How has private expenditure on tertiary education evolved over time and how does it affect participation in education?

EDUCATION INDICATORS IN FOCUS

DECEMBER 2019

#72

OECD

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- Expenditure on tertiary education in OECD countries increased faster than the number of students between 2010 and 2016, leading to an increase in expenditure per student. In 2016, OECD countries spent USD 15 600 per student on average at tertiary level.
- Between 2010 and 2016, private expenditure on tertiary educational institutions increased faster than public expenditure.
- Participation in tertiary education is not correlated to the funding model in tertiary institutions and high levels of private expenditure are not associated with lower tertiary enrolment rates. Countries with high levels of private expenditure tend to provide public financial support in the form of grants or loans, which can ease the financial burden on households.

Total expenditure per student on tertiary educational institutions is increasing in OECD countries

On average, OECD countries spend around two-thirds more per student each year on tertiary education than on primary, secondary and post-secondary non-tertiary education. Most of the difference can be explained by inherently different cost structures and service provision: tertiary education involves both instruction and research activities while non-tertiary levels mainly only involve teaching (New Zealand Ministry of Education, 2006[1]). In 2016, OECD countries spent USD 15 600 per student per year on average at tertiary level, compared to USD 9 400 per student at primary, secondary and post-secondary non-tertiary levels (OECD, 2019[2]).

In recent years, total annual expenditure on educational institutions has increased substantially, particularly at tertiary level. Between 2010 and 2016, total expenditure on tertiary educational institutions grew by 9% on average across OECD countries, faster than the increase in the number of students over the same period (3%). In comparison, total expenditure on primary, secondary and post-secondary non-tertiary institutions increased more slowly, rising by an average of 5%, while the number of students remained fairly stable over the same period (OECD, 2019[2]).

Increasing private expenditure on tertiary educational institutions has made up for falling public expenditure in many countries

In a context of increasing expenditure on tertiary education, policy makers should strike a careful balance between funding education through public sources and requiring students and families to cover some of the costs. It is crucial for policy makers to understand the costs and returns of tertiary education to inform this debate.

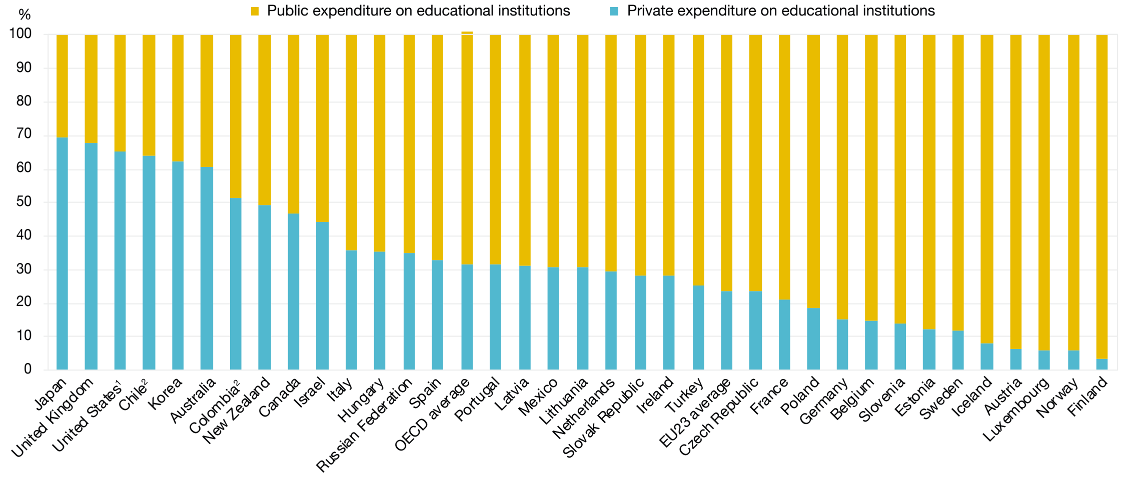
Completing a tertiary education degree brings individuals substantial returns on investment. In 2016, the private cost of attaining tertiary education added up to USD 45 100 for a man and USD 34 800 for a woman on average across OECD countries (OECD, 2019[2]). However, investing in education pays off in the long run for both men and women. The gains associated with a tertiary education that individuals can expect to receive over their career exceeds the costs they bear during their studies. In 2016, the average net private financial return from tertiary education was USD 295 900 for a man and USD 227 600 for a woman.

Although tertiary educational institutions across OECD countries are mainly funded from public sources, private expenditure (including public-to-private transfers) remains a significant source of funding (Figure 1). In 2016, 32% of all spending on tertiary educational institutions came from households and other private entities (OECD, 2019[2]). However, the share of private expenditure on educational institutions varies across countries. In the same year, the share of private expenditure on tertiary institutions ranged from less than 10% in Austria, Finland, Iceland, Luxembourg and Norway to more than 60% in Australia, Chile, Japan, Korea, the United Kingdom and the United States.

Reliance on private funding by tertiary educational institutions has been growing. Between 2010 and 2016, private expenditure on these institutions increased more quickly than public expenditure. Between 2010 and 2016, on average across OECD countries, private expenditure on tertiary educational institutions increased by 3% on average each year while public expenditure grew by just under 1% a year over the same period (Figure 2). Although about two-thirds of countries with available data experienced such faster private expenditure growth (countries above the yellow line in Figure 2), there are stark differences among countries in how the relative share of public and private expenditure has changed.

Figure 1 / Share of public and private expenditure on tertiary educational institutions (2016)

After transfers from public sources (final source of funds)



Note: International expenditure is aggregated with public expenditure for display purposes. Public-to-private transfers are included in private expenditure on educational institutions. Student loans attributable for tuition fees to educational institutions represent on average 73% of these public-to-private transfers, while the remaining refers to public grants

1. The figures for the United States are for net student loans rather than gross, thereby underestimating public transfers.

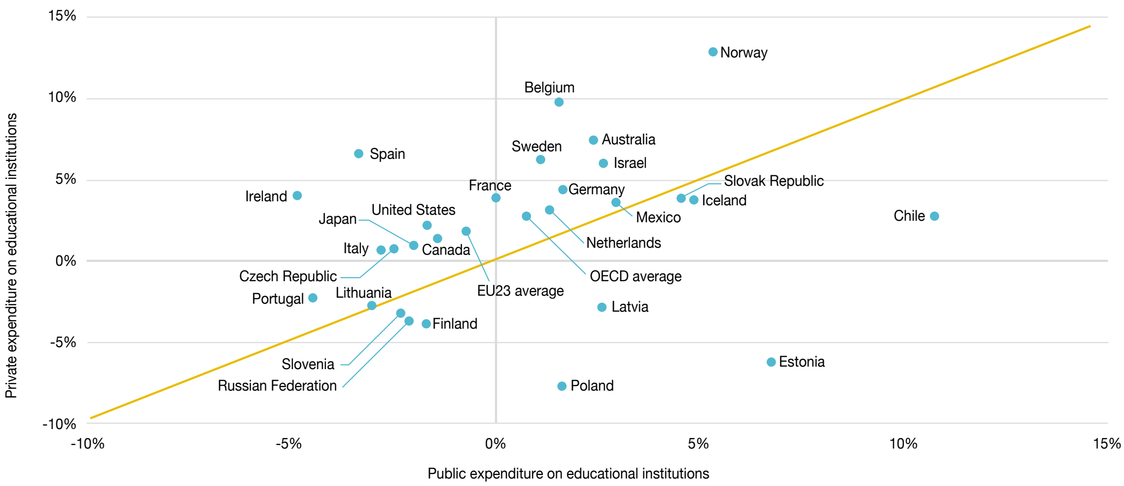
2. Year of reference 2017.

Countries are ranked in descending order of the share of private expenditure on educational institutions for tertiary education.

Source: OECD (2019[2]), *Education at a Glance 2019: OECD Indicators*, https://doi.org/10.1787/19991487, Table C3.1.

Figure 2 groups countries into four categories, each represented by a quadrant of the chart. In countries such as Ireland and Spain (top-left quadrant), reductions in public expenditure between 2010 and 2016 were to some extent compensated for by increases in private expenditure. However, the opposite trend is observed in countries such as Estonia, Latvia and Poland (bottom-right quadrant), where it is private expenditure that has fallen, to some extent compensated for by higher public spending. In countries in the top-right quadrant, such as Belgium and Norway, both public and private expenditure on tertiary educational institutions have increased, although in most of these countries, private spending grew faster than public spending. In contrast, in countries such as Lithuania and Portugal, in the bottom-left quadrant, both public and private expenditure on tertiary educational institutions fell over the period 2010-16, partially as a result of declining students populations.

Figure 2 / Average annual growth rate of public and private expenditure on tertiary educational institutions (2010-16)



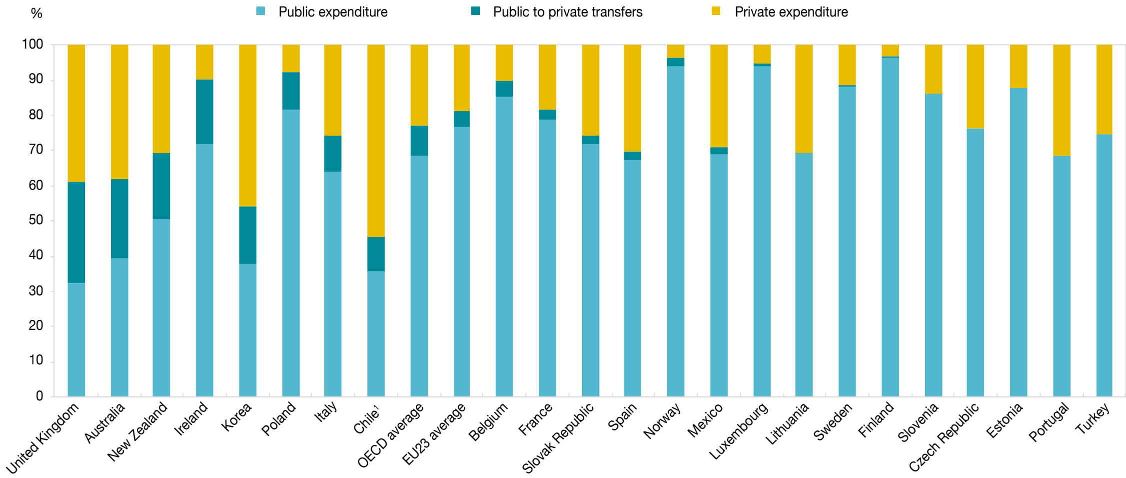
Note: Above the yellow line, line, average annual growth rates of private expenditure are greater than those of public expenditure. In this chart, public and private expenditure are considered from the final sources of funds.

Source: OECD (2019[2]), *Education at a Glance 2019: OECD Indicators*, https://doi.org/10.1787/1999148, Table C3.3.

Participation in tertiary education is not correlated to the funding model on tertiary institutions

Differences in private expenditure on tertiary educational institutions can be partially explained by the levels of tuition fees that students and their families face when enrolling in tertiary programmes. While tuition in public institutions is free for national students in about a third of OECD countries with available data, bachelor students enrolled in public institutions in Chile, the United States, and the United Kingdom paid more than USD 7 000 on average in 2017/18 (OECD, 2019[2]).

Figure 3 / Distribution of transfers and public and private expenditure on tertiary educational institutions (2016)

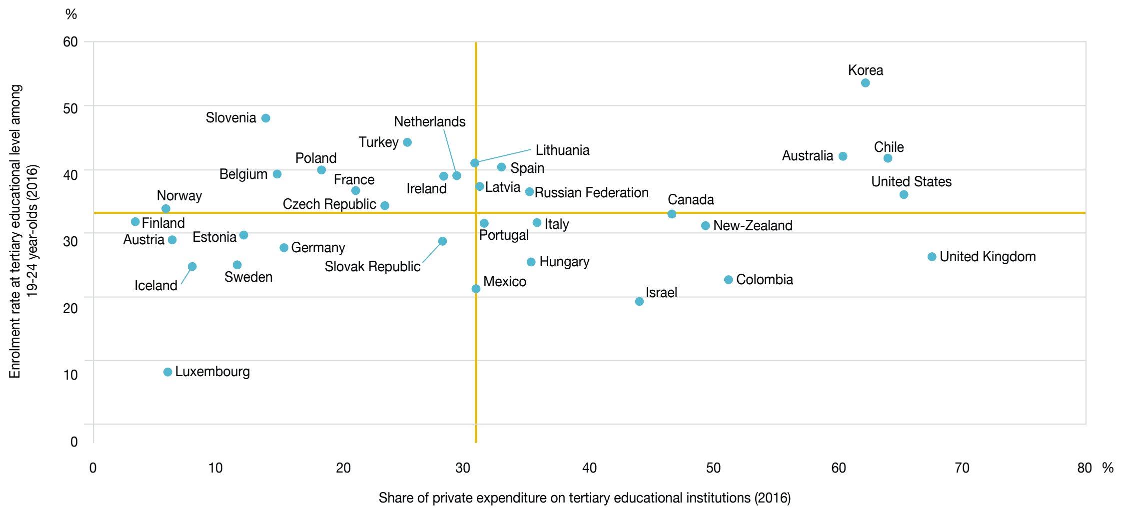


Note: International expenditure is aggregated with public expenditure for display purposes.
Countries are ranked in descending order of the proportion of public to private transfers.
1. Year of reference 2017.
Source: OECD (2019[2]), *Education at a Glance 2019: OECD Indicators*, https://doi.org/10.1787/19991487.

Countries with high proportions of private expenditure on tertiary education tend to rely more on public financial support mechanisms to support students. Usually in the form of public grants or loans, these are important tools for increasing access to tertiary education and shift the burden of paying for it until students are financially capable of doing so. In 2016, on average across OECD countries, 9% of total expenditure on tertiary educational institutions was spent on public-to-private transfers in the form of scholarships, grants or publicly guaranteed loans to cover tuition fees to educational institutions. Figure 3 shows that the countries with the highest share of public-to-private transfers are also those with the highest share of private expenditure. Australia and the United Kingdom are clear examples since public-to-private transfers represent more than 20% of total expenditure on tertiary educational institutions while the share of private expenditure is one of the highest among the countries analysed.

Student loans seem to be the preferred financial support mechanism over grants in most OECD countries (OECD, 2019[2]). Advocates of student loans argue that, for a given amount of resources, overall access to higher education is higher when funding is channelled through loans rather than grants and scholarships. Loans shift some of the costs of education onto those who benefit most, reflecting the high private returns from completing tertiary education. The use of income contingent repayments conditions, increasingly prevalent in OECD countries, mitigates the risk of default by indexing the amount to be repaid to students' earnings after graduation. However, opponents of loans argue that student loans are less effective than grants at encouraging low-income students to pursue their education. They also argue that high levels of student debt at graduation may have adverse effects on both students and government if large numbers of students are unable to repay their loans (OECD, 2014[4]).

Figure 4 / Share of private expenditure and enrolment to tertiary educational institutions (2016)



Note: Yellow axes represent the OECD averages based on data available. In this chart, private expenditure are considered from the final sources of funds.
Source: OECD (2019[2]), *Education at a Glance 2019: OECD Indicators*, https://doi.org/10.1787/19991487.

Some OECD countries have increased their financial support through grants and loans to help students cope with the increasing cost of tertiary education. Between 2007 and 2017, 15 out of the 28 countries and economies with available information undertook tuition fee reforms. For instance, in Canada, Estonia, Italy, New Zealand and Spain, on average, tuition fees at bachelor's level increased by more than USD 600 over this period – with the increase in total tuition fees exceeding 50% in Spain and Italy. In contrast, Chile and Germany have implemented policies to significantly reduce tuition fees at bachelor's level (by around USD 500); this represented a reduction of around 80% of the total tuition fee in Germany (OECD, 2019[2]).

Some of these countries have also implemented reforms that increased the proportion of students benefiting from loans or grants/scholarships, or a combination of both. Chile and Italy are notable examples of this. In 2007, only 17% of students in either country benefited from financial support, but in 2017, 58% of students in Chile and 39% in Italy received some form of financial support, the two largest increases among countries with available data (OECD, 2019[2]).

Although funding models can have an important role in promoting or deterring participation to tertiary education, the evidence on tertiary enrolment rates in OECD countries does not reveal any correlation between the relative share of private expenditure on tertiary educational institutions and participation in higher education (Figure 4). For instance, tertiary enrolment rates among 19-24 year-olds in Norway, Australia and Chile were quite similar (around 33% for Norway, 42% for Australia and 40% for Chile) but their funding models differ very significantly: Private sources account for 6% of total expenditure on tertiary institutions in Norway, compared to more than 60% in Australia and Chile (Figure 4). In addition, public to private transfers in the form of student loans and grants make up about a third of total private expenditure in Australia, whereas public subsidies to the private sector are much lower in Chile despite similarly high levels of private funding.

The bottom line

On average in OECD countries, private sources account for a significant share of investment in tertiary educational institutions. Private expenditure on tertiary educational institutions increased faster than public expenditure between 2010 and 2016 on average across OECD countries, although this varies from country to country. Participation in tertiary education is not correlated to the funding model in tertiary institutions and high levels of private expenditure at tertiary education are not necessarily associated with lower enrolment. Financial support mechanisms in the form of grants or loans help alleviate the financial burden to households, particularly in countries where private spending on tertiary education is high.

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[4] OECD (2014), *Education at a Glance 2014: OECD Indicators*, Education at a Glance, OECD Publishing, http://dx.doi.org/10.1787/eag-2014-en.

[2] OECD (2019), *Education at a Glance 2019: OECD Indicators,* Education at a Glance, OECD Publishing, Paris, https://dx.doi.org/10.1787/eag-2019-en.

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CONTACT:
Daniel Sánchez Serra (daniel.sanchezserra@oecd.org)