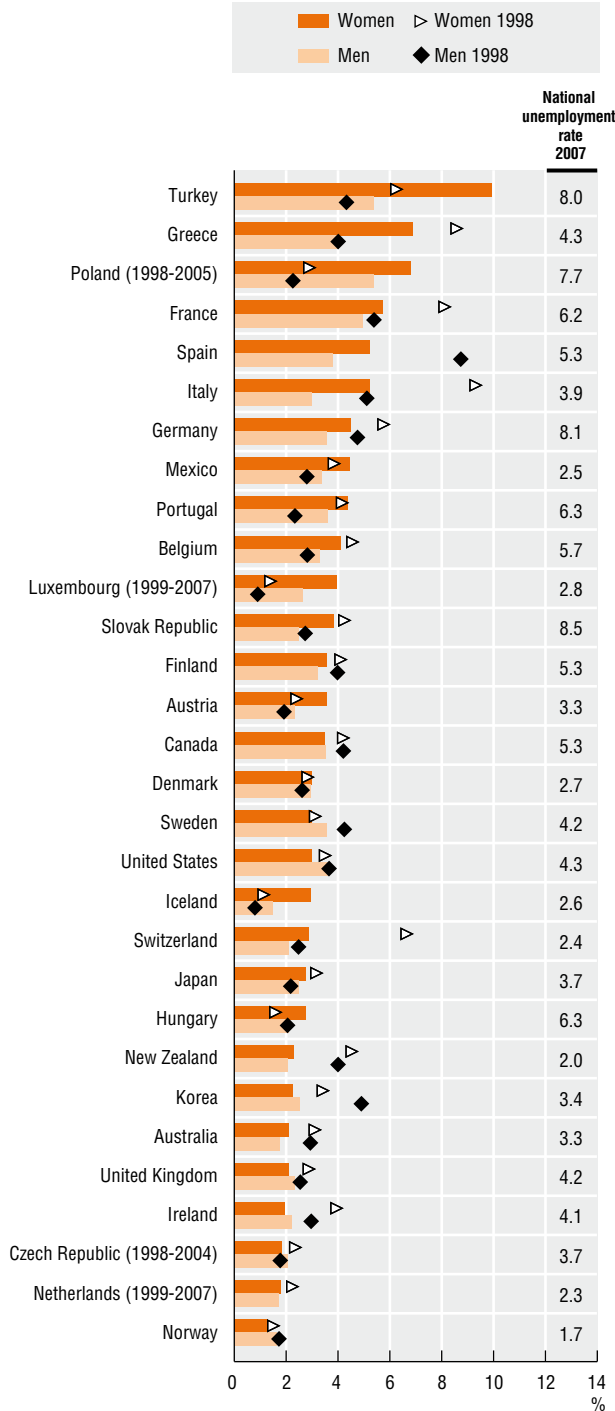


Getting people to the labour market is crucial to foster innovation, economic growth and social well-being. Ensuring the right balance between specific labour market needs and generic competencies is a challenge faced today by higher education institutions around the world.

**Unemployment rate of university graduates, 2007**



Source: OECD (2009b), OECD Science, Technology and Industry Scoreboard 2009, OECD, Paris.

StatLink <http://dx.doi.org/10.1787/835373004272>

**DID YOU KNOW?**

On average across OECD countries, about 25% of people without a university degree are employed as managers, professionals or technicians.

(OECD, Educational Attainment Database, 2009.)

Unemployment rates decrease as educational attainment increases for both males and females, but differences by gender exist. In most countries, the unemployment rate of females with university degrees is higher than that of men with the same educational level. In some countries it is even higher than the national unemployment rate.

Transition to full employment can take several years and the match between educational attainment and occupation is not perfect. Unemployment rates of doctoral graduates in the humanities are generally higher than those in other fields.

An analysis of the skill composition of employment based on occupation and educational attainment shows a difference between the supply of and demand for highly skilled employees in most countries.

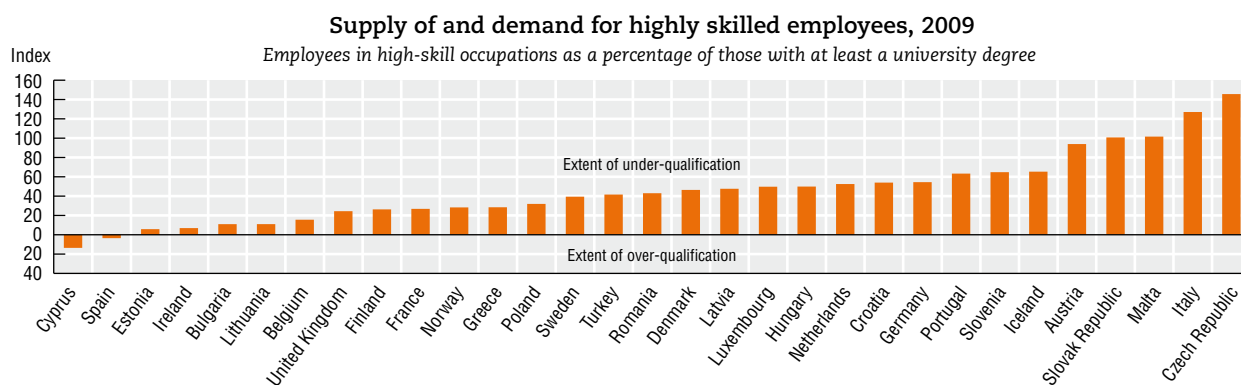
The attractiveness of research positions and careers is critical for innovation. Doctoral graduates are satisfied with their situation, but less so in terms of salaries, benefits, job security or opportunities for advancement. Dissatisfaction appears more prominent among women. Data on their earnings reveal that in most countries for which information is available, doctoral graduates are better paid when they do not work as researchers, especially outside the enterprise sector.

**Definitions**

Skilled occupations are those designated by the UN “International Standard Classification of Occupations” (ISCO-88) as ISCO1 (legislators, senior officials and managers), ISCO2 (professionals) and ISCO3 (technicians and associate professionals).

The index of occupations and educational attainment at the country level is computed as follows:

$$\left[ \left( \frac{\text{Number of high skilled\_occupation definition}}{\text{Number of high skilled\_education definition}} \right) \times 100 \right] - 100$$

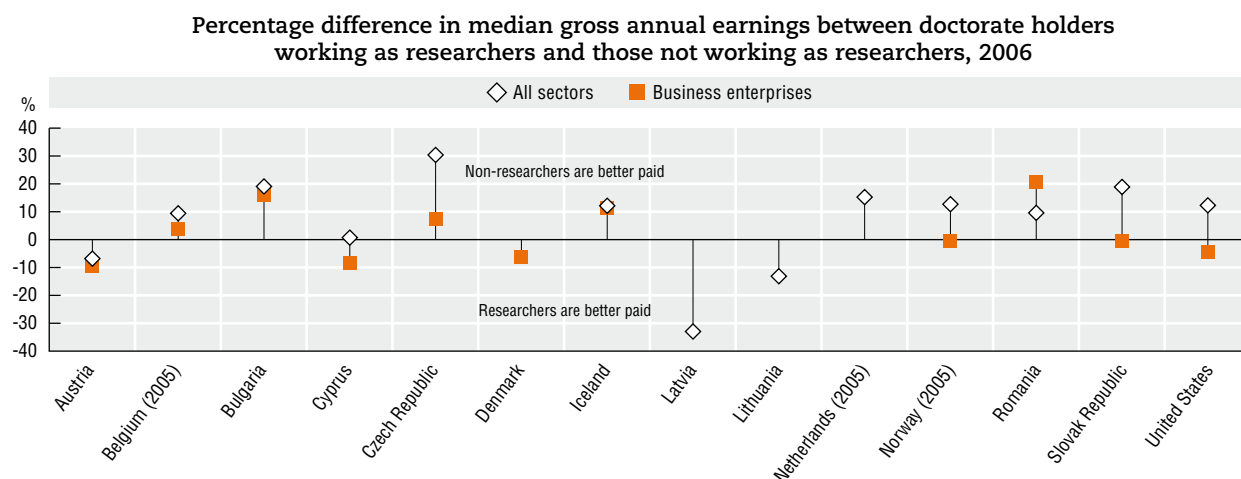


#### How to read this figure

In the Slovak Republic, there are two times (100%) more highly skilled individuals when defined on the basis of their job rather than their educational attainment.

Source: OECD, ANSKILL Database, December 2009.

StatLink <http://dx.doi.org/10.1787/835373004272>



#### How to read this figure

In the United States, doctorate holders earn 12% more when they do not work as researchers, except in the business sector, where as researchers they earn 4% more than non-researchers.

Source: OECD/UIS/Eurostat CDH data collection 2009.

StatLink <http://dx.doi.org/10.1787/835373004272>

### Measurability

As early as 1995 the OECD and Eurostat released a *Manual on the Measurement of Human Resources Devoted to S&T (HRST)*, the “Canberra Manual”. HRST are measured on two dimensions: occupations (ISCO2 and ISCO3) and level of educational attainment (ISCED5 and ISCED6). On this basis, the OECD developed a new database, ANSKILL. This database aims to add an industry-level “skill” dimension to the STAN Database for Structural Analysis. It covers European countries, Australia, Canada, Japan and the United States. The major comparability issue relates to the industry breakdown.

The need to focus on more specific sub-populations is further addressed through the OECD/UNESCO Institute for Statistics/Eurostat project on Careers of Doctorate Holders (CDH). This project aims at better understanding this population’s labour market, career paths and mobility. Efforts are being made to better measure specific aspects of the career patterns of doctorate holders. For instance, improved definitions and means of measuring two new important phenomena, postdoctoral positions and types of mobility (e.g. inter-sectoral and international mobility), are being established with the help of experienced institutions (e.g. the US National Science Foundation). These improvements will be included in the 2010 CDH data collection.