Executive summary

Demand for tertiary education is still strong despite a larger supply of graduates

In 2018, 44% of 25-34 year-olds held a tertiary degree, compared to 35% in 2008, on average across OECD countries. The expansion of the population of adults with a bachelor’s degree has contributed the most to this growth. The employment advantage of young tertiary-educated adults over those with upper secondary education has remained fairly constant over the past decade. Tertiary-educated adults are more resilient against long-term unemployment and, in 2018, their employment rate was 9 percentage points higher than that of adults with upper secondary education. Tertiary-educated adults also reap higher earnings, although this varies by field of study. Their advantage increases with age too: 25-34 year-olds with tertiary education earn 38% more than their peers with upper secondary education while 45-54 year-olds earn 70% more.

Education systems have facilitated access to tertiary education yet some gaps remain

Providing financial support mechanisms has helped make tertiary education more accessible to more people. In countries with the highest tuition fees, more than 70% of students benefit from grants or loans. Progression to master’s or doctoral level has remained constant across generations despite attractive returns on the initial investment. The annual cost of these programmes is similar to that of a bachelor’s degree in more than half of OECD countries with data, while earnings are 32% higher, on average.

Some sectors still struggle to find the skilled workers they need. While engineering, manufacturing and construction, and information and communication technologies are two fields most commonly associated with the best labour market outcomes, only 14% of graduates earned a degree in the former and 4% earned a degree in the latter in 2017. Women are particularly under-represented: less than 25% of entrants into these fields are women, on average across OECD countries.

Transitions from upper secondary education and tertiary admissions systems influence progression through education

More than 40% of 19-20 year-olds in nearly half of OECD countries are enrolled in tertiary programmes and the average age at entry into a bachelor’s programme ranges from 18 in Japan to 25 in Switzerland. Countries where a larger share of students enrol in general upper secondary programmes are more likely to show larger enrolment in tertiary education at younger ages. Entry into tertiary education is open in more than half of countries and economies, whereas other countries use selective criteria, such as academic performance, examinations and, in some cases, upper secondary programme orientation. On average across OECD countries, 17% of first-time entrants into tertiary education enter a short-cycle programme compared to 76% who enter at the bachelor’s level and 7% at the master’s level. However, by the beginning of the second year of study, an average of 12% of bachelor’s degree students have left the tertiary education system. Only 39% of those who enter a bachelor’s programme graduate within the theoretical duration of the programme; another 28% graduate during the following three years. Male students and those from a vocational upper secondary programme are generally less likely to enter and complete a tertiary degree. Tertiary education plays an important role in lifelong learning: more than three in four 30-39 year-olds in education attend a tertiary programme, on average across OECD countries.
TERTIARY EDUCATION

Entry into tertiary education
Among first-time entrants to tertiary education:
- 17% enter a short-cycle programme
- 76% enter at the bachelor’s level
- 7% enter at the master’s level

Among bachelor’s-degree students:
Timeline through bachelor’s degree (years):
- 12% drop out of tertiary education by the beginning of the second year
- 28% graduate during the following three years
- At least another 12% will drop out at a later stage
- 39% graduate within the theoretical duration of the programme

Sectors in high demand may struggle to find the skills they need
Only 14% of graduates earned a degree in engineering, manufacturing and construction
Only 4% of graduates earned a degree in information and communication technologies

Increased funding has sustained the expansion of tertiary education
Index of change 2005-2016
- Total expenditure
- Number of tertiary students

The benefits of tertiary education
higher employment
- 85% of tertiary-educated adults are employed
- 76% of those with only upper secondary education are employed
higher earnings
- 38% earnings premium compared to adults with upper secondary education
- 25-34 year-olds earn 38% more
- 45-54 year-olds earn 70% more
more resilience to long-term unemployment
- % long-term unemployed, among unemployed adults, by educational attainment
  - Tertiary: 29%
  - Upper secondary: 36%
Increased funding has sustained the expansion of tertiary education

Between 2005 and 2016, spending on tertiary institutions increased by 28%, on average across OECD countries, more than double the rate of student enrolments (12%). However, both the number of students and total spending have increased at a slower pace since 2010. In 2016, expenditure per tertiary student amounted to USD 15 556, approximately one-third of which was devoted to research and development. While private sources financed more than 30% of the expenditure, on average, tuition fees for bachelor programmes increased by more than 20% between 2007 and 2017 in half of the countries with data. Human resources in tertiary education have also expanded in most countries. Between 2005 and 2017, the number of academic staff at the tertiary level across OECD countries increased at an average rate of 1% per year, a rate similar to that to that of tertiary enrolments.

Graduation rates from upper secondary education have increased over the past decade

Although graduation from upper secondary education increased by 6 percentage points between 2005 and 2017, 15% of 25-34 year-olds did not attain upper secondary education in 2018, on average across OECD countries. In some countries, vocational programmes are prominent at the upper secondary level. On average across OECD countries, 40% of first-time upper secondary graduates earned a vocational qualification in 2017; in Austria, the Czech Republic, the Slovak Republic and Slovenia, more than 66% of this population did. OECD countries spent an average of 3.5% of GDP on primary, secondary and post-secondary non-tertiary institutions in 2016, and public expenditure at this level increased by 18% since 2005. Smaller classes and higher teachers’ salaries contributed to this increase. At the lower secondary level, the average class shrank by 6% while teachers’ salaries increased by 8% between 2005 and 2017, on average across OECD countries.

The teaching profession still struggles to attract new recruits

In most OECD countries, the share of primary and secondary teachers among 50-59 year-olds is larger than the share among 25-34 year-olds, which raises concerns about future teacher shortages. About 10% of primary and secondary teachers are under the age of 30, on average across OECD countries. Salaries tend to increase with the level of education taught, but teachers’ earnings remain between 78% and 93% of the earnings of other tertiary-educated adults. By contrast, school heads earn at least 25% more than their tertiary-educated peers. The number of teaching hours per year decreases as the level of education increases, on average across OECD countries, and this has remained largely unchanged between 2000 and 2018 in most countries with data.

Other findings

In 2017, more than one in three children under the age of three were enrolled in early childhood education and care services, on average across OECD countries – an increase of 7 percentage points compared to 2010. On average across OECD countries, 14% of 18-24 year-olds are neither employed nor in education or training (NEET). In Brazil, Colombia, Costa Rica, Italy, South Africa and Turkey, over 25% of 18-24 year-olds are NEETs. Adults with higher educational attainment tend to participate more in cultural or sporting activities: more than 90% of tertiary-educated adults do compared to less than 60% of those who had not attained upper secondary education.