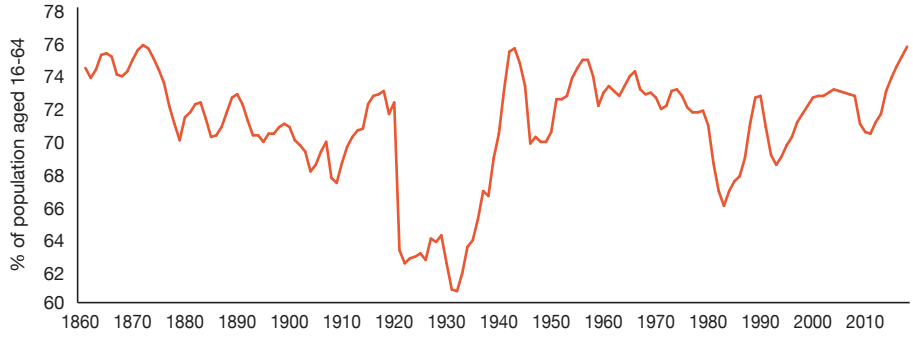
4. How does UK labour market performance compare to other OECD countries?[1]

Key points

- The UK's employment rate is at record high of over 75%, but it still ranks towards the middle of the OECD range, coming 13th out of 35 countries.
- The UK has improved its scores on both PwC's Youth Employment Index and our Golden Age Index (for workers aged 55 and over) since 2007, but is only performing at around the OECD average level on these indices, as other countries have also improved.
- On a new composite PwC Labour Market Performance index, combining results from our Youth Employment, Golden Age and Women in Work indices, the UK comes 19th overall amongst OECD countries.
- The potential GDP boost for the UK from improving labour market performance to match that of Sweden[2] for women, younger and older workers would be around £250bn, or 12% of GDP.
- Realising these potential gains will require a mix of policies to overcome age and gender discrimination, boost vocational training for all age groups, help with retraining older workers to adapt to new technologies, further improve childcare provision and promote flexible working. Successive UK governments have made progress on these areas over the past two decades, but our analysis suggests there is still more to be done to match international best practice and maximise the UK's labour market potential.

Figure 4.1 – UK employment rate



Source: ONS, Bank of England

Introduction

The UK's labour market performance has been remarkably strong over the past seven years, albeit at the expense of subdued productivity growth. The unemployment rate has fallen to below 4%, the lowest since the mid-1970s, while the employment rate for 16 to 64 year-olds has reached historic highs of over 75%. Longer term analysis by the Bank of England shows that this has only been matched at the peak of World War II mobilisation in 1943 and at the peak of British imperial pomp in the early 1870s (see Figure 4.1).

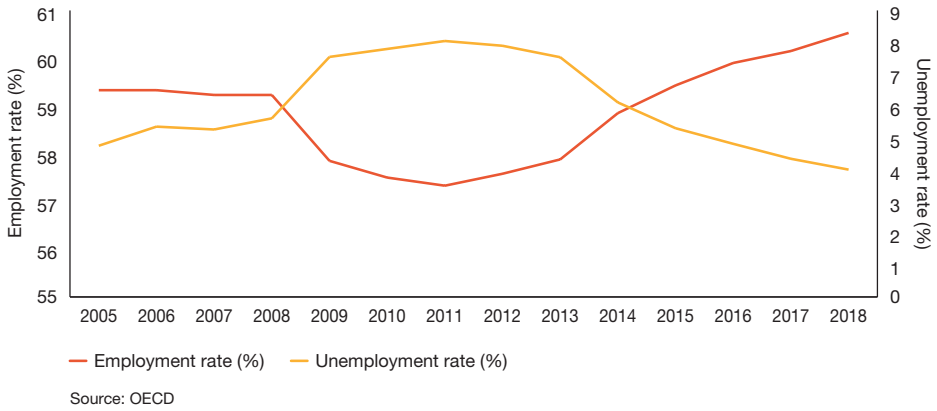
> "Matching Swedish labour market performance could add up to £250bn a year to UK GDP.
>
> **John Hawksworth**
> Chief Economist, PwC

1 This article was written by Frederica Martin with additional inputs by John Hawksworth and Mike Jakeman.
2 Sweden is chosen as the most realistic comparator for the UK as it ranks second in the OECD (and top in the EU) on our composite Labour Market Performance index. The leading country, Iceland, is an outlier in terms of labour market performance and seems less realistic as a comparator for a much larger economy such as the UK.

The impressive recent rise in UK employment rates reflect a number of factors. First, there is a long-term trend towards higher female participation in the workforce. Second, there is a more recent trend towards encouraging people to remain in the workforce for longer, particularly women, whose state pension age has risen from 60 to 65 since 2011. Third, unemployment rates have fallen sharply from their post-crisis peak in 2012 (see Figure 4.2), most notably for young people whose employment prospects were hit relatively hard by the deep recession of 2008-9.

How much further could the UK employment rate rise? To answer this question, it is helpful to benchmark the UK's performance against other OECD countries for key demographic groups. PwC has been doing this for some years through its Golden Age Index (for 55-69 year-olds) and its Youth Employment Index (for 16-24 year-olds) and in this article we update the analysis we published last year for these two indices. We also refer to our latest Women in Work index results, as published in March 2019, and present a new combined index covering all three sub-indices.

Figure 4.2 – UK employment & unemployment (%)



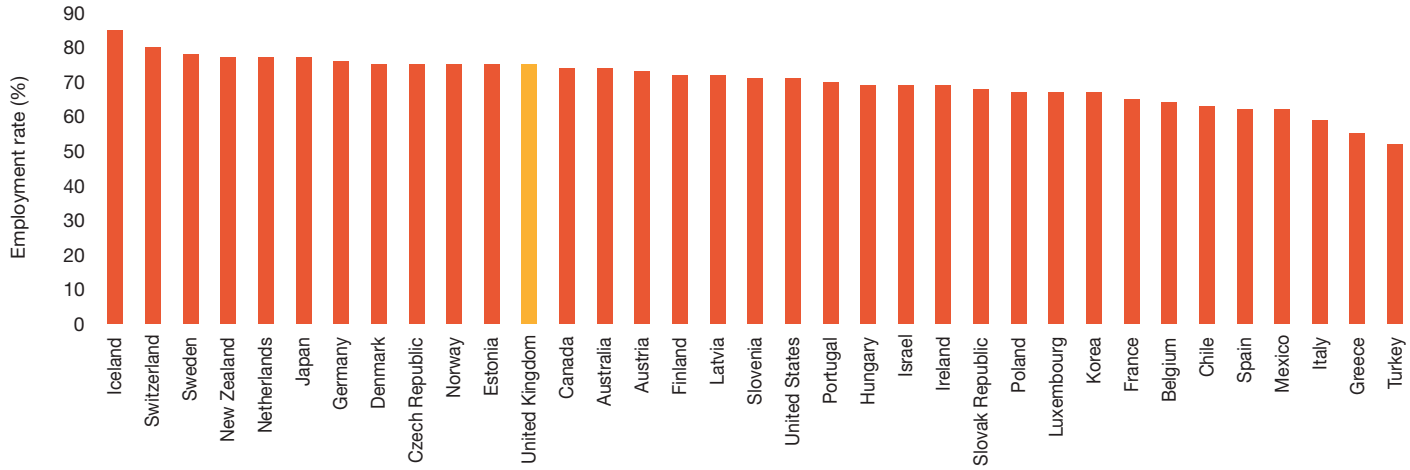
Source: OECD

The discussion in the rest of the article is structured as follows:

- Section 4.1 includes comparisons of recent UK labour market performance with other OECD countries for all workers
- Section 4.2 discusses updated results for our Golden Age and Youth Employment indices
- Section 4.3 considers how the UK performs on a new combined index covering women, young and older workers
- Section 4.4 discusses the potential boost to GDP if the UK could match the labour market performance of top performers in the long term
- Section 4.5 discusses some of the policy measures that the UK could take to realise these gains
- Section 4.6 summarises and concludes.

Methodological details of our three comparative labour market indices are contained in a technical annex.

Figure 4.3 – OECD employment rate (2018)



Source: OECD

4.1 – Comparison between the UK labour market and the OECD

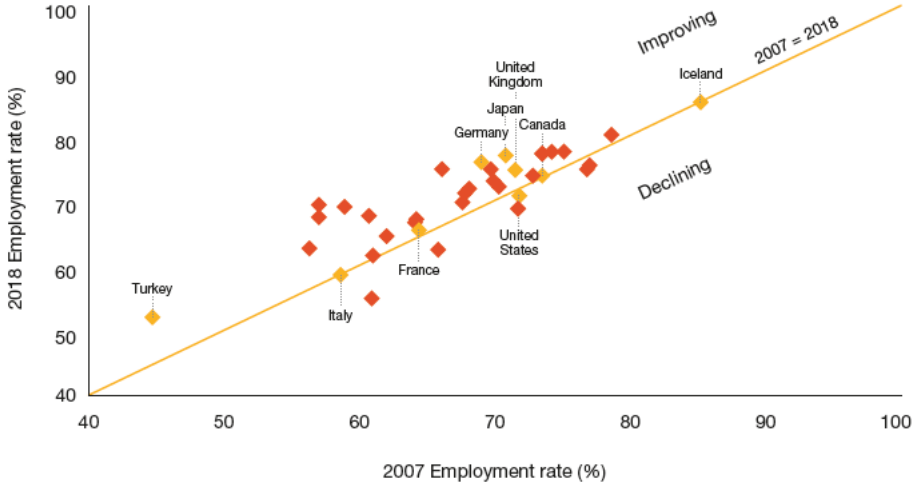
Although the UK is currently experiencing record rates of employment, its performance looks more middling when compared to the rest of the OECD, ranking 13th out of 35 countries (see Figure 4.3.) The strongest performers include Iceland, which tops the rankings for the ninth year in a row, along with Switzerland, New Zealand, Germany and Japan. Although Iceland has reached an employment rate of 85%, when trying to understand how far UK employment rates could rise over the next few years, it is more appropriate to compare it to larger economies, such as Switzerland or Sweden, which rank 2nd and 3rd respectively, and have employment rates of around 80%. Japan, which has a considerably larger economy than the UK, also has an employment rate of more than 78%, demonstrating that there is still potential for the UK see employment rise further.

Although this comparison is useful for understanding the UK's relative performance within the OECD, it is also important to put the current performance in historical context. The 2008 global financial crisis was a massive shock to the world economy and the subsequent global recession caused employment rates to fall across the OECD. Therefore, comparing current employment and unemployment rates to those in 2007 gives a useful picture of how countries are performing relative to their pre-crisis levels.

As seen in Figure 4.4, the majority of OECD countries, including the UK, have employment rates at or above pre-crisis levels. The UK is a relatively strong performer compared with the rest of the G7, showing a notable improvement on its 2007 employment rate. However, since 2007, both Germany and Japan have seen their employment levels improve more quickly, meaning they have now overtaken the UK. The rest of the G7 (the US, Canada, France and Italy) have failed to increase their employment rates beyond pre-crisis levels, with Italy faring worst of all. Turkey lags behind the rest of the OECD, both in 2007 and 2018, but has made significant improvements on its 2007 employment rate, rising 7% to 52%.

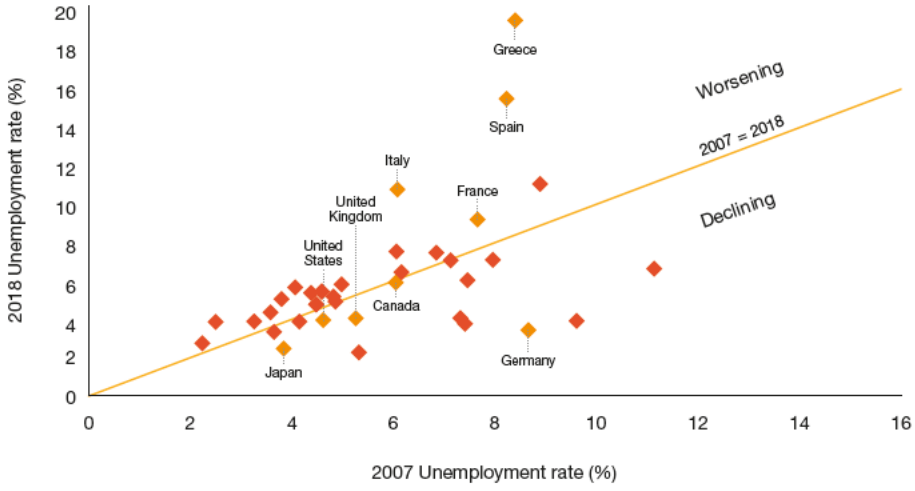
When comparing unemployment rates between 2007 and 2018, the picture across the OECD is more mixed. As shown in Figure 4.5, many countries still have higher unemployment rates than in 2007, even though employment rates have largely returned to or overtaken pre-crisis levels. In the G7, both Italy and France still have significantly higher unemployment rates than in 2007, along with Spain and Greece, two countries badly impacted by the Eurozone crisis. Germany, by contrast, has seen one of the strongest improvements on its 2007 unemployment rate, whilst the unemployment rate in the UK has also fallen some way below 2007 levels.

Figure 4.4 – Employment rate 2007 vs 2018



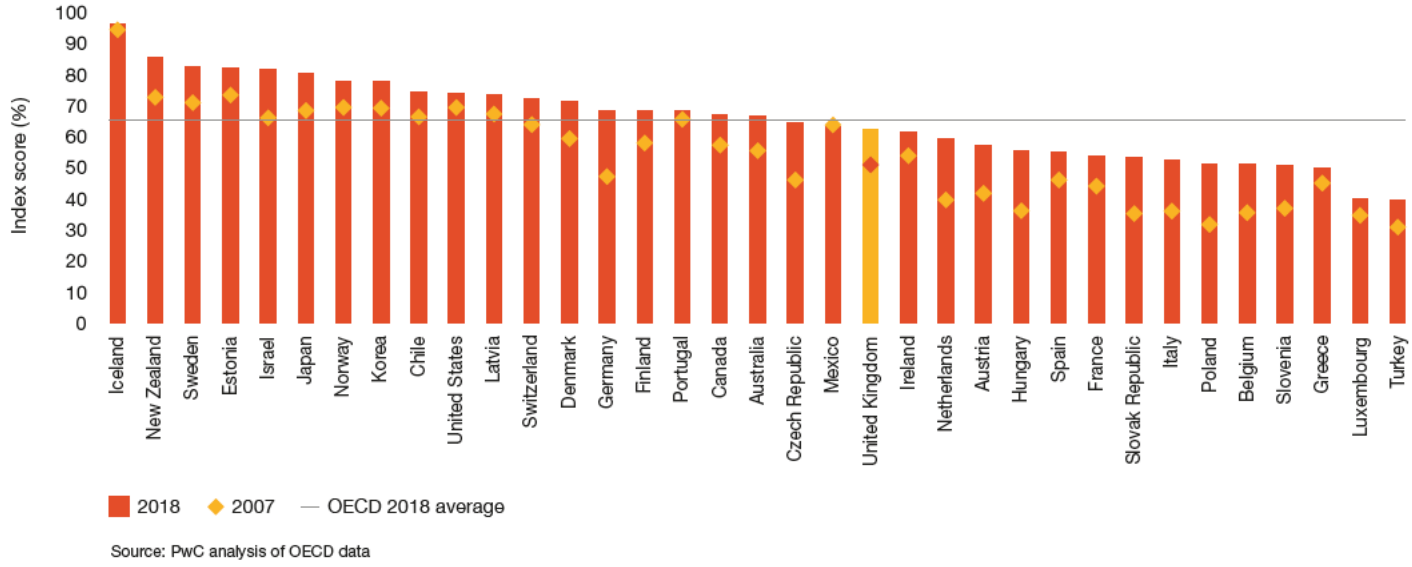
Source: PwC analysis of OECD data

Figure 4.5 – Unemployment rate 2007 vs 2018



Source: PwC analysis of OECD data

Figure 4.6 – 2018 Golden Age Index scores



Source: PwC analysis of OECD data

4.2 – Updated results for the PwC Youth Employment and Golden Age indices

In this section, we present updated results for our Youth Employment and Golden Age indices, which measure how well OECD counties harness the potential of their younger and older workers. It becomes clear when comparing the UK's performance with the rest of the OECD, and in particular with the top performers, that there is much scope for the UK to further increase its employment rate by encouraging further participation in the workforce from these demographic groups.

Golden Age index for older workers

PwC's Golden Age Index is constructed through a weighted average of seven indicators which reflect the labour market for those aged 55 and above, including employment, earnings and training (see annex to this article for further details of how this index and our other labour market indices are constructed). The indicators are normalised, weighted and aggregated to generate an index score for each country on a scale from 0 to 100, with the average OECD value in the base year of 2003 set at 50. This allows for comparisons over time and between countries, as well as giving an indication of absolute improvements for a country over time.

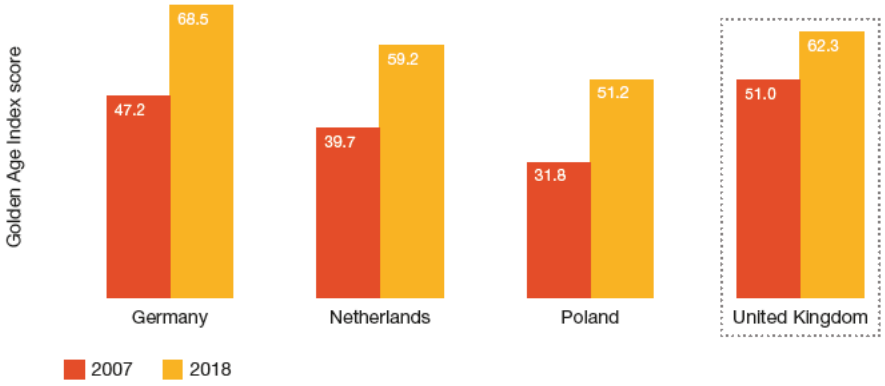
As can be seen from Figure 4.6, the UK falls slightly below the OECD average for its Golden Age Index score, with a score of 62, ranking 21st out of 35 countries. This represents a relative fall in position from 20th in 2007, despite the fact that the UK has seen a significant absolute increase in score of 11 points over this time. These results show that the rest of the OECD's scores have been increasing at a faster rate than that of the UK. It also suggests that there is still scope for further improvement in the employment of older workers in the UK to match the top performers in our index.

As in previous years, Iceland is once again at the top of the index, followed by New Zealand, Sweden, Estonia and Israel. These are a diverse set of countries, both geographically and culturally, although they are all relatively small economies, and have varied performances across the different indicators. For example, while Iceland leads the way for its employment rate and relative participation in training for those over 55, Estonia performs strongly for its narrow gender gap in employment and low incidence of part-time work for its older workers. All of the Nordic countries perform well, while the southern European countries are clustered towards the bottom of the rankings. Mexico is the only country to see a decrease in its absolute index score from 2007, caused by a reduction in the effective labour force exit age from 74 to 69. However, this is owing to increases in social pension provision over this time rather than a decline in labour market conditions.

The biggest improvers since 2007 are Germany, the Netherlands and Poland, as shown in Figure 4.7. These improvements have largely been driven by increases in employment rates for those over 55, which follows the pattern for the rest of the OECD. This is also the case for the UK, owing to recent increases in the state pension age, in particular for women. However, the UK still only ranks 16th out of 35 for its employment rate for 55 to 64 year-olds, which is at 65% versus 81% for Iceland and 78% for New Zealand. The UK plans to increase the state pension age to 66 for both men and women by October 2020, with further increases expected by 2028, which may lead to further rises in employment for older workers.

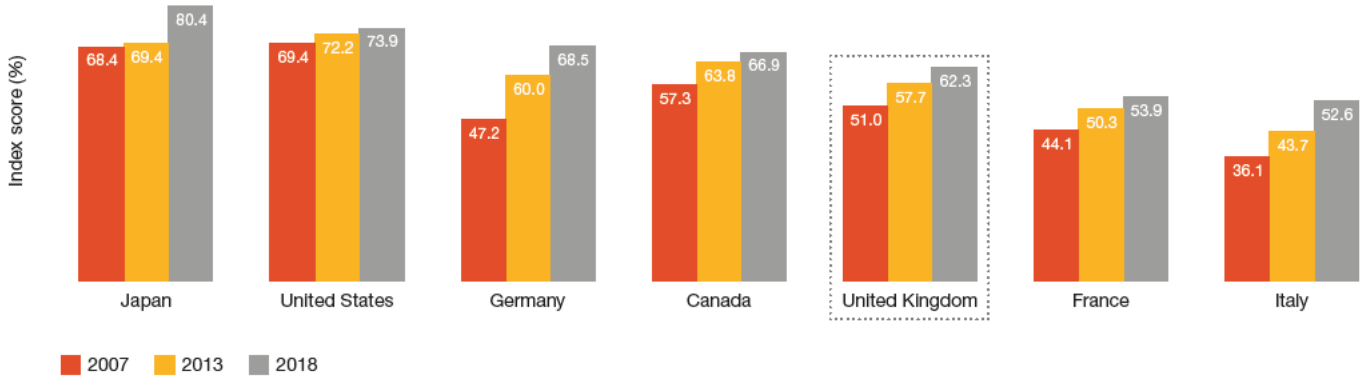
Owing to Germany's strong improvements, it has overtaken the UK in the overall rankings, leaving the UK in the bottom half of G7 countries (see Figure 4.8), albeit still well ahead of France and Italy. Japan has made a notable improvement since 2013 to become the top performer in the G7.

Figure 4.7 – Largest improvements in GAI (2007 vs 2018)



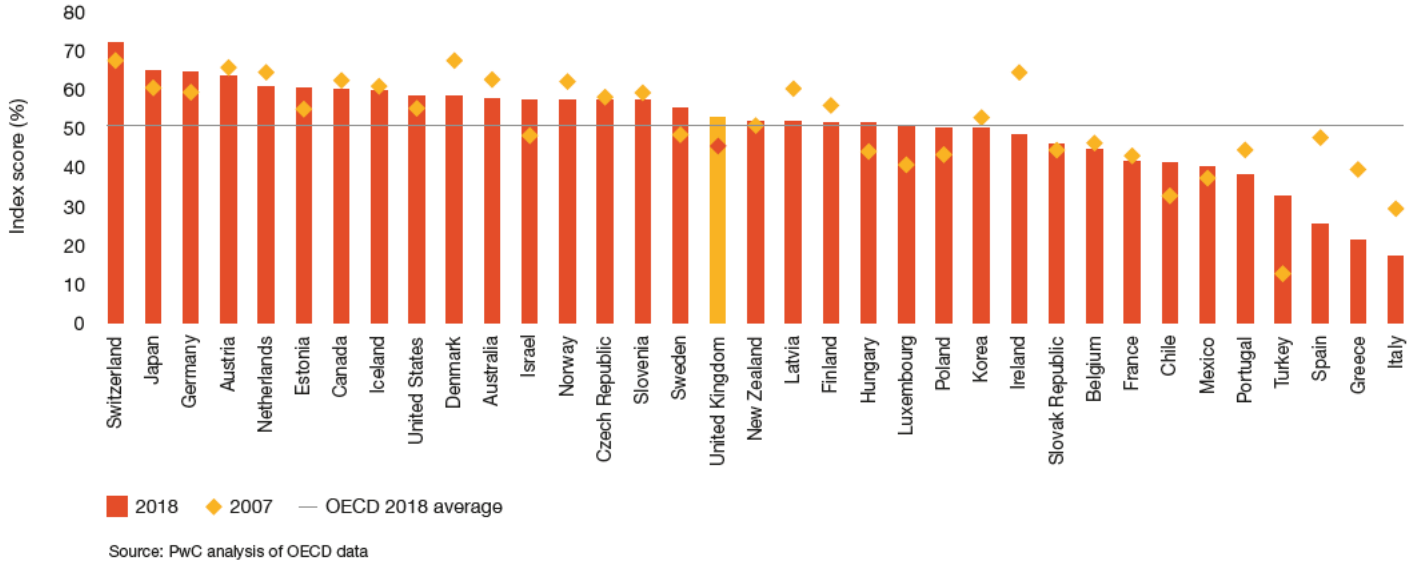
Source: PwC analysis of OECD data

Figure 4.8 – G7 Golden Age Index scores



Source: PwC analysis of OECD data

Figure 4.9 – 2018 Youth Employment Index scores



Source: PwC analysis of OECD data

Youth Employment index

Our Youth Employment Index (YEI) is constructed using a weighted average of eight indicators which reflect the labour market for workers aged 15 to 24 across the OECD, again including indicators related to employment, education and training (see annex for more details). As for the Golden Age index, these indicators are normalised, weighted and aggregated to generate index scores for each county on a scale from 0 to 100, this time setting 2006 as the base year, with the OECD average score in that year set to 50.

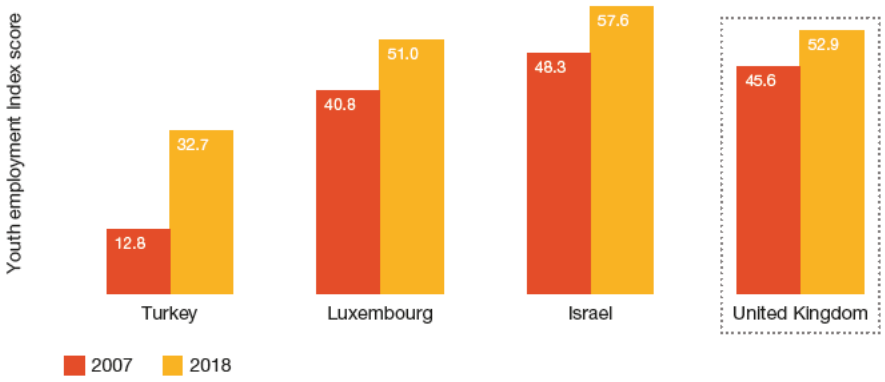
As shown in Figure 4.9, the results for the YEI across the OECD are more mixed than for the Golden Age Index, with a higher variance between scores and many countries with a lower score in 2018 than in 2007. Switzerland maintained its position at the top of the rankings, as it has done for several years, followed by Japan and then Germany. These two economies have switched places since 2016.

The UK performs better for younger workers than older ones, coming 17th out of 35 countries and performing slightly above the OECD average with a score of 53. This represents a slight improvement on 2017 and a significant improvement on its 2007 score of 46. The UK has improved faster than the OECD average, climbing the YEI rankings by 7 places since 2007. This increase in score has largely been driven by a reduction in the UK's NEET rate (the percentage of those not in employment, education or training) for 20 to 24 year-olds of over 5 percentage points, which is one of the best performances on this measure across the OECD. Another key area of improvement is in the UK's educational enrolment rate for 15 to 19 year-olds, increasing from 70% in 2007 to 85% in 2018. This is due to increases in the school leaving age over this period from 16 to 18, moving the UK more into line with the OECD norm in this respect. The UK performs worst for its relative unemployment ratio between 15 to 24 year-olds and 25 to 54 year-olds, falling to 34th in the rankings on this indicator. This shows that there is still more to be done to ensure young workers are sharing in wider jobs growth in the UK economy.

As shown in Figure 4.10, the biggest improvers on the YEI since 2007 are Turkey, increasing its score by 20 points to reach 32nd, Luxembourg, which has raised its score by 10 points, and Israel, which has seen a score increase of 9 points.

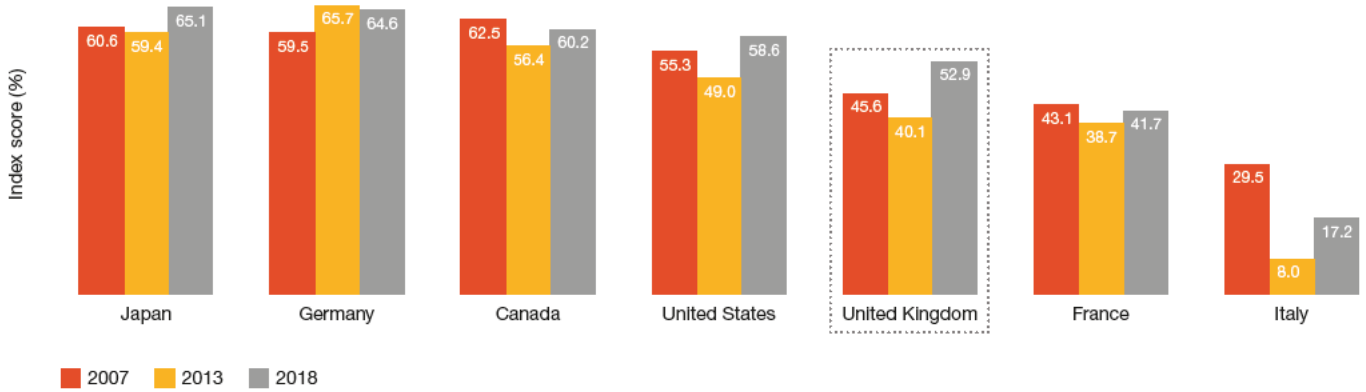
As shown in Figure 4.11, the UK is still lagging behind most of the G7 in terms of its overall Youth Employment Index score, with Japan and Germany in particular being two of the strongest performers in the OECD (while Italy has been one of the weakest). However, the UK has shown the largest rise in its YEI score among G7 members since 2007. It is important here to note that, unlike for the Golden Age Index, where all G7 countries improved in absolute score since 2007, most G7 countries experienced a considerable reduction in their Youth Employment Index score after 2007, with several countries still not at pre-crisis levels.

Figure 4.10 – Largest improvements in YEI (2007 vs 2018)



Source: PwC analysis of OECD data

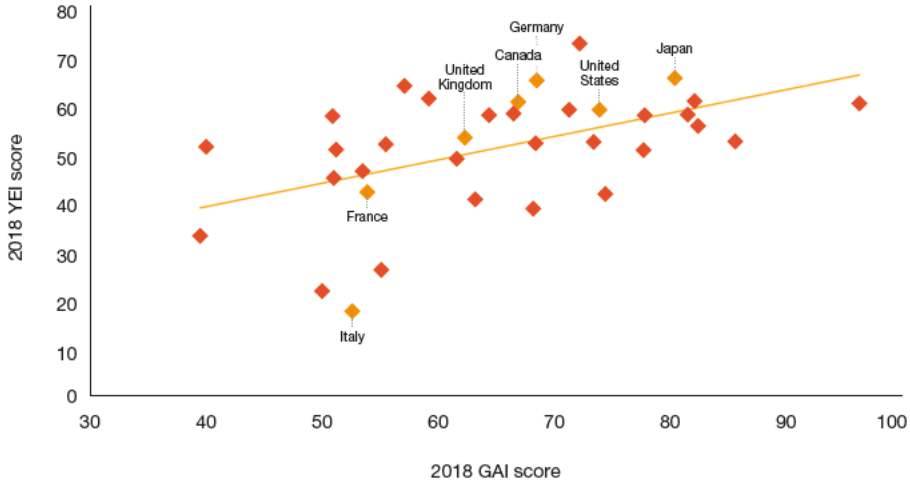
Figure 4.11 – G7 Youth Employment Index scores



Source: PwC analysis and OECD data

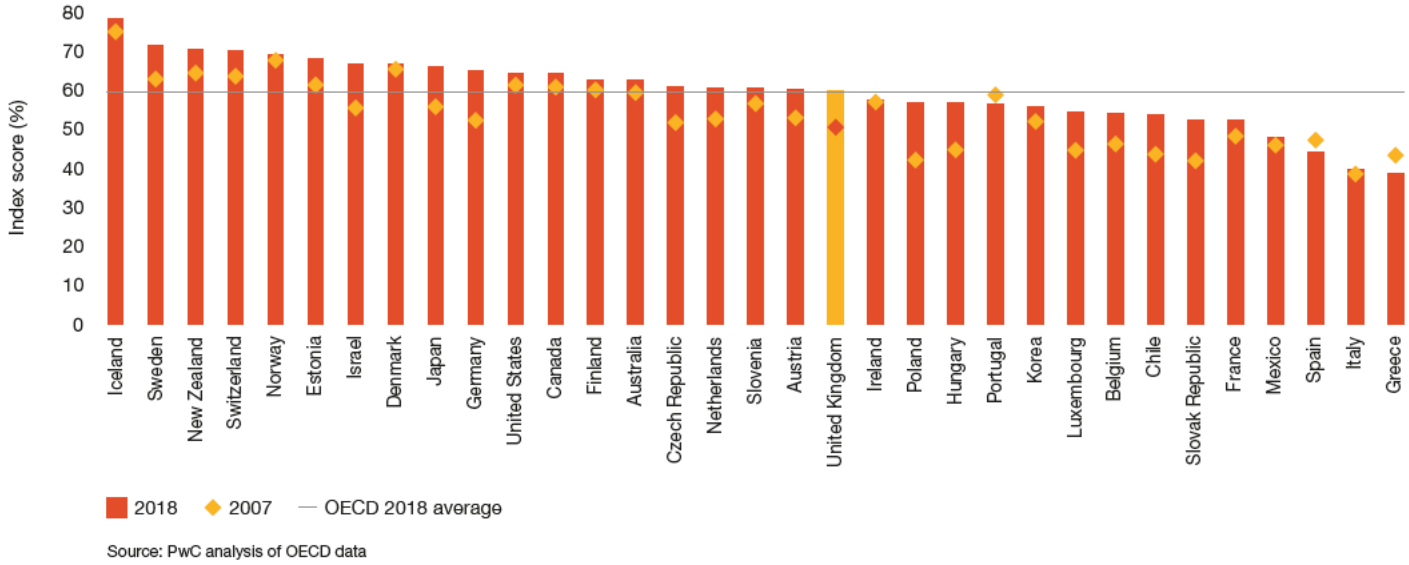
A common misconception is that encouraging older workers to remain in the workforce for longer will crowd out younger workers. If this were the case, then we might expect to see a negative correlation between a country's scores on the Youth Employment and Golden Age indices. Figure 4.12 shows, however, that there is a significant positive correlation between the two index scores. This shows that there is not a trade-off between including younger and older workers in the labour market, as both indices are driven by similar factors, including the overall strength of the economy, the flexibility of the labour market and government policy.

Figure 4.12 – Youth Employment Index (YEI) vs Golden Age Index (GAI) scores



Source: PwC analysis of OECD data

Figure 4.13 – 2018 Labour Market Performance Index scores



Source: PwC analysis of OECD data

4.3 – Combined PwC Labour Market Performance Index results

In this section we present the results of a new composite index, constructed from our Youth Employment and Golden Age Indices, presented above, along with our Women in Work index, the latest results of which were published in March 2019. We refer to this as the PwC Labour Market Performance Index (LMPI). Each index has been given an equal weighting to create a total combined score, which reflects the general labour market conditions for these demographic groups across different OECD countries. The results are shown in Figure 4.13.

Unsurprisingly, Iceland comes first in the combined index by a high margin, due to its high scores in the Women in Work and Golden Age Indices, although it is rather a special case as a small island economy.

The UK comes 19th out of 33 countries (Latvia and Turkey have been excluded as they were not included in this year's Women in Work index), and scores around the OECD average. The UK has increased its absolute score by 11 points since 2007, while the OECD average is a rise of 6 points. The UK's healthy improvement has seen it rise up the relative rankings by 3 places. The UK's highest ranking (13th) is in the Women in Work index, but its largest improvement in score come from the Golden Age Index, thanks to higher employment rates.

The largest changes in LMPI ranking since 2007 come from Poland, which has risen by 10 places to 21st, Israel and Germany, which have both risen by 9 places to 7th and 10th respectively. Countries hit especially hard by the Eurozone crisis, such as Portugal, Ireland and Spain have fallen most since 2007, but have shown some improvement in absolute index scores in recent years.

Overall, it appears that labour markets have strengthened for all three demographic groups across the OECD in the past decade, but the gains have been more notable for women and older workers, as they have experienced structural improvements in labour market participation through policy changes. In the UK, these have included increases in the female state pension age and the introduction of shared parental leave. Younger workers have seen some general improvements in labour market conditions, but these have largely come about through stronger economic performance in the post-crisis period than through specific government policy measures.

4.4 – Potential boost to GDP from improved labour market performance

We have also conducted analysis of the potential long-run boost to GDP from improving the UK's labour market performance in 3 key indicators: its NEET rate for 20 to 24 year=olds, its full-time equivalent (FTE) employment rate for women aged 25 to 54, and its FTE employment rate for those aged 55 and over. If the UK could match Sweden, which ranks 2nd in the overall index, in these three metrics, it could see a potential GDP boost of up to around £250bn, or around 12% of GDP. We have selected Sweden as our benchmark country as it performs strongly across all three indices and is more comparable to the UK in its scale and economic structure than Iceland.

There is a wide variance of potential gains across the OECD from matching Swedish performance, with the highest performers having the least to gain and those at the bottom of the LMPI rankings the most. Greece could see the highest boost to its economy in percentage terms (up 39% of GDP), while the US has the most to gain in absolute terms (almost $2 trillion), due to the size of its economy. The OECD as a whole could see a potential GDP boost of up to $7 trillion if it could match Sweden across these three variables, with the majority of these gains, around $4.7 trillion, coming from the G7.

4.5 – Policy options

It is beyond the scope of this article to offer a comprehensive discussion of the policy options for the UK to further improve its labour market performance and realise the large potential GDP gains identified above. But below we summarise three key areas where we think further progress can be made for different demographic groups: dispelling misconceptions, encouraging training and promoting flexible working[3].

Dispel misconceptions and combating discrimination: Often, important barriers to entry for specific groups of workers are the misconceptions held by them or by potential employers, preventing people from applying or being hired for the correct position. This may involve implicit discrimination even where legal rules are being followed. For example, many young people believe that they will be worse off in an apprenticeship than as a graduate, disincentivising them from applying and exacerbating the growing skills mismatch present in the UK economy, causing there to be an ever-increasing shortage of skills in STEM subjects and a large proportion of graduates in non-graduate roles. Harmful myths also impact older workers, with many employers seeing them as less productive than their younger counterparts, making employers less likely to hire and retain them. Governments could combat this by introducing specific policies, such as financial incentives or information campaigns, to dispel these myths, giving firms and workers the information they need to make the right decisions for their business or career.

Encourage training: A second obstacle preventing many from entering or remaining in the workforce is a lack of appropriate training. The UK has already made some steps towards further harnessing the potential of young workers with the introduction of the Apprenticeship Levy, which has incentivised some firms, especially larger firms, to hire more apprentices. However, through redesigning the policy, such as removing the link to payroll, which disproportionately taxes firms who hire large numbers of workers relative to revenue, the Levy could be made even more effective. Countries that score well in the Youth Employment Index also typically have high quality vocational training opportunities for young people, such as Germany and Switzerland, who both have large-scale public vocational education and training programmes. With regards to older workers, the UK does not score highly for its relative participation in training ratio between 55 to 64 year-olds and 25 to 54 year-olds. Recent data from the Labour Force Survey suggest that only 45% of those aged 65 and over have received at least one day of training in the last 12 months. Advances in technology are putting many jobs at risk, especially for older workers. Introducing specific policies to target this issue, such as training schemes in digital jobs for older workers, will be necessary to ensure these workers remain productive and relevant in a changing labour market.

3 For further detail on potential policy options for each demographic, please see our previous reports:
https://www.pwc.co.uk/economic-services/WIWI/pwc-women-in-work-2019-final-web.pdf
https://www.pwc.co.uk/economic-services/YWI/youth-employment-index-2018-final.pdf
https://www.pwc.co.uk/economic-services/golden-age/golden-age-index-2018-final-sanitised.pdf

Promote flexible working: One of the most effective ways that business can attract a more diverse workforce is through promoting flexible working wherever possible. Younger workers tend to be more interested in other forms of compensation to salary, such as increased holiday, more relaxed uniform policy and medical insurance benefits. Older workers may also benefit from being able to work from home more freely or work part-time. Flexible working policies would particularly benefit older female workers, who have a high risk of leaving the labour force owing to caring responsibilities for their spouse or grandchildren. Government policy can be introduced to encourage businesses to adopt these practices. In Finland the Employment Contracts Act 2011 was amended to entitle working carers to extended care leave.

4.6 – Summary and conclusions

The UK is currently experiencing record rates of employment. However, this achievement only places it 13th out of 35 countries in the OECD, which suggests that there are still considerable gains to be made to further include workers across all demographic groups into the labour force, building on the gains of recent years.

Although the UK has improved in its scores in our Youth Employment and Golden Age indices since 2007 (and indeed since 2016), these changes have only brought it up to around the OECD average. Most of these improvements have come from increases in the employment rate, in particular for older workers. In our new composite Labour Market Performance Index (LMPI), the UK ranks 19th out of 33 OECD countries covered by this index.

The gains from harnessing the potential of all groups of workers could be significant. If the UK could match Sweden's labour market performance, we estimate that the boost to UK GDP could be around £250bn, or 12% of GDP. The potential gain for the OECD as a whole from matching Swedish performance could be up to around $7 trillion, with $4.7 trillion of this coming from the G7 economies.

There are many policy options open to countries to encourage further participation. First, by using financial incentives and information campaigns, the government could encourage more people to apply for the right positions. Second, both businesses and governments could encourage further and higher quality vocational training for workers to ensure their skillsets match the changing needs of the economy, especially in relation to developments in digital technologies. Third, businesses could promote flexible working wherever possible to attract a more diverse workforce.

Governments could encourage flexible working through financial incentives or by introducing legislation, such as entitling certain workers to care leave and providing additional state-subsidised childcare. By focusing on the specific needs of certain demographics and taking policy inspiration from other OECD countries, the UK could build upon its already strong recent jobs market performance to become a top performer in the OECD in the longer term.

Technical annex: methodology used to compile PwC labour market indices

All three PwC labour market indices – the Women in Work Index (WIW), the Golden Age Index (GAI) and the Youth Employment Index (YEI) – are calculated using the same general methodological approach.

Firstly, the different indicators used in each index are standardised using the z-score method, based on the mean and standard deviation of the sample of OECD countries in a particular base year for each index (2000 for WIW, 2003 for GAI and 2006 for YEI). This allows for comparisons both across countries and across time. A positive/negative factor is applied to each indicator to ensure each variable enters the index with the correct sign (e.g. positive for employment rates, negative for unemployment rates). Individual country scores are constructed as a weighted average of these normalised indicator values and rescaled to values between 0 and 100, with the average value across all 36 countries set, by definition, to 50 in the chosen base year.

All indices have been constructed using the latest available data from the OECD. Index scores for previous years have been updated using the most recent figures for that year and therefore may be different to those published in previous years.

PwC Golden Age Index

Our Golden Age Index is constructed from 7 different indicators and given the following weights:

Technical annex table 4.1: Golden Age Index indicators and weightings

Measure	Weighting (%)
Employment rate 55-64 (% of the age group)	40
Employment rate 65-69 (% of the age group)	20
Gender gap in employment, 55-64 (ratio women/men)	10
Incidence of part-time work, 55-64 (% of total employment)	10
Full-time earnings 55-64 relative to 25-54 (ratio)	10
Effective labour force exit age, 55-64 (years)	5
Participation in training (ratio, 55-64 relative to 25-54)	5

Source: PwC Analysis of OECD data

The latest overall results are as follows:

Technical annex table 4.2: Golden Age Index Scores

Rank			Country	Score		
2007	**2017**	**2018**		**2007**	**2017**	**2018**
1	1	1	Iceland	94.4	98.4	96.3
3	2	2	New Zealand	72.7	85.8	85.6
4	4	3	Sweden	70.9	81.4	82.4
2	3	4	Estonia	73.4	81.5	82.1
11	5	5	Israel	66.1	81.2	81.5
8	6	6	Japan	68.4	79.2	80.4
5	8	7	Norway	69.4	77.7	77.8
7	7	8	Korea	69.2	78.1	77.7
10	9	9	Chile	66.4	74.1	74.4
6	10	10	United States	69.4	73.5	73.9
9	12	11	Latvia	67.3	71.3	73.4
13	11	12	Switzerland	63.9	71.9	72.2
15	13	13	Denmark	59.4	70.1	71.3
21	14	14	Germany	47.2	67.6	68.5
16	15	15	Finland	58.0	66.4	68.4
12	18	16	Portugal	65.6	66.1	68.2
17	16	17	Canada	57.3	66.4	66.9
18	17	18	Australia	55.5	66.3	66.5
22	20	19	Czech Republic	46.1	62.3	64.4
14	19	20	Mexico	63.8	63.0	63.2
20	**21**	**21**	**United Kingdom**	**51.0**	**61.5**	**62.3**
19	22	22	Ireland	53.9	60.2	61.6
27	23	23	Netherlands	39.7	57.9	59.2
26	24	24	Austria	41.8	55.3	57.1
29	26	25	Hungary	36.2	53.6	55.5
23	25	26	Spain	46.1	54.0	55.1
25	27	27	France	44.1	53.3	53.9
32	28	28	Slovak Republic	35.3	52.6	53.5
30	29	29	Italy	36.1	51.6	52.6
34	30	30	Poland	31.8	50.7	51.2
31	31	31	Belgium	35.6	49.6	51.0
28	33	32	Slovenia	37.0	47.9	50.9
24	32	33	Greece	45.1	48.0	50.0
33	34	34	Luxembourg	34.7	39.5	40.0
35	35	35	Turkey	30.9	38.9	39.5
			Average	**54.4**	**64.5**	**65.4**

Source: PwC Analysis of OECD data

PwC Youth Employment Index

Our Youth Employment Index is constructed from 8 different indicators using the following weights:

Technical annex table 4.3: Youth Employment Index indicators and weightings

Measure	Weighting (%)
NEET rate 20-24 (% of the age group)	20
Employment rate 15-24 (% of the age group)	20
Unemployment rate (% of the labour force)	10
Relative unemployment rate youth/adult (15-24)/(25-54)	10
Incidence of long-term unemployment (% of unemployment)	10
Incidence of part-time work (% of employment)	10
Enrolment 15-19 (% in education)	10
School drop-outs (% of the age group)	10

Source: PwC Analysis of OECD data

The overall results are as follows:

Technical annex table 4.4: Youth Employment Index Scores

Rank			Country	Score		
2007	2017	2018		2007	2017	2018
2	1	1	Switzerland	67.6	72.3	72.2
10	3	2	Japan	60.6	63.9	65.1
12	2	3	Germany	59.5	64.4	64.6
3	4	4	Austria	65.8	63.2	63.5
5	5	5	Netherlands	64.6	60.3	60.9
17	8	6	Estonia	55.1	60.0	60.4
7	6	7	Canada	62.5	60.3	60.2
9	7	8	Iceland	61.0	60.1	59.9
16	9	9	United States	55.3	58.6	58.6
1	10	10	Denmark	67.6	58.2	58.6
6	13	11	Australia	62.7	57.3	57.8
21	11	12	Israel	48.3	57.9	57.6
8	14	13	Norway	62.2	57.2	57.5
14	12	14	Czech Republic	58.2	57.8	57.5
13	15	15	Slovenia	59.3	57.2	57.3
20	16	16	Sweden	48.6	55.2	55.3
24	**17**	**17**	**United Kingdom**	**45.6**	**52.9**	**52.9**
19	19	18	New Zealand	50.9	51.6	52.1
11	18	19	Latvia	60.4	52.0	52.0
15	21	20	Finland	56.1	51.2	51.7
27	20	21	Hungary	44.2	51.5	51.5
30	23	22	Luxembourg	40.8	50.1	51.0
28	24	23	Poland	43.4	50.0	50.4
18	22	24	Korea	52.9	50.6	50.3
4	25	25	Ireland	64.6	48.4	48.5
26	26	26	Slovak Republic	44.6	45.8	46.0
23	27	27	Belgium	46.4	43.9	44.6
29	29	28	France	43.1	41.3	41.7
33	28	29	Chile	32.8	41.6	41.3
32	30	30	Mexico	37.4	40.2	40.2
25	31	31	Portugal	44.6	37.8	38.3
35	32	32	Turkey	12.8	32.5	32.7
22	33	33	Spain	47.8	25.3	25.7
31	34	34	Greece	39.6	21.5	21.4
34	35	35	Italy	29.5	17.0	17.2
			Average	**51.3**	**50.5**	**50.8**

Source: PwC Analysis of OECD data

PwC Women in Work Index

Our Women in Work Index is constructed from 5 different indicators using the following weights:

For the most recent set of results, please refer to our latest Women in Work Index report, published in March 2019[4].

PwC Labour Market Performance Index

Our new composite index, the Labour Market Performance Index, was constructed by taking the mean score for each country, using its latest scores from the GAI, YEI and WIW. Each score was given an equal weighting in the composite index. This covered the 33 OECD countries where we had data for all three indices.

Technical annex table 4.5: Women in Work Index indicators and weightings

Measure	Weighting (%)
Gap between female and male earnings	25
Female labour force participation rate	25
Gap between female and male labour force participation rates	20
Female unemployment rate	20
Share of female employees in full-time employment	10

Source: PwC Analysis of OECD data

4 https://www.pwc.co.uk/economic-services/WIWI/pwc-women-in-work-2019-final-web.pdf

The full results are as follows:

Technical annex table 4.6: Labour Market Performance Index Scores

Rank			Country	Score		
2007	2013	2018		2007	2013	2018
1	1	1	Iceland	75.0	77.5	78.4
6	5	2	Sweden	62.9	65.3	71.5
4	4	3	New Zealand	64.4	66.2	70.4
5	3	4	Switzerland	63.6	66.6	70.0
2	2	5	Norway	67.7	68.9	69.2
7	11	6	Estonia	61.4	60.1	68.1
16	6	7	Israel	55.5	64.1	66.8
3	7	8	Denmark	65.4	62.8	66.6
15	14	9	Japan	55.8	58.2	66.2
19	9	10	Germany	52.3	61.3	65.0
8	13	11	United States	61.3	59.6	64.5
9	8	12	Canada	60.8	61.4	64.4
10	10	13	Finland	60.1	60.6	62.6
11	12	14	Australia	59.4	59.7	62.5
21	20	15	Czech Republic	51.7	50.9	61.0
18	16	16	Netherlands	52.7	57.0	60.7
14	21	17	Slovenia	56.6	50.4	60.6
17	15	18	Austria	52.9	57.0	60.3
22	**18**	**19**	**United Kingdom**	**50.5**	**52.0**	**59.8**
13	28	20	Ireland	57.0	45.7	57.5
31	26	21	Poland	42.1	47.4	56.9
27	29	22	Hungary	44.7	43.3	56.7
12	24	23	Portugal	58.8	48.1	56.5
20	19	24	Korea	52.0	51.3	55.7
28	22	25	Luxembourg	44.6	49.7	54.3
25	25	26	Belgium	46.2	47.7	53.9
29	17	27	Chile	43.6	54.1	53.7
32	30	28	Slovak Republic	41.9	42.0	52.5
23	23	29	France	48.2	49.4	52.3
26	27	30	Mexico	45.9	45.8	48.0
24	31	31	Spain	47.2	33.0	44.1
33	32	32	Italy	38.5	32.8	39.8
30	33	33	Greece	43.3	27.5	38.5
			Average	**54.1**	**53.9**	**59.7**

Source: PwC Analysis of OECD data

Methodology for calculating potential GDP impacts from improving labour market conditions

The total GDP boost estimate is calculated through summing together the individual GDP boost estimates from matching the chosen benchmark country, Sweden, across three key indicators: the NEET rate for 20-24 year olds, FTE employment rates for women and FTE employment rates for workers over 55. The female FTE figure is scaled down to 60% of its original value to estimate the GDP boost for females aged 25 to 54 to ensure there is no overlap between age groups for the different GDP boost figures. A scaling factor of 60% is chosen as this represents the percentage of the UK's female labour force within this age bracket. For simplicity, we apply the same scaling factor to other countries (given our primary focus in this article is on the UK).

For young workers, we assume that a percentage point decrease in a country's NEET rate will lead to a 0.34% increase in GDP, as younger workers will on average not reach their productive potential until later in their careers (for further details of the rationale behind this assumption, which draws on an earlier academic study, please see our original Youth Employment Index report published in 2015).

For the FTE rate for females, we calculate the GDP per FTE, using total GDP and full-time and part-time employment rates for each country (scaled down by 60% as described above), and then use this figure to calculate the overall estimated GDP boost from increasing the female FTE rate to that of Sweden.

For the FTE rate for those over 55, a similar approach was taken, but instead using the FTE rate for those aged 55 to 64 and 65 and over. In both cases we calculate full-time equivalent employment as full-time employment plus half of part-time employment, making the assumption that a full-time worker is twice as productive as a part-time worker.

The full set of estimates (with the US dollar figures being based on 2018 GDP values) are as follows:

Technical annex table 4.7: Potential GDP boost estimates from matching Swedish labour market performance

Country	Potential GDP boost (%)	Potential GDP boost ($bn at 2018 GDP values)
Greece	39	100
Italy	35	783
Belgium	26	143
Mexico	26	520
Spain	25	399
France	23	641
Luxembourg	21	14
Chile	18	72
Poland	18	135
Netherlands	17	161
Austria	17	80
Slovenia	17	10
Ireland	16	59
Slovak Republic	15	19
Hungary	14	26
Portugal	12	33
United Kingdom	12	352*
Australia	12	155
Korea	11	212
Germany	11	445
United States	10	1993
Finland	10	26
Israel	9	33
Denmark	9	30
Switzerland	9	55
Canada	8	134
Japan	7	388
Czech Republic	7	21
New Zealand	5	9
Estonia	4	1
Norway	4	13

Source: PwC Analysis of OECD data

* This is the US dollar estimate based on average 2018 exchange rates. In sterling terms, the estimate for the UK equates to around £250bn at 2018 GDP values.

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