

# *Empowering a new generation*

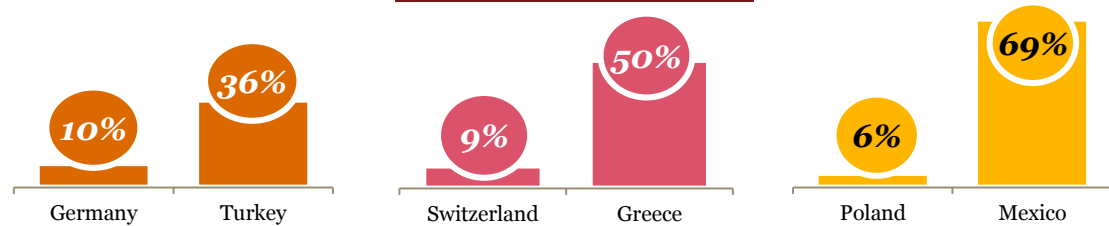
*How governments  
and businesses can  
unlock a \$1 trillion  
prize*



Share of youth not in  
employment, education  
or training

Youth unemployment  
rate

School drop-out rate



# Contents

Executive  
summary

Pg 4

1

Key results

Pg 6

2

Potential boost to  
GDP

Pg 11

3

Implications for  
policy and  
business

Pg 16

4

In depth: The  
United Kingdom

Pg 23

5

Individual labour  
market indicators

Pg 31

6

Comparison with  
other measures

Pg 42

7

Conclusion

Pg 49

8

Annexes

a. Methodology  
b. Contacts

Pg 52

# Empowering a new generation: how governments and businesses can unlock a \$1 trillion prize

**Every person is born with potential. The key is how to unlock that potential.** So, how can we provide opportunities that empower young people to take ownership over their own future outcomes? In this report, we discuss how governments and businesses can reap the rewards from playing their part in making this happen.

**In almost a half of all the OECD countries in 2015, one in four young people were unemployed for over a year. We need to pay attention to this.** What would a world look like if we are not able to grow our future leaders, innovators, entrepreneurs? Not only does this have a negative impact on productivity and government finances, but it also has long term implications for the real-life opportunities of young people and the communities around them.

**We don't need to reinvent the wheel to empower the youth of today.** We can learn from countries such as Germany, who have been able to improve economic opportunities for younger people even after the financial crisis, where youth unemployment rates dropped to around 7%.

In contrast, almost half of young people were unemployed in countries, such as Spain and Greece, who have struggled to translate their policies into positive outcomes for young people.

**We have nothing to lose but everything to gain** from sharing our experiences over what works and what doesn't. Some countries might say that we aren't the same as Germany but there is increasing recognition of the value from modern apprenticeship schemes in services sectors as well as manufacturing.

**Our PwC Young Workers Index estimates the potential gain from youth empowerment to be over \$1 trillion** across the OECD economy. We consider how governments, businesses, schools and young people themselves can work together to create economic opportunities in a way that promotes social mobility. This is what I care about: social mobility – and **I firmly believe that youth empowerment is the key to a more equal platform of opportunity.**

I graduated from UCL in 2014 and since then have worked hard to progress my career with PwC, which has given me the opportunity to take the lead on this project.

**As a young worker myself, I hope that I can show how empowering young people can help your business and change the lives of generations to come.**

Please feel free to reach out to us – we would be more than happy to discuss how you could invest in the future of your organisation and benefit from unlocking the potential of young people.



*David Tran, 23 years old*

*Consultant*

*PwC Strategy&*

E: david.n.tran@uk.pwc.com







# 1

## *Executive summary*

## Executive summary: Five key messages

1



### Index country rankings (2015)

**Switzerland, Germany and Austria** lead the table. The Nordic countries perform strongly with Iceland, Norway and Denmark taking the next 3 spots.

2



### Risers and fallers

**Israel and Germany** climbed up the rankings between 2006 and 2015. Meanwhile Spain and Ireland have struggled to recover since the global financial crisis.

3



### Potential economic gain

The total **potential economic gain** from matching German performance could be **over \$1 trillion** across the OECD in the long term.

4



### Policy implications

Governments should engage businesses in **vocational training**, promote **core skills** (such as digital and mathematics skills) and focus on **social inclusion**.

5



### Business implications

Businesses should play an active role in **designing apprenticeships** and **being proactive around youth employability**.

### What is the Young Workers Index?

*This measures how well OECD countries are developing the economic potential of their younger workers over time.*

*The index is a weighted average of eight indicators that reflect the labour market impact and educational participation of people aged between 15-24 in 35 OECD countries.*



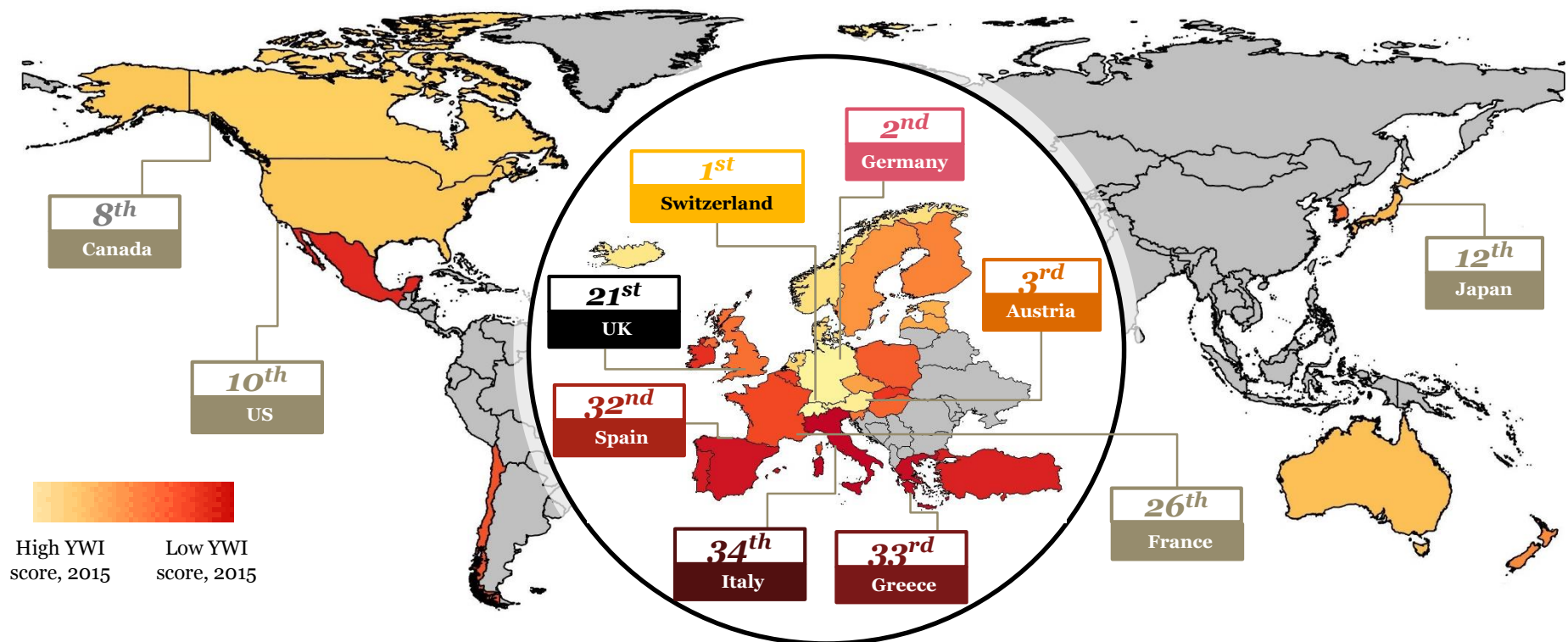
# 2

## *Key results*



# Our Young Workers Index explores the large variance in the economic prospects of young people across 35 OECD countries over time

*In 2015, the Southern European economies experienced high levels of youth unemployment and NEET\* rates reflecting the particularly long-lasting impact of the recession on young people. In contrast, countries such as Switzerland and Germany have managed to improve economic opportunities for young people since the financial crisis. In order to understand these trends, we have developed the PwC Young Workers Index.*



Sources: PwC analysis, OECD

\*NEET rates (Share of youth not in employment, education or training)

# PwC Young Workers Index: Key results

## Switzerland, Germany and Austria take the top three places

Core European countries continue to dominate the table, with Switzerland holding 1st place and Germany being the lead EU country in the index.

The UK's ranking slightly worsens from 2006 to 2014 but recovers to its original position at 21st in 2015.

### Key

- High performance
- Middle performance
- Low performance

The Nordic countries also perform strongly, with Iceland, Norway and Denmark closely following the top 3.

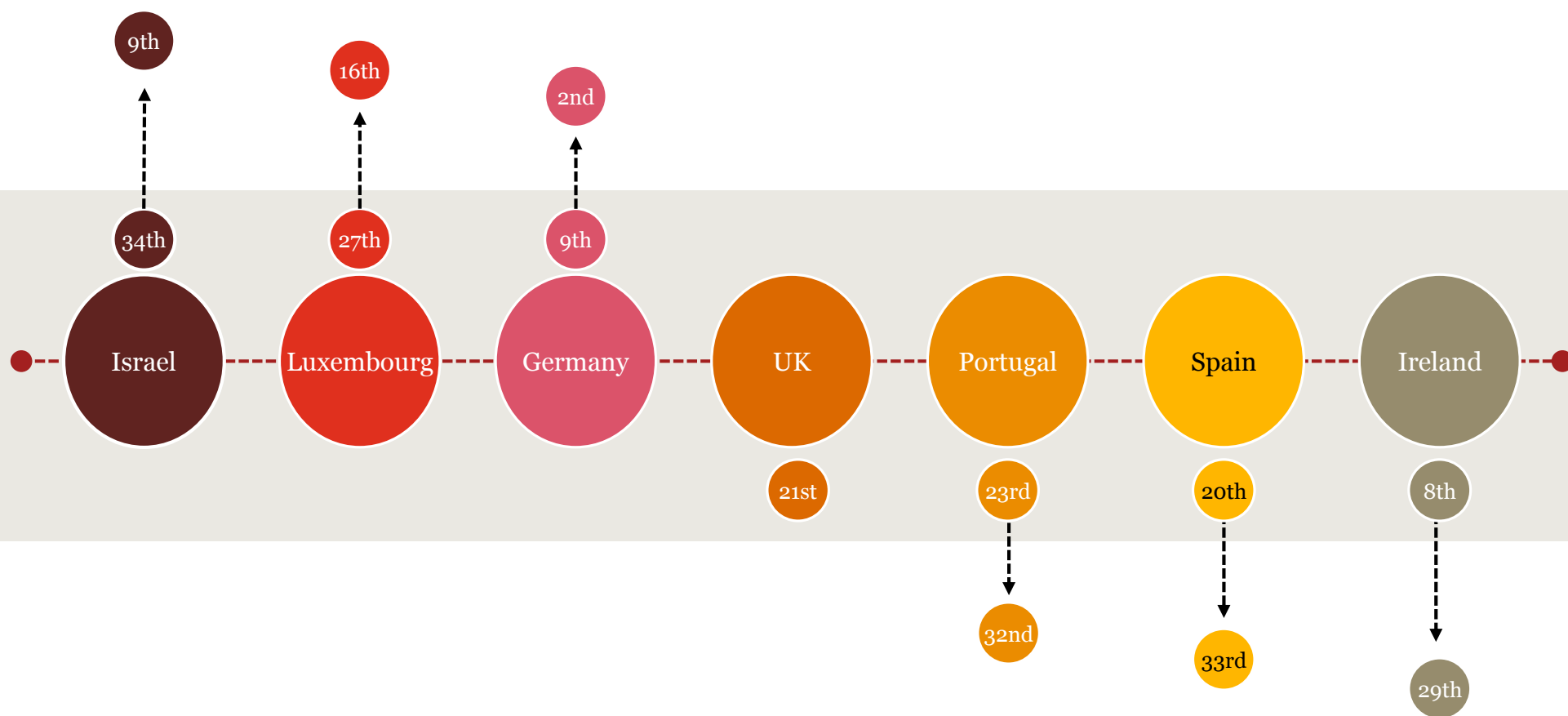
Most of the southern European economies improved their performance between 2014 and 2015, apart from Italy.

Rank				Country	Index			
2006	2011	2014	2015		2006	2011	2014	2015
1	1	1	1	Switzerland	69.1	69.7	69.0	67.7
9	2	2	2	Germany	58.1	66.1	66.2	66.1
4	3	3	3	Austria	65.4	65.7	65.2	63.6
11	9	4	4	Iceland	56.4	55.9	63.0	62.9
5	8	5	5	Norway	62.8	57.8	61.3	60.3
2	5	8	6	Denmark	67.8	59.1	57.3	60.1
3	4	6	7	Netherlands	67.1	63.1	59.2	57.5
6	6	7	8	Canada	62.7	58.7	59.2	57.3
34	29	9	9	Israel	29.7	36.9	55.9	56.4
10	13	12	10	United States	58.0	51.6	53.6	56.4
7	7	10	11	Australia	62.1	58.6	55.4	56.1
14	10	11	12	Japan	55.1	52.9	54.5	55.9
12	15	13	13	Estonia	55.8	48.5	52.6	55.5
16	24	16	14	Latvia	53.5	40.7	50.0	55.2
19	14	15	15	Czech Republic	50.7	50.1	51.6	54.6
27	19	27	16	Luxembourg	41.3	45.3	39.8	52.9
24	16	18	17	Sweden	44.8	48.0	48.9	52.2
15	17	17	18	New Zealand	53.7	46.5	49.3	51.2
13	12	14	19	Finland	55.3	52.2	52.3	50.8
17	11	20	20	Slovenia	52.9	52.5	46.2	50.6
21	23	22	21	United Kingdom	48.4	42.1	44.0	46.9
18	18	19	22	Korea	51.4	45.4	47.3	46.9
25	25	26	23	Hungary	43.3	39.0	40.0	45.8
29	21	21	24	Poland	39.7	44.5	44.5	44.8
26	26	24	25	Chile	43.3	38.7	40.4	42.7
28	22	23	26	France	41.2	42.1	41.0	41.8
22	20	25	27	Belgium	46.4	44.9	40.2	40.6
30	30	29	28	Slovak Republic	38.8	33.7	36.0	39.2
8	31	30	29	Ireland	60.5	31.4	35.5	39.0
31	27	28	30	Mexico	38.7	38.2	37.6	37.5
35	33	31	31	Turkey	12.9	27.9	30.9	33.0
23	28	32	32	Portugal	45.8	37.2	28.7	29.6
20	34	34	33	Spain	49.6	24.9	18.7	22.4
32	32	33	34	Greece	37.2	28.1	20.8	21.9
33	35	35	35	Italy	30.3	21.1	12.4	11.6
OECD Average					50.0	46.3	46.5	48.2

Sources: PwC analysis, OECD  
\*The PwC Young Workers Index 2016 edition uses the latest annual available data up to 2015.



***Israel and Germany climbed up the rankings between 2006 and 2015, while other countries struggled to recover from the Eurozone crisis. Overall, the UK's ranking did not change***

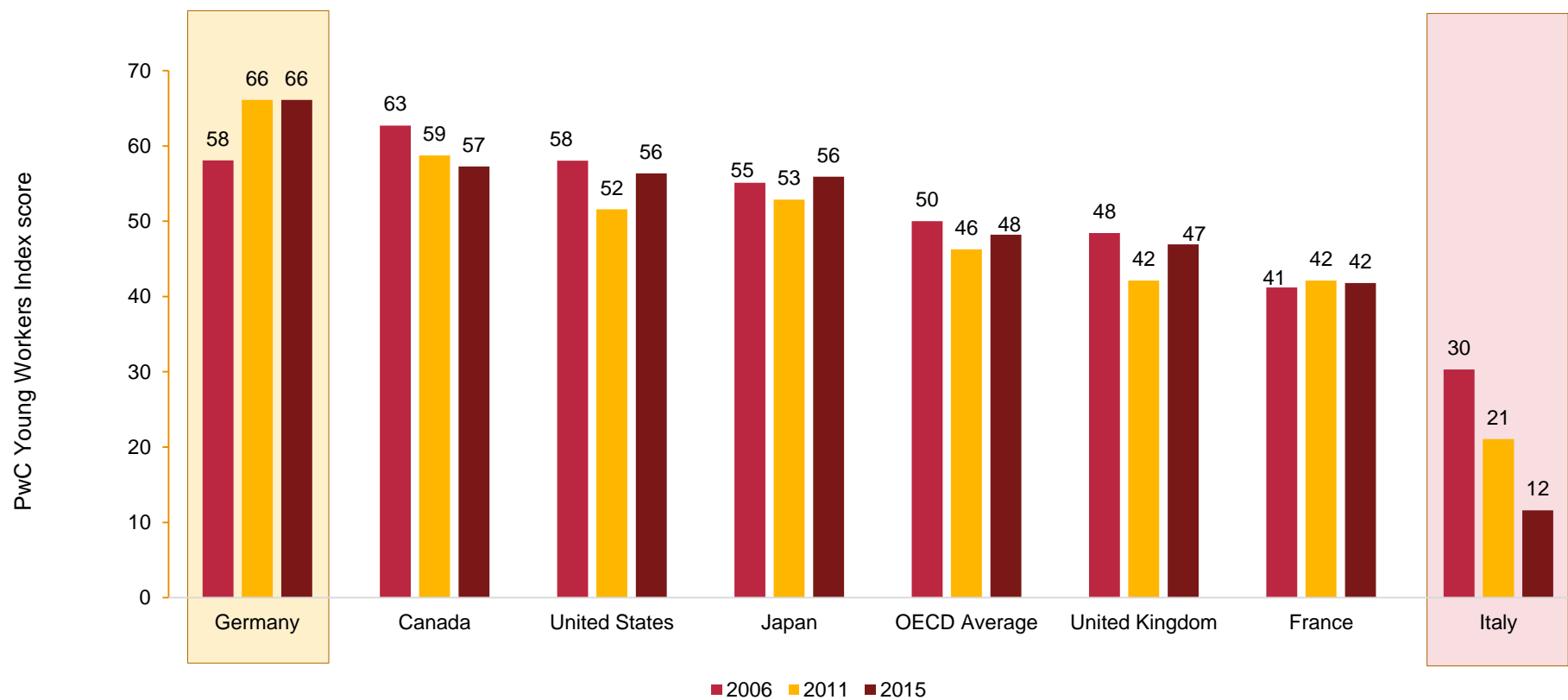


Sources: PwC analysis, OECD

\*Luxembourg showed strong performance but is a relatively small economy with high volatility in their index scores over time

## OECD average score fell during the recession before recovering slightly in 2015, but experience varied across countries with Germany faring best

*Germany has seen the most improvement and maintained strong performance even during the recession. This is mainly due to strong vocational training, reforms that increased labour market flexibility and strong export-led economic growth. In contrast, Italy experienced a steep decline within the decade towards a significantly lower index score out of the G7 countries.*





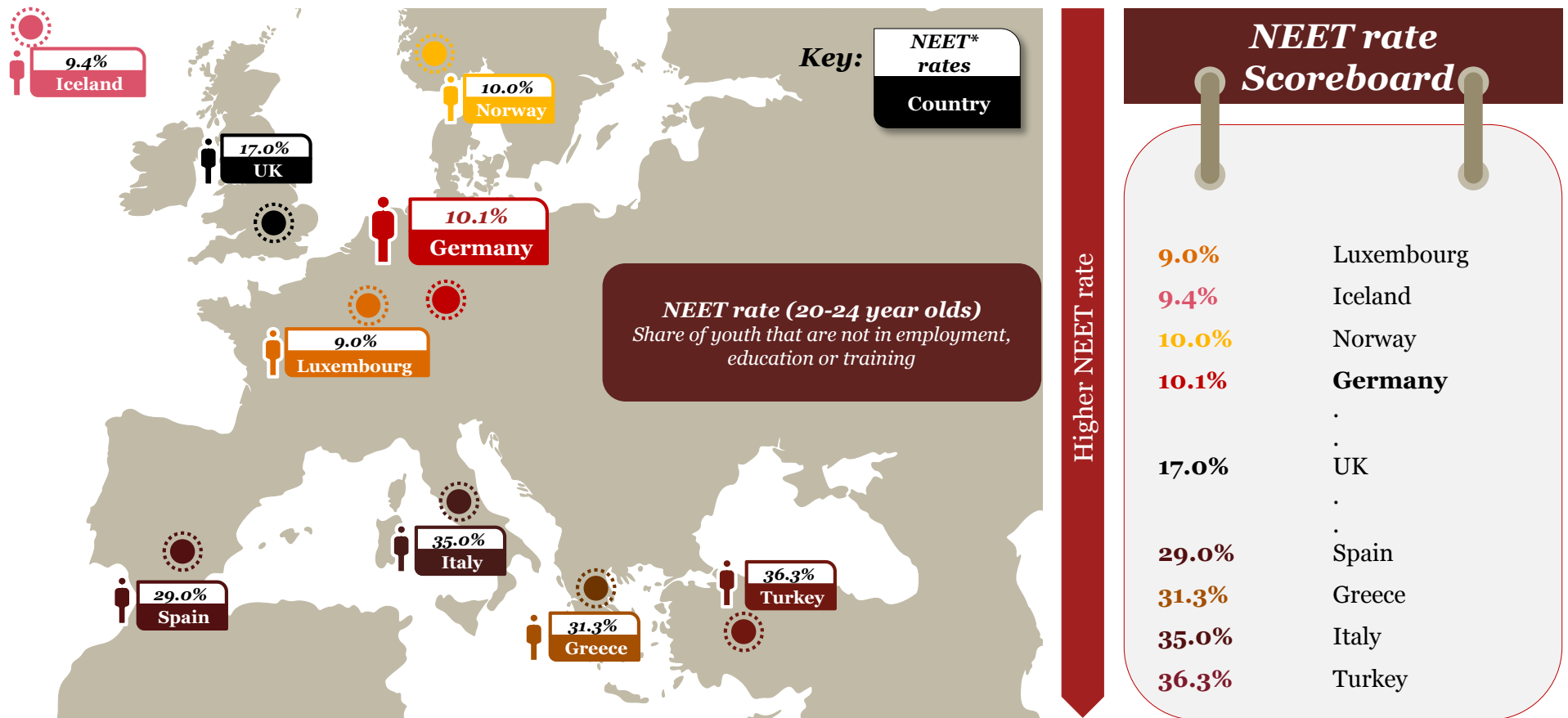
# 3

*Potential boost to GDP*



# We estimate how much countries could gain from improving the performance of their younger workers by focusing on NEET rates

There is huge variance in NEET rates across the OECD, ranging from around 10% in Germany (the leading EU country in our index) – to over triple that in Turkey, at around 36%, where over a third of young people are not in employment, education or training. Based on these variations, we estimate the economic gain from lowering NEET rates to the levels of Germany.



Sources: OECD

\*We use the latest annual available data for NEET rates across the OECD

# Potential long-run boost to OECD GDP from lowering NEET rates of 20-24 year olds to match Germany could be over \$1.1 trillion

**The OECD could add around \$1.1 trillion to total GDP if countries with higher NEET rates among 20-24 year olds lowered their rates to German levels**

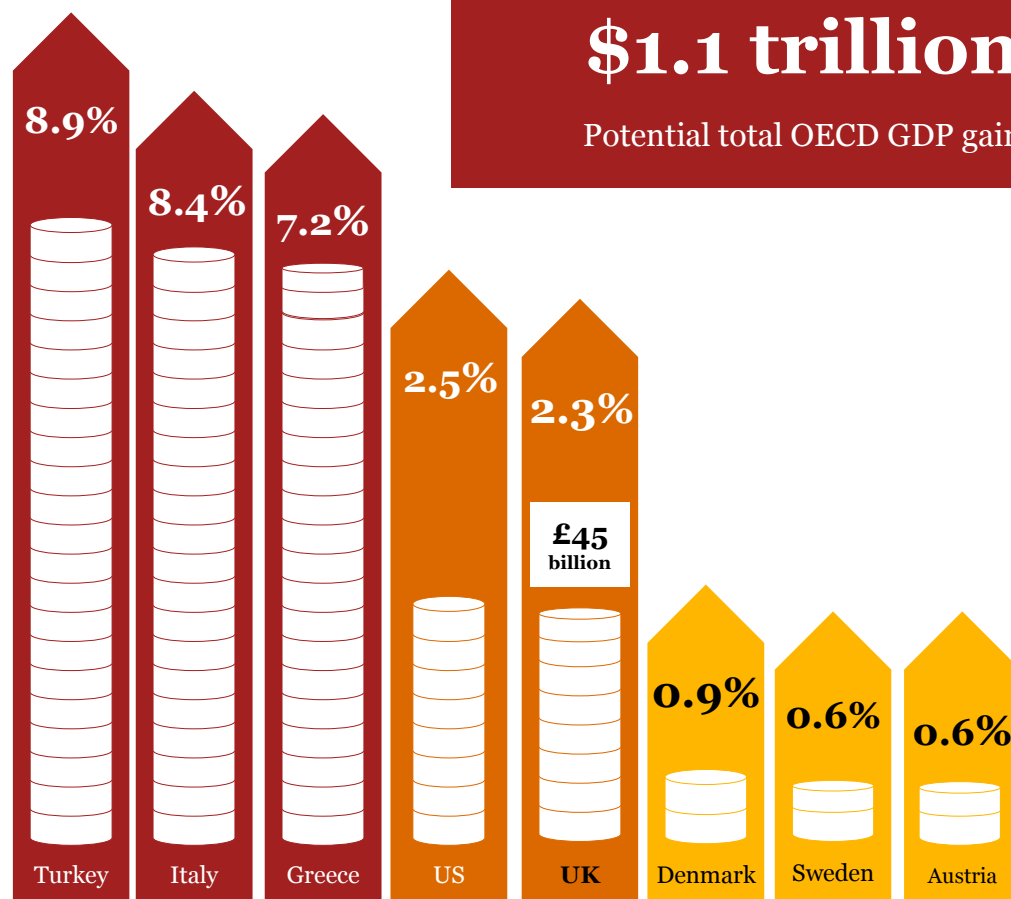
- Our analysis provides an estimate of the broad order of magnitude of potential gains from lowering NEET rates to match those of Germany – a top ranking EU economy in our index\*.
- The potential GDP boost from lowering NEET rates for 20-24 year olds varies significantly across countries, from around 0.1% in the Netherlands, who already perform relatively well, to around 8.9% in Turkey.
- Within the G7\*\*, the overall gain could be c.\$777 billion, which accounts for roughly two thirds of total potential GDP gains for the whole OECD. The EU GDP gain accounts for 38% of that of the OECD.

**Those who scored lower on the Young Workers Index have the most to gain in the long-run from lowering their NEET rates**

- Italy, who ranks last at 35<sup>th</sup> place, and Turkey, who comes in at 31<sup>st</sup>, could experience the largest economic gains of around 8-9%.
- For top scorers, who perform strongly in our index, the gains are lower as their NEET rates are closer to German levels already.

**The UK could achieve an increase in GDP of around 2.3%**

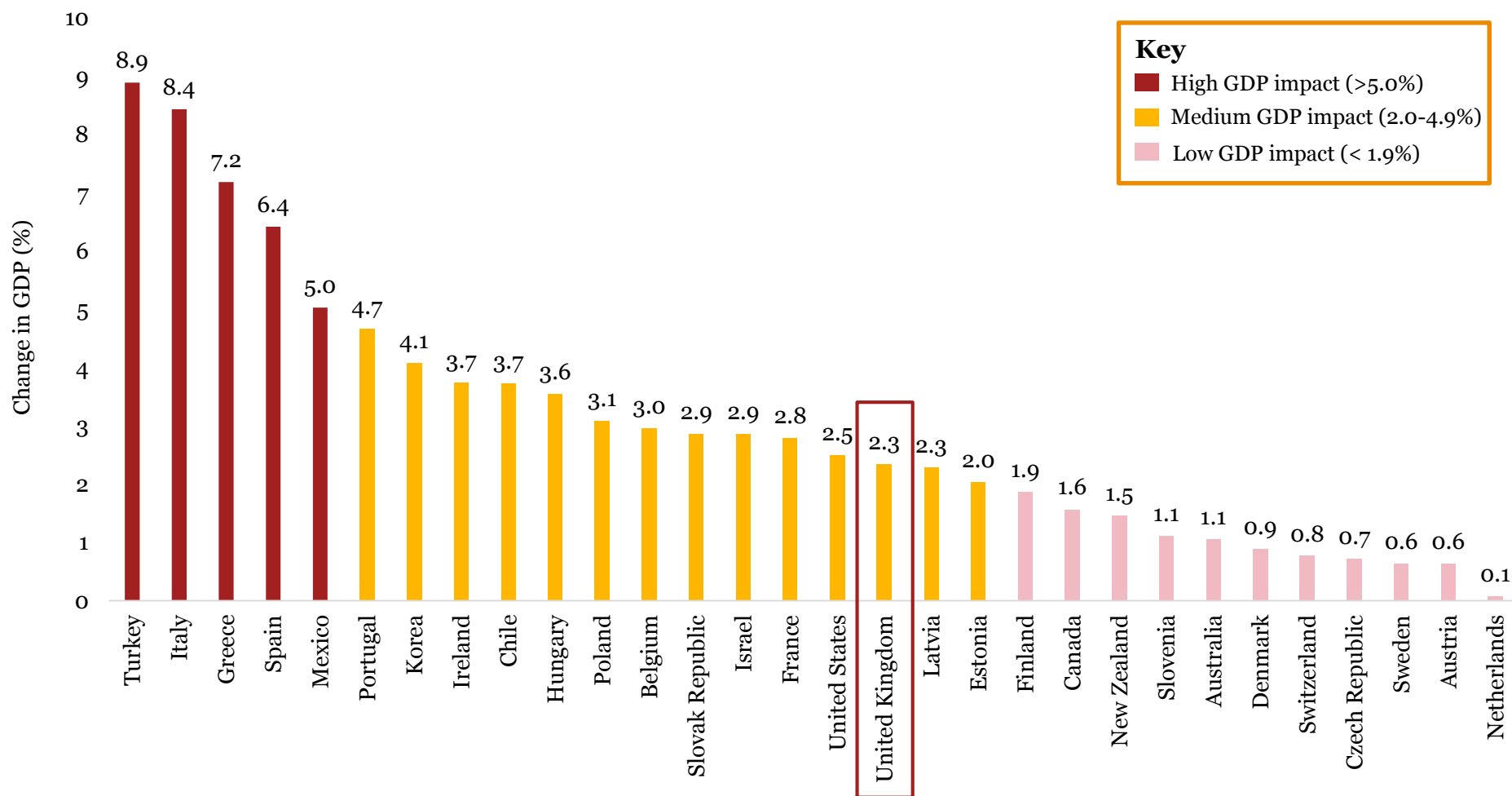
- While Germany has gradually lowered its NEET rate for 20-24 year olds between 2006 and 2014, the UK's rate has drifted upwards between 2006 and 2012, from 18.2% to 20.2%. However, in 2014 UK NEET rates improved to 17%, although remaining considerably above NEET rates in Germany (10.1%).
- By matching the NEET rates of 20-24 year olds in Germany, the UK could increase its GDP by around 2.3%, or £45 billion at 2016 GDP values. This would take time to build up, so should be interpreted as a long-term potential boost to the economy.



\* Luxembourg, Iceland and Norway perform slightly better than Germany in terms of NEET rates, but are considered less relevant benchmarks as they are relatively small economies.

\*\* We exclude Japan, for whom there is no comparable data available

## Countries scoring lower on our Young Workers Index generally have the most to gain from lowering their NEET rates to German levels





## *We estimate the potential long-term economic gain for the OECD based on the difference in NEET rates with Germany*

Country	NEET gap with Germany (ppt)	Potential long term boost to GDP (%)	Estimated value at 2016 GDP levels (\$ billion)
Turkey	26.2	8.9	67
Italy	24.8	8.4	156
Greece	21.1	7.2	14
Spain	18.9	6.4	80
Mexico	14.8	5.0	54
Portugal	13.7	4.7	10
Korea	12.0	4.1	54
Ireland	11.0	3.7	10
Chile	11.0	3.7	9
Hungary	10.5	3.6	4
Poland	9.1	3.1	15
Belgium	8.7	3.0	14
Slovak Republic	8.4	2.9	3
Israel	8.4	2.9	9
France	8.2	2.8	69
United States	7.4	2.5	464
United Kingdom	6.9	2.3	65
Latvia	6.7	2.3	1
Estonia	6.0	2.0	0.5
Finland	5.5	1.9	4
Canada	4.6	1.6	23
New Zealand	4.3	1.5	3
Slovenia	3.3	1.1	0.5
Australia	3.1	1.1	13
Denmark	2.6	0.9	3
Switzerland	2.3	0.8	5
Czech Republic	2.1	0.7	1
Sweden	1.9	0.6	3
Austria	1.9	0.6	2
Netherlands	0.2	0.1	1
<b>Total</b>			<b>1154</b>



# 4

## *Implications for policy and business*

## *We have identified three key labour market themes which commonly feature in high performers on our Young Workers Index*

**1**

### ***Promoting vocational education & training***

A **dual education system** that incorporates vocational training and classroom learning could provide young people with more options in their transition into the working world. We think that **engaging employers in the design and delivery of apprenticeship** frameworks is the key to preventing skill mismatches.

**2**

### ***Engaging employers with youth and schools***

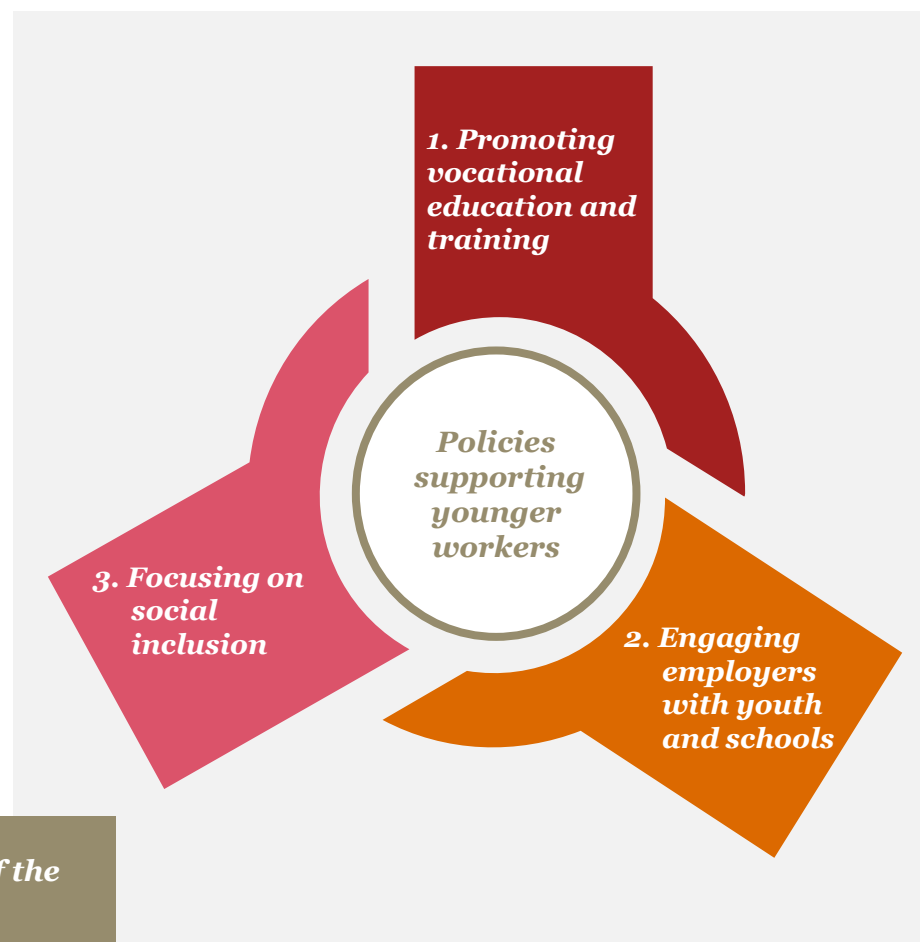
Changing employers' perceptions of youth and encouraging **early engagement** in schools could **increase youth employability and information** around career options. This could include work experience, career advice, mentoring, and youth-led social action.

**3**

### ***Focusing on social inclusion***

Reducing informal recruitment methods and use of qualifications as filters could **reduce work barriers** to engage with youth from low socio-economic backgrounds who may be at risk of anti-social behaviour.

*In the next few slides, we set out some of the policy measures adopted in selected economies to support younger workers.*





# The education systems in the top three performers in our index have a strong focus on vocational training alongside school

*Switzerland, Germany and Austria all operate dual education systems, in which students are offered the opportunity to undertake an apprenticeship alongside their formal classroom education.*

## What is the policy?

- Dual education-apprenticeship schemes, which are an increasingly common feature of high-performing countries in our index, allow students to undertake vocational training alongside formal education.
- Young people are able to complete recognised qualifications that provide them with the core transferable skills that employers need.

## How does it work?

- By offering a mix of theoretical and applied learning, students can gain practical experience in the working environment.
- This enables youth to directly engage with employers, who should be proactive in developing the employability of youth to combat the skills mismatches that employers tend to face in the labour market.

## What is the impact?

- Dual education systems have helped to create a highly skilled workforce in the countries below, contributing to strong economic growth and low youth unemployment rates.
- This system could also improve social mobility, as it widens the options for young people when considering alternatives to higher education in their transition to the working world.

### Switzerland

Index rank: 1



- Over 70% of young people participate in the **Swiss vocational education and training system (VET)** which offers apprenticeships, formal qualifications and early career training in over 200 different occupations.
- Around a third of companies in Switzerland engage in apprenticeship training programmes.

### Germany

Index rank: 2



- Germany's **dual education system** puts more than 50% of school students in one of over 300 training occupations.
- The Vocational Training Act has provided over 500,000 company-based training contracts a year.
- Recent government initiatives include presenting university dropouts (which is high at 28%) the option of vocational training.

### Austria

Index rank: 3



- The Austrian state offer a **Youth Guarantee Scheme**, which entitles every young person interested in an apprenticeship to a place.
- Austria's "Industry turns female" programme aims to introduce young girls from the age of 12 to technical careers by raising awareness and promoting opportunities are career fairs.

# The recent EU Youth Guarantee initiative acts as a safety net and targets those at risk of long-term unemployment

*The EU's Youth Guarantee was launched in 2013 and is based upon similar youth guarantees introduced by the Nordic countries in the 1980s and 1990s.*

## What is the policy?

- In Iceland, young people who have been unemployed for more than 3 months are enrolled onto a programme offering jobs, training and study opportunities, while Norway's youth guarantee focuses on those who have been unemployed for 6 months or more.
- In Denmark, a 2009 initiative aimed to make immediate offers of employment to 18 and 19 year olds.

## How does it work?

- The Nordic youth guarantees aim to prevent young people from drifting into long-term unemployment.
- A focus on training during unemployment ensures young people are continually developing new skills to increase their employability. In Finland, school leavers are offered training guarantees which ensure a place in further education or vocational training.

## What is the impact?

- As well as having some of the *highest* rates of youth *employment*, the Nordic countries also have some of the *lowest* long-term youth unemployment rates, aided by their strong focus on guaranteeing young people valuable employment or training.
- In Finland, 83% of young job seekers received a successful offer within 3 months of being unemployed and enrolling onto a training guarantee programme.

### Iceland

Index rank: 4



- Icelandic authorities have recently focused on **long-term unemployment** and activating young people by operating work and production centres for 16-24 year olds who have struggled in the labour market. Youth can work in return for education and work-training grants.
- Compared to other Nordic countries, unemployed Icelandic youth tend to receive higher unemployment benefits due to the high participation rate.

### Norway

Index rank: 5



- Norway's Labour and Welfare Administration have **targeted those with 'reduced working capabilities'** with initiatives such as: training and work practice schemes, with particular focus on immigrants.
- The government also implemented initiatives aiming to incentivise employers to employ young people, for example wage supplements over a limited period of time, depending on the individual's needs.

### Denmark

Index rank: 6



- Denmark's youth guarantee also offers mentoring support, reading and writing courses and established a national youth unit to help job centres implement new measures and share learning.
- Similar to Sweden, Denmark have heavily pursued an **active labour market policy** (ALMP), investing predominantly in supported employment and rehabilitation measures, employment incentives and training.

# Other high performers place a focus on helping vulnerable young people into training and employment

*Countries including Canada, the US and Australia have all implemented youth employment initiatives specifically focused on low-income and vulnerable young people facing barriers to employment.*

## What is the policy?

- Some developed economies have focused on building the employability of low socio-economic groups.
- In Canada, funding is offered to organisations to offer training and education programmes, while the US are directly providing work for low-income youths

## How does it work?

- Providing further training opportunities helps to target long-term unemployment by ensuring young people retain relevant skills.
- They also promote social mobility, providing those from low socio-economic backgrounds with employment and training opportunities.

## What is the impact?

- These policies help to prevent vulnerable youths from under-investing in their education and development, providing them with confidence and opportunities to increase their employability.
- Canada and Australia continue to have some of the highest rates of youth employment.

### Canada

Index rank: 8



- Canada's Youth Employment Strategy focuses on helping those facing barriers to employment, get the skills and advice required to enter the labour market.
- The **Skills Link** programme provides funding to organisations to offer education and training, focussing on youth with disabilities, those living in remote areas, and those from single-parent or immigrant families.
- **Canada Summer Jobs** offers funding to employers to create summer job opportunities, focusing on local youths.

### United States

Index rank: 10



- In the US, the **YouthBuild** programme, which sees low-income young people learn construction skills on projects building affordable housing for low-income or homeless families in their neighbourhoods.
- The programme offers training on a construction site alongside school, where the young person can attain their high-school diploma.
- There are over 200 YouthBuild programmes across 40 states currently in operation with 6,000 youths a year.

### Australia

Index rank: 11



- From 2017, vulnerable young jobseekers who have been unemployed for over 6 months will participate in 6-week training programmes and 120,000 internship placements over the next 4 years.
- Other youth investment includes the **New Enterprise Incentive Scheme**, which offers training, mentoring and business advice for aspiring entrepreneurs.
- Australia also offers employers a **youth bonus wage subsidy** if they hire an unemployed young person.



# Companies have recently expanded their youth employment programmes to provide attractive alternatives to higher education

*Below are several examples of employers across a range of industries that have taken a proactive approach to investing in a youth employability strategy to benefit their business. Common employer policies to support younger workers include: developing structured apprenticeship schemes, youth-led social action and engaging with youth early to promote employability and provide information around alternative career options.*

Company	Relevance	Policy to support younger workers
<b>Nestlé</b> Food & drinks	Over <b>1,400</b> employment opportunities for young people created since 2013	<ul style="list-style-type: none"> <li>In 2013, Nestlé launched their Youth Employment Initiative, which aimed to provide 1,900 employment opportunities for young people by 2016, including 300 <b>paid work experience placements</b>.</li> <li>In partnership with MyKindaFuture, a social business, Nestlé have provided employability skills workshops in over 50 schools to connect with a more diverse talent pool and <b>promote the career opportunities</b> available in the industry.</li> </ul>
<b>Jaguar Land Rover</b> Automotive	<i>JLR launched its recruitment drive for over <b>200</b> apprentices in September 2016</i>	<ul style="list-style-type: none"> <li>Jaguar Land Rover (JLR) is the largest apprenticeship provider in the UK automotive sector, recruiting roughly 50% of total apprentices in the industry with a recent recruitment drive to hire more young females to diversify their workforce.</li> <li>This exemplifies an <b>employer-led scheme with both formal learning and on-the-job experience</b>. Apprentices can gain vocational qualifications and engineering degrees.</li> </ul>
<b>National Grid</b> Gas	Over <b>1,750</b> participants in the Young Offender programme, with 15% progressing to team leadership roles	<ul style="list-style-type: none"> <li>National Grid runs a Young Offender Programme focusing on the training and recruitment of young offenders and <b>providing sustainable employment</b>. For participants, the reoffending rate is 6%, significantly lower than the national average of 70%.</li> <li>Operating in 22 prisons across the UK, the programme offers training at sites outside of the prison during sentences, offering a seamless <b>transition into work</b> upon completion of the prison sentence.</li> </ul>
<b>Intel</b> Technology	<i>She Will Connect programme aims to reach <b>5 million</b> young women in Africa</i>	<ul style="list-style-type: none"> <li>Intel has a number of initiatives aimed at <b>engaging young females in STEM (science, technology, engineering and mathematics) careers</b>.</li> <li>The 'She Will Connect' programme offers online training to develop young girls' digital literacy skills, as well as an online peer network to offer support and inspiration.</li> <li>Intel recently pledged \$300 million to increase diversity in its workforce, employing more women and minorities by 2020.</li> </ul>

## Businesses are taking a proactive approach to promoting employability by engaging with young people earlier

Company	Relevance	Policy to support younger workers
<b>Barclays</b> Financial services	<i>Over <b>1.1 million</b> young people supported through the Life Skills programme</i>	<ul style="list-style-type: none"> <li>Barclays adopted an <b>integrated approach to youth employability</b> by focusing on preventing youth from becoming NEET through the 'Life Skills' and apprenticeship programme.</li> <li>This aims to <b>support youth in their transition from school to work by building skills</b> (relationship, finance and general employment skills) through online interactive content, educational resources, workshops and work experience matching. Furthermore, over 2000 out of 5000 young apprentices have gained permanent positions since 2012.</li> </ul>
<b>Microsoft</b> Technology	<i>'YouthSpark' aims to generate educational and employment opportunities for over <b>300m</b> youth</i>	<ul style="list-style-type: none"> <li>In 2015, Microsoft invested in 'Youth Spark': a \$75 million in an global cross-company initiative <b>engaging with youth</b> by increasing access to computer science education.</li> <li>Microsoft have demonstrated their engagement with youth via a <b>peer-to-peer mentoring</b> scheme where interns host events that provide insight into the industry and where they can deliver presentations to other young people.</li> </ul>
<b>EE</b> Telecommunications	<i>EE apprenticeship scheme has resulted in lower attrition, absenteeism and a cost reduction of <b>£2.7 million</b></i>	<ul style="list-style-type: none"> <li>The EE Customer Services team were experiencing high staff turnover but investment in the apprenticeship scheme brought in more engaged employees with 50% lower sickness rates.</li> <li>Over the 15-month period, apprentices also receive <b>extensive support that can result in intermediate or advanced qualifications</b>.</li> <li>The programme has had a <b>positive impact on company performance</b> through a more engaged workforce, significant cost savings and a boost to corporate reputation through media coverage and awards for the social impact of their programme.</li> </ul>
<b>Marks &amp; Spencer</b> Retail	<i><b>80%</b> employability rate for young workers in the Make your Mark programme</i>	<ul style="list-style-type: none"> <li>In 2013, M&amp;S launched their Make your Mark programme, a <b>tailored 4-week in-store training scheme for disadvantaged young people</b> aged 16-24, in partnership with the Prince's Trust. The scheme aims to offer 1,400 placements a year, an eight-fold increase in the number of placements offered prior to the scheme starting.</li> <li>Upon completion of the scheme, participants are <b>'accredited', giving them the opportunity to take up work in any suitable vacancy</b> in an M&amp;S store without going through the assessment process. It offers around 80% of participants a full-time job.</li> </ul>

Sources: Business in the Community (2016), CIPD (2013), Prince's Trust (2016), M&S (2016), Microsoft (2016)



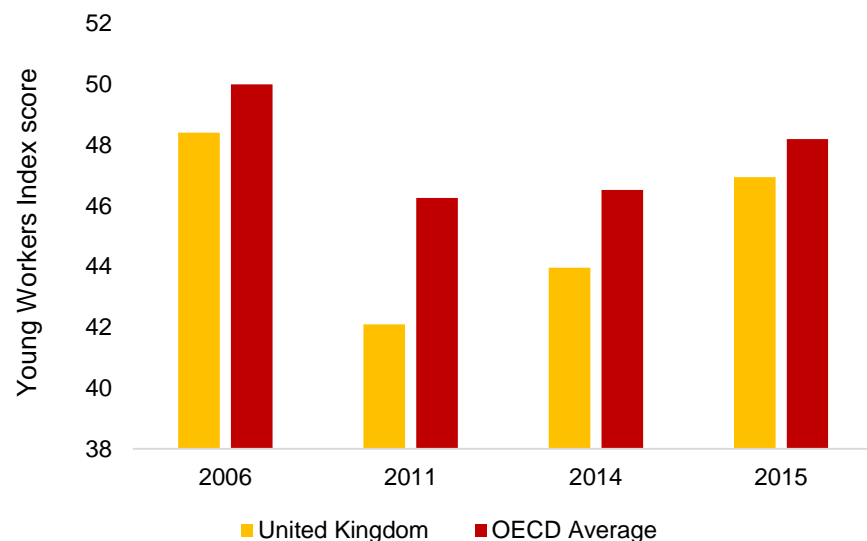
# 5

*In depth: The United Kingdom*

## Since 2011, the UK has made progress in closing its gap with the average OECD score, but remains below 2006 levels

### How has the UK performed?

- The UK scored below the OECD average on the Young Workers Index between 2006 and 2015 (see chart below).
- The UK's absolute performance fell between 2006 and 2011, as a result of rising youth unemployment and NEET rates during the recession.
- Since 2011, the UK's performance has begun to recover but not to pre-crisis levels. The employment rate of 15-24 year olds in 2015 (50.1%) remained below that in 2006 (53.7%). Similarly, unemployment of 15-24 year olds has fallen from a high of 22.2% in 2012 to 15.4% in 2015, but still remains above the rate in 2006 (13.8%).
- It remains to be seen how Brexit could impact this in future, though if it implies lower levels of EU migration to the UK this could increase the need to develop the skills of young UK nationals.



Source: PwC analysis, OECD

1

The UK performs close to the median of the OECD countries for the NEET rate of 20-24 year olds, unemployment of 15-24 year olds, and long-term unemployment.

2

The UK has relatively high rates of part-time work for 15-24 year olds. While this may be preferable for some workers, it is likely to adversely affect earnings, training opportunities, career development, and job security and has a negative impact in the index.

3

The UK has the highest youth unemployment relative to unemployment rates of older workers out of all 35 OECD countries. However, improving unemployment rates for older workers means that weak performance of younger workers in the labour market is overstated.

4

The UK performs relatively strongly for employment rates of 15-24 year olds. In 2015, the UK's youth employment rate stood at 50.1%, above the OECD's average of 38.5%.



# The UK has made an employer led skills system and increased apprenticeship engagement a key delivery vehicle for youth employment

**In light of high youth unemployment and rising university tuition fees in the UK, the government has recently launched a number of initiatives to promote apprenticeships and engage employers in their bid to raise the profile of technical education.**

## Youth Employment Initiative

In association with the European Social Fund, the UK government pledged £170 million to 5 areas in the UK with high youth unemployment rates, including Inner London and the West Midlands, to extend provision of apprenticeships and work placements.

## New vision for technical education

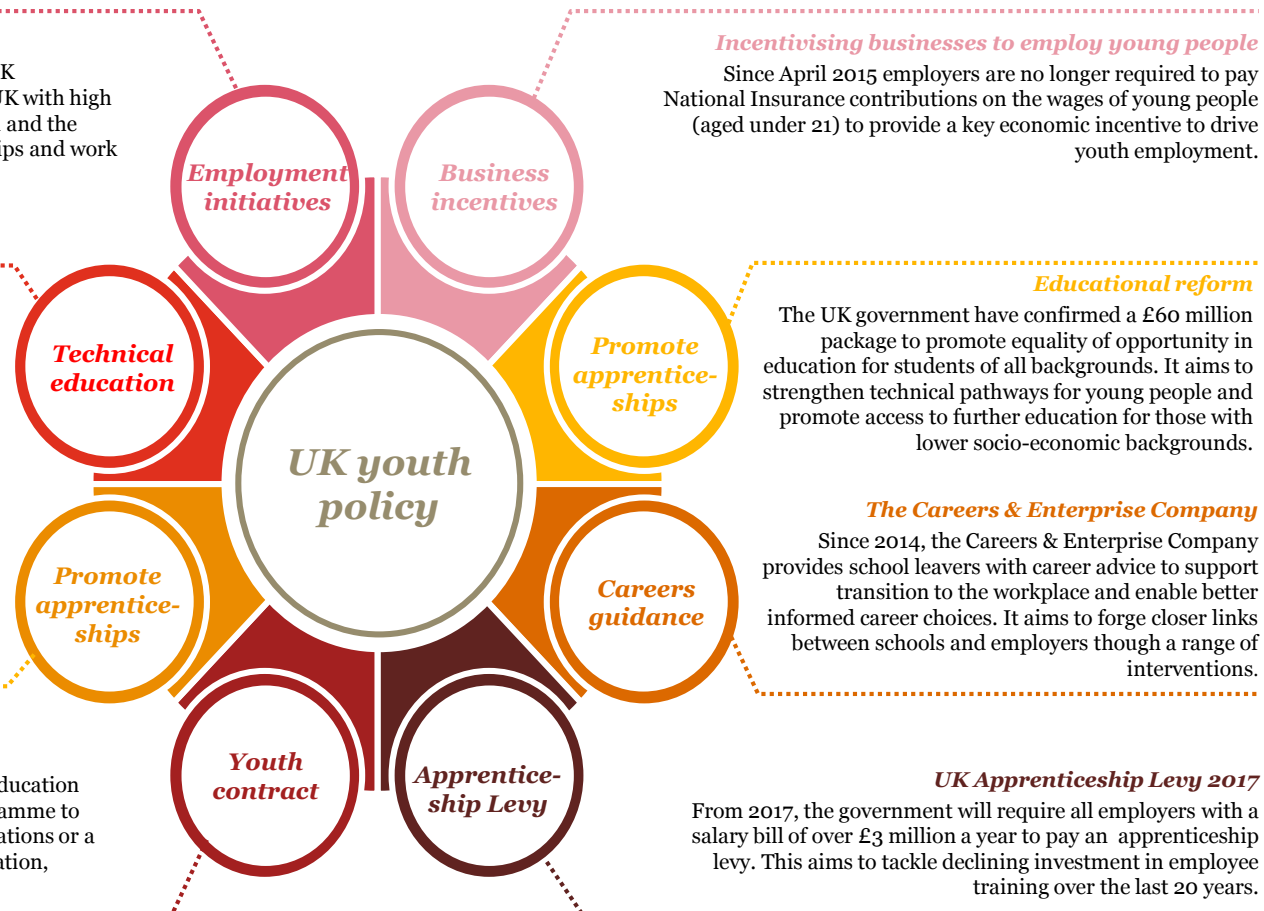
In July 2016, the government set out a Post-16 skills plan to set out technical education as an official alternative pathway to academic education. The new system aims to increase the parity of esteem between technical and traditional academic routes.

## Commit to 3 million new apprenticeships

The UK government will increase the number of apprenticeships by 2020 and improve their legal and societal standing to be on par with degrees.

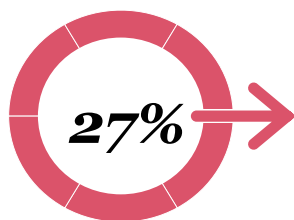
## Engaging 'hard-to-reach' youth

As part of the 2010-2015 young people policy, the Education Funding Agency managed the Youth Contract programme to engage young people with insufficient prior qualifications or a youth offending record and support them into education, training or a job with training.



# Cultural perceptions around apprenticeships improving in the UK but are not a replacement for all ‘in-work’ training strategies

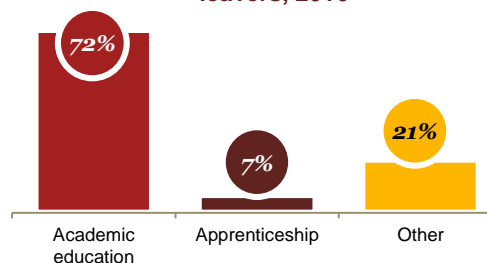
*In 2016, the UK government explicitly promoted vocational education in a bid to shift cultural perceptions of youth, businesses, schools and parents, around apprenticeships. However, businesses should continue to recognise the value of in-work training for the wider workforce.*



Only 27% of parents felt that an apprenticeship would be the best pathway for their child

Source: Interserve Society

Plans following school for UK school-leavers, 2016



Apprenticeships are seen as a less attractive option than traditional academic routes for the majority of school leavers

Source: Interserve Society

## Five common misconceptions

**1** Apprenticeships are only for blue-collared jobs

**2** University students have better career prospects

**3** Apprenticeships are not for high-achievers

**4** Apprentices won't receive high quality training

**5** Apprentices won't receive high quality training

## Apprenticeship myth-busting

**Apprenticeship schemes are now no longer exclusive to technical, vocational industries.** Apprenticeships now serve industries, ranging from financial services to business administration, and many others.

Businesses who engage in the design and delivery of the apprenticeship programme are **more likely to offer permanent jobs**. Employers are increasingly aware of 'Qualification Inflation' and the value of employability skills gained by apprentices.

Employers are recognising that **experience is just as important as academic education** in the workplace. These are no longer considered as back-up options but serious alternatives to traditional academic routes.

It is **increasingly common for companies to incorporate, and often fund, vocational and degree-level qualifications**. This enables apprentices to learn both in the classroom and on-the-job and also improves staff retention for employers.

Given how apprentices can now **earn whilst learning** and **avoid rapidly increasing university tuition fees**, apprenticeships are becoming a financially more appealing alternative to higher education. Given the lower debt ceiling and increased earning power of apprentices, it can deliver a better financial outcome than a degree.

## Fact

**24%** of English apprenticeships in 2015 were in **business, administration and law**

Skills mis-match is growing in the UK. Between 2005-10, **59% of graduates were in non-graduate jobs**.

The number of apprenticeships in England has increased by **84%** from 2009 to 2015.

**Technical certificates** span many sectors and are available in pharma science, customer service and IT.

Apprentices in arts, media & publishing can earn up to **270%** more over their lifetime than graduates.

# The UK government could use the proceeds of the new Apprenticeship Levy to improve the quality and quantity of apprenticeship schemes

*The number of apprenticeships in England almost doubled between 2009 and 2015 to just under 1 million, supported by growth in: business, administration and law; healthcare and engineering. However, is the aim to create 3 million new starts by 2020 too ambitious? Below, we discuss the 2017 Apprenticeship Levy, which represents a major policy initiative which will have wide ranging impacts on UK employers and the economy.*

## What is the policy?

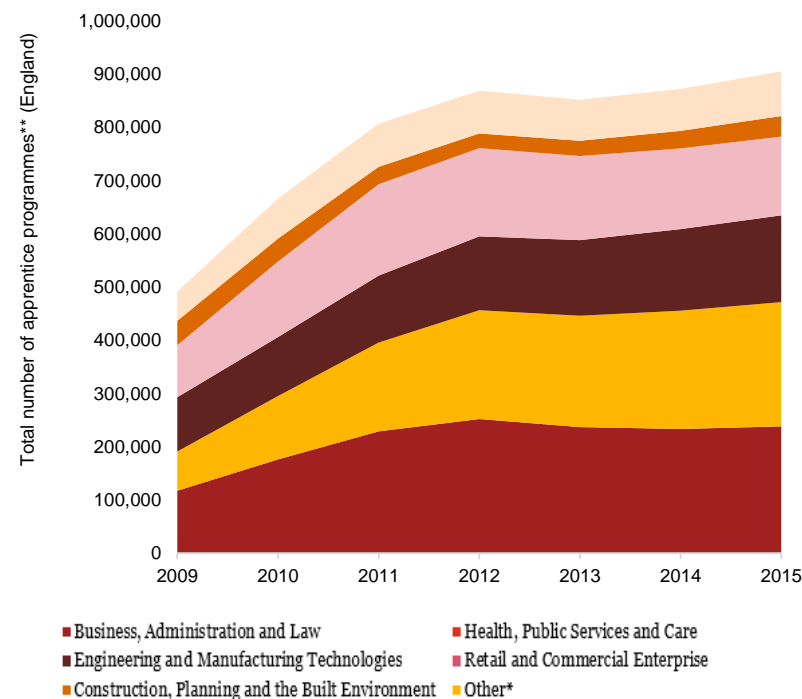
- In delivering the target of 3m new apprenticeship positions by 2020, the UK government has announced the apprenticeship levy. The levy will subject all businesses with a PAYE payroll bill of over £3m to pay for apprenticeship delivery. The levy has been designed to both increase youth employment and counter the trend of declining investment in workplace training, which has halved over the last 20 years.
- The levy applies to both private and public sector organisations, with public organisations further having to comply with a participation target of 2.3% of the workforce starting apprenticeships each year.
- Employers will benefit from improved access to funding for training and employment.
- Employers are being supported to develop new standards which will deliver training that better supports the industries in which they work.

## Potential design issues

- The apprenticeship levy is a 'one size fits all' scheme that is not targeted at specific employers with a business need for apprenticeship funding. 28% of employers do not expect to make use of the levy funding at all, particularly among small employers.
- Many employers are contributing to a scheme of which they are not prepared to make use of, either because they have no apprenticeship scheme in place or because they have no suitable roles. This could result in either a lower rate of spend than desired or companies making junior staff redundant in order to create apprentice roles, meaning long term employment is reduced.
- If companies are taxed without the ability or need to reinvest into apprenticeships, funding for other necessary training might be lacking.

## Impact on youth

- The levy could result in increased opportunities for young people to start their careers with high-quality training. However, this is contingent on the funding being utilised by businesses to establish or improve apprenticeship schemes. If the scheme is further successful in raising the profile of technical education, less academically oriented young people will benefit from better career opportunities and progression suited to their preferences.



Source: PwC analysis, Skills Funding Agency, Department for Education

\*Other industries include: Information & Technology, Leisure & Tourism, Agriculture, Education & Training, Arts & Media, Science & Mathematics, Languages etc.

\*\*From 2011/12 onwards, 'total' counts each apprenticeship learner only once regardless of how many programmes they participated in.

# We have helped to drive the change in image of a traditional apprenticeship from blue collar to white collar

## Employer case study

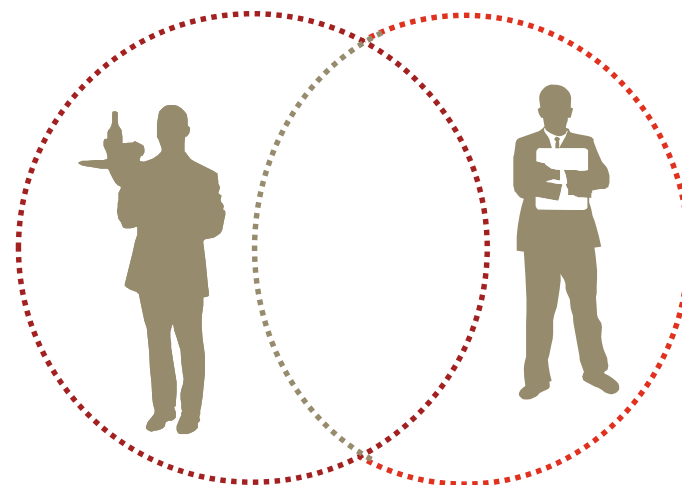


PwC have recently led the way with the 'Professional Services Apprenticeship Trailblazer' and **developed new apprenticeship frameworks that aim to put workforce skills in the hands of the employer.** Working with a representative sample of other professional services companies, PwC has developed a new industry standard which makes training more relevant and impactful for employers.

## Impact



- This initiative was implemented to meet the needs of employers and **improve social mobility** by providing younger workers with routes into industries and companies that were previously inaccessible.
- PwC have supplemented this with various **mentoring programmes** to support their transition from non-traditional backgrounds into the working world.



## Top three lessons learnt on apprenticeship schemes for businesses... coming from PwC Skills Leadership Team, Peter Norriss

1

**Effective** design. "Investment in apprentices will be maximised when a meaningful programme is designed. By developing a meaningful training programme, the business benefits will increase."

2

**Develop** your apprentices. "This is a mutually beneficial deal for businesses. Giving apprentices responsibility will provide the relevant practical skills improve the impact of apprentices and become potential future leaders."

3

**Diversity** of thought and experience. "By working with youth apprentices, your business can improve its products and services through an increased diversity of thought and learnings from those with different experiences."

**Meaghan, 21, joined the PwC apprenticeship programme** after leaving school and shares her experiences...



**My story:** In the face of tripling university fees, I decided to join PwC as an apprentice as it gave me a platform to join a leading professional services firm, without having obtained a degree.

**How the apprenticeship scheme has benefited me by:** kick-starting my career as a Consultant. It has given me the opportunity to gain a recognised professional qualification, and two years worth of valuable client experience.

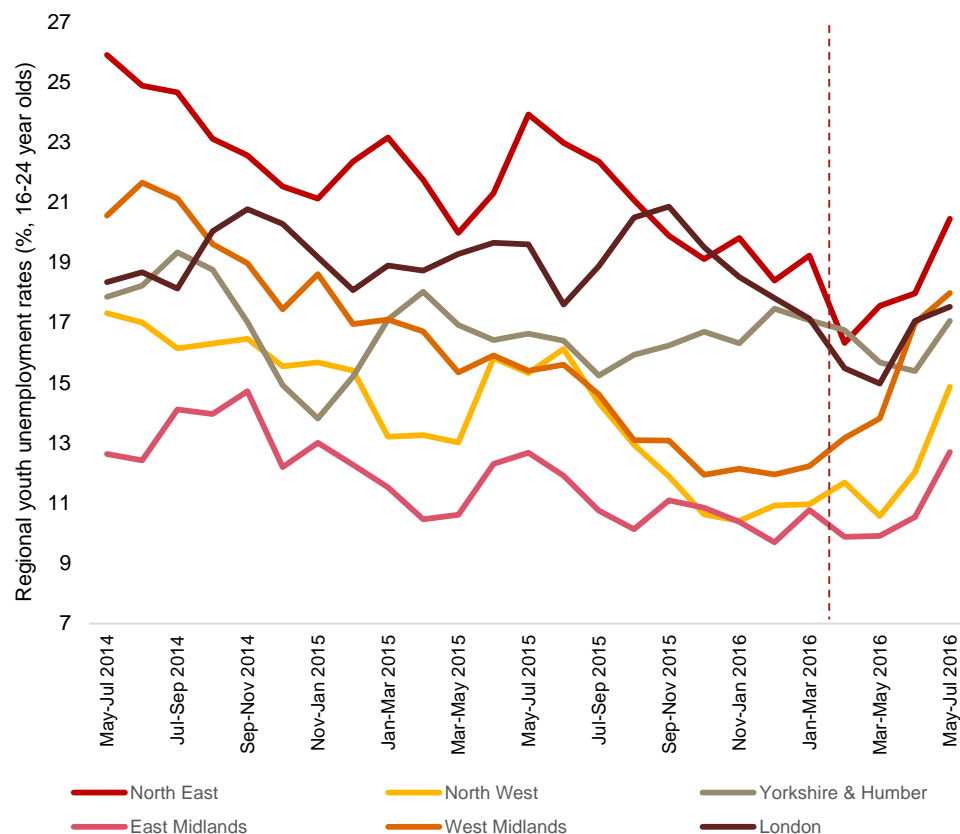
**The apprenticeship has given me a platform to:** progress onto PwC's Graduate Scheme, and continue to work on large scale projects that will allow me to establish an invaluable network of internal and external contacts!



# Youth empowerment could facilitate social mobility and devolution could be an opportunity for us to accelerate this movement

*The UK government are pursuing devolution deals with various regions with diverging economic and social trends. Shifting budgets and responsibility to local authorities to make 'better decisions' according to local need could allow policymakers to put youth empowerment and inequality at the forefront of their agendas.*

Since early 2016, youth unemployment drifted upwards amongst regions with potential for devolution, but Great Northern Powerhouse initiatives such as the 'Sheffield City Region Skills Bank' could help to reverse this trend...



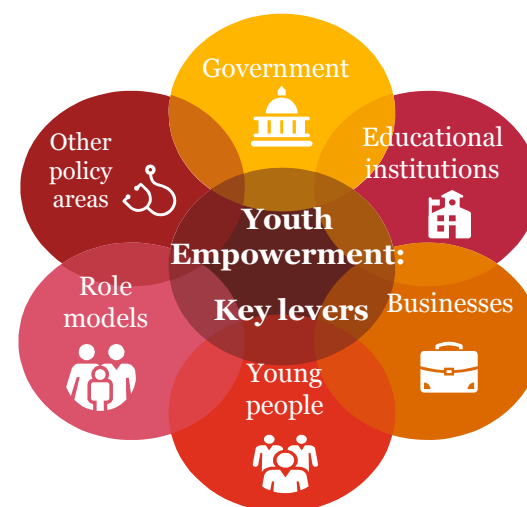
## \*Managing devolution\*

The trend of devolution brings opportunities but also poses challenges. Germany have capitalised on a system that attributes high value to vocational training, which the UK are aspiring to. But how can we manage this societal cultural shift as devolution occurs on a regional basis?



## Our point of view

Each devolved region will have different needs and objectives. However, local decision makers should adopt a holistic youth policy that also considers youth crime and health - and engages all stakeholders including schools, employers, role models and youth themselves.



# Devolution

## A great disruptor or a disruptive influence?

### How will devolution impact youth unemployment?

- The devolution agenda is one which represents the **opportunity for a major shift in the Skills and Youth Employment markets in the UK**. Recent initiatives around skills and youth employment have been based on delivering improvements to the existing model and supplementing existing policies.
- There is a risk that through devolution we could see a dilution or confusion of the messages being set from the government, **making societal shifts in perception of vocational training, more difficult**. With each area taking a potentially different approach, the **impact could be one of mixed messages and complexity** which particularly affect employers operating at the national level.
- In the same way that disruptive technologies such as Uber, have been able to radically alter their market, devolution presents the same opportunity for the UK youth. **By taking a disruptive approach**, it is possible for devolved areas to make an immediate impact on their youth employment and skills initiatives which will, in turn, dramatically increase their GDP. Those areas who are most prepared to be bold, are likely to experience the biggest impacts on their youth population.

### Area case study: Sheffield City Region (SCR)

In approaching their City Deal, the SCR felt that the UK skills system was not working for their region and its residents. Employment and skills policy is designed and services are commissioned in silos across Government Departments to address issues that do not sit neatly within Whitehall boundaries. The SCR felt that *“it requires a fundamental shift in how we and government organise and commission activity jointly to secure better outcomes.”*

#### Further devolution has been secured and will allow the area to make greater impact through:

- co-commissioning with DWP for the Work and Health Programme
- development of an employability pilot to support the long term unemployed into work

### The future of devolution

As has been showed through work in Germany, it is possible for a devolved system to make a real impact on the lives of young people. Devolution in the UK will place the decision making powers in hands of local areas.

Through implementing locally designed solutions which are tailored to the needs to the locality, the devolved powers can make significant improvements in supporting youth employment.

### Example City Deal and Growth Deal Achievements



**The Sheffield City Region Skills Bank is an excellent example of how devolution is having a positive impact on young people.** A unique service that invests in the skills that businesses really need to grow. The service creates opportunities for people as young as 16 years old to break social barriers. It's a major initiative that could drive regional growth and change the face of national skills policy. So far, employers with over 7,000 learners have engaged with the Skills Bank.



**Skills Made Easy is a unique project which offers practical and impartial advice to help employers make the right choices when it comes to growing and developing their workforce.** The project helped to create c. 2,500 new apprenticeships in SMEs and large businesses new to apprenticeships and provided training to c. 1,650 further businesses. Without devolved funding, it would not have been possible to make this impact.

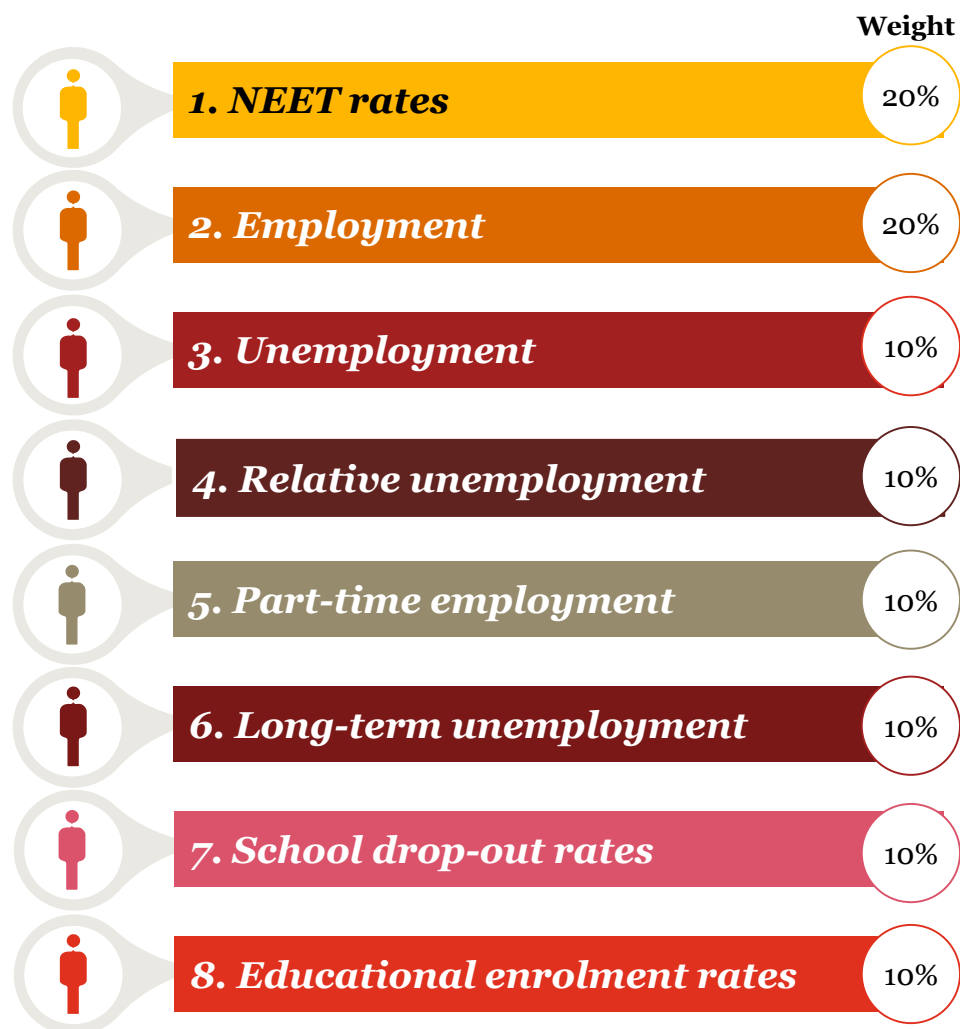


# 6

---

## *Individual labour market indicators*

## ***Our Young Workers Index is constructed using eight key labour market measures that reflect labour market activity and educational participation***



*In the next few slides, we show how each of the 35 OECD countries perform on these labour market indicators.*





# There is scope for each of the 35 OECD countries to improve the economic performance of their younger workers by sharing good practice

Here is a snapshot that shows the performance of each of the 35 OECD countries in 2015 across each of our eight labour market indicators.

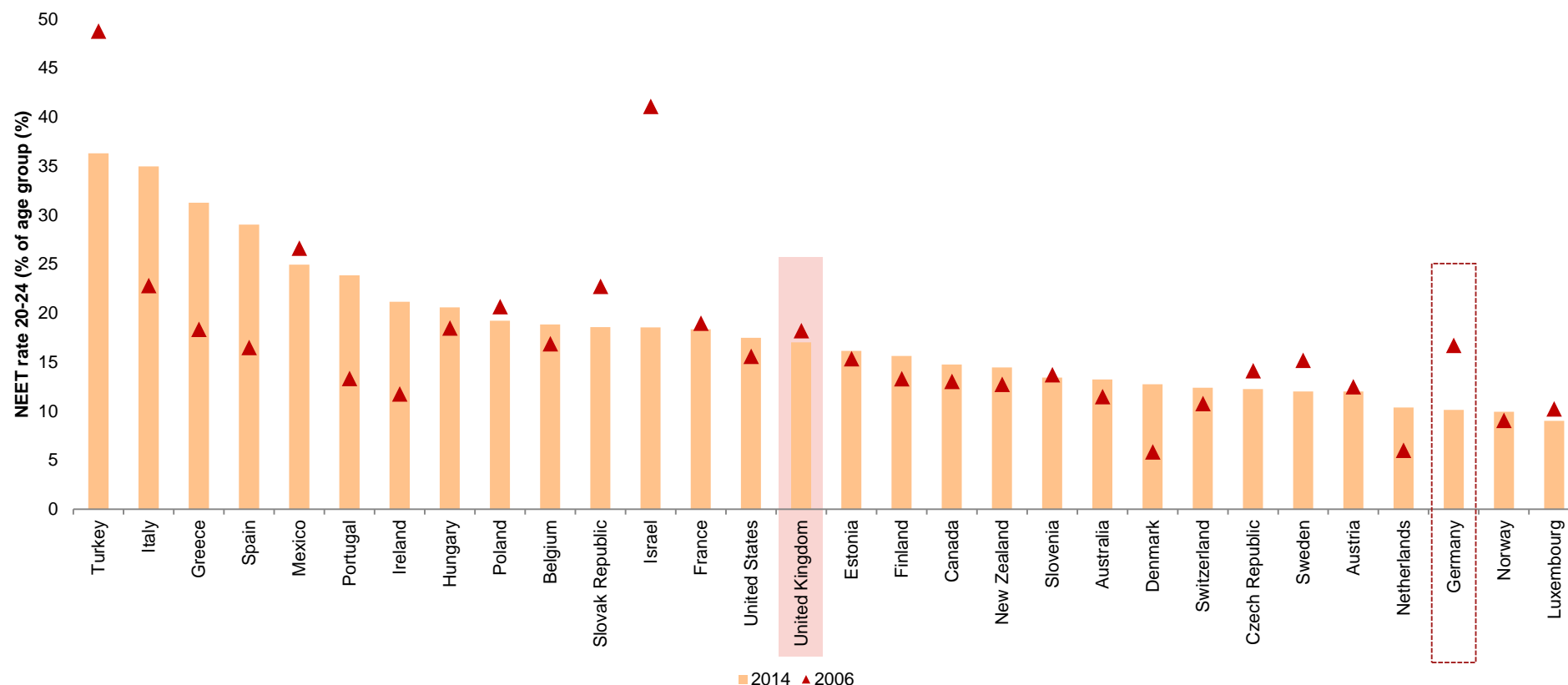
YWI Rank	Country	NEET rates (%)	Employment rate (%)	Unemployment rate (%)	Relative unemployment ratio (15-24/55-54)	Long-term unemployment (%)	Part-time employment (%)	School drop-out rate (%)	Enrolment rates (%)
1	Switzerland	12.4	61.0	8.6	2.1	-	20.6	9.4	85.7
2	Germany	10.1	45.3	7.2	1.7	22.5	21.6	11.9	89.2
3	Austria	12.0	51.4	10.6	2.0	15.8	19.1	10.7	79.2
4	Iceland	9.4	73.1	8.7	2.7	1.6	46.0	55.2	88
5	Norway	10.0	50.4	10.0	2.4	3.1	50.5	20.3	86.9
6	Denmark	12.7	55.4	10.8	1.9	8.0	63.9	14.2	87.5
7	Netherlands	10.4	60.8	11.3	2.0	18.7	71.5	32.0	91.3
8	Canada	14.8	55.8	13.2	2.3	5.1	48.2	9.3	73.1
9	Israel	18.5	44.4	9.3	2.0	4.8	20.1	10.8	64.8
10	United States	17.5	48.6	11.6	2.6	11.4	-	9.7	80.8
11	Australia	13.2	58.5	13.1	2.7	18.0	47.1	23.1	86.3
12	Japan	-	40.7	5.5	1.6	25.0	32.5	-	-
13	Estonia	16.1	36.3	12.6	2.3	15.5	20.1	13.8	87.2
14	Latvia	16.9	34.6	16.3	1.7	27.1	10.8	-	93.6
15	Czech Republic	12.3	28.4	12.6	2.7	30.9	9.3	5.8	89.9
16	Luxembourg	9.0	29.1	17.3	3.0	8.5	22.0	4.6	77.7
17	Sweden	12.0	43.9	20.3	3.5	4.4	38.1	7.4	85.9
18	New Zealand	14.5	53.1	14.7	3.4	6.9	39.0	33.7	85.7

YWI Rank	Country	NEET rates (%)	Employment rate (%)	Unemployment rate (%)	Relative unemployment ratio (15-24/55-54)	Long-term unemployment (%)	Part-time employment (%)	School drop-out rate (%)	Enrolment rates (%)
19	Finland	15.6	40.5	21.1	2.7	8.0	36.7	9.7	86.1
20	Slovenia	13.4	29.6	16.3	1.9	35.8	35.9	9.9	92.2
21	United Kingdom	17.0	50.1	15.4	3.7	21.9	35.2	20.4	81.4
22	Korea	22.2	26.9	10.5	3.2	0.2	23.8	-	87.1
23	Hungary	20.6	25.7	17.3	2.9	27.2	5.3	11.9	87.4
24	Poland	19.2	26.0	20.8	3.1	29.2	10.4	5.6	90.1
25	Chile	21.1	30.2	15.5	2.7	-	25.7	-	78.8
26	France	18.4	27.8	24.7	2.7	28.8	20.4	14.6	84.9
27	Belgium	18.9	23.4	22.1	2.9	35.7	21.7	13.4	91.8
28	Slovak Republic	18.6	23.3	26.4	2.5	51.2	11.5	5.0	84.6
29	Ireland	21.2	28.7	22.4	2.5	38.5	39.9	-	96.7
30	Mexico	24.9	41.0	9.0	2.5	0.8	23.0	69.1	54
31	Turkey	36.3	34.1	18.5	2.0	13.8	13.0	45.0	69.1
32	Portugal	23.9	22.8	32.0	2.9	30.9	19.8	38.0	88.4
33	Spain	29.0	17.9	48.3	2.4	35.0	35.7	35.3	87.1
34	Greece	31.3	13.0	49.8	2.0	56.1	20.3	17.3	-
35	Italy	35.0	15.6	40.3	3.6	55.7	25.9	20.3	77.7

\*This table shows the latest available data for each labour market measure. Where there is no data available for a specific country, we use the OECD average for the purpose of constructing the index

## Despite the global economic downturn, Germany was able to reduce NEET rates to become one of the strongest performers

*Israel has reduced NEET rates by over half from 2006 to 2014. Other big risers include Germany, who have improved NEET rates to become one of the strongest performers. In contrast, the US and UK remain middling. Turkey has made significant improvement over the period but still has the highest NEET rate across the OECD.*

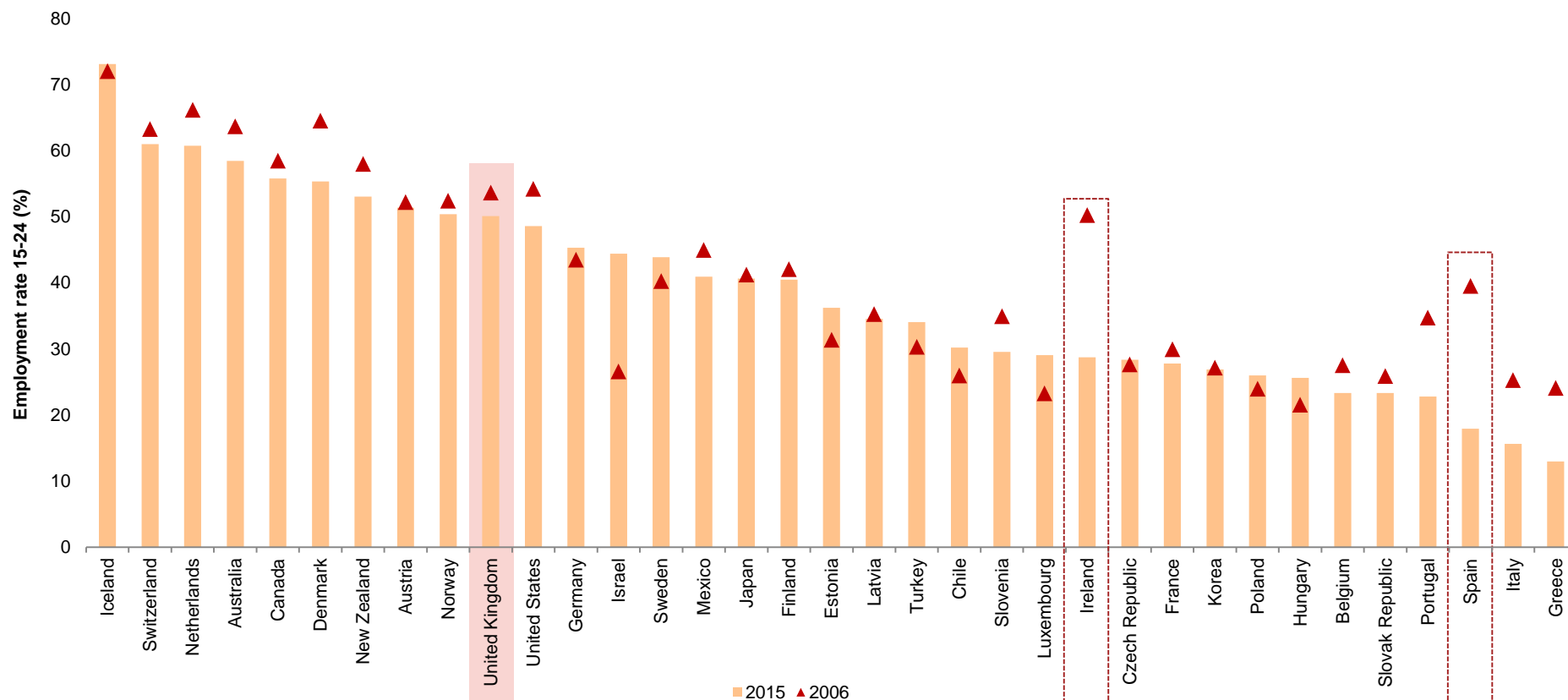


Source: OECD

There is no comparable data available for NEET rates in Japan. We also use the latest annual available data for NEET rates in Korea and Chile, for whom there is no comparable data available in 2014.

# Youth employment rates fell sharply for the Eurozone crisis economies after the global recession

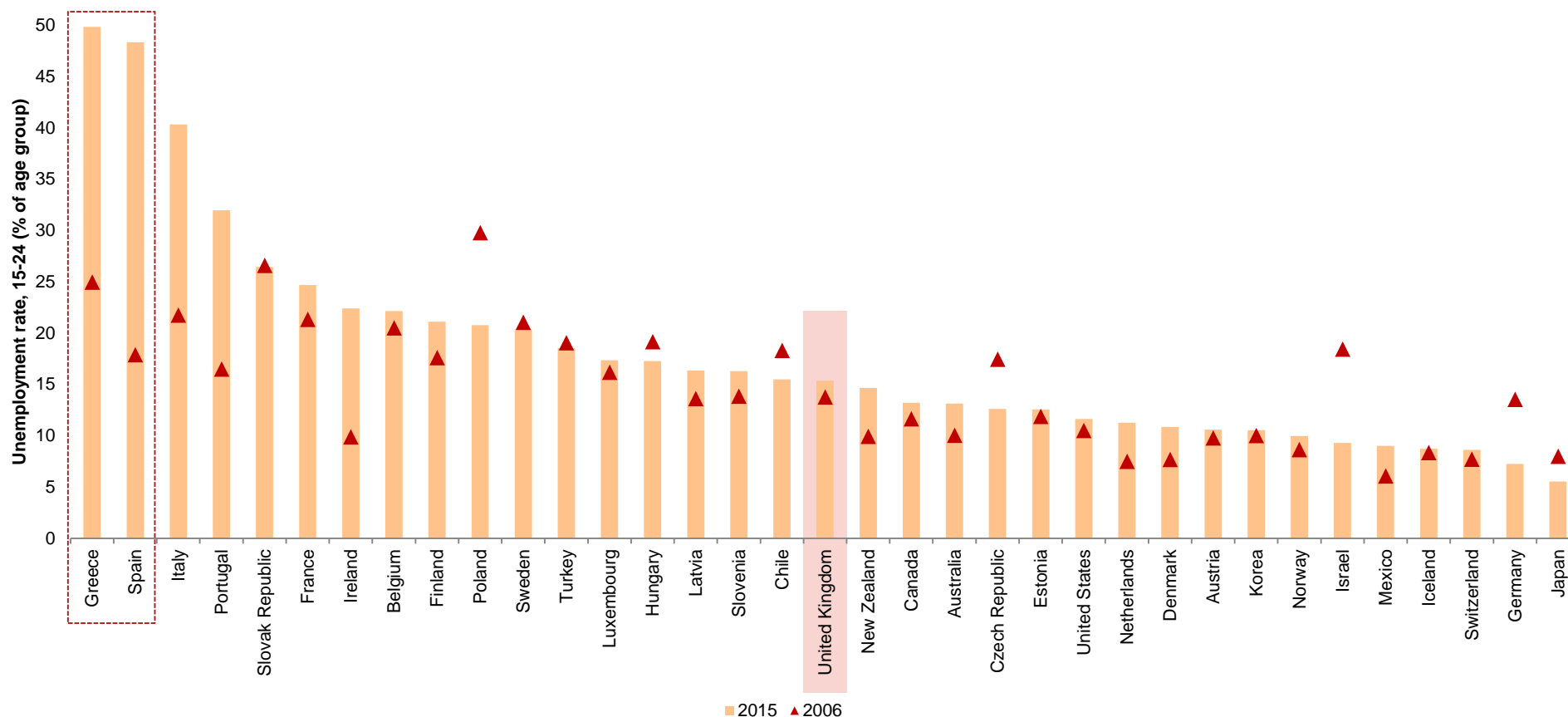
*Employment rates vary widely across the OECD countries but young people have been hit hardest in the Eurozone crisis economies such as Ireland, Portugal and Spain where employment fell sharply between 2006 and 2015.*



Source: OECD

# Almost half of the youth population were unemployed in Greece and Spain in 2015

*Unemployment in Greece (49.8%) and Spain (48.3%) skyrocketed, with the number of young people unemployed doubling between 2006 and 2015. UK performance slightly worsened over the period and sits firmly in the middle of the pack.*



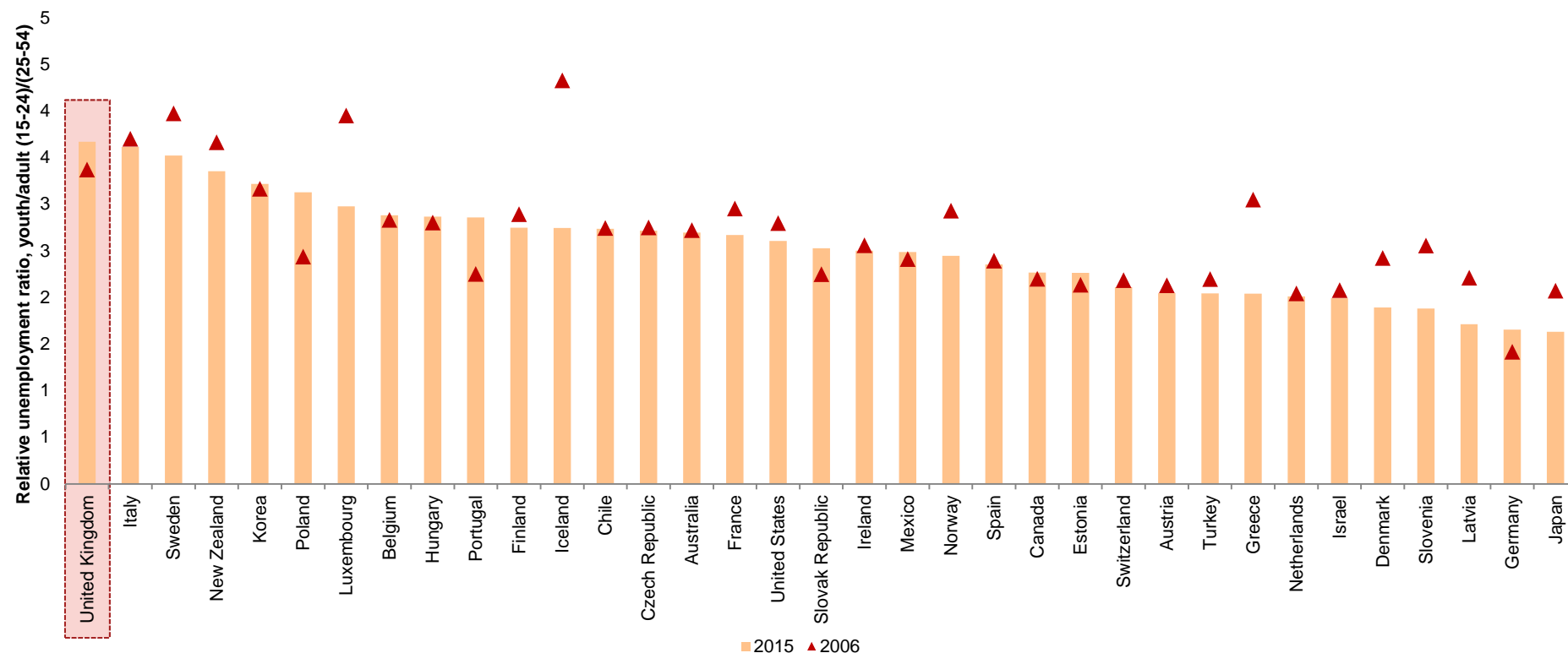
Source: OECD

Note: For the purpose of the index calculation, we have capped unemployment of Spain, Greece and Italy, across all years, at 35% so that these outliers do not unduly distort the results after normalisation.



# The UK had the highest youth unemployment relative to older workers but this could mask falling unemployment rates for older workers

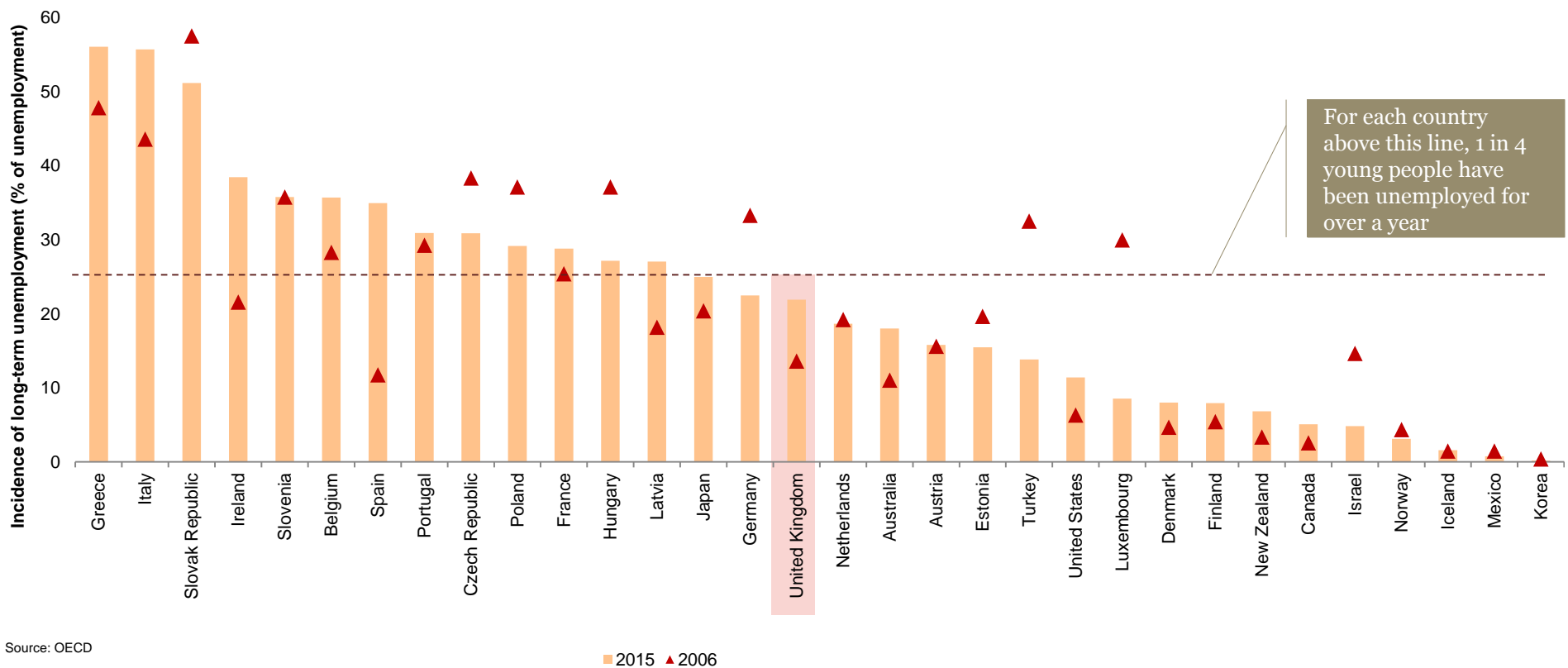
*The UK performs the worst on this measure with the highest youth unemployment relative to older workers, reflecting how younger workers have fared relatively poorly during the economic downturn. However, this could disguise improving unemployment rates for older workers in recent years. In contrast, Iceland and Luxembourg improved performance considerably in this area between 2006 and 2015.*



Source: OECD

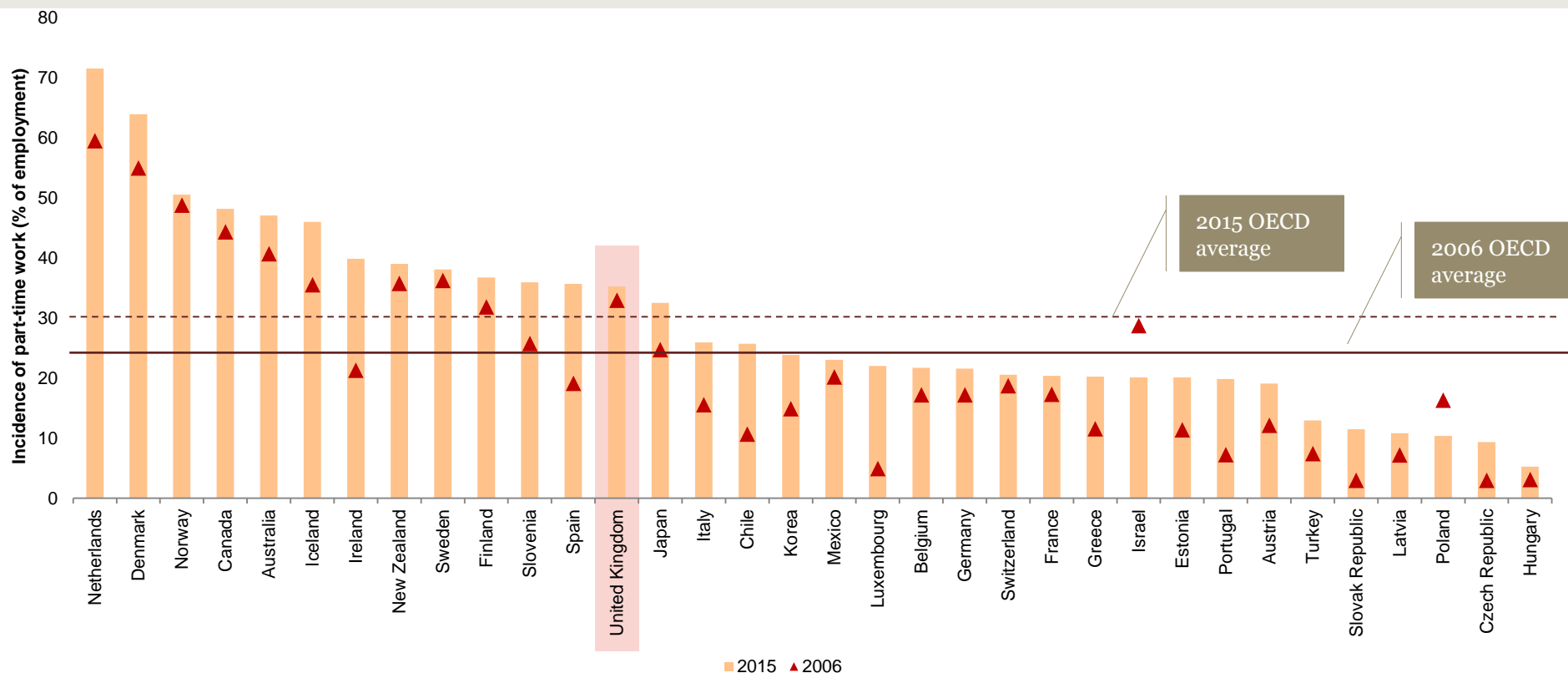
# Long-term youth unemployment is high in most of the OECD countries and likely to have a negative impact on youth employability

*Korea and Mexico have maintained incredibly low rates of long-term unemployment of around 1% from 2006 to 2015. However, long-term unemployment is too high for comfort in most of the OECD countries, which may have a negative effect on the self-confidence and employability of youth. Over half of young people are unemployed for over a year in Greece and UK performance noticeably worsens over the period.*



## There has been an upwards trend in part-time work for young people but this could support them in the transition from unemployment

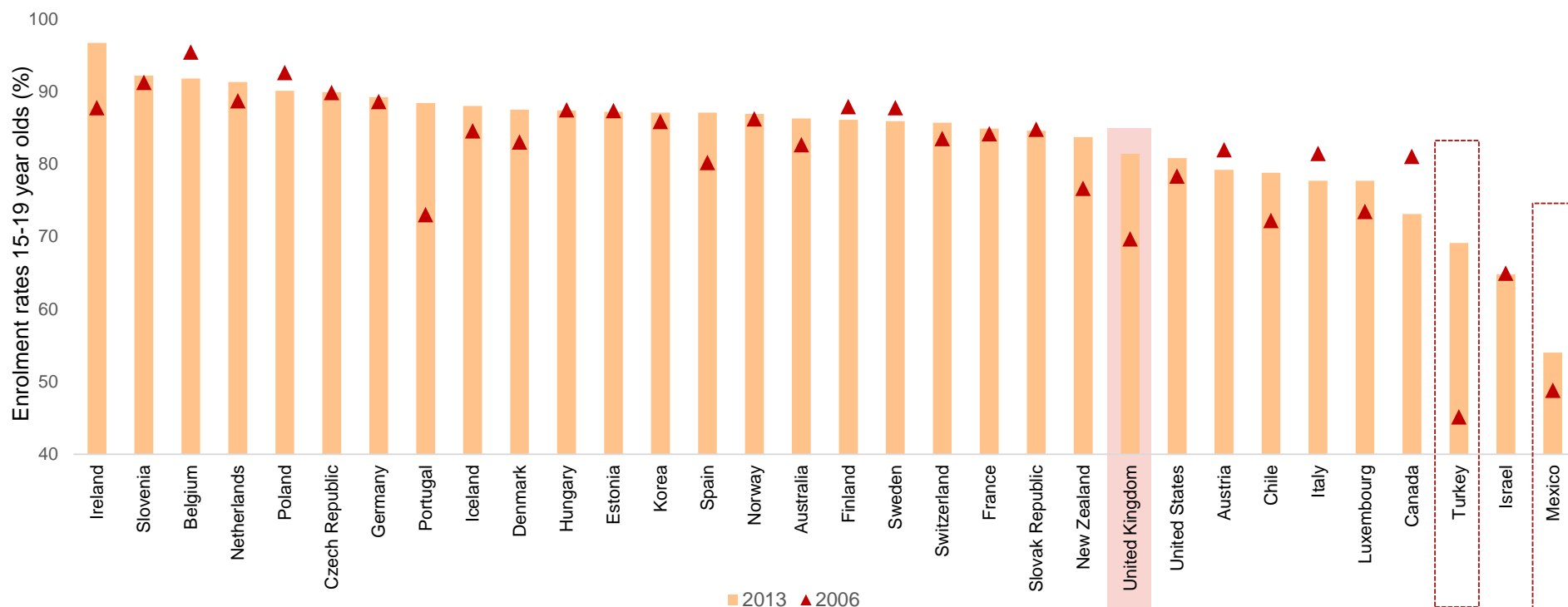
Part-time employment has shown an upward trend in the majority of OECD countries, except for Israel and Poland. This could be beneficial to a number of youth who are making the transition from unemployment to permanent full-time employment and flexible working in the form of part-time work may suit some young workers (e.g. students). However, in other cases, this may be involuntary and young workers, who seek higher earnings through working higher hours, are not able to obtain full-time contracts.



Source: OECD

# Educational participation is important but governments need to focus on the transition between schools and employment to reap the benefits

*Despite showing an upward trend, Mexico and Turkey are among the countries with the lowest educational enrolment rates. In 2015, the UK had over 80% of young people in education, which has risen but still remains below the OECD average. Educational participation is important to increase employability and maintain engagement among youth, which could prevent them drifting into anti-social behaviour. However, governments need to engage with teachers, review curriculum relevance and assessment methods to test the effectiveness of education policy.*



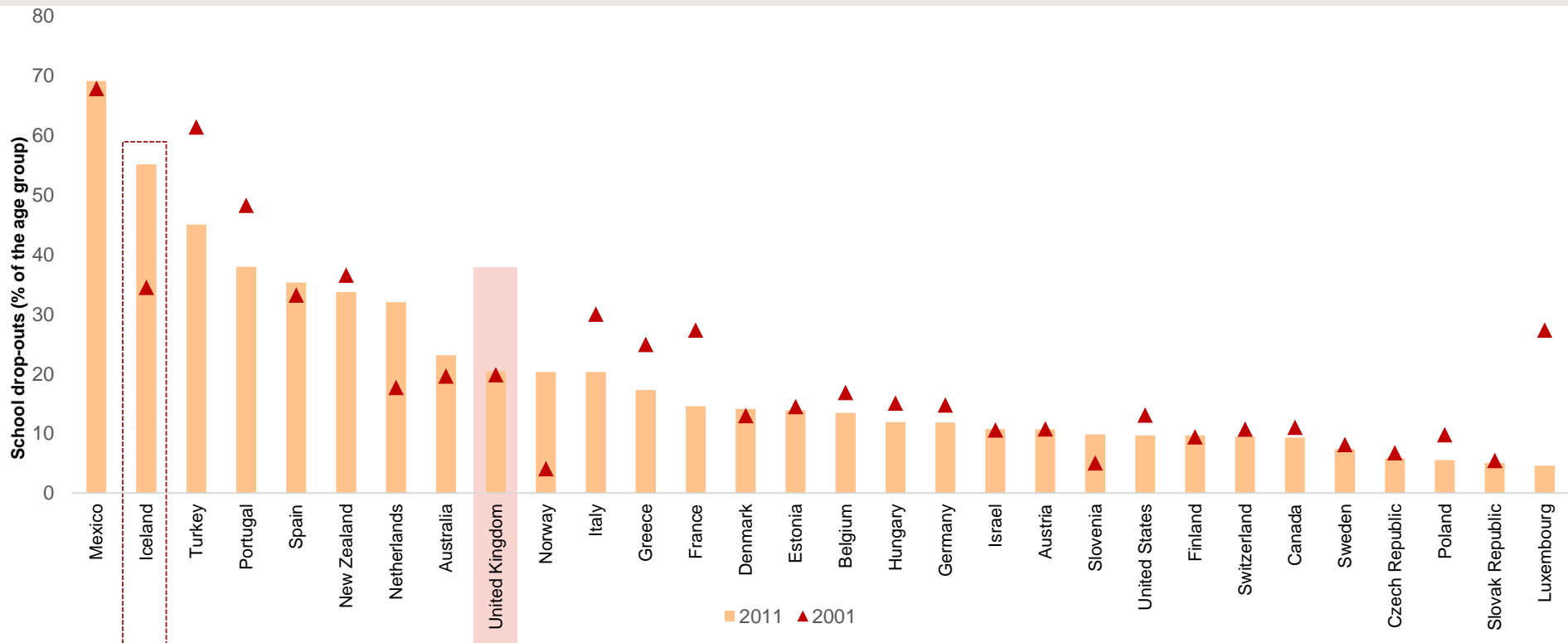
Source: OECD

For the purposes of the index score calculations, we use the latest available data for educational enrolment rates



## Despite high school drop-out rates, Icelandic efforts to keep youth in employment has supported strong performance in our index

*Mexico have the highest school drop-out rates at almost 70%. Luxembourg, Turkey and France have all made significant progress in boosting school drop-out rates but the UK's drop out rate remains too high for comfort. Iceland, one of our stronger performers, has the second highest school drop-out rate. However, the Youth Guarantee policy in Iceland has pointed youth in the direction of employment and training.*



Source: OECD

Note: 2014 data for School drop-out rates are unavailable so we assume this to be 2011 data.



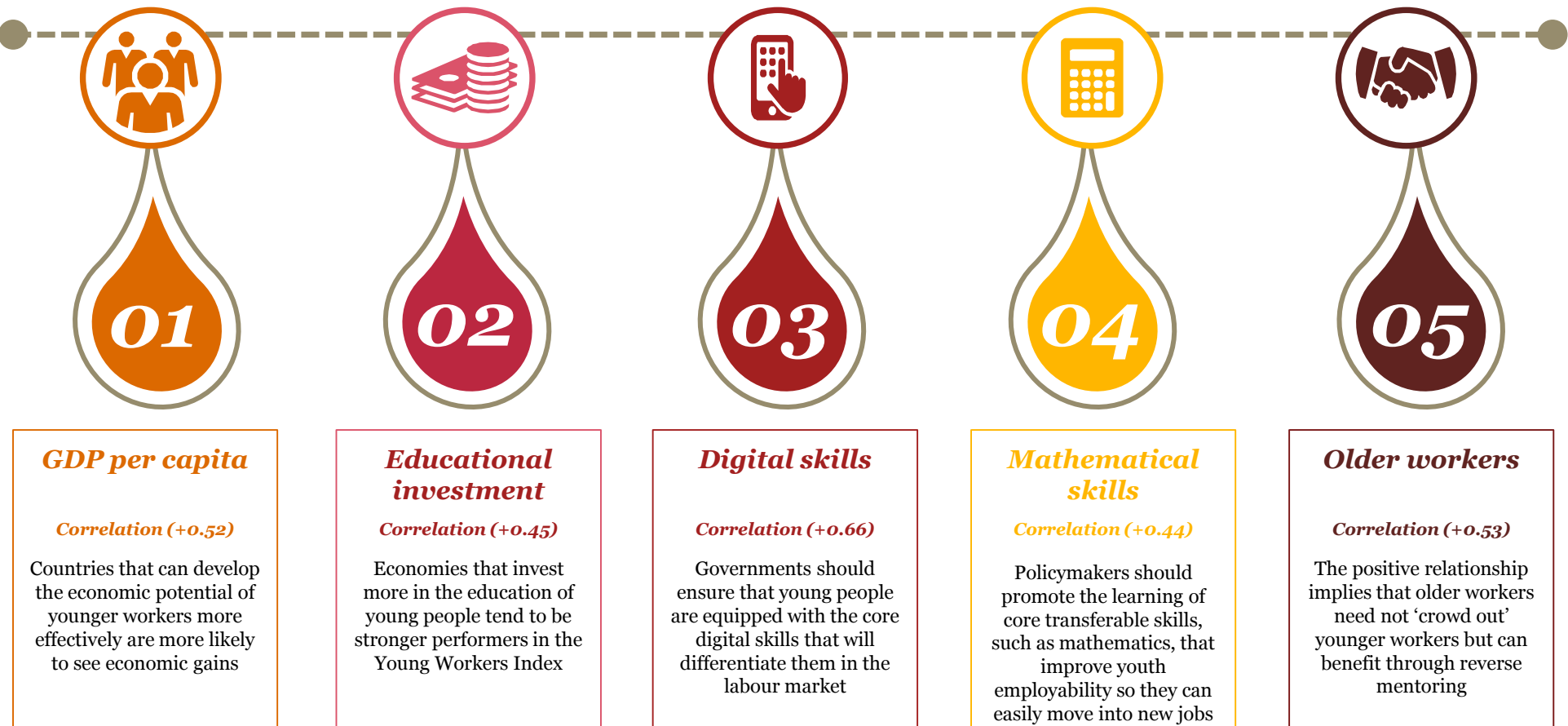
# 7

## *Comparison with other measures*

## Summary of relationships with other measures

### What can we learn?

*We analysed the relationship between our Young Workers Index and other measures and found a positive correlation with the variables below. However, we note that this may imply positive association between two variables but not necessarily a causal link, as there may be other contributing factors and reverse causality may apply in some cases. We discuss these relationships in more detail in the following slides.*

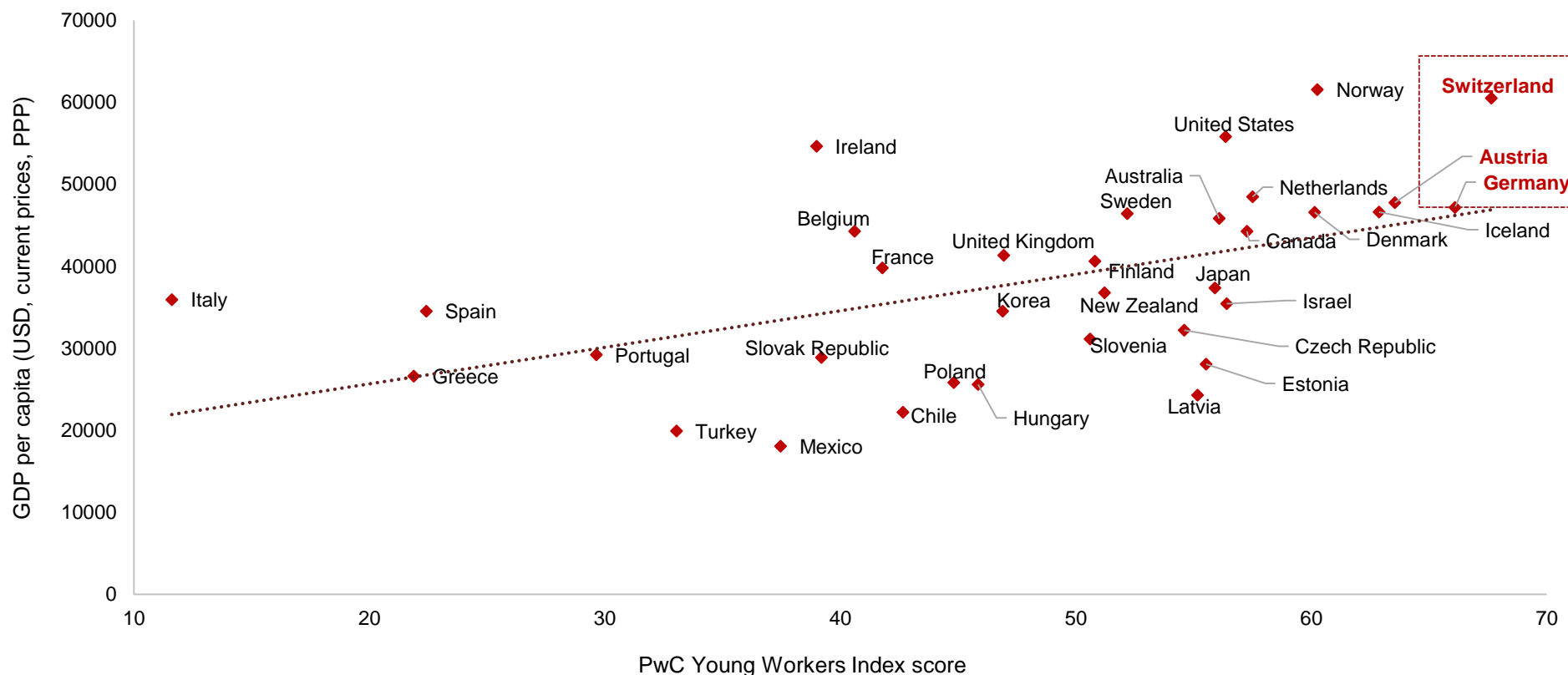


Source: PwC analysis

\*Correlation coefficient ranges between -1, perfect negative correlation, and +1, perfectly positive correlation. Zero correlation implies that there is no statistical relationship between the two variables.

## The top performing countries in our Young Workers Index tend to have higher GDP per capita

*There is a clear positive correlation between our Young Workers Index scores and GDP per capita, implying that it can pay dividends when countries, such as Switzerland, are more effectively able to develop the economic potential of their younger workers. However, this could also mean that richer countries are more likely to invest in their younger people.*



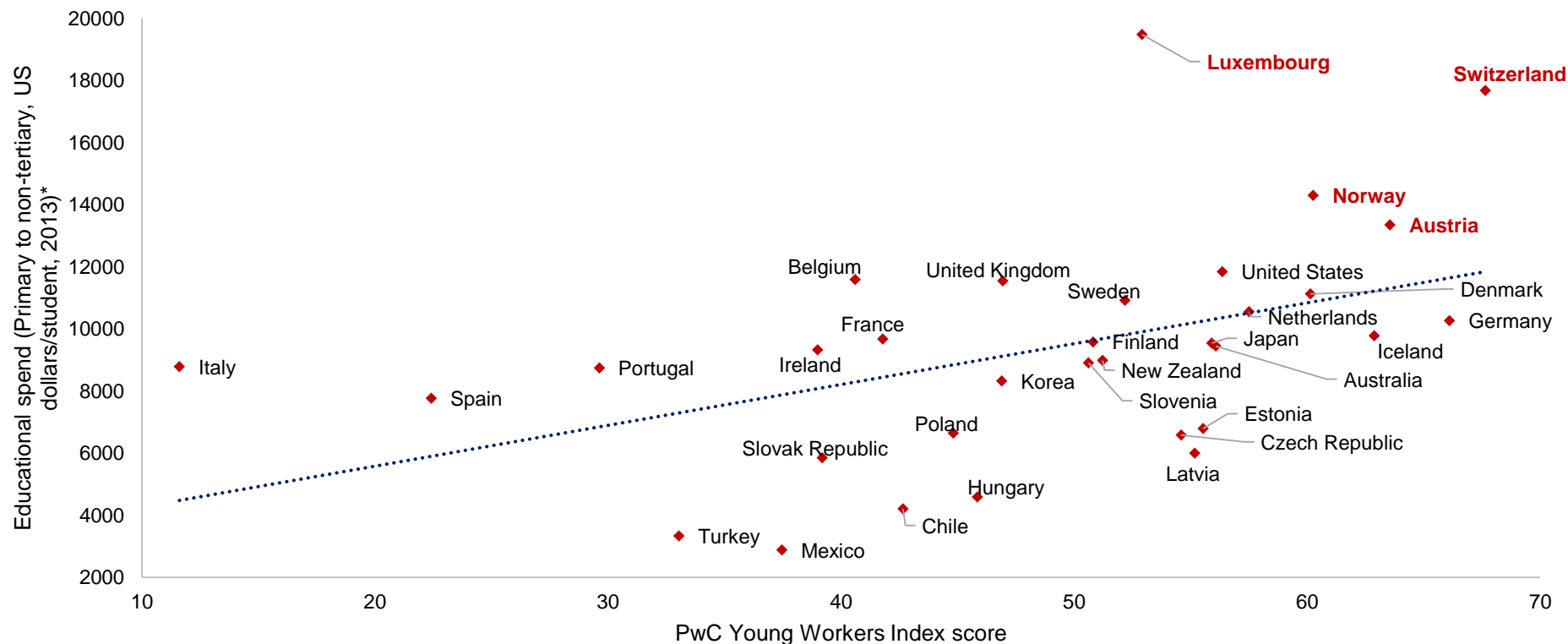
Sources: PwC analysis, OECD

Note: We have excluded Luxembourg on the basis that it is an outlier with a high GDP per capita of around \$102,000.



## High performing countries in our Young Workers Index tend to invest more in the education of young people

Countries who perform well in our index, such as Switzerland, Austria and Norway, tend to spend more on early education and hence reap the long-term benefits when young people enter the labour market. However, governments should also focus on how resources are being spent and regularly review class sizes, quality of teaching, assessment methods, quality of school leaders and commitment to engage with employers.



Sources: PwC analysis, OECD

\*Data for Canada, Israel and Greece were unavailable

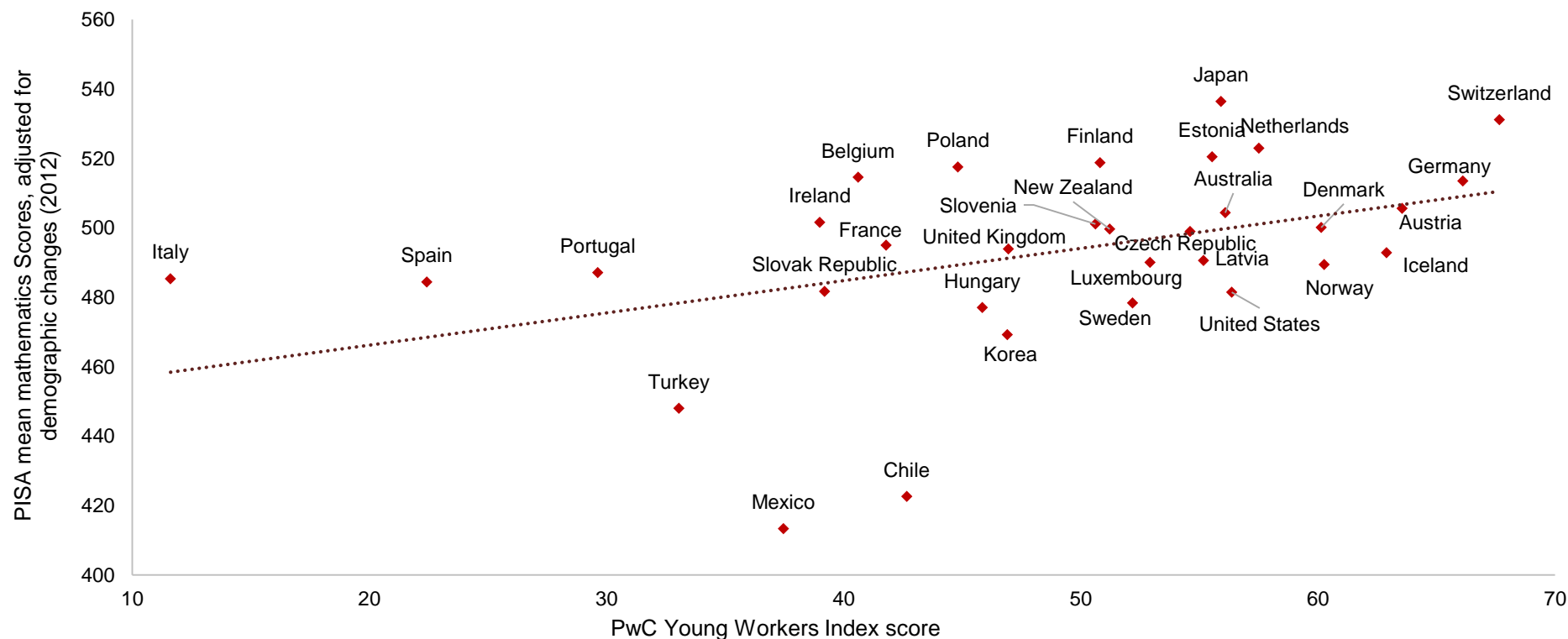
## Governments should promote digital literacy in their skills strategy to prepare them for the new digital age

*Countries with the highest 'internet penetration' are more likely to perform well in our Young Workers Index, implying that Governments should ensure that young people are equipped with the core digital skills that will enable them to add value such a constantly evolving environment that is underpinned by technological development. This could also help differentiate them from other workers in the labour market.*



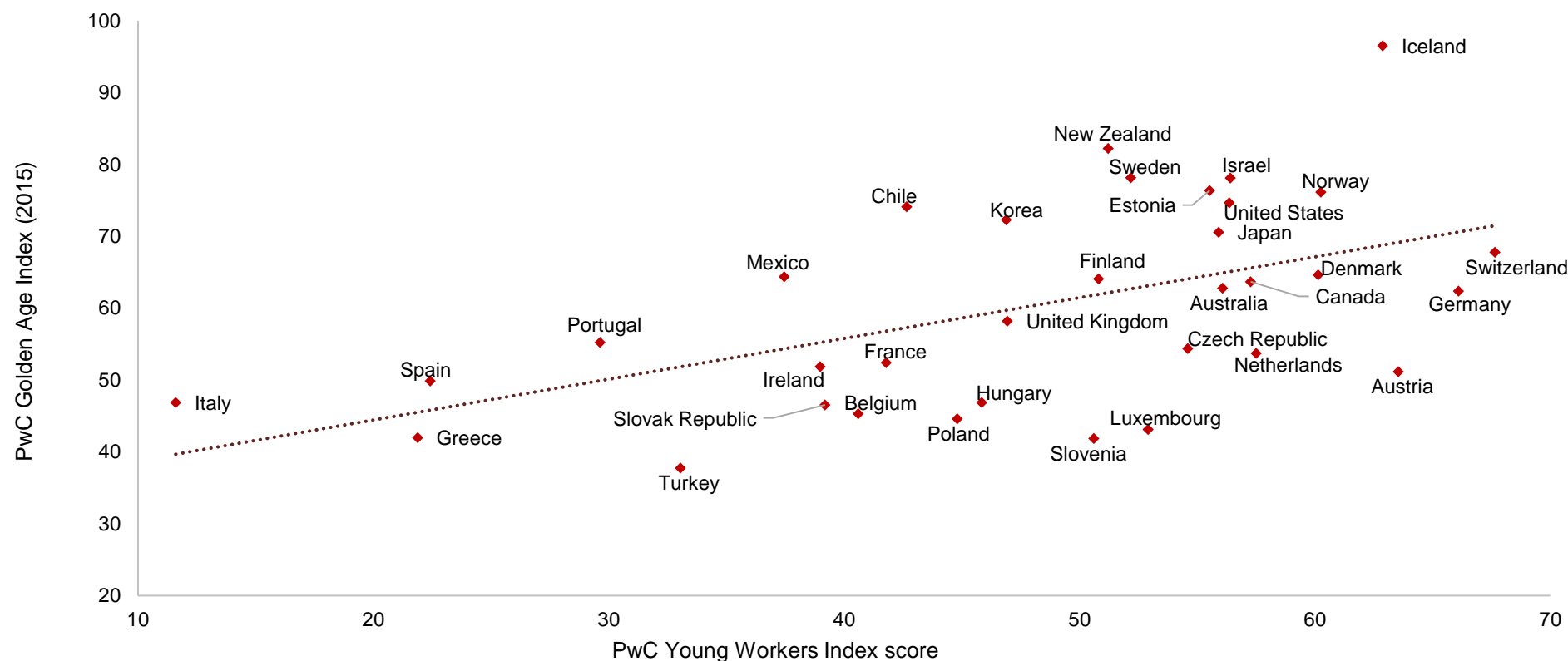
## Education should provide youth with core transferable skills, such as mathematics, in order to improve long term employment prospects

*Policymakers should develop an educational curriculum and training initiatives that promote the learning of transferable skills, which will equip young people with the core skills required to succeed across a number of working environments. This also benefits the wider economy, as young people would be more able to move from shrinking into growing industries and bring their transferable skills with them.*



## Countries who perform well in the Young Workers Index tend to perform well in our Golden Age Index

*There is a positive relationship between our Young Workers Index and the Golden Age Index, which suggests that older workers do not 'crowd out' younger workers and that there is actually a complementary relationship at the economy-wide level. Businesses could benefit from the transfer of knowledge through initiatives such as reverse mentoring (see PwC Golden Age Index report for more information).*







# 8

## *Conclusions*

# Conclusion

## Key challenges for governments

*How can we raise vocational education to German levels?*

1

*How can we approach youth policy in a way that promotes social mobility?*

2

*How can we manage policy on a regional and local level?*

3

1

- **Change cultural perceptions** of apprenticeships among schools, role models and young people. Let's recognise vocational careers, like medicine, to be truly vocational.
- **Implement dual education systems** that combine classroom learning and apprenticeships would help to address the 'skills mismatch' and provide alternatives to higher education.

2

- **Target long-term unemployment.** Nordic Youth Guarantees engage young people who have been unemployed for longer than 6 months. Governments should focus on building employability of youth from low-socio economic backgrounds.
- **Incorporate youth policy** with other policy areas such as health and crime among youth. Education and training alone are not enough to empower youth.

3

- In cases like the UK, devolution presents an opportunity to level out the playing field on a national level. Governments should **attach social mobility as a pre-condition** to granting budget and responsibility.
- **Encourage local authorities to engage** with all parts of society. The key to success is to ensure that local government, employers, schools and role models play their part in empowering youth.

*Please feel free to reach out to us (see Annex a for contact details) to further discuss how we could help you to do this.*

# Conclusion

## Key challenges for businesses

*What can we do to make our investment in apprenticeships worthwhile?*

1

*How can we engage with youth effectively to attract the best talent?*

2

*How can we promote social mobility whilst adding value to the wider business?*

3

1

- **Engage in the design of the apprenticeships.** Being proactive around building the framework will add value by tailoring to skills requirements of your business.
- **Raise diversity of thought and experience.** Young apprentices can improve your products and services through increased diversity of perspectives and experience.

2

- **Engage with youth earlier;** way before the transition to employment. Offering work placements to school students will demonstrate the core skills required in your working environment.
- **Raise awareness of career options** amongst youth. Being transparent around the core skills that you are looking for, will help you to develop fresh talent before it even walks through the door.

3

- **Building employability amongst young people from non-traditional backgrounds** will help to build your own reputation. Youth-led social action is increasingly important to Millennials.
- **Reducing informal recruitment methods** and use of qualifications as filters. This allows you to benefit from workforce diversity, without restricting you from hiring the best.

*Please feel free to reach out to us (see Annex b for contact details) to further discuss how we could help you to do this.*





# 9<sub>a</sub>

## *Annex: Methodology*



# PwC Young Workers Index methodology

## Variables included in the index

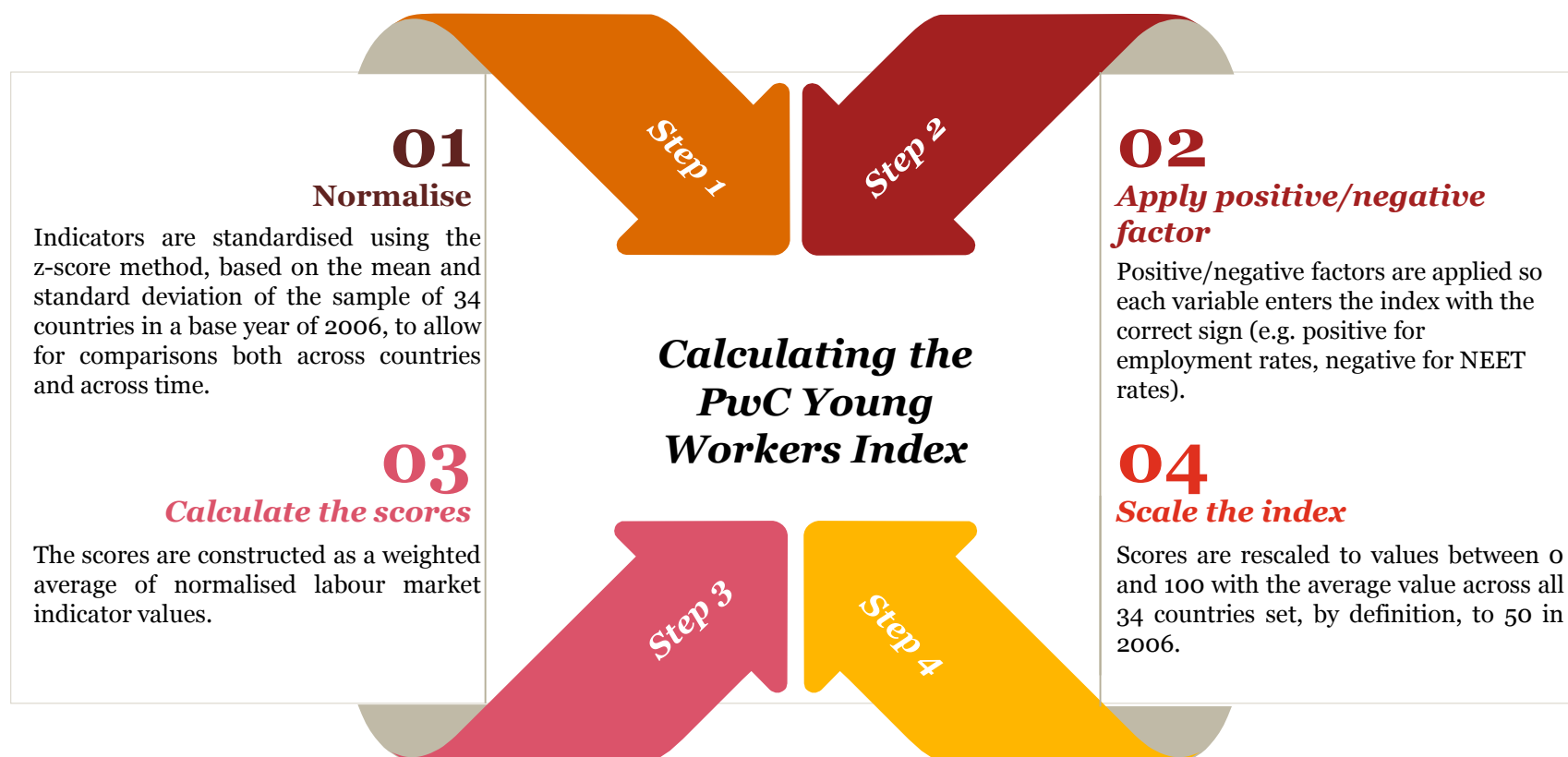
<i>Variable</i>	<i>Weight</i>	<i>Factor*</i>	<i>Rationale</i>
NEET rate 20-24 (% of the age group)	20%	-1	This measure can imply a wider range of vulnerabilities among youth, including unemployment, early school leaving and labour market discouragement. It can also represent economic and social costs. We use it as the basis for estimating the potential boost to UK GDP in the long run if NEET rates could be reduced to German levels for this age group.
Employment rate 15-24 (% of the age group)	20%	1	The proportion of 15-24 year old workers in employment is an important measure in our index and so has quite a high weight of 20%. But it is less critical for younger than older workers as for young workers education and training is a valid alternative to employment.
Unemployment rate (UR) (% of the labour force)	10%	-1	This is the proportion of the labour force that is unemployed but actively seeking employment (as opposed to in education or inactive). This represents a cost to both young people and to the wider economy as there could be social costs to having a large number of unemployed young people (e.g. increased crime and drug use).
Relative UR youth/adult (15-24)/(25-54)	10%	-1	The relative unemployment rate is included to reflect how young people fare in the labour market relative to older members of the labour force. Equality would imply equal opportunities across age groups but in many countries young people are more likely to be unemployed, reflecting the difficulty of getting into the workforce in the first place.
Incidence of long-term unemployment (% of unemployment)	10%	-1	The youth long-term unemployment rate reflects the economic vulnerability of young people. Being unemployed for over a year can have longer-term impacts in the form of skills erosion and increased reliance on benefits. This could also damage confidence and lead to long-term detachment from the labour force, increased crime rates and drug use.
Incidence of part-time work (% of employment)	10%	-1	Part-time employment may adversely affect earnings, pensions and job security, but this is given a lower weight in the index since some younger workers (e.g. students or young parents) may prefer part-time work due to its greater flexibility.
Enrolment 15-19 (% in education)	10%	1	This indicator recognises that young people may still be in education or training and therefore are still contributing to the economy and enhancing their productivity even if not yet employed.
School drop-outs (% of the age group)	10%	-1	This is an indication of the number of young people becoming detached from school at an early age, which will also tend to worsen their job prospects in the short and long term.

\*Indicates whether higher values of an indicator are positively or negatively scored in the index

# ***PwC Young Workers Index methodology***

## How does it work?

*We used a standard method to construct this index, similar to the one used in the PwC Women in Work, Golden Age and ESCAPE indices, and by many other researchers constructing such indices.*



# Bibliography

- Automotive Council UK (2013), 'Jaguar Land Rover launches 2014 apprenticeship drive' (<http://www.automotivecouncil.co.uk/2013/11/jaguar-land-rover-launches-its-2014-apprentice-recruitment-drive-with-a-call-for-more-female-engineers/> page viewed on 16th September 2016)
- Business in the Community BITC (2014), 'EE Apprenticeship Programme'
- BITC (2015), 'Grow with Barclays, the Youth Employment Strategy'
- BITC (2016), 'Barclays LifeSkills', 'Make your Mark: How M&S are supporting young people into work'
- BITC (2011), 'National Grid: Youth Offender Programme'
- Centre on International Education Benchmarking (2015), 'Gold Standard: The Swiss Vocational Education and Training System'
- CIPD (2013), 'Employers are from Mars, young people are from Venus: Addressing the young people/jobs mismatch'
- CIPD (2016), 'Employer views on the apprenticeship levy'
- Eurofound (2015), 'Finland: Youth Guarantee shows positive signs despite budget cuts'
- European Commission (2015), 'The Youth Guarantee: First Successes'
- European Commission – Employment, Social Affairs & Inclusion (2016), 'Youth Guarantee'
- European Social Network (2016), 'A way into work? Two local examples of youth employment strategies'
- Federal Ministry of Education & Research (2015), 'Report on Vocational Education and Training 2015'
- Government of Australia (2016), 'Budget 2016: Youth Employment Package'
- HM Government (2015), 'English Apprenticeships: Our 2020 Vision'
- ILO (2007), 'Industry turns Female'
- Intel (2016), 'Closing the Technology Gap'
- International Labour Organisation (ILO) (2007), 'National Pact on Vocational Training and Education'
- Interserve (2016), 'The Interserve Society Report - Apprenticeships: the path to success?'
- M&S (2016), 'Sparkling Action on Youth Unemployment'
- Microsoft (2016), 'Microsoft YouthSpark'
- Nestle (2015), 'Nestle Year 2 Campaign Summary'
- Nordic Social Statistical Committee (NOSOSCO) (2011), 'Youth Unemployment in the Nordic Countries'
- OECD (2009), 'Reviews of Vocational Education and Training - Switzerland'
- Service Canada (2016), 'Youth Employment Strategy'
- The Prince's Trust (2016), 'Success stories: Marks & Spencer'
- Training Journal (2015), 'Jaguar Land Rover recruiting apprentices for 2016' (<https://www.trainingjournal.com/articles/news/jaguar-land-rover-recruiting-apprentices-2016>, page viewed on 16th September 2016)
- US Department of Labour – Employment and Training Administration (2009), 'YouthBuild Information'
- YouthBuild (2016), 'About YouthBuild'





# 9<sub>b</sub>

## *Annex: Contacts*

## Key contacts

### Authors


**David Tran**

Economics and Policy Consultant

E: david.n.tran@uk.pwc.com

David is an Economics & Policy Consultant at PwC Strategy&. He has gained a range of Strategy Consulting experience in central government, including public policy development and economic impact assessment. Recently, David has presented his research on youth empowerment in European Parliament in order to influence European youth policy. He enjoys *applying economic principles to real life policy issues that have an impact on society* and is passionate about this topic because he thinks that making a difference in this area could give us a society with more equal opportunity.


**John Hawksworth**

Chief Economist

E: john.c.hawksworth@strategyand.uk.pwc.com

John is Chief Economist in our UK firm and editor of our Economic Outlook publications. He co-created our Women in Work, Golden Age and Young Workers indices, which aim to provide a multi-dimensional view of how labour market performance compares across the OECD countries. John has over 25 years experience advising on economic and public policy issues in the UK and overseas and, with a daughter now doing her A-levels, has a close personal interest in maximising the educational and employment opportunities for young people in an increasing competitive global economy.


**Hannah Audino**

Economist

E: hannah.e.audino@uk.pwc.com

Hannah is an economist within our Strategy& Economics & Policy team. She has experience in public policy development, working in health and on transport impact assessments. She currently works within our macroeconomics team, writing for our monthly Global Economy Watch and working on foresight including our PwC Golden Age Index. Hannah was in the first cohort of UK graduates to be impacted by rising university tuition fees and has since developed an interest in how governments and businesses can offer alternative pathways for school leavers.

### People & Skills experts


**Carol Stubbings**

Global People and Organisation leader

E: carol.a.stubbings@uk.pwc.com

Carol is a partner and global leader of PwC's People and Organisation practice. She also leads the overall relationship with two of our global (FT100) clients. Carol specialises in helping UK and multinational organisations deal with their most pressing strategic challenges. Her recent work includes advising clients on global cost reduction and transformation, Talent and Culture programmes, HR strategy and operating models, entering and exiting new markets/products and the implications and opportunities from market disruptors and innovations.


**Peter Norriss**

Education and Skills Specialist

PwC Skills Leadership team

E: peter.norriss@strategyand.uk.pwc.com

Peter has worked in education and skills for over 20 years and is passionate about the impact that it can make. Having worked for providers, a sector skills council and the Skills Funding Agency, Peter has seen the education and skills sector from a range of angles, providing him with a great insight. Currently leading the Sheffield City Region Skills Bank, Peter is at the forefront of devolution and the changes in the skills sector, driving greater employer responsiveness. He is a keen supporter of initiatives which help to improve the life prospects of young people and help our economy grow.



***Our Economics and Policy practice*** offers a wide range of services covering: market reform in a range of industry sectors (including energy, water, media and telecoms, financial services, health and government services); competition policy, disputes and other investigations; economic, social and environmental impact analysis; financial economics; fiscal policy and macroeconomics. This practice forms part of Strategy&, PwC's strategy consulting business.

For more information about these services please visit our website:

<http://www.pwc.co.uk/economics-policy>

[www.pwc.com](http://www.pwc.com)

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PwC does not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2016 PwC. All rights reserved. "PwC" refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see [www.pwc.com/structure](http://www.pwc.com/structure) for further details

161014-212543-DT-UK

This study forms part of our wider Megatrends research programme:

<http://www.pwc.co.uk/megatrends>

The study also links to past PwC research on Millennials and the Future of Work:

<http://www.pwc.com/gx/en/issues/talent/future-of-work/millennials-survey.html>