The share of middle-skilled jobs has declined relative to low- and high-skilled jobs though this has not resulted in a fall in the share of working adults in the middle-income class. Workers in middle-skilled jobs are finding it increasingly difficult to be in the middle-income group while workers in high-skill jobs have become less likely to be in the high-income group. Households with one working adult are increasingly struggling to make it in the middle-income class, regardless of the occupation of the person in employment. Even the presence of two earners per se is becoming less effective in achieving middle-income status. Today, it needs at least one high-skill worker in a two-earner couple to increase the chances of being part of the middle-income class. These trends might help explain some of the social frustrations which have been at the centre of the debate about “the squeezed middle” in many OECD countries. Despite these shifts, higher skill levels remain strongly associated with higher income outcomes.

The share of middle-skill jobs is declining, but the share of middle income workers is not

In all OECD countries, technological change, trade and population ageing have contributed to the reshaping of the occupational structure in recent decades. Middle-skilled jobs have lost shares in favour of both high- and low-skilled jobs leading to a widespread polarisation of labour markets (OECD, 2017). However, this has been mostly tilted towards much higher growth in high-skill jobs than in low-skilled ones (Figure 1).

While the decline in the share of middle-skilled jobs is almost ubiquitous, this is not the case for the share of workers who have middle incomes (see Box 1 for definitions). In fact, on average across the 18 OECD countries analysed, the share of working adults in the middle-income class has remained stable since the mid-1990s (Figure 2). In the mid-2010s, about 70% of working adults were in the this group, 13.5% in the higher income class and 16.5% in the lower income class. The share of workers in the middle-income class declined in eleven countries, falling by 4 percentage points (pp) or more in Denmark, Canada, the United States and Germany. In France, Ireland, and Hungary the share of workers in the middle class increased by more than 4pp.

While job polarisation has shifted the occupational composition of employment mostly towards high-skill jobs, the changes in the distribution of workers across incomes classes have resulted on average in a small net shift towards the lower class. On average, the share of workers in the higher income class declined by just less than one pp while that in the lower income class has grown by just over 1.1 pp (Figure 2). Among the eleven countries which have seen a decline in the share of workers in the middle income class, six have seen a clear shift towards the lower income class, two (Denmark and Luxembourg) a clear shift towards the higher income class, and the remaining three (US, Germany, and the Netherlands) have had similar increases in the share of both the lower and the higher income classes.

Box 1. Measuring jobs by skills and individuals belonging to the middle-income class

Following previous analysis on job polarisation (OECD, 2017), skill groups are defined using the International Standard Classification of Occupations (ISCO-88). Low skill workers are those holding a job in sales and service and elementary occupations (ISCO 5 and 9); medium skill workers are those holding a job in clerical, craft, plant and machine operators and assemblers occupations (ISCO 4,7 and 8). High skill workers are those holding a job in managerial, professional, technicians and associate professionals occupations (ISCO 1, 2 and 3). Skilled agricultural workers are excluded from the analysis.

The middle-income class comprises all individuals in households with net disposable income between 75% and 200% of the median household income in a given year and country. The income of reference is the household disposable income, corrected for household size with the OECD equivalence scale. In this brief, the focus is on people who hold a job, or on families in which at least one person is in work.

Job polarisation has only had a very small direct impact on the share of workers in the middle-income class (OECD forthcoming). The impact of the decline in the share of middle-skilled workers (and in some countries of low-skilled workers) was offset by the growth in high-skilled jobs. The shift of some high skill workers towards the middle is consistent with the evidence of increased inequality at the higher end of the wage distribution (OECD, 2018). However, a number of other factors affecting total household income could also have contributed to the movements of workers across income groups, notably: changes in the distribution of individual labour or non-labour incomes; changes in household composition (including employment status of working-age members and assortative mating); and changes in the tax and benefit system.
The middle-income class is becoming much more high-skilled than middle-skilled

Workers in middle-income households are now much more high skilled and less middle skilled than was the case 20 years ago.

Between the mid-1990s and mid-2010s, the share of middle-income workers in high-skilled occupations increased from 35% to 47%, across 18 analysed OECD countries. Conversely, the share who hold middle-skilled jobs has declined from 41% to 32%.

In the mid-1990s, middle-skilled workers were the largest group in the middle-income class in 14 out of 18 analysed countries. By the mid-2010s, that was still the case in only five countries (Estonia, Hungary, Italy, Mexico, and the Slovak Republic).

Part of the increase in the share of high-skilled workers in the middle-income class is due to the fact that their share in the population has increased as labour markets have polarised (Figure 1). However, the increase has generally been larger in the middle class than in other income classes because the distribution of the three skill groups across the three income classes has also changed.

All skill groups are shifting towards lower income classes

High skilled workers are now less likely to be in the higher income class (Figure 3). On average, the proportion of high skill workers found in the higher income class declined from 25% to 21% between mid-1990s and mid-2010s. The decline has occurred in 14 of the 18 countries considered. Middle skilled workers are now less likely to be in the middle and more likely to be in the lower income group: the probability has increased from 17% to 19%. The increase is seen in 11 of the 18 countries considered here.

Low skilled workers are increasingly concentrated in the lower income class: the probability has increased from 23.5% in the 1990s to 27% in the mid-2010s. The shift of low-skilled workers towards the lower income class has occurred in 13 of the 18 countries considered (Figure 4).

Low-skilled workers are therefore still the group with the highest probability of being in the lower income class (Figure 3). In spite of the shift towards the lower income classes affecting all groups, higher skill levels are still strongly associated with relatively better outcomes.

Multiple earners in high-skilled jobs are increasingly defining features of middle-income households

The increase in the number of working adults in the last few decades, particularly as a result of rising female employment, is generally thought to have bolstered the middle-income class. Forthcoming OECD research, however, shows that rising employment had only a limited impact on the size of income classes since mid-1990s. That said, the income status of a household depends on the number and skill level of its working members – and it needs more and better skilled workers in a household today to be ‘middle income, than 20 years ago.

Couples with just one earner are now less likely to be middle-income class

In most countries, single-earner couples are now less likely to have middle incomes than previously (Figure 5, panel B.). The probability that a single earner couple is found in the middle-income class declined on average by around 3pp (from 62% in the mid-1990s to 59% in the mid-2010s), while the probability that they are found in the lower income class has increased from 31% to 34.5%.

Changes in the status of dual-earner couples has followed a mixed pattern across countries...

The status of dual earner couples has followed a variety of patterns without a clearly prevailing trend emerging across countries. On average, across the countries considered, the probability that a dual earner couple is found in the middle-income class has increased slightly (1.5 pp), bringing their proportion to just over 73% (Figure 5, panel A.). Such probability increased by more than 5 pp in Ireland, Hungary and Spain but decreased in Denmark and Estonia.

…while couples with only low or middle skill workers have tended to move towards the lower income class

The presence of a high-skilled worker in a couple helps prevent the shift towards the lower income class (Figure 6). On average across all countries, for a dual-earner couple with at least one high-skilled worker, the probability of being in the middle-income class has increased by 4.5 pp, entirely compensated for by a decline in the probability of being in the higher income class. As a result, in the 2010s, 70.5% of dual-earner couples with a high-skilled worker were part of the middle-income class. By contrast, couples with only middle- or low-skilled workers have moved slightly towards the lower income class. On average, the probability that this group is found in the lower income class has increased by almost 2pp. This has taken the share of dual-earner couples without any high-skilled workers who are found in the lower income class to 17%.
Job polarisation across OECD countries, mid-1990s to mid-2010s

Percentage points change in share of working adults in each skill group

<table>
<thead>
<tr>
<th>Country</th>
<th>Medium-skill</th>
<th>Low-skill</th>
<th>High-skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>-20</td>
<td>-10</td>
<td>0</td>
</tr>
<tr>
<td>Australia</td>
<td>-20</td>
<td>-10</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
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<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
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<td>-10</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>-20</td>
<td>-10</td>
<td>0</td>
</tr>
<tr>
<td>Italy</td>
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</tr>
<tr>
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<td>-20</td>
<td>-10</td>
<td>0</td>
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<td>Belgium</td>
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</tr>
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<td>United States</td>
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</tr>
<tr>
<td>Mexico</td>
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<td>-10</td>
<td>0</td>
</tr>
<tr>
<td>Slovak Republic</td>
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<td>-10</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: Low-skill workers are those holding a job in sales and service and elementary occupations (ISCO-88 5 and 9); medium skill workers are those holding a job in clerical, craft, plant and machine operators and assemblers occupations (ISCO-88 4,7 and 8). High skill workers are those holding a job in managerial, professional, technicians and associate professionals occupations (ISCO-88 1, 2 and 3).

Source: OECD, Under Pressure: The Squeezed Middle Class, Chapter 3, Chart 3.4

Change in the shares of workers belonging to the middle class, mid-1990s/mid-2010s

Percentage points change in working adults

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Change in Share of Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle income (75%-200% of the median)</td>
<td>10</td>
</tr>
<tr>
<td>Lower income (0%-75% of the median)</td>
<td>-20</td>
</tr>
<tr>
<td>Upper income (more than 200% of the median)</td>
<td>-10</td>
</tr>
</tbody>
</table>

Figure 3. Probability that a certain skill group belongs to a certain income class, OECD average

Panel A. Changes in the share of high-skill workers in the three income classes

Panel B. Changes in the share of medium-skill workers in the three income classes

Panel C. Changes in the share of low-skill workers in the three income classes


Figure 4. Changes in the probability that a skill group belongs to a given income class

Percentage point changes between the 1990s and the 2010s

Panel A. Changes in the share of high-skill workers in the three income classes

Panel B. Changes in the share of medium-skill workers in the three income classes

Panel C. Changes in the share of low-skill workers in the three income classes

Source: OECD, Under Pressure: The Squeezed Middle Class, Chapter 3, Chart 3.6
Figure 5. Changes in the distribution of earner households across income classes, mid-1990s to mid-2010s

Percentage point changes between the 1990s and the 2010s

Panel A. Changes in the distribution of dual-earner couples across classes

Panel B. Changes in the distribution of single-earner households across classes

Notes: Households with no working adults or with at least one retired person are excluded.

Figure 6. Changes in the distribution of earner households across income classes, mid-1990s to mid-2010s

Percentages

Panel A. Couples with at least one high-skill worker

Panel B. Couples with no high-skill workers

Notes: Households with no working adults or with at least one retired person are excluded.
Source: OECD, Under Pressure: The Squeezed Middle Class, Chapter 3, Chart 3.8
Conclusions

Job polarisation and the movements of skill groups across classes have led to significant changes in the composition of workers in the middle class and in the fortunes of different skill groups. Workers who hold jobs with higher skill levels remain much more likely to experience higher earnings and standards of living. However, some jobs are increasingly failing to deliver on the promise of the status they have traditionally been associated with. In particular, middle-skilled workers are less likely than previously to make it to the middle-income class and high-skilled workers are less likely to reach the higher income class. In addition, the presence of two earners per se is becoming less effective in achieving middle-income status, if not at least one of the partners is highly skilled. Couples involving only low and middle-skilled workers have seen an increase in the probability of finding themselves in the lower income class.

Hence, in terms of job polarisation, most countries are not so much faced with a “middle class problem”, but rather with a “middle skill” problem, as workers in this group are now less likely to be in the middle-income class. These changes may help explain some of the social frustration which has been at the centre of the political debate even in countries where the size of the middle-income class has remained stable.

Encouraging and supporting skill acquisition is still a fundamental policy to ensure higher standards of living for workers. Active labour market policies can play a crucial role in this endeavour as well as ensuring young people are better equipped with the skills needed by employers and to learn new skills as they progress in their careers. In addition, redistribution policies have a role to play to prevent further rises in the proportion of workers who are excluded from the ranks of the middle class. Fiscal policies need to be adjusted in order to account for the changing relationship between occupations and household income status. In particular, the design of taxes and social transfers including in-work benefits must reflect and address the fact that middle- and low-skilled jobs increasingly fail to prevent households from falling into lower and very-low income classes.

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References


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Financial support and disclaimer

This document was produced with the financial assistance of the European Union.

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