline in the size of their middle class during that period (Figure 5). There was thus a sort of catching-up process in the years before the crisis between those initially with a small middle class and those that had already reached a rather large middle class. Interestingly, this process is not visible after the crisis with first a progression of the middle class which is very limited in percentage and in number of countries. The crisis thus seems to have stopped the catching up process of countries with a small middle class. By contrast, the middle class slightly increased in countries such as Denmark and Norway.

There is thus a sort of upper social mobility or 'catching up' process: countries with a smaller middle class – generally less developed countries in transition – have experienced a rapid economic growth that has allowed more people to shift up to the middle group and also to the upper income ranges. We will see later the driving forces behind such a development. Rapidly developing economies, especially in their first stage of development, can also experience a rapid growth of inequality and therefore a further erosion of their middle class along with economic growth. The opposite scenario is when there is a general deterioration, with a decrease of the middle and the upper classes, which shift down towards lower income groups (that, as a result, increase in size); this scenario occurs in cases of deep and prolonged recession (we will see few examples of it in the post-crisis period). There can also be other combinations. Table 2 summarizes this typology.

Scenario	LC	LMC	CMC	UMC	UC	Example countries
Catching up	7	A	K	7	7	Austria, Ireland, Portugal, Slovakia, Latvia (2004-06); Cyprus, Latvia (2008-11)
Deterioration	7	7	A	A	A	Sweden (2004-06); Greece, Italy, Poland, Lithuania (2008-11)
Polarization	7	7	K	7	7	Europe, Germany, Greece, UK, Netherlands (2004- 06); Spain, Slovenia, Estonia, Czech Rep. (2008-11)
Decreased inequalities	7	7	7	7	7	Lithuania, Estonia, Poland, Spain, France, Belgium (2004-06); Norway, Luxembourg. (2008- 11)
Mixed: catching up and depolarization	A	7	7	A	7	Italy, Norway (2004- 06), Ireland, Hungary (2008-11)

Table 2 Typology of scenarios in the relationship between polarization and the middle class

3.3 Effects of the crisis: a reduction of the middle class (size and share in total income)

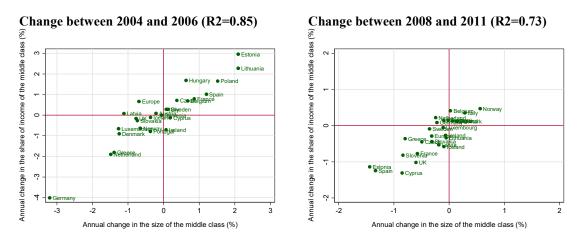
The crisis has halted or accelerated a number of trends concerning income groups. While Figure 5 shows a number of European countries with an increasing core middle class before the crisis, this scenario is no longer present after the crisis. The difficulties of exiting from the economic slowdown and some adverse labour market developments (lower participation, increased unemployment) have affected middle-income groups. There is thus a sort of halt in the progress of the middle class in most countries. Figure 2 shows 19 countries that experienced a decline in the size of their core middle class in 2008–2011, while it remained stable in two countries and increased slightly in only five countries. Even countries where the middle class had rapidly grown before the crisis have experienced a rapid fall, such as Estonia, Spain and Cyprus. Other European countries continued to experience the erosion of their middle class, such as Greece, the United Kingdom and Germany. Countries that were still registering an increase in their core middle class in 2004–2006, such as the Czech Republic, France and Sweden, experienced a reverse trend in 2008–2011.

Figure 6 presents an overview of national trends in the size of the middle class and also in the the middle class share in total household income. It first shows that the number of countries that experienced a decrease in both indicators were much more numerous in the 2008–2011 period than in 2004–2006. This was typically the case of the United Kingdom, Spain, Lithuania and Estonia, but also Slovenia and Sweden. In fact, almost all countries have shifted towards the left bottom quarter in Figure 6, showing that they have experienced a decrease in both the size of their middle class and the share of total income going to the middle class. Moreover, even when there was a progression it was very small, as in Romania, Portugal, the Czech Republic and the Netherlands.

The chapter on the United Kingdom confirms that the distribution of households moved to the left with an increased concentration around the lower part of the core middle-income band with majority of households being centred around 70-80 per cent of median household income.

The above results are confirmed by a recent OECD (2015) conclusion, that 'uncertainty and fears of social decline and exclusion have reached the middle class in many societies.' It is thus important to identify the drivers of such adverse developments.

Figure 6 Correlation between change in middle class size and change in its household income share. 2004-2011



4. EXPLANATORY FACTORS IN THE WORLD OF WORK

In this section we explore the specific effects that trends in the world of work may have had on inequalities and middle-income groups. Table 4 in the Annex summarizes some of the main findings in the national chapters. We distinguished between two periods – before and after the crisis – when relevant and when the effects were distinct and sometimes even going in the opposite direction. We complemented this overview with some analysis based on the EU-SILC database, which also provides a few variables of the world of work, such as belonging to the public or private sector, employment status and different skill categories.

In the course of this comparative analysis, we remain conscious of its limitations due to the difficulty of isolating the relative impact of elements of the world of work. Within the world of work itself we also distinguish as far as possible structural changes, such as in labour participation (for instance, of women) and the generalization of the dual-earner model, and changes in the occupational structure, from institutions/policies (educational upgrading, health, social protection, taxes, social dialogue/unionization and so on), and also from the distinctive influence of the economic and social context (globalization, recession, crises). Despite such complexity, the data we present confirm that elements in the world of work are likely to have played a key role in middle class growth and erosion.

4.1 Evolving labour market participation

Labour market participation has increased over time and represents an important factor in the middle class increase. In particular, higher labour market participation among women from the 1980s and 1990s has totally changed the number of working adults in households and thus has also increased the probability of belonging to the middle class. For instance in Spain, the female participation rate grew from 29 per cent in 1986 to 53 per cent in 2014 alongside fairly regular growth. Figure 7 shows that in all countries more working adults there are in the household and higher will be the opportunities for this household to belong to the middle class and even upper class. This is particularly strong in countries like Belgium and Ireland. A number of chapters confirm that the development of a dual and even multiple earners' household model helped to increase the middle class, as in Portugal, Spain, the Netherlands and many others.

■ Upper middle income class ■ Upper income class

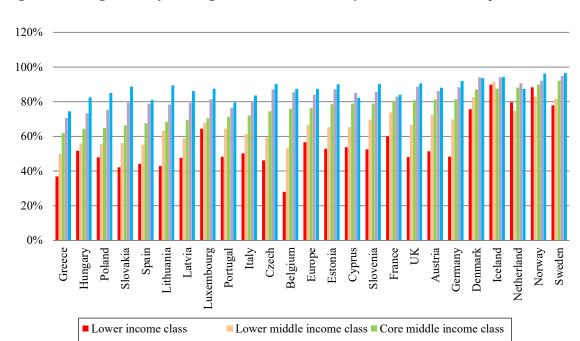
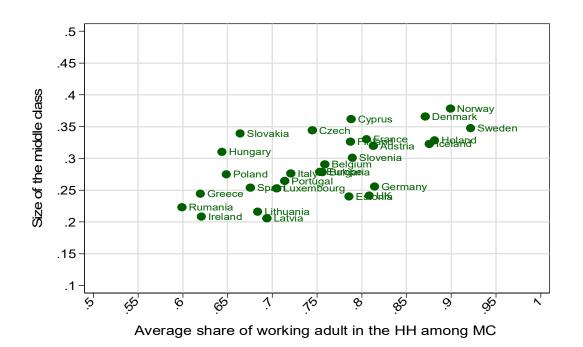


Figure 7 Average share of working adults in households, by income classes, Europe, 2011

Figure 8 Size of middle class and average share of working adults in households among middle class households (HH), Europe, 2011



This is confirmed by Figure 8, which presents the relationship between the average number of working adults in the household and the size of the middle class.⁵ The countries with a higher share of working adults in the household – and thus with higher participation of women – are also those with a larger middle class (here we regrouped the three middle class subgroups) and also the upper class. Both indicators are very high in Scandinavian countries (Sweden, Norway, Denmark), but also in the Netherlands, Iceland, France and Germany. Female employment rates increased steadily in those countries but also in Belgium, the United Kingdom and many others. Both indicators are lower in southern European countries, such as Greece, Spain, Italy and Portugal, but also in some central and eastern European countries, such as Poland, Lithuania and Latvia. Ireland is similar. This might be explained by an increased participation of women in the labour market that happened later – and thus remains below average – than in Scandinavian countries, for instance. However, even in these countries upper class membership is positively related to the number of working adults in the household. The relatively late increase in the labour market participation of women in Greece. for instance (from 40 per cent in 1993 to 55 per cent in 2008) helped to increase household living standards and enabled them to shift up the income ladder. This also contributed to maintaining low unemployment rates in Greece prior to the 2008 financial crisis.

One result that appears rather clearly in some of the chapters in this volume – for instance, in the chapters on the Netherlands and Italy – is that today there is a need for two working adults in a family to ensure that it belongs to the middle class, while in the 1990s a good income on the part of the breadwinner was often sufficient. On the other hand, the rise of dual-earner households has enabled them to acquire more income and to attain or sustain middle class status.

Similarly, the context of unemployment may influence the probability of belonging to or remaining in the middle class.

Different chapters in this volume - notably Italy and Greece - show how very high youth unemployment rates could explain a lower probability of being part of the middle class in the future, and would thus lead to a sort of intergenerational gap. By contrast, lower youth unemployment rates in Belgium or Germany – made possible in Germany thanks to the use of vocational training and short-time working schemes - could help younger generations to achieve or maintain middle class status.

The situation of older workers also has an impact. Employment rates for older workers (55–64 years) have increased during the past decade, as in Sweden. The postponement of exit at the end of job career entails a lengthening of working life and provides a means of sustaining middle class

4.2 A change in the structure of jobs

Since income groups can be characterized by specific types of jobs, the middle class can also be defined according to professions and types of jobs. For instance overall, the share of professionals, managers and associate professionals is much higher among the upper income class and still high among the upper middle income class and – according to the country – among the core middle class. Conversely, elementary occupations tend to be clustered among the lower income households. Beyond labour participation, the shift in the structure of employment that has taken place over recent decades clearly also had an impact on the middle class. In particular, while the years of growth led to an increase in middle-income jobs – notably in the public sector and in services – a sort of employment polarization is observed in many European countries. This is due to a falling demand for jobs with intermediate skills, whether due to routinization of job tasks and/or the skill upgrading bias of technical change. This declining share of middle-skilled occupations relative to low- and high-skilled occupations is described in the literature for the United States (Autor et al., 2007) and Europe (Goos et al., 2009) and also confirmed by national experiences presented in this volume.

In Spain, for instance, we observe two employment restructuring movements, first an increase in professionals that led to an increase of the upper middle class and even upper class, and at the same

⁵ We defined here the middle class according to the gross median income – and not the net median income as in the previous section – to better highlight the role of income from labour before taxation.

time the reduction of skilled manufacturing jobs that led to a substitution of jobs typical of the core middle class by low-middle class and even low class jobs. Job polarization is also reported in the United Kingdom, with a long-term decline of manufacturing jobs during the 2000s, with job losses clustered in the middle three quintiles, mainly in the high-tech and low-tech parts of manufacturing. In the middle quintile, services job losses added to the decline in manufacturing. In 2001–2010 there was a collapse in employment in mid-quintile jobs of around 700,000 jobs in a context of overall net employment expansion. This job polarization — that may correspond to a U-shaped workforce — is explained by Damian Grimshaw (in this volume) as a major explanation of the deeper stagnation in real earnings among middle-wage groups of workers compared with other workers. This job polarization has been aggravated since the recent financial and economic crisis. In Spain, an intense destruction of employment in the middle of the jobs distribution is reported.

4.3 New forms of work contract

Labour market reforms in the 1990s in Europe led to a progressive growth of non-standard forms of employment (NSFE) that are defined as covering 'work that falls outside the scope of a standard employment relationship, which itself is understood as being work that is full-time, indefinite employment in a subordinate employment relationship' (ILO 2015: 1). Included under this definition are temporary employment, temporary agency work, ambiguous employment relationships and part-time employment. Non-standard forms of employment progressively extended to all income categories and thus started to affect the middle class, too. We add in this section self-employment as another form of employment that influences middle class groups. These forms of employment can have advantages for both employers – in terms of providing more flexibility in hiring and also planning work, especially in seasonal activities – and workers, to accommodate family or education obligations or to serve as a stepping stone towards permanent employment. On the other hand, these forms of employment often lead to lower wage or non-wage costs (ILO, 2015: 3).⁶

Temporary employment is particularly high in Spain and Poland (25 per cent of waged employees in 2013) but has also been growing in slowly in Portugal and the Netherlands (up to 20 per cent), France (16.5 per cent), Slovenia and Sweden (16 per cent), Germany (13.5 per cent) and Italy (to 13.2 per cent) (ILO, 2015: 5). This has sometimes led to increasing duality in the labour market. In Belgium, Greece, France, Italy, Sweden and Germany this type of work has had a stronger impact on the lower class, young people, migrants and women. In Belgium, for instance, the increase in the share of temporary contracts remained in the bottom lower middle class; temporary employment is especially high among young and migrant workers, a trend that could explain why a significant part of them struggle to attain middle class status. In Italy and the United Kingdom, women seem to face difficulties in moving out from part-time and non-standard forms of employment. The rise of temporary employment in Spain – which is one major change of the Spanish labour market in recent decades – has altered one major attribute of the middle class, which was to have a full-time job with an open-ended contract and with good coverage by employment protection legislation.

In the early onset of the financial crisis, a last-in-first-out principle prevailed, as firms found it more difficult to fire tenured employees than to stop renewing temporary contracts and, as a result, total temporary contracts in the 17 EU countries of the Euro area (EUROSTAT) declined in proportion to total employment from 16.6 per cent in 2007 to 15.4 per cent in 2009. As the crisis deepened, however, the easiest way for companies to adjust to the shock and retain employees was through an increase in non-standard and part-time employment, which impacted all cohorts in the world of work. In France, the share of fixed-term contracts doubled for the middle class between 1996 and 2011 (from 4 to 9 per cent);

The growth of such forms of contract – to all sectors, including the public sector – with their greater uncertainty and sometimes employment and income disruption have had an impact on the middle class; 21 per cent of the labour force in Portugal are now on temporary contracts. In Italy,

⁶ The wage penalty for non-regular workers was estimated at between 1 and 34 per cent in developed countries (ILO 2015: 26).

non-standard employment accounts for almost 40 per cent of total employment (60 per cent among young workers) (OECD, 2015) and around a third of total employment in the OECD in 2013, shared roughly equally between temporary jobs, permanent part-time jobs and self-employment (OECD, 2015: 29). In Spain, in 2014 nearly 20 per cent of the two professions representing the middle class - professionals and technicians - were on temporary contracts. Temporary work contracts have brought to the middle class a higher risk of slipping down the social class scale. In fact, studies have shown that non-standard forms of employment through lower wages and stagnant or falling wages contribute to polarization (ILO, 2015:32).

In Greece, Italy, Ireland, Spain and Portugal, youth unemployment has not only increased significantly, but more young people have become exposed to being trapped in non-standard forms of employment and of experiencing discontinuous careers, low pay and inadequate social protection. The chapter on Sweden shows that low-skilled young people were also particularly affected there, which further strengthened class polarization during the crisis. In 2012, half of young employees aged 20-24 years were on short-term contracts, compared with less than 10 per cent among prime age adults.

Involuntary part-time also increased significantly especially after the crisis. In Greece, part-time work doubled between 2008 and 2014 (from 4 to 9.3 per cent) and 70 per cent of part-time employment is involuntary. Similarly, more than 50 per cent of part-time is involuntary in Bulgaria, Cyprus, Italy, Romania and Spain (ILO, 2015: 19). Involuntary part-time work has also grown in the United Kingdom and France – where working time flexibility represented a practical way for firms to adjust to the crisis. A decrease of involuntary part-time was witnessed in Belgium. We should add that temporary employment is also often involuntary: the percentage of workers who reported holding a temporary job because they could not find a permanent job was, for instance, 40 per cent in the Netherlands, 67 per cent in Sweden and even over 90 per cent in Greece, Portugal and Spain (OECD, 2014).

Ireland and the UK also experienced a massive rise in the use of so-called 'zero-hour contracts', leading to a decrease in job quality and also income insecurity. The chapter on the United Kingdom shows how the standard employment relationship has been eroded and has hollowed out prospects for relatively secure and stable middle-income occupations. One case study studies the effects of non-standard forms of employment – such as zero-hours contracts – for middle-income households.

Conversely, self-employment is often related to middle class well-being (Goldthorpe 2000; 2010), and in countries such as France, Italy and the United Kingdom specific social measures, such as tax incentives and employment protection legislation, were put in place to encourage the development of self-employment. The appearance of a new type of self-employment (so-called 'bogus self-employment' or also 'dependent self-employment') in recent years – imposed by the employer to replace previous employee status to reduce costs, for instance social contributions – may also bring more risk and vulnerability and thus rather hinder than strengthen their belonging to the middle class. This is the case in Italy where, within the same category of self-employed, there are both true, high-income 'professional' workers and low-paid, precarious workers.

One of the most striking features of the post-2010 jobs recovery in the United Kingdom has been the significant growth in self-employment. The share of workers in self-employment was stable prior to the crisis (2003–2009), but then rapidly accelerated so that by 2014 it accounted for nearly one in six workers (15 per cent). Overall, jobs for the self-employed accounted for 55 per cent of net job expansion during 2011–2014 (540,000 of 990,000 net job growth). The increased incidence of self-employment was associated with lower median income, tougher welfare entitlement rules, new technologies that enable employers and customers to access 'crowdsourced' employment and straightforward income tax advantages.

4.4 Wages and incomes

The evolution of wages is certainly a major factor explaining the long-term development of the middle class. While households in the bottom class often depend strongly on social transfers because they do not participate in the labour market and the top largely benefits from financial income, households in the middle class acquire their well-being based on their wages. The chapter in the Netherlands, for instance, highlights how income from earnings is not only by far the most important category, but also directly responsible for the contrasting evolution of the middle class.

While before the crisis most countries were experiencing a growth in median income within each class – and in particular within the 'middle class' income groups – this progression was halted by the crisis, with a majority of countries experiencing first a decline in the median income (see Figure 9) (which is what allowed to identify the different income groups with regard to that median) and then also a fall in the median income within each class (Figures 10a and 10b).

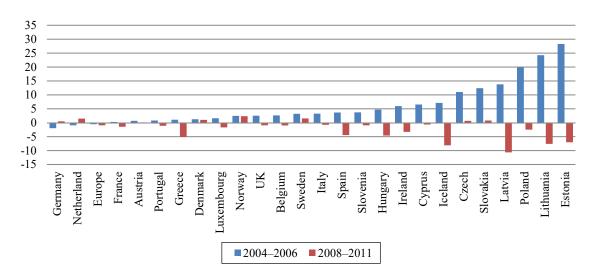


Figure 9 Changes in net median income, Europe, 2004–2006 and 2008–2011

At the same time, the erosion of median incomes occurred mainly after the crisis in countries such as Ireland and Greece and affected mainly low income groups, while in Germany it started before the crisis for low and middle-income groups (Figure 10a). The Netherlands is characterized by a massive long-term stagnation of real incomes, especially at the bottom, which combined with growth at the top has led to increased inequality. The United Kingdom has been characterized by falling and stagnant pay levels, allied with low productivity growth and the absence of appropriate institutional levers to boost pay and productivity, such as support of trade unions and worker voice in pay determination. This trend started already in 2002 and is the longest period of falling real wages since wage records began in 1964 (Taylor et al., 2014). By contrast the rise in median income before the crisis was high in some central and eastern European countries that experienced rapid growth, such as the three Baltic states, Poland, the Czech Republic and Slovakia.

The declining wage share that is affecting many European countries has thus had an impact on the middle class. The reason behind the wage share decline observed in most European countries (ILO, 2014) is precisely the increasing gap between rising productivity – to which the middle class has contributed a lot – and wage increases that have failed to catch up. Mechanisms such as collective bargaining but also pay systems – for instance, related to productivity – can only help to restore that link. ⁷

Figure 10b confirms that with the crisis, median income declined in almost all countries within all classes, including the middle class, even if lowest income classes were often hurt more. In Figure 10b all classes in 15 countries had experienced a fall in median income. Middle-income groups were thus not protected from this decline; their median income also fell in more than two-thirds of the European countries under examination (Figure 10b). The most severe income fall was observed

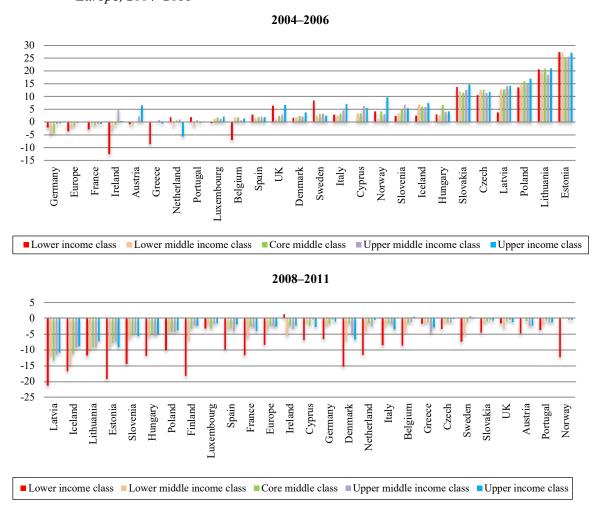
⁷ It is interesting to note that some candidates to the Presidency election in the US have recently proposed profit-sharing schemes to better ensure wage and living standards progression for the middle class; see 'Profit-sharing is a Win-Win' by Hillary Clinton, *Boston Globe*, 28 July 2015, see also 'Hillary Clinton focuses on middle class wages in sweeping economic policy speech', by Samantha Lachman, *Huffington Post*, 13 July 2015.

in Iceland (-15 per cent for all classes following the collapse of their economy during the financial crisis), but also in the Baltic states. The high percentage decrease in income can be explained by jobs lost in the crisis, especially among the bottom income groups. But the middle income groups have also been affected. The chapter on the United Kingdom in this volume shows how polarization seems to have been accompanied by a collapse of middle wages and incomes. Moreover, relative to the top and bottom of the wage distribution, middle earners have fared the worst both before and since the crisis. High earners benefited most from employer practices to reward staff with bonuses, as well as other non-pay rewards, such as stock options. Low earners, on the other hand, benefited from the upward pressure at the bottom exerted by the statutory minimum wage introduced in 1999 and especially the period 2003–2007, when the Low Pay Commission acted purposefully to raise the relative value of the minimum wage.

While Austria and Belgium managed to stabilize median income for nearly all classes (confirmed by the Belgian chapter in this volume), and to a lesser extent France, the Netherlands and Norway (where, however, lower income groups seem to be the ones experiencing a decline), other countries - especially from central and eastern Europe, such as the Czech Republic and Poland - seem already to have experienced some catch-up in median income alongside economic recovery.

Income seems to have contributed to general middle class trends. Not only has the size of the middle class been eroded, but the median income around which we define middle class groups has also been declining, which highlights a general loss for middle-income groups (see Figures 10a and 10b). This also explains our previous results indicating a declining share in total household income.

Figure 10 Annualized percentage change in (equivalized) median (net) income per adult by class, Europe, 2004–2011



The outcome of these downward wage trends is not the same in a context of high income inequality (as in the United Kingdom) compared with a context of low income inequality (as in Belgium). It is also important to take into account the low-pay threshold and the development of the low-pay segment that has extended to the middle class.

Recent studies have shown that the middle class in Spain is progressively falling into poverty; this involves 1.7 million wage earners, 10 per cent more than in 2012. According to the IFRC (2013: 20), 'in Romania 20 per cent of the population was classified as middle class in 2008. Today the number is about 10 per cent, the same as in Croatia and Serbia'. Not only low-income families but also the middle class have been impoverished in Italy as a result of increased cuts in social investment and social expenditure, privatization and higher co-payments for social services, as well as (direct and indirect) tax increases.

A study by the Bertelsmann Foundation found that in Germany 5.5 million middle class people became low earners between 1997 and 2012, while half a million people joined the high earner ranks. In Denmark as well, the middle class decreased by 111,000 people between 2002 and 2009. In France we also witness increased polarization.

In Portugal, middle-income brackets were found to lack upward mobility to higher income brackets during the crisis. Middle deciles 4, 5, 6 and 7 experienced the greatest increase in immobility between 2008 and 2011: 12.1, 11.1 and 10.3 percentage points for deciles 4, 7 and 6, respectively. This translates into fewer opportunities for career progression among employees belonging to middle-income groups.

The middle class in southern European countries may be particularly affected as young people move from the south to countries with better employment and social investment prospects. The most mobile tend to be among the best skilled, leading to a depletion of skills in sending countries and more skills in the receiving countries; this process can be halted only through better social investment and labour market developments in the home countries.

Falling wages and incomes have pushed many middle-class households to take on more debt. In the Netherlands, for instance, as shown by Wiemer Salverda in this volume, households' average mortgage debt relative to their average net income more than doubled between 1993 and 2013 and explains the lack of growth in household consumption. Moreover, the fact that the dual or multiple earners model has developed shows that while the middle class has remained large and stable, household members have to work hard and get top and multiple earnings if they want to maintain their middle-class life.

This concentration of debt may put such households – even with a high level of assets – at risk if there are sudden changes in asset prices, as happened in the recent financial and economic crisis.

4.5 Collective bargaining and social dialogue

The growth of non-standard forms of employment has also brought lower coverage of collective bargaining and social dialogue. Temporary workers, agency workers and the self-employed are usually not covered by collective bargaining, and the crisis further aggravated the adverse coverage rate of collective bargaining.

The middle class is traditionally well covered by collective bargaining because of their concentration in sectors and occupations that are generally well unionized - as in education and health. As explained in the chapter on Spain, trust in trade unions is higher among the middle class than among unskilled workers, and the affiliation rate is high among middle-income employees. This income category also traditionally enjoys collective agreements in the public sector.

Table 4 in the Annex shows, however, that collective bargaining has been weakened through a number of reforms included in fiscal consolidation packages: removal of extension mechanisms, derogation at enterprise level from upper level agreements, no systematic renewal of enterprise collective agreements, lower application of collective agreement and priority given to enterprise bargaining.

Collective bargaining on wages and other working conditions were also weakened in the public sector, thus making way for more radical adjustments that certainly had an impact on the middle class. In the United Kingdom, weakly embedded institutions for collective bargaining are likely to have played a role in the decline in real wages. The share of employees whose pay is agreed through negotiations between employer(s) and union(s) fell from 23 per cent in 1995 to just 17 per cent in 2013. In the public sector, too, despite strong joint regulatory mechanisms to set pay, restrictive government rules since 2010 have restrained pay growth in the public sector. Declining union coverage has had a disequalizing effect on the wage distribution, as shown in various chapters and reported by the OECD (2015).

The weakening of collective bargaining provides a direct explanation of the wage moderation and falling median income reported in the previous sub-section. By contrast those countries that managed to stabilize collective bargaining and industrial relations are also the ones that managed to maintain some progression of wages and incomes. For instance Belgium, France and the Netherlands have managed to stabilize their low and middle classes and have maintained strong collective bargaining coverage (Visser, Hayter and Gammarano, 2015).

In this volume, the case of Belgium shows that consultation mechanisms have contributed to maintaining wages and working conditions, and therefore represent a major factor behind middle class stability there. Industrial relations stability has also played a major role in limiting inequalities and stabilizing the middle class in France, where inequalities seem to have decreased slightly over the most recent period (INSEE 2015). Mechanisms of collective agreement extension have also greatly helped in those two countries.

As stressed by Visser et al. (2015) 'in many cases the underlying reason for the observed stability of collective bargaining coverage is the continued willingness of employers' organizations and trade unions to negotiate with each other - and to act as social partners in the regulation of labour markets.' This has allowed social partners to set framework conditions in sectoral and/or intersectoral agreements that are relevant for enterprise negotiations, something which is key in a context of decentralization to enterprise-level bargaining.

The Netherlands offers another illustration in this volume of stable social dialogue – with 80 per cent coverage of collective agreements through extension mechanisms - which has enabled distribution and the middle class to remain important, with 80 per cent of Dutch households being members of the middle class (when measured by means of net equivalized incomes). Sectoral bargaining and also the administrative extension of collective agreements in the industrial sector have also helped to maintain cohesion among different categories of workers and also between sectors of activity. In the Netherlands, collective bargaining since the crisis even expanded into new sectors, while collective agreements were also extended (cleaning, services, safety and so on).

By contrast, the sharpest decline in bargaining coverage occurred in the group of European countries that suffered the most from the economic implications of the recent crisis, many of which had to seek direct assistance from international financial organisations. The bargaining coverage rate for this group of 10 countries (according to the typology of Visser et al., 2015 and including countries studied in this volume, such as Hungary, Greece, Ireland and Portugal) fell by an average of 21 per cent. These are also the countries in which the wages of both low-income and middleincome groups fell the most, as explained in individual chapters. The weakening of tripartite consultations in these countries also contributed to this (see Annex). In Romania, Greece and Slovenia, national pay agreements were ended in 2009 and 2010.

At the same time, a rapid deterioration of the social climate seems to have been avoided in countries in which the government has managed to organize tripartite consultations, as in Estonia, as distinct from Latvia and Lithuania, and in Ireland over the second period after the crisis - the first period after the crisis saw a weakening of tripartite bargaining – with an agreement concluded in the public sector in 2010.

4.6 The role of the public sector

The public sector has traditionally been a haven for middle class employment because many of its jobs require a high level of education and skills. It has also represented a fairly secure source of employment and income. The public sector hosts many of the professions traditionally associated with the middle class – school teachers, nurses, doctors and civil servants, for example. Figure 11 shows that the proportion of employees in the public sector – proxied here by the sectors of public administration, health and education – per household increases between 2004 and 2006 among the five income groups and is most important among the core and upper middle class.

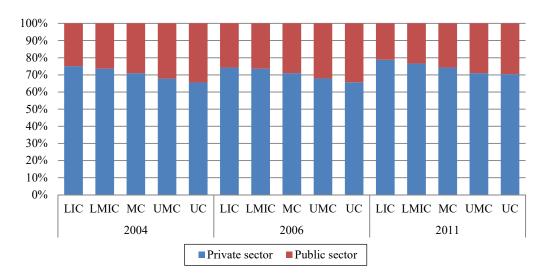


Figure 11 Proportion of public sector employees by classes, Europe, 2004–2011

We can see that public sector employment is most common among working-age households defined as upper middle income. The share of public sector jobs among lower middle and lower income households is below the average. Nevertheless, the key finding is that public sector jobs are distributed progressively along the income scale, with the lowest proportion at the bottom for those with net incomes below 60 per cent of the median. Any changes in the public sector may thus directly affect the middle class, represented by these middle-income groups.

A rapid expansion of jobs in the public sector in the past two decades in Europe led to significant job growth in the middle class, as in Greece, Portugal, Spain, the Netherlands and many others. Figure 12 shows that public sector employment among the middle class had already fallen in a number of countries before the crisis, for instance in Germany, Denmark, Cyprus, Estonia, Italy, Portugal and Austria. It continued to grow among the middle class in a majority of countries, especially in Hungary, Lithuania but also Luxembourg, thus confirming the importance of this sector for middle income groups.

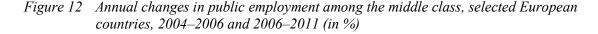
The role of public sector has been reversed during the crisis and subsequent years. As documented in previous work (Vaughan-Whitehead, 2013; 2015), fuelled by the economic crisis, the decision to target budget deficits has plunged the public sector in Europe into an unprecedented wave of 'adjustments', with policymakers favouring quantitative adjustments, mainly spending cuts, but also cuts in public sector jobs and wages. Quantitative adjustments have also been accompanied – and often preceded – by more structural adjustments in the composition of employment, mainly due to the recourse to more fixed-term contracts and the outsourcing of a number of functions previously carried out by public services. The number of temporary contracts in the public sector has increased rapidly throughout Europe.

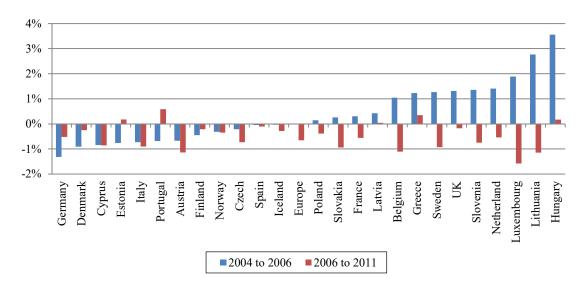
Employment security is thus no longer the norm in the public sector, where an increasing number of employees are hired on temporary work contracts and permanent employees can be laid off. Moreover, the public sector does not seem to represent a lever for employment growth for the middle class as witnessed in the past. Even more extreme, for Rafael Munoz de Bustillo in his chapter, 'the Spanish public sector, from being the sole "employment generating" actor, became a major factor of destruction of middle- and high-quality employment'.

Women have been particularly affected by this process. The representation of women in the extended definition of the public sector here (public administration, education and human health and social work) in 14 selected EU member states was reported to be between 65 to 76 per cent. The public sector is not only a major source of employment for women but also provides many jobs for highly qualified women. In the context of employment cuts in the public sector, this may lead not only to job losses for women but also to a decline in quality employment for women that cannot be immediately replaced, if at all, by private sector quality employment (Rubery, 2013: 44). This process is directly affecting the dual model and the growth of the middle class.

The public sector has also experienced significant wage cuts, often due to a weakening of collective bargaining that was traditionally strong in this sector. In the United Kingdom, for instance, despite strong joint regulatory mechanisms to set pay, restrictive government rules since 2010 have restrained pay growth (in the form of a two-year pay freeze followed by a 1 per cent cap on pay rises until 2020).

Another way to gain flexibility and reduce spending is to replace jobs previously carried out in the public sector by new private sector jobs by outsourcing and privatizing public services. Governments' use of outsourcing has also rapidly increased in OECD countries, from 8.7 to 10.3 per cent between 2000 and 2009. This process has been implemented on a large scale in the UK (including job search services and, most recently, the national post office, the Royal Mail) which explains the decrease of the United Kingdom in terms of public sector employment (Figure 12). A similar process is occurring in Germany and other European countries. Outright privatization has led to a reduction in the share of government expenditure and public sector employment.





Alongside such cuts in expenditure, more difficult career progressions due to fiscal consolidation programmes may also have an impact. Career development was frozen in Portugal and wage increments frozen in many parts of the UK public sector, where, moreover, public career services were even dismantled. In Greece, too, career progression has become more difficult due to the obstacles hindering public sector employees from moving up the ranking scale, regardless of performance. Lower career prospects, combined with cuts in wages and benefits, risk affecting public sector employees' ability to maintain living standards and may contribute to shifting them towards lower income groups.

The magnitude of current public sector adjustment, together with decreasing public expenditure, notably on training, will lead to significant changes in the skill composition of public sector employees, which may also affect younger graduates' prospects.

All these changes – especially when resulting in a growing mismatch between increasing demand for public services and falling supply – cannot be neutral for the future quality of such services. In this context it has not been possible to achieve the professed aim of most of the reforms, as indicated by the OECD, namely to 'improve efficiency ... using fewer resources' (OECD, 2011). The examples so far show that resources have certainly fallen, but that this has also brought a deterioration in performance and service quality.

This is already to be observed in education and health care – on such simple indicators as higher ratios of teachers and students in classes and longer hospital waiting lists – but also threatens public administration in a substantial number of European countries (Vaughan-Whitehead, 2013). Social investment has thus been affected. There are other instances of deteriorating public services: cuts in security services leading to increased insecurity; longer judicial delays, along with pay reductions, leading to increased corruption; lack of skills, including information technology (IT), in the public sector due to reduced investment; and lower services also in health care, including the closure of emergency units. All these trends have also affected the middle class not only as public sector employees, but also as public service users.

4.7 Intergenerational and regional gaps

Factors in the world of work can also explain differences in inequalities and middle class outcomes between different generations. The currently high rates of youth unemployment, which are particularly dramatic in southern European countries (50 per cent youth unemployment in Spain and Portugal, 60 per cent in Greece), can explain the gap found between the job and income prospects of young employees compared with those of their parents, as reported in Italy, but also in other countries in this volume. Labour market difficulties and different 'world of work' prospects in certain regions may explain why attaining middle class income levels might be more difficult for individual households, as highlighted in the chapters on Belgium, Germany and Italy.

Table 4 in the Annex presents the links found between elements in the world of work and the middle class. Throughout this volume national experts complement their information and statistical analysis with qualitative analyses and two case studies for each country – summarized in Table 3 – aimed at illustrating and providing further evidence on the national stories.

Table 3 Case studies in selected European counties (see individual chapters)

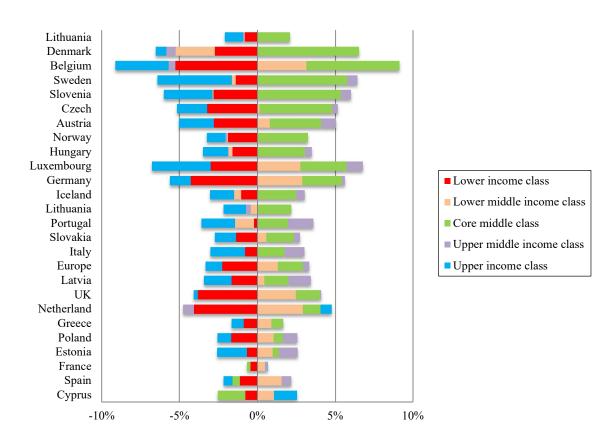
Country	First case study	Second case study
Baltic states (Chapter 2)	Migration in Latvia and its effects	Position of teachers and Estonian
	on the middle class	middle class
Belgium (Chapter 3)	The middle class and the welfare	The role of immigrants in the
	state: the Belgian service voucher	relationship between the labour
	system	market and the middle class
France (Chapter 4)	Working time regulations and	Education and the middle class
	heterogeneity across social groups	
	and occupations	
Germany (Chapter 5)	Effects of the minimum wage on	Upgrading of skills did not pay off
	middle-income classes	
Greece (chapter 6)	Neutralizing 'the public sector', a	The emergence of professionals and
	traditional nurturer of the middle	technicians as middle class groups
	classes	
Hungary (Chapter 7)	Emerging middle class and	Intergenerational mobility patterns of
	age/education bias in the transition	the middle class
Ireland (Chapter 8)	Credit, debt and the housing	Middle class occupations in Ireland's
	market effects on income groups	boom and bust
Italy (Chapter 9)	Mobility along the income	Belonging to the middle class:
	distribution	intergenerational mobility
Netherlands (Chapter 10)	Interaction between the world of	Wealth and debt of the middle class
	work and the new dual earners	
	model	
Portugal (Chapter 11)	Structural transformation of	The effects of public sector
	employment and the middle	employment adjustments
	classes: polarization or upgrading?	
Spain (Chapter 12)	The welfare state as 'middle class'	Education and middle class growth at
	job provider	a turning point
Sweden (Chapter 13)	Long-term transformation in the	Changes in the ethnic composition of
	jobs' structure, and effects on the	the labour force and impact on
	middle class	inequality
United Kingdom (Chapter 14)	Patterns of pay among mid-level	The rise of precarious employment
	jobs	and self-employment and effects on
		income groups

5. BEYOND THE WORLD OF WORK

5.1 Effects of taxation

Other policies outside the world of work (summarized in Table 5 in the Annex) may also have influenced different income groups. This is typically the case of tax policy whose purpose is not only to generate revenues for the public budget but also to redistribute – equally or equitably – the burden of such contributions among all income groups. The more progressive the taxation system is, the more equalizing the effect it will have on different income groups, with a relatively higher contribution being asked of higher income groups, which should lead to lower inequalities. By contrast, regressive taxation may lead to higher inequalities. Similarly, indirect taxation, such as value added tax on goods, proportionally hurts those on lower incomes more than those with higher incomes. Figures 13 confirms the important effects of tax policy, showing how the size of the respective income classes is modified between gross and net income; that is, after the effect of income tax. It clearly highlights that, in general, income tax – which generally increases along the income scale – tends to reduce the extent of upper and upper-middle class groups and also of lower income groups, which instead join the lower-middle class or core middle class groups, whose size increases after taxation. An effective tax policy is thus essential to avoid an increase in both extremes and to reduce inequalities, while at the same time inflating the number of people belonging to middle-income groups. This balancing effect of reducing polarization is particularly strong (at the top of the inverse pyramid in Figure 13) in the countries that rely most on progressive income tax policy, such as the Scandinavian countries (Denmark, Sweden, Norway), but also Belgium, the Netherlands, Luxembourg, Germany and Slovenia, where the middle class is also increasing most between gross and net incomes.

Figure 13 Redistribution effect of income tax (difference in respective size of each class between gross and net incomes), European countries, 2004–2011



Income tax policy seems to have played a role – but to a much lesser extent – in countries such as Cyprus, Spain and Greece, with also sometimes a negative effect on the size of the core middle class group. Even after the crisis, we can observe that income tax had clearly helped to increase the size of the middle class in almost all countries, and also sometimes the lower middle class group by allowing many who belonged to the lower income group in terms of their gross income to rise to the middle class category. Although less distributive than many European countries, the British system of tax and benefits also has a significant impact on household income distribution. Since 2010 cuts in the real value of tax credits and other means-tested benefits have affected many workers in low and middle income households reliant on top-ups to wage income.

The declining size of the middle class documented in this volume can thus also be traced back not only to the changes in the world of work but also to the tax reforms that have been adopted in recent years. In order to increase tax revenues while not overburdening the lowest paid (because most vulnerable are unable to pay) nor the highest incomes (because of the dogma that they are 'job creators') most governments generally decided to tax middle range incomes.

In Spain, for instance, the reforms in 2011 concentrated the tax burden on the wage-earning middle class. In Greece, a new series of regressive tax measures adopted in 2011, coupled with drastic increases in indirect taxes, have hit not only middle class but also lower class incomes the most. Income tax reform in 2013 exacerbated this. The main elements of the reform were: the reduction of income tax rate bands from eight to three; the elimination of selective tax credits; tax allowances for children; the tax-free personal income threshold for the self-employed and professionals; the special tax regimes based on imputed income for farmers and seamen; and the restructuring of the tax regime for corporate profits, resulting in a reduction of the gross tax rate on distributed profits from 40 per cent to 33.4 per cent. This reinforced the tax squeeze on the lower and middle classes.

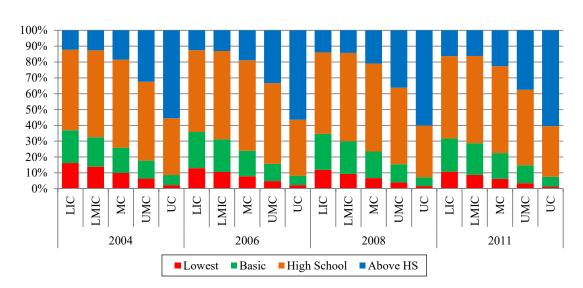
In Portugal, middle class earners experienced cuts in previous tax deductions. Moreover, public servants, a core group of the middle class, have lost disposable income due to increased targeted taxes. Fiscal consolidation policies have also been concentrated on the public sector with – as described above - cuts in wages and pensions and freezing of promotion in public careers, implemented since 2010. In Italy, tax and pension reforms have hurt both low income families and the middle class.

In Hungary, the new government has favoured the upper middle class and upper income earners. The economic reasoning is to boost investment and labour supply at the top. The 16 per cent flatrate income tax and the generous child tax-credit for high income families are intended to serve this aim. The chapter on the United Kingdom also shows how tax changes since 2010 have further reduced the redistributional function of tax policy and hurt most low and middle-income households.

The middle class have also been hit by property tax changes. In Ireland, for instance, the 'value based' property tax hit middle class Dublin homeowners. In Italy, the new property tax for primary residents also hurt middle class homeowners and affected small businesses.

5.2 Returns to education

The various chapters in this volume highlight the importance of education for moving people into middle class or upper class groups. Figure 14, based on SILC data, shows that those belonging to the upper class and the middle class have a higher proportion of adults with higher education than lower income groups. The middle class also has a high proportion of people with secondary qualifications (more than the upper class), but less than the lower income class. Clearly, the higher the level of educational attainment, the higher the income group to which individuals will belong. In the United Kingdom, for instance, among lower income households, two-thirds of reference adults have only high school education, while in upper income households this is true of fewer than one in five adults. Reference adults with higher education account for a majority in the upper middle and upper class households and only around one in five in the lower and lower middle income classes.

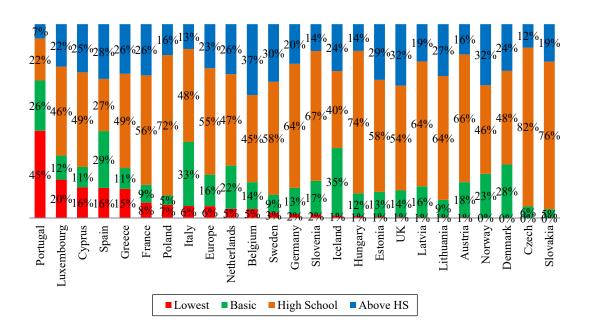


Proportion of employees with primary, secondary and tertiary education, by classes, Europe, 2004-2011

Note: LIC = Lower income class; LMIC = Lower middle income class; MC = Core middle class; UMC= Upper middle class; UC = Upper income class. In the case of Bulgaria and Romania there is no information for 2004.

Figure 15 shows the same distribution of education level within the core middle class for individual countries. The different endowment can help explain the size of the middle class in the respective countries. Tertiary and secondary education remains lower than average in Portugal, with tertiary education lower in Italy, Romania and the Czech Republic (although this is compensated by a higher proportion of secondary education). The proportion of tertiary and secondary education is, for instance, higher in Finland, Norway, the United Kingdom, Lithuania and Belgium.





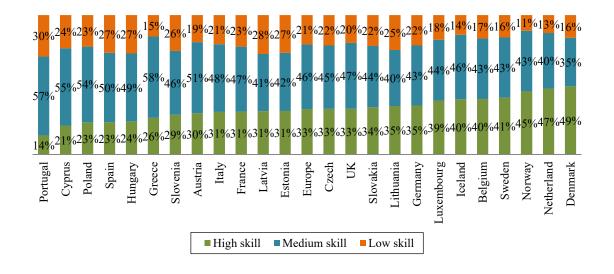
Education systems have also changed radically in recent decades, with notably an increase of individuals in tertiary education. The percentage of workers in tertiary education, for instance, doubled in Spain in a period of 10–15 years, but this was accompanied by a high rate of early school abandonment – 32 per cent in 2008, with Portugal the highest in Europe – thus creating a V-profile of educational attainment that can only further increase inequalities and exacerbate polarization on the labour market. As in Spain, the growth of tertiary education in Portugal has contributed greatly to developing the middle class thanks also from a move from an 'elitist' system' to wider access to university.

However, cuts in health care and education since 2009 have affected this process. In the United Kingdom and Ireland, a series of measures such as the abolition of education maintenance grants and the tripling of university fees have disproportionately affected disadvantaged groups, but also the middle class. A similar process is reported in Spain with an increase in university tuition and suppression of a number of grants. As a result, Spanish families have increased their share of expenditure on university education by nearly 50 per cent in a few years and especially since 2012–2013.

University loans (Latvia and Lithuania) and scholarships (Portugal) have been curtailed and school curricula have been narrowed (Hungary). Various chapters in this volume show how this is making it more difficult for young people to enter the labour market, as in Italy, either because of a lack of needed skills and/or because of over-educated profiles, while the fact that older people tend to remain in employment for longer may exacerbate an intergenerational conflict.

In fact, cuts in expenditure on education, combined with lower spending by employers on training, have led to a rapid deterioration of human capital throughout Europe. This process can only further exacerbate the current mismatch that is observed and reported here in many countries between the increased but not always adequate human capital of the growing number of new graduates and the educational requirements of the economy. As a result, and as emphasized in the chapter on Spain, 'young workers having tertiary education is no longer a passport to a middle class job with a middle class wage'. Nevertheless, we can see that the countries with the highest level of education among the middle class also have the highest percentage of highly skilled within this middle class, as shown in Figure 16, for instance, in Denmark, the Netherlands, Norway, Sweden and Belgium. Those high skills not only contribute to the large size of the middle class in those countries but also increases the chances of households' remaining in the middle class or even upper class.

Figure 16 Distribution of occupational skills among middle class, Europe, 2011



5.3 Effects of social protection

Social protection, by safeguarding people against health problems, loss of income or employment, obviously contributes to well-being, especially for those at the bottom of the wage scale. Social protection has also contributed to the growth of the middle class.

The increased female employment rates that we have documented earlier in this chapter for countries such as Sweden, Belgium, France, Germany, Greece, Ireland, Italy and the United Kingdom, were generally facilitated by an increase in welfare policies, such as the expansion of childcare, parental leave and long-term care insurance for the elderly. The cuts in social protection since the crisis that intervened in many European countries have thus had a reverse impact.

Low income workers are not the only ones to have been affected by the changes to and reforms of social protection. The middle class has also been affected, notably by the progressive shift away from a universal social protection system in which it had a stake and also by labour market reforms. The decreased quality of public services has also affected them directly.

By contrast, in Sweden the middle class has continued to have access to generous and encompassing social protection systems, as well as high-quality public services. This is also why the middle class has remained supportive of the welfare state and the relatively high tax burden associated with this. Sweden is thus providing an example of the importance of maintaining a universal system to keep the middle class benefiting from – and financing – the social model.

5.4 Family composition

Probability of belonging to the middle class is also very much influenced by the many different types of household structure.

The formation and composition of families have rapidly changed and are influencing the probability of belonging to the middle class. Countries in this volume – for instance, the Netherlands - have experienced a rapid increase in the number of single people and a decline of larger households as a result of declining or delayed fertility. Demographic factors are also influential with for instance an increase in the number of pensioners due to higher life expectancy.

In several countries covered in this volume, the major share of upper middle and upper income class households are represented by non-retired adults without children, with a much lower representation of single-parent and pensioner households. Significantly in the United Kingdom, three-quarters of all single parent households are below the median income level compared with only half of dual-parent households.

5.5 Migration

Migration – notably through its impact on the world of work – has also influenced the middleincome groups. First, by providing a labour force that has contributed to economic growth. Since 1997 immigrant employment has represented at least 40 per cent of total employment growth in Austria, Denmark, Italy and Spain (OECD, 2009). Second, because migrants have often filled jobs that locals did not want – generally manual and low skilled jobs – thus providing services that also benefited the middle class. The chapter on Spain, for instance, highlights how the arrival of female migrants has increased the supply of workers for domestic services, thus meeting the demand mainly from middle-income households. This abundant labour force even led to a decrease in the prices of domestic services from which the middle class households could directly benefit. This process stimulated the dual-earner model by providing cheap domestic services for families and allowing women to join the workforce.

The crisis also led to adverse developments. Worsening wages and working conditions in several occupations, including in the public sector, have also led to waves of migration. Some countries that were receiving immigrants so far have been confronted by growing emigration, especially by highly educated and skilled professionals, leading to a depletion of skills in sending countries and more skills in the receiving countries. Emigration of young graduates occurred throughout Southern Europe, particularly in Spain, Greece, Portugal and Italy, as well as in Ireland and the United Kingdom – generally recipient countries. The changes in the world of work that we describe in this volume for some Southern countries – such as real wage falls, weakened collective bargaining, cuts in employment and wages in the public sector and reduced expenditure in health and education – have led many middle class employees to emigrate to seek better employment and wage conditions. Emigration of middle class public sector employees could also be observed from Southern countries to Northern countries. The ILO documented the illustrative case of a middle class employee from the Portuguese state administration who decided to emigrate in Switzerland to work as a cleaning lady to earn more income and ensure the coverage of her family needs. A high number of doctors have emigrated from Hungary, Romania, Czech Republic, Poland and Slovakia, but also Spain and Greece to work in Northern countries (Vaughan-Whitehead, 2013).

6. CONCLUSION

This volume is aimed at providing evidence on the general trends with regard to inequalities and middle-income groups on the basis on extensive research (both statistics and case studies) in individual countries and also some comparative analysis. These results converge towards a number of conclusions. First, while the middle class in most European countries experienced a rapid increase in the 1980s and 1990s – notably due to increased labour participation – the past decade seems to have brought some erosion of the middle class, exacerbated by the effects of the recent financial and economic crisis.

The expansion of middle-income households below median income levels is reported in several countries, highlighting a shift towards the left of the distribution.

This suggests that several European countries are not moving from a pyramid-shaped society in which most people fill low-income ranks, to a diamond shape, in which a majority enjoy incomes clustered around the mean. In particular this volume highlights a correlation between increasing income inequality and erosion of the middle class. At the same time, great diversity can be found between individual countries.

Elements in the world of work were found to help explain these general trends, while also providing some explanations for national differences. The higher labour market participation of women and the prevalence of dual-earner households, for instance, have clearly lifted a number of households up to middle class status. At the same time, the changing structure of jobs and occupations, the growth of non-standard forms of employment and contracts and general wage moderation seem to be common factors behind the middle class erosion in Europe already observed in many countries before the crisis. As shown for the Netherlands, households, to cover their needs, may have to compensate for the lack of wage growth through multiple income earners within the households.

Additional factors were brought by the crisis, such as further increases in unemployment, especially among young people, further real wage decline, the dismantling of some social dialogue institutions and cuts in both employment and wages in the public sector, previously a secure employment and income oasis for the middle class. Some occupations that traditionally represented the middle class, such as teachers or doctors, may not systematically belong to the middle-income groups anymore. This calls for further research on professional and individual trajectories.

All these factors have played a depressing role in reducing both the size and the median income of the middle class in most European countries. Other drivers in the world of work help to explain national stories, such as the importance of social dialogue in the stability of the middle class in Belgium, the importance of the welfare system in Sweden and the education and skills composition in Germany. Industrial relations as a process for influencing the world of work were found to play a particular role. Even if industrial relations systems are very different between, for instance, Belgium, France, the Netherlands and Sweden, its resilience in those four countries seems to have represented one major reason for relatively lower inequalities and greater stability of the middle class. Conversely, the weakening of a number of mechanisms of social dialogue since the crisis

⁸ 'From public sector worker in Portugal to cleaner in Switzerland', *ILO News*, 20 September 2012, ILO, Geneva, accessible (accessed on 8 November 2015),

 $at\ http://www.ilo.org/global/about-the-ilo/newsroom/features/WCMS_189941/lang--en/index.htm.$

seems to have had a direct impact on the world of work in countries such as Greece, Spain and Ireland, with significant effects on inequalities and the middle class. Rather than the crisis, longterm transformations in industrial relations and labour markets seem to explain the growth of the low pay segment and the erosion of the middle class in countries such as Germany, the United Kingdom and Italy.

Limited collective bargaining in countries such as the Baltic states and Hungary seem to render both low and middle class development directly dependent on the economic context and on government tax policy, with some thus lacking a cushion to sustain the world of work and thus both aggregate demand and production in times of crisis.

Mechanisms of wage fixing and wage bargaining were also found to play some role. While the removal of the wage indexation mechanism in Italy in the early 1990s was accompanied by an immediate increase in inequalities, the survival of the indexation system in Belgium seems to have contributed to limit inequalities and to stabilize the middle class there. Extension mechanisms and coordinated collective bargaining also seem to contribute to some more coherence along the income scale and thus to less inequalities between the two extremes.

Common factors also seem to explain the more insecure position of middle-income groups across countries, such as greater vulnerability of jobs and incomes in the public sector, and greater exposure to factors such as involuntary part-time and temporary jobs. In particular the decline in middle-skill employment that went hand in hand with a decrease of standard work contracts led to job and income polarization and to a decline of the middle class. Basic features such as higher education also do not seem to represent a sufficient asset anymore for middle-income groups to avoid employment and income insecurity.

Such an erosion of the middle class is worrying – especially when it seems to hurt young people most prominently, thus leading to an intergenerational gap – and calls for policy initiatives. Increased inequalities and the progressive erosion of the middle class and their possible implications calls for urgent policy action specifically aimed at stopping this trend. This volume highlights the policy programmes that could help to reduce inequalities and strengthen the middle class. Such initiatives should be launched in the world of work, but also in other related areas, such as taxation, education and social protection. This requires a new and comprehensive policy agenda extended to different and complementary fields that would finally establish the middle class as a target group and lead to both sustained economic growth and improved living standards.

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ANNEX

Table 4 Some effects of the world of work on the middle class, Europe, 1990–2015

	Positive effect on the middle class	Adverse effect on the middle class			
Labour market partici	Labour market participation				
Women	1980–1990s: Rise in female labour market participation rates in most countries, which allowed families to acquire or sustain middle class status. Women's participation was facilitated by the improvement of welfare policies such as the expansion of childcare, parental leave and long-term care insurance for the elderly in Belgium, Sweden, Norway, Germany and France. 2008–2015: The EU-wide gender gap in the employment rate has fallen by 3.2 percentage points: from 14.1 points in 2008 to 10.9 in the first quarter of 2012 since men were most affected by the impact of the crisis on manufacturing. This affected the dual-earner model and in some cases even brought a shift from dual to female breadwinner households: more pronounced in countries worst hit by the crisis such as Estonia, Latvia, and Lithuania.	1980–2000s: Over-representation of women in the service sector (including public sector jobs) and part-time employment; under-representation in manufacturing, construction. 2008–2015: Cuts in public spending in the second phase of the crisis, and fewer legal restrictions on firing part-timers, adversely affected female employment rates in Greece where it fell by 8 per cent, in Spain (–4 per cent), and in Ireland (–3 per cent), Portugal (–3 per cent) the Netherlands (–3 per cent) and Latvia (–3 per cent). The collapse of dual-earner households has made it harder for families to sustain middle-class status.			
Older workers (55–64 years)	2000–2015: An ageing population has led to a lengthening of working life and a means of sustaining middle class status for most countries. Europe's employment rates for older workers rose from 38.4 per cent in 2002 to 51.8 per cent in 2014. This was exacerbated by the 2008 financial crisis which caused many countries to implement a gradual increase in retirement age.	2000–2015: The postponement of older workers' exit from the labour market has implied a higher probability for them to remain within the middle class.			
Youth	1990–2007: In 2007 youth unemployment remained below the EU28 average of 15.6 per cent in Germany, Estonia, Ireland, Latvia, Lithuania, the Netherlands and the United Kingdom due to higher enrolment rates in tertiary education, stable labour market growth and in some cases youth emigration (notably the Baltic states). Vocational training and short-time working schemes in Germany and Belgium helped to maintain low youth unemployment, thereby helping younger generations to achieve or maintain middle class status. These schemes were particularly effective during the 2008 crisis, notably in Germany – the only country to experience a decline in youth unemployment rates (3 per cent).	1990–2007: Higher youth unemployment rates in countries such as Greece, Spain, Italy, Hungary and Portugal have created an intergenerational gap between different age cohorts. 2008–2015: Less stable job opportunities for young people during the crisis added higher cyclical sensitivity to temporary employment. The average young worker in temporary employment in the EU experienced a wage penalty of 14.4 per cent in 2010 in comparison to a worker on a standard contract with similar characteristics. With the exception of Luxembourg, all EU member states have seen a rise in the number of NEETs (not in employment, education or training)since the onset of the crisis; in 2010 in Italy and the United Kingdom, the size of the NEET population reached approximately 1.1 million of those aged 15–24 years. Youth unemployment rates rose in all EU28 states between 2008–2014 (with the exception of Germany) and in 2014 remained			

		above 50 per cent in Greece and Spain, above 40 per cent in Italy and above 30 per cent in Portugal.
Job restructuring	1990–2000s: A change in the occupational composition of the middle class led to growth in middle-income jobs due to an expansion of the public and service sectors, as in Sweden, Belgium and the Netherlands.	1990–2000s: In 1995–2008 countries began to witness varying degrees of job polarization due to a concomitant rising demand at the upper and lower ends of the occupational skill distribution, driven by technical change and globalization. This polarization can also be linked to institutional transformations such as the de-standardization of employment regulation (most prominent in continental Europe in late 1990s-early 2000s). 2008–2015: The crisis brought increasing evidence of job polarization mainly through the destruction of middle wage jobs. This was evident in Greece, Spain, Austria, Latvia and Lithuania which changed from a centripetal development to a very intense job polarization. Jobs at the bottom of the employment structure either decreased less markedly than the middle or even expanded significantly in a few cases (such as France, Greece or the UK).
New forms of work con	ntracts	
Self-employment,	1990–2008: Countries such as France, Italy and the United Kingdom adopted specific social measures, such as tax incentives and employment protection legislation, to encourage development of the self-employed, leading to increased middle class well-being. 2008–2015 Self-employed workers increased in UK (18 per cent), France (9.9 per cent) and the Netherlands (23 per cent).	2008–2015: The crisis had a negative impact on the creation of self-employed workers and increased their vulnerability due to less demand for their products and services, less financial support from lending institutions and cuts to their social benefits. This caused a decline in self-employed workers in Spain (–13 per cent), Italy (–5.7 per cent), Greece (–17 per cent) since 2008 and in Germany since 2010 (–2.1). At the same time, development of 'dependent self-employed' with weak statute and weak protection.
Temporary and part- time employment	1990–2000s: Labour market reforms – aimed at increasing flexibility – in countries such as France, Spain, the United Kingdom, Sweden and Italy that simultaneously led to the growth in part-time employment, made it possible for many women to enter the labour market. These dual-earner households allowed many families to reach the middle class. 2008–2015: Short-time working was used across countries to cushion the fall in employment in the recent crisis in Sweden, Germany and Belgium. This helped to preserve both low class and middle class employment.	1990–2000s: Reforms aimed at increasing labour market flexibility in countries such as France, Spain, the United Kingdom, Sweden and Italy led to a growth in temporary and part-time employment, which put at risk a core feature of the middle class: a permanent job with an open-ended contract. The growth of different types of NSFEs (Non-standard forms of employment) strengthened this trend. 2008–2015: The contemporary 'buffers' in the crisis were young men and women on temporary and other atypical employment contracts, as well as migrants, many of whom were employed irregularly or temporarily. A last-in-first-out principle also prevailed, as firms found it more difficult to fire tenured employees than to stop renewing temporary contracts.
Involuntary part-time	2008–2015: The rise in involuntary part-time employment in many countries was used as a practical way to reduce hours to avoid employment cuts in the recent economic crisis.	2008–2015: Involuntary part-time as a percentage of total part-time employment rose between 2007 and 2014 in France from 30 to 40 per cent, Spain from 33 to 63 per cent, Greece from 42 to 69 per cent and Ireland from 10 to 41 per cent, putting at risk the stable nature of employment, which many middle class people are accustomed to. In 2010, when the first employment

		dip occurred in the EU28, the share of involuntary over total part-time had risen to 32.4 per cent, up 5.5 points from its 2007 level. Underemployment also remains an issue: across the EU 9.8 million part-time workers (or 22 per cent) worked fewer hours than they would have liked to in 2014. In Greece the proportion rose to 72 per cent, 66 per cent in Cyprus and 57 per cent in Spain. More than two-thirds of all underemployed workers were women.
The public sector		
Wages	1990–2000s: Growth of public sector wages in most countries during this period, that sustained the growth and maintained the living standards of the middle class. It allowed women to have access to jobs and also to highly skilled jobs. They set the standards in terms of work and family reconciliation schemes that contributed to the growth of women's participation rates and to the emergence of the dual-earner model as an engine of middle class growth.	2008–2015: Large-scale public sector wage cuts during the crisis in most countries caused a substantial change in gross and net wages, impacting upward social mobility and middle class aspirations. Wages fell in Greece (– 15–30 per cent in 2010), Hungary (–37 per cent for unskilled and –13 per cent for high skilled in 2008–2010), Latvia and Lithuania (–25 per cent and –15 per cent, respectively, in 2009–2010), Spain (–5 per cent in 2010), Portugal (–5 per cent average wages 2010–2011), United Kingdom (wage freeze in 2010–2012 led to –5 per cent fall in real wages).
Employment	1990–2000s: Sustained public sector employment in most countries during this period. The public sector acted as a major source of employment for the highly educated, especially for women, and was a major nurturer of the middle class. 2008–2015: In Ireland two public sector agreements were negotiated during the crisis, thereby reinstating the middle class status of many public sector employees.	1990–2000s: An increase in privatization programmes led to a decline in public sector employment in in Greece (from 40 to 34.5 per cent between 1993 and 2008), Sweden (–19.6 per cent in same period) and Germany (6.74 million in 1991 to 4.65 million in 2014). 2008–2015: Large-scale public sector employment cuts during the crisis in most countries caused a break in the middle class 'safety net'. Strict hiring rules in Greece since 2010 have caused precarious public sector employment with reduced rights, as in Italy and Portugal. The launch of extensive privatization programmes in Greece, Portugal, Spain and to a lesser extent in Ireland, Italy and the United Kingdom has impacted job quality and security.
Services	Growth of public services helped middle class families in terms of provision of child care etc.	2008–2015: Cuts in expenditure in the public sector affected the middle class through lower supply and quality of public services; it also rendered more difficult women's participation in the labour market, hurting the dual model and the middle class.
Industrial relations		
Indexation mechanisms	1990–2000s: In the period before the crisis, indexation measures linking wages to the cost of living were in place in Belgium, Cyprus, Luxembourg, Malta and Spain. These have historically ensured less inequality between lower and middle-income classes through more egalitarian income distribution.	1990-2000s: In 1992 the removal of the indexation system 'scale mobile' Directly contributed to decrease real wages and to increase wage inequality. 2008–2015: Changes to indexation arrangements have led to greater polarization between lower- and middle-income classes as the wage gap widened in, for example, Cyprus, Luxembourg and Spain.

	2008-2015: Maintaining indexation mechanisms contribute to explain middle class stability as explained for Belgium in this volume. In Italy a 2009 cross-sectoral agreement introduced a new indicator of expected inflation as the reference point for sectoral wage negotiations.	
Minimum wage setting	1990–2008: Twenty-one of the EU28 set a universal, statutory minimum wage. In most of central and eastern Europe, minimum wages are subject to attempted tripartite agreements. Wage increases in Ireland, were negotiated under the national wage agreement. In the UK the government decides following the recommendations of a tripartite commission. In Germany, since January 2015, the new government introduced a national statutory minimum wage.	2008–2015 Changes to statutory minimum wage-setting procedures occurred in Croatia, Cyprus, Greece, Hungary, Ireland (cut in 2010 but restored by new government in 2012), Poland, Portugal, Spain, Slovakia and Slovenia. In Greece the minimum wage is no longer defined by the social partners through the NGCA (National General Collective Agreement), but by the government in consultation with social partners. In Spain since 2011 the government no longer consults the social partners before setting the minimum wage, In Portugal the MoU imposes restrictions on criteria for any increase in the minimum wage (Marginson and Welz, 2014). This has increased inequality and affected both bottom and middle-income groups.
Trade union density	1990–2015: Higher affiliation rates of middle-income classes compared with low and top income classes in Belgium, Spain and Estonia; in the United Kingdom middle earners are more likely to join a union. In Belgium and Sweden relatively low wage inequality can be attributed to high trade union density for all cohorts. Higher trade union density of middle classes has enabled them to have an impact on collective bargaining, thereby preserving wages and welfare.	1990–2015: Long-term decline in trade union density in Greece, the Baltic states, Hungary, the Netherlands, the United Kingdom and France. 2008–2015: The crisis caused an accelerated decline in density in the worst affected countries; and a loss of trade union trust and dampened reputations in Spain and also Ireland. In the United Kingdom the proposed implementation of a trade union bill will make it harder to strike.
Extension procedures and automatic continuation of collective agreement	1990–2000s: In France, Austria and Belgium extensions of collective agreements are guaranteed by the intervention of a public body, and in Portugal by ministerial decree. In Ireland agreements must be registered with the Labour Court. Extension is ensured by criteria related to representation in Greece and Spain, or like the presence of a substantial proportion of workers in the sector already covered by the agreement, or the representativeness of the signatory organizations. These mechanisms are used as a tool to ensure a minimum standard of working conditions, thus contributing to the stability of the middle class. Some countries have mechanisms of automatic continuation of collective agreements on expiry – for example, Spain (ultraactividad), Greece (metenergeia) and Portugal (sobrevigencia).	2008–2015: The crisis led to changes to extension procedures, making them more difficult or impossible in Greece, Slovakia, Portugal and Romania; in Ireland extension orders were suspended after a ruling of the Supreme Court. There have also been changes in their use in Bulgaria, Germany and Italy where judicial decisions have underpinned de facto extension of the wage provisions of sector agreements. Changes to clauses providing for the continuation of agreements beyond expiry have featured in Spain where the validity of expired agreements was limited to one year, in Portugal to 18 months and in Greece and Croatia it is limited to three months. In Estonia, legislative changes required parties to agree to the continuation of agreements.

Coverage of collective bargaining / Coordinated or multilateral collective bargaining	1990–2000s: Coordination and multi-level bargaining make it possible to cover a higher number of employees by collective agreements, as in Belgium (96% of total employment), France (93%), Sweden (90%), The Netherlands (80%) and in contrast with UK and the Baltic States where single-employer bargaining predominates. Single-employer bargaining can lead to unilateral employer decisions, that can cause greater polarization between income classes. Multi-employer bargaining involving sector and/or cross-sector arrangements also predominated in Portugal, Greece and Spain. 2008-2015 Coverage rates remained stable in France, Italy, Austria and Belgium. In Belgium and France the extension of collective agreements played an important role. In Finland and the Netherlands, coverage increased (Visser, Hayter, Gammarano, 2015).	1990–2000s: Collective bargaining agreements in Germany in the 1990s led to a decline in collective bargaining coverage and a rise of low wage workers. Similarly in Sweden the breakdown of centralized bargaining in 1983 led to wage setting based on individual performance. 2008–2015: The crisis caused a sharp decline in coverage rates in countries that underwent extensive changes to their collective bargaining mechanisms, such as Cyprus, Greece, Ireland, Latvia, Portugal and Romania.
Tripartite consultations	1980–2000s: Countries such as Belgium, Portugal, Sweden, Ireland and the Netherlands have historically used social dialogue that helped to stabilize the middle class. These consultation mechanisms have maintained wages and working conditions, and therefore middle class wellbeing. Spain and Greece are also marked by a succession of bilateral or trilateral social agreements. 2008–2015: During the economic crisis a rapid deterioration of the social climate was avoided in countries in which the government has managed to organize tripartite consultations, as in Estonia, Latvia, Lithuania, Portugal and Ireland (second phase of the crisis).	1980–2000s: In Italy, there has been a trend towards diminishing the role of social dialogue institutions, and in the Baltic states unions and social dialogue have declined in importance. 2008–2015: A lack of effective social dialogue prevailed in many countries during the implementation of labour market reforms. This led to increased strikes and in the case of Italy, Spain, Portugal and Greece, recourse to the courts. In Spain in 2010 and 2012 bipartite negotiations aimed at modernizing collective bargaining were considered unsatisfactory and led to the unilateral reform of the legal framework. In Hungary institutions of tripartite social dialogue were modified by the government in 2010.

Source: National studies and variety of other sources including Visser, Hayter and Gammarano, 2015; Marginson and Welz, 2014 and Bettio, et, al., 2012.

Table 5 Effects of other factors (outside the world of work) on the middle class, Europe, 1990–2015

	Positive effect on the middle class	Adverse effect on the middle class		
Trends beyond the world of work				
Higher education	1990s–2000s: This period saw a general rise of the share of individuals with tertiary education. Extended stints in education have also contributed to declining youth unemployment. Those with just a primary education have generally been over represented in the bottom and lower middle classes. In Spain the number of those with a tertiary education doubled over the past three decades; in Estonia it tripled. Hungary experienced a rise from 6.5 per cent in 1980 to 18.9 per cent in 2011. Such increased education was beneficial for integrating young generations into the middle class. Most governments also invested in education, which favoured the growth of the middle class.	2000s–2015: Investing in education is a strategy often used by middle class to guarantee a better future for their offspring. However in labour markets characterized by over-supply of skilled labour and insufficient demand for skills due to high unemployment rates, new higher skilled entrants are experiencing a more severe wage penalty, as in Italy and Spain. Moreover new graduates do not find a job at their level of education/skills. While this mismatch between education and labour market requirements is a long-term trend that was emerging already before the crisis, the reduction of job opportunities as a result of the crisis has aggravated this mismatch and caused young people to spend longer in higher education (as a long-term strategy to achieve middle class status or above). 2008–2015: The financing of public universities, as in Spain, has been reduced, causing students to rely on bank loans. The Baltic states after having increased education expenditure in 2006-2009, started to cut it in recent years. Expenditure also declined in Portugal and Romania between 2007 and 2011 (by 0.12% and 0.27% respectively).		
Tax and benefits	1990s–2000s: Public policies have helped to preserve the middle class in a number of countries prior to the 2008 crisis, having a mostly positive effect on household income. These redistributive policies have particularly benefited the middle class in Sweden, France, the Netherlands and Belgium (where the middle class have one of the highest tax burdens in the OECD, at around 50 per cent but they are also among the main beneficiaries of cash and non-cash benefits). In the United Kingdom, Southern Europe (Greece and Italy due also to tax avoidance), Hungary and the Baltic states, welfare policies are less redistributive in comparison, leading to larger inequalities and polarization between classes. In Estonia a gradual reduction of the income tax rate from 26 per cent in 2000 to 21 per cent in 2008 benefited people in higher income deciles more and increased inequality in net incomes.	2008–2015: Crisis-induced welfare reforms, coupled with government measures to increase revenue through higher taxation, without overburdening the low paid has had a negative effect on household incomes in the middle class. While the middle class in those countries with relatively more inclusive welfare states has been less affected by these cuts, the opposite holds true for Southern Europe and Ireland (property taxes) and Hungary where the introduction of a 16 per cent flat tax rate favoured upper and middle classes at the expense of the poor and has not led to an intended boost of the economy. In Greece the welfare state acted as a shock absorber but only for the middle and upper classes. In the United Kingdom policy post-2010 reduced the earnings threshold for 40 per cent income tax and raised the personal allowance by 30 per cent, with a negative effect on middle class household incomes. In Portugal a new surtax on public wages impacted middle class aspirations.		
Regional disparities	1990s–2015: Regional disparities in the composition of the middle class can be identified in Belgium (35 per cent of Flemish and Walloon households are middle class in contrast to 23.4 per cent in	2008–2015: In Spain regional disparities in terms of university fees occurred during the crisis. University tuition was raised, increasing the average cost from the school year 2009–10 to the school year 2013–14 by		

	Brussels); France (the Paris region is overrepresented by middle/upper middle class); Germany (fewer eastern than western Germans assign themselves to the upper middle and upper class). In Italy the Gini index is higher in the South (0.34) than it is in the North (0.3), which may signify lower middle class attainment in the South.	an average of 47 per cent (37 per cent in real terms). Regions such as Madrid or Catalonia have applied larger increases of 108 per cent or 138 per cent, respectively (in real terms). This has led to an increase in the cost differences of university tuition depending on region of residence, resulting in an increase in the max/min ratio from 1.4 in 2009–2010 to 2.8 in 2013–2014.
Migration	1990s–2000s: Inflow of migrants to western and parts of southern Europe in 2004 following enlargement of the EU. Many took manual and low skilled jobs, which nationals often did not want. Between 2000 and 2008 the non-national component of elementary workers increased by 85.6 per cent, while the rise in the national component was only 13.7 per cent (CEDEFOP, 2011). Immigrants from non-Western countries tend to reside at the bottom of the income distribution in contrast to those from western Europe who are rather situated in top classes. This has resulted in a polarization of households with foreign backgrounds. Since 1997 immigrant employment has represented at least 40 per cent of total employment growth in Austria, Denmark, Italy and Spain (OECD, 2009). Immigration also stimulates the dual-earner model by providing cheap domestic services for families and allowing women to join the workforce.	2008–2015: Immigration countries in 2001–2007 have become net exporters of migrants. Emigration of young graduates occurred throughout Southern Europe, particularly in Spain, Greece, Portugal and Italy, as well as in Ireland, the United Kingdom (generally recipient countries). This marked a defining feature of the recession for many middle and upper income households. The most mobile tended to be among the best skilled, leading to a depletion of skills in sending countries and more skills in the receiving countries. Emigration of middle class public sector employees could also be observed from Southern European countries to Northern countries. Female migrants emigrated to work in the care sector, where demographic aging continues to sustain demand for personal services (Bettio et al. 2012).
Family changes	1990s–2000s: Rise of dual/multiple earner households of the middle class in most countries, in parallel with the increase in female employment rates. Middle class households are generally characterized by a higher share of better-educated, non-retired adults without children. Lone parents are more represented in the lower class, with divorce rates generally cited as an explanation for declining middle classes.	2008–2015: Changing composition of households during the crisis; for example in Greece between 2008 and 2014 the share of dual earner households collapsed in the middle class (–18.9 percentage points against 9 and 10 percentage points among the lower and upper classes, respectively).