



How can countries best produce a highly-qualified young labour force?

- In an economically uncertain world, countries must balance the need for austerity with the need to invest in building a high-quality workforce.
- There is only a weak relationship between spending per student and tertiary attainment rates – the same level of spending can produce very different outcomes in different countries.
- The amount of time students spend getting their qualification varies widely across OECD countries but more time spent in education does not produce a better-qualified workforce.
- The risk of an over-educated population seems small: higher participation rates do not lead to higher graduate unemployment. Rather, the widening employment gap between the most and the least educated suggests countries should continue to aim for a highly-qualified young workforce.

In building a highly-qualified labour force, countries face trade-offs.

Policy making often means making difficult choices, finding the best possible balance between competing interests. Educational policies are no exception: even the most ambitious have to make trade-offs between equally important considerations, costs and benefits. The current global economic transformation requires countries to build a highly-skilled workforce, while fiscal consolidation and austerity oblige them to limit public spending on tertiary education. Students demand high-quality university education, but are not willing to bear the full cost. High youth unemployment lowers the opportunity cost of education, so students prefer to stay in education rather than to enter an insecure labour market. At the same time governments want to increase the size of the working population by reducing the length of studies and containing the increasing age of graduation. In this complex mix of trade-offs, countries have to choose their own priorities.

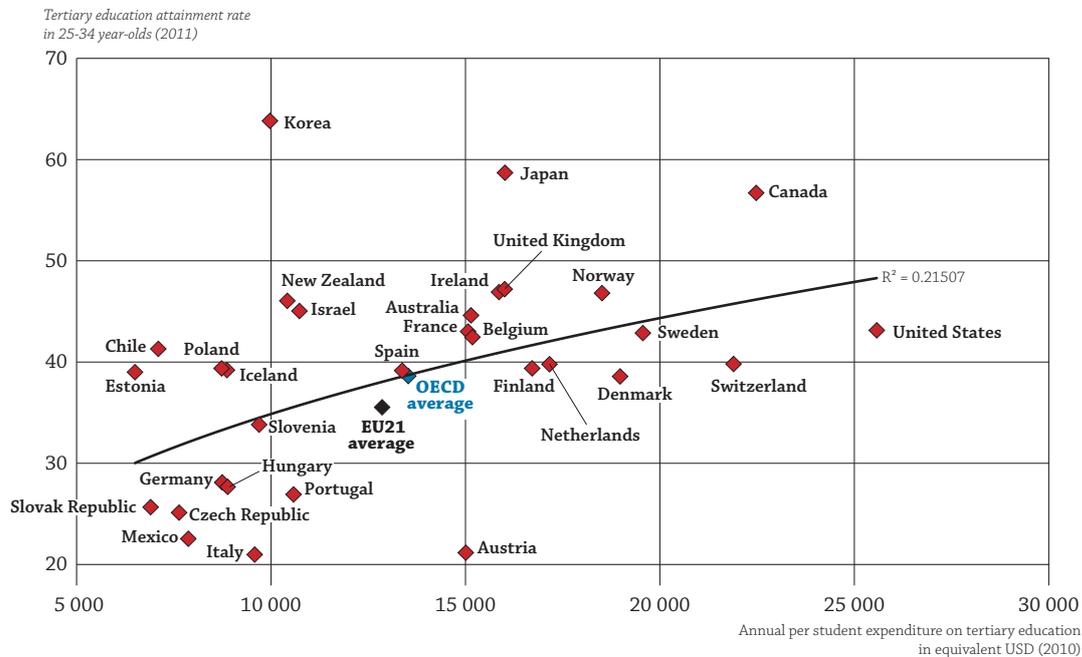
Tertiary educational attainment among young people is the end product of a process that has accumulated over their entire educational career. Whether they go on to achieve a tertiary qualification depends partly on the educational opportunities, structures and behavioural patterns that shaped their primary and secondary education. Still, many policy choices at tertiary level have an impact on attainment levels. If governments want to improve the qualifications of their young workforce, they will have to make sure to align their policy choices with that goal.

While spending matters, countries differ in how much they pay...

Does the amount of educational investment in tertiary education make a difference? On average OECD countries spend 1.4% of gross domestic product (GDP) on tertiary education or USD 13 500 per student. Countries which invest more on each student than average, from public and private sources combined, might expect to secure high-quality tertiary education, and hence a higher percentage of graduates among young workers than lower-spending countries.



Annual per student expenditure and tertiary attainment rate among 25-34 year-olds



Source: Education at a Glance 2013: OECD Indicators, Indicators A1 and B1 (www.oecd.org/edu/eag2013).

As the chart above indicates, however, there is only a weak relationship between the amount invested per student and tertiary attainment rates. The differences between countries are huge. Countries such as the Czech Republic, Germany, Hungary, Italy, Mexico, Portugal and the Slovak Republic spend around USD 10 000 per student, and less than 30% of their 25-34 year-olds are tertiary graduates. Yet Israel, Korea and New Zealand all spend similar amounts but have much higher levels of tertiary attainment. Canada, Japan and Korea all manage tertiary attainment rates of around 60% among 25-34 year-olds, but for very different price tags. Canada has translated high levels of investment into a highly-qualified young labour force, while similar spending levels in the United States and Switzerland have achieved much less. In fact, with a cost per student of more than USD 25 000, the United States is less efficient than Australia, the United Kingdom and most of the European countries, which manage to produce a similarly qualified young workforce while spending approximately USD 10 000 less.

Increased financial investment improves tertiary attainment mainly by increasing the capacity of a country's educational system, allowing a higher percentage of a given age cohort to complete tertiary education. It increases the number of graduates overall, but does not necessarily increase completion rates, which would improve internal efficiency (see Box A.4.1 in *Education at a Glance 2013: OECD Indicators*).

...but participation and time spent in tertiary education also matter.

Another element in the education equation is the time students spend in tertiary education. Good quality studies take time, but that time affects efficiency in two ways: more time spent studying increases the cumulative cost per student, while postponing entry in the labour market reduces the size of the working population in the most productive age cohort.

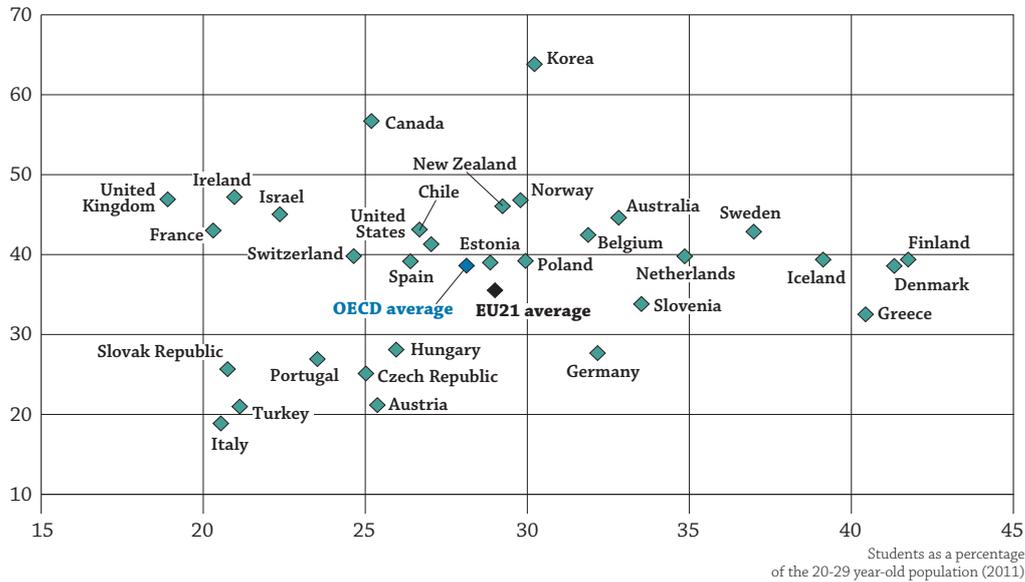
Typically, tertiary studies in OECD countries take 3.9 years, but this conceals wide variations: students in Austria on average take 5.3 years to complete their qualification and their colleagues in the United Kingdom only 2.7 years. Time spent in tertiary education is the product of institutional arrangements (such as the nominal duration of studies and



whether short or long programmes are provided) and students' actual behaviour. Students choose whether or not to go to college at all; they may take more time to complete their course, or may even remain in education to postpone their entry into the labour market in times of crisis. Governments have tried to lower the actual duration of study by implementing new degree structures – such as in the Bologna process – or by penalising those studying for an excessively long time.

Students in the 20-29 year-old population and tertiary attainment rate among 25-34 year-olds

Tertiary education attainment rate among 25-34 year-olds (2011)



Source: Education at a Glance 2013: OECD Indicators, Indicators A1 and C1 (www.oecd.org/edu/eag2013).

The number of students as a percentage of the 20-29 year-old population reflects a combination of participation rates and the time spent in tertiary education. Policy makers might suppose that having more students enrolling and participating in tertiary education would help produce more graduates.

However, as the chart above illustrates, the percentage of students in the 20-29 year-old age group bears no relationship to the percentage of tertiary qualified youngsters in the age group five years on. Both Austria and Canada have approximately 25% to 30% of their 20-29 year-olds studying, but only 21% of Austria's 25-34 year-olds are tertiary graduates, compared with 57% of Canada's. France, Israel and the United Kingdom seem to be able to reach a tertiary attainment rate of approximately 45% while only having 20% of students in the 20-29 year-old age group. Having more students in the system and allowing them to study longer does not necessarily produce a better-qualified workforce. Time spent in education is not a good predictor of outcomes.

Finally, graduate employment prospects further complicate the picture.

In designing policies regarding tertiary education participation, the question of whether those graduates will find a job is politically very sensitive. Countries may want to refrain from producing a highly-qualified young workforce, fearing that more graduates would result in higher graduate unemployment. The chart below suggests that, with the exception of Greece, a higher share of students among 20-29 year-olds does not seem to mean a lower employment rate among tertiary qualified 25-34 year-olds. The widening gap in employment opportunities between highly- and low-skilled people also suggests that the risk of over-schooling is limited and that it should not deter countries from finding the right policy mix to produce a highly-qualified young workforce.

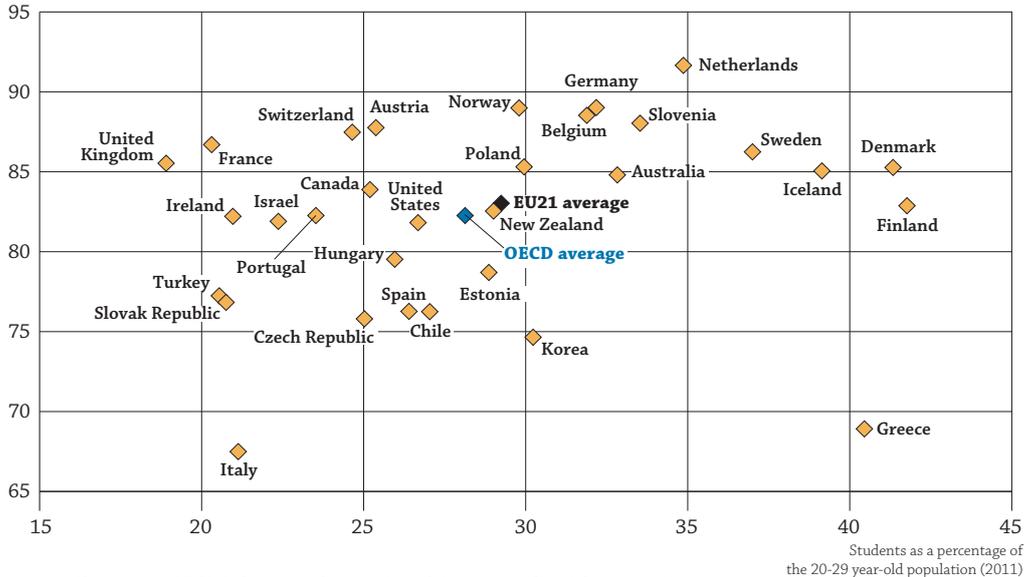
6.8%
50
2014
28.32%
2013
138
2014
36.5

18.4
28.32
100%
6%



Students in the 20-29 year-old population and employment rate of tertiary graduates 25-34 year-olds

Employment rate of tertiary qualified 25-34 year-olds (2011)



Source: Education at a Glance 2013: OECD Indicators, Indicators C1 and C5 (www.oecd.org/edu/eag2013).

The picture is mixed. Countries such as Belgium, Germany, the Netherlands, Slovenia and the Nordic countries are able to combine high rates of participation in tertiary education with high graduate employment. On the other hand, Korea seems to be an example of a country where investing in participation and attainment has come at a price in terms of graduate employment among 25-34 year-olds. France and the United Kingdom seem to value graduate employment more highly than stimulating participation.

Efficiency is finding the right balance.

In navigating through the various policy trade-offs, each country finds its own path. But some policy combinations seem to be smarter than others. Four 'extreme' cases demonstrate the alternatives. Canada is an example of a country producing a highly-qualified young workforce with moderate levels of participation and good employment prospects, but at a comparatively high cost. Italy is a country which is low on all indicators: low attainment rate, low participation, low graduate employment and low levels of investment. Korea aspires to a highly-qualified workforce and has succeeded in achieving an average level of tertiary participation for relatively low investment, but at the cost of low graduate employment rates. Belgium seems to have found a smart "middle-of-the-road" balance: an average attainment level with an average participation rate and an average level of investment, but with good graduate employment outcomes.

The bottom line Building a highly-qualified workforce requires balancing conflicting policy options. More money spent on tertiary education is a necessary but not sufficient condition. Higher student participation and more time spent in tertiary education don't do the job either. Smart policy combinations make the difference.

Visit:
www.oecd.org/edu/eag.htm

See:
OECD (2013), *Education at a Glance 2013: OECD Indicators*, OECD Publishing.

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Does upper secondary vocational education and training improve the prospects of younger adults?

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2012
28.32
36.5
2008
45%

8.625 2012
36.5 2012
28.32