

2. THE ECONOMIC AND SOCIAL BENEFITS OF EDUCATION

How does education affect the economy?

- More than half of the GDP growth in OECD countries over the past decade is related to labour income growth among tertiary-educated individuals.
- Employers pay almost twice as much for a 45-54 year-old worker with tertiary education, than for someone without an upper secondary education.
- The most attractive wages for people with tertiary education are found in Australia, Austria, Ireland, Luxembourg, the Netherlands, the United Kingdom and the United States, where average spending power exceeds USD 40 000 per year.

Significance

The skills available in the labour force and the price of those skills determine how countries will fare in the global market. As services and production systems become more complex, they require workers with higher levels of education. In order to attract and retain skilled workers, it is important for societies to strike the right balance between fostering overall equity and offering strong economic incentives.

Increasing attainment levels in the population, better employment prospects and the increasing earnings that come with higher educational attainment can all contribute to growth and prosperity in OECD countries. In this context, labour income growth in GDP by educational categories provides a simple measure to illustrate this move towards higher skills and the impact it has on economic growth.

Findings

On average, about half of the economic growth is related to labour income growth at the tertiary level of education. In France, Norway, Switzerland and the United Kingdom, 60% or more of growth in gross domestic product (GDP) is generated by those who have attained a tertiary education. In Denmark and Ireland, the labour income growth of those with tertiary education exceeds GDP growth, largely as a consequence of a strong shift towards higher skills and the impact of the global economic crisis on overall economic activity in these countries.

Annual labour costs increase substantially with educational attainment. On average across OECD countries, a person without an upper secondary education costs USD 38 000 to employ, an individual with an upper secondary education costs USD 46 000 and a tertiary-educated person costs USD 68 000 per year. In Austria, Denmark, Ireland, Italy, Luxembourg, the Netherlands, Norway and the United States, over the course of a year, employers pay at least USD 20 000 more than the OECD average to employ individuals with tertiary degrees.

The most attractive wages for tertiary-educated individuals are found in Australia, Austria, Ireland, Luxembourg, the

Netherlands, the United Kingdom and the United States, where average net spending power exceeds USD 40 000 per year. There are substantial differences in labour-related tax policies among OECD countries. After accounting for taxes and compulsory contributions, an individual between the ages of 45 and 54 without an upper secondary education can, on average across OECD countries, expect to keep 62% of labour costs in net income, while a tertiary-educated worker can expect to keep 56% of those costs. This figure reaches 70% or more for an individual with a tertiary education in Israel, Korea and New Zealand, while it is below 50% in Austria, Belgium, France, Germany, Hungary, Italy, the Netherlands and Sweden.

Trends

Even during the recent economic downturn, labour income growth among tertiary graduates generated a positive impact on GDP of more than half a percentage point per year (between 2008 and 2010). While GDP shrank by almost 4% across OECD countries in 2009, labour income growth among tertiary graduates still made a positive contribution to GDP of 0.4%.

Definitions

This indicator is based on data on GDP and labour income extracted from the OECD National Account Statistics Database in September 2011. Data on earnings are supplemented with information on employers' social contributions and non-tax compulsory payments from the OECD's *Taxing Wages Database*.

Information on data for Israel:
<http://dx.doi.org/10.1787/888932315602>.

Going further

For additional material, notes and a full explanation of sourcing and methodologies, see *Education at a Glance 2012* (Indicator A10).

Areas covered include:

- Relationship between GDP growth and labour income growth.

Further reading from OECD

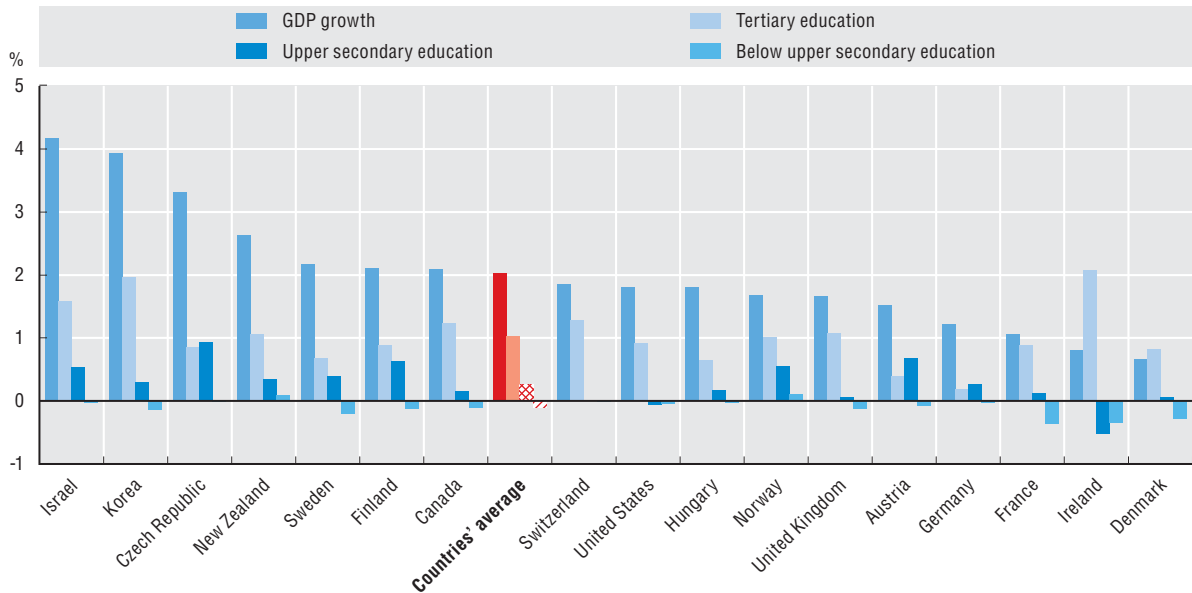
Taxing Wages (2011).

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How does education affect the economy?

Figure 2.11. **Average GDP growth over one year and labour income growth by education levels between 2000 and 2010**

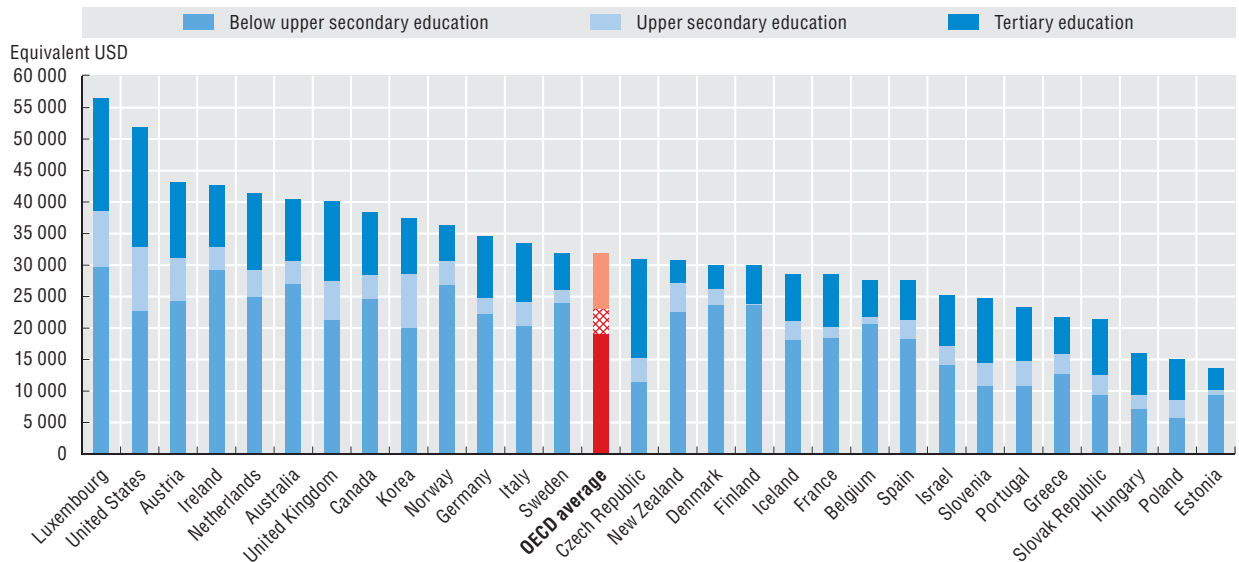
This figure shows the correlation between GDP growth and labour income growth between 2000 and 2010. In many countries, over half of the GDP growth is related to labour income growth at the tertiary level of education.



Source: OECD (2012), *Education at a Glance 2012*, Table A10.1, available at: <http://dx.doi.org/10.1787/888932665620>.

Figure 2.12. **Average labour income by education level (2009 or latest available year)**

This figure compares average labour income by education level across countries, in PPP-adjusted USD.



Source: OECD (2012), *Education at a Glance 2012*, Table A10.2, available at: <http://dx.doi.org/10.1787/888932665639>.





3. PAYING FOR EDUCATION

How much is spent per student?

Has spending per student increased?

What share of national wealth is spent on education?

What share of public spending goes to education?

What is the role of private spending?

How much do tertiary students pay?

What are education funds spent on?

How much do teachers cost?



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