PROPORTION OF NATIONAL WEALTH DEVOTED TO EDUCATION

Expenditure on education according to the OECD

The OECD retains several definitions of expenditure on education for educational institutions. The one that is used in this sheet includes all costs (educational services, ancillary services and research and development) funded by the central administration, regional and local governments, the private sector (households and enterprises) and international entities. Household expenses made outside the school, public funds for financing certain outside-school student expenses (e.g. living costs), and continuing education-related costs are excluded. However, grants that are funded by the State are included. Both ISCED 01 and ISCED 02 are not in the scope. Costs are either expressed as a percentage of GDP or as equivalent US dollars in purchasing power parity (PPP). The PPP is a currency conversion rate making it possible to express the purchasing power of different currencies in a common unit.

EDUCATION REMAINS VERY PREDOMINANTLY FUNDED BY PUBLIC SOURCES IN EUROPE

In 2014 the average expenditure for education by the 22 European Union OECD member countries amounted to 4.9% of their **Gross Domestic Product** (3.1.1). This proportion varied from 3.6% of the GDP in Luxembourg to 6.6% in the United Kingdom. If we look at the costs spent only on school education (from ISCED 1 to ISCED 4), the amount of the GDP devoted to education varied from 2.6% in the Czech Republic to 4.8% in Denmark and the United Kingdom. Expenditure for higher education as a percentage of GDP varied from 0.5% in Luxembourg to 1.9% in Estonia. Estonia was particularly noteworthy, for 38% of its spending on total education was devoted to higher education, which is 10 percentage points higher than the European average.

Education remained very predominantly funded by public sources. There was, however, greater relative weight of private funding in higher education. On average of the EU country members of the OECD, private resources accounted for 6% of ISCED 1 to ISCED 4 funding. This rate was 19% for ISCED 5 to ISCED 8. France's situation, with proportions of 7% and 18% respectively, was very close to the European average. If the expenditure on school education and higher education are combined, only 4 countries surpassed the 15% threshold of private-source funding, i.e. the Netherlands, Portugal and Spain, as well as the United Kingdom at 29% of expenditure on education coming from private sources. The UK was an exception in Europe, particularly in higher education where nearly 70% of the funding was privately sourced with a large proportion being covered by households in the form of tuition and administrative fees (*cf.* 3.3).

A CONTAINED RISE IN THE PROPORTION OF GDP FOR EDUCATIONAL EXPENSES OVER THE DECADE

In 2014, the share of GDP dedicated to education expenditure by the 22 EU-member countries of the OECD is close to what it is in 2005 (4.7%) (3.1.2). Global evolution between these two years differed, however, from country to country. In the 16 countries for which statistics are available, 10 saw a more or less tangible rise of the proportion of GDP dedicated to education over the decade, i.e. Estonia, Finland and Spain (+0.4 of a percentage point), Belgium and Ireland (+0.5%) and Portugal (+1%) were the notable examples. Germany and Latvia were the only countries that remained stable over the period. Lastly Sweden (-0.2%), Poland (-0.6%) and Hungary and Slovenia (-0.7%) saw tangible reductions in expenditure on education over the 2005-2014 period.

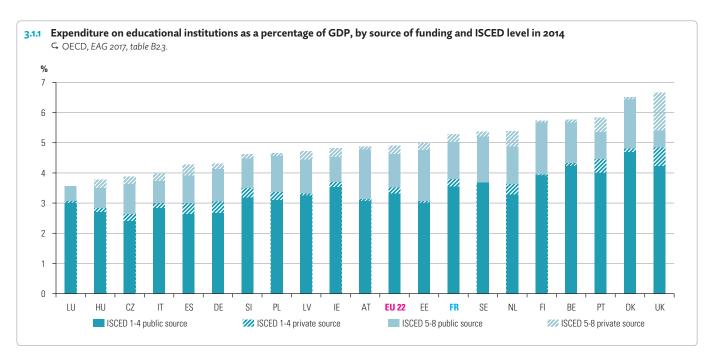
CONTRASTING DEVELOPMENTS IN SPENDING ON PUBLIC EDUCATION SINCE THE CRISIS

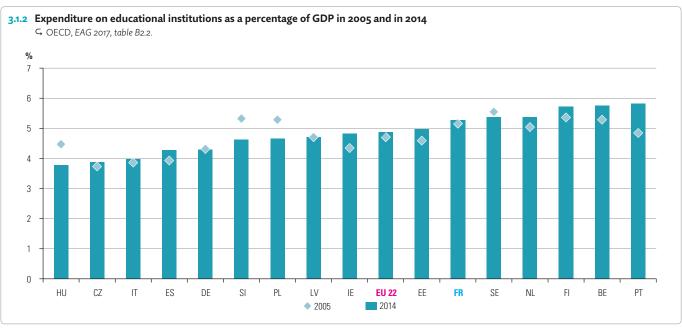
What impact has the crisis had on expenditure for education in the European Union countries? It is relevant here to focus on public expenditure for education to gauge countries' budgetary responses to the crisis. Only expenditure funded by the central administration, regional and local governments and international entities has been taken into account.

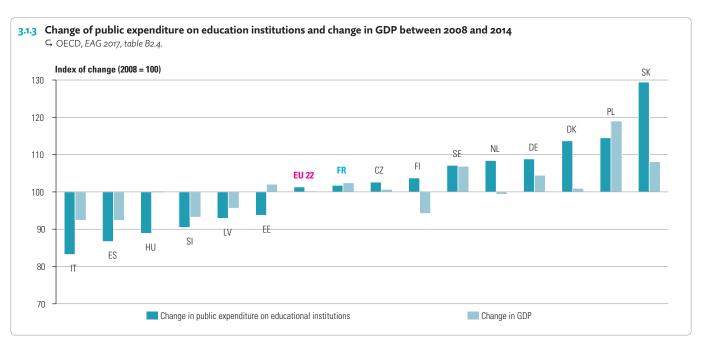
Between 2008 and 2014, in the 22 EU-member countries of the OECD, public expenditure for educational institutions increased on average by 1.3% whilst the GDP of these same countries increased by only 0.1% (3.1.3). But here too this overall situation hid large disparities between countries over the period.

Among the countries studied here, two big groups can be differentiated. The first contains the countries where there was a reduction in public educational spending. It is composed of six countries, including Estonia, Italy (-17%) and Spain (-13%). Estonia's case is singular in that it was the only country that saw a rise in its GDP. The second group is composed of those countries where there was a rise in their public spending on education, often along with a rise in their GDP, but not systematically (e.g. Finland). In Slovakia the rise in public spending was very clear-cut with a 29% increase between 2008 and 2014. With a very limited rise in its public spending on education and its GDP, France was very close to the average for the European OECD countries.

See definition p. 68.







CONTRASTING COSTS PER STUDENT AND PER EDUCATIONAL LEVEL

In 2014 the cost of education per student (cf. 3.1, p. XX), for the average of the 22 EU OECD member countries was higher for students in secondary education (10,360 US dollars PPP^{III}) than for students in primary education (8,800 USD PPP) (3.2.1). There were significant differences within the EU-22 with Hungary showing the lowest cost per student (less than 4,000 USD PPP in ISCED 1 and ISCED 2 and Luxembourg the highest (over 21,000 USD PPP for each ISCED level of school education.

Observed by level of education, the annual expenditure per student revealed different choices across the countries. Finland and Slovenia allocated a remarkably high amount per student in ISCED 2 compared to that allocated in ISCED 1 or ISCED 3. Singular in the EU-22, Denmark focused on ISCED 1 with the annual expenditure per student reducing as the ISCED level increased. France and Germany showed fairly similar profiles with costs per student below the EU-22 average in ISCED 1 but rising with the educational level to attain values considerably above the average in ISCED 3.

FACTORS INFLUENCING THE EXPENDITURE LEVELS **PER STUDENT**

Four main factors influence expenditure per student: the teachers' gross actual salary (main factor of expenditure), teachers' teaching time (according to public regulations), students' instruction time (according to public regulations) and, finally, the average class size. Per student expenditure is an increasing function of the teachers' salary and of the students' instruction time; it is a decreasing function of the teachers' teaching time and of the average class size. Observing the per student expenditure in ISCED 2 in three European countries (France, Germany and Italy) reveals different approaches.

France and Germany have an annual expenditure per ISCED 2 student which is very close to the average of the 22 EU OECD member countries. In Germany, two factors weigh the expenditure per student down: a high teaching time and a high number of students per class on average. However, the teachers' salary, which is much higher than the EU 22 average, pulls the level of expenditure per student back up to the European average. In France, where the teachers' salary is very similar to the EU 22 average, the significantly high number of students per class is enough to compensate by itself the low teaching time and the high instruction time.

In Italy, the significantly low teachers' salary is enough to explain the relatively low annual expenditure per student in ISCED 2. Indeed, the three other factors that pull the expenditure up (a very high number of hours of instruction time, a close-to-average number of students per class and a low number of teaching hours) do not compensate the low salary.

Note that some other factors that influence expenditure were not taken into account here: boarding services, canteens, administrative services, school transports. These factors may also enlighten differences between countries. However, international indicators do not allow the comparison of such expenses in a consistent manner.

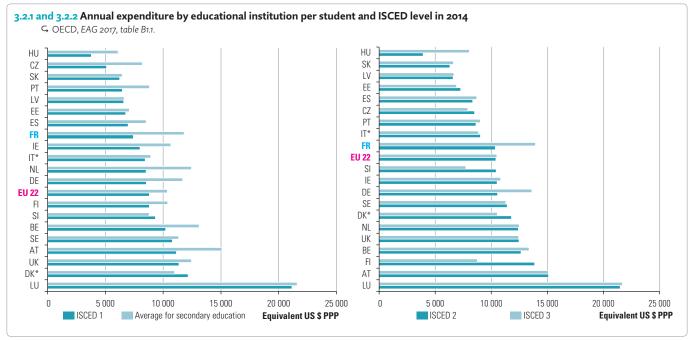
LARGE DISPARITIES IN CUMULATIVE EXPENDITURE IN A STUDENT'S CAREER IN EUROPE

To examine cumulative expenditure per student, ZOOM the oecd looks at an age group (6 to 15 years old) that corresponds to compulsory schooling in a majority of countries in the EU. To each age, the OECD applies the observed annual expenditure per student for the corresponding ISCED level. For instance, a 14 years-old French student would be in troisième, in ISCED level 2, which corresponds to a 10,310 USD PPP annual expenditure. An Italian student of the same age would be in ISCED level 3, meaning an annual expenditure of 8,860 USD PPP.

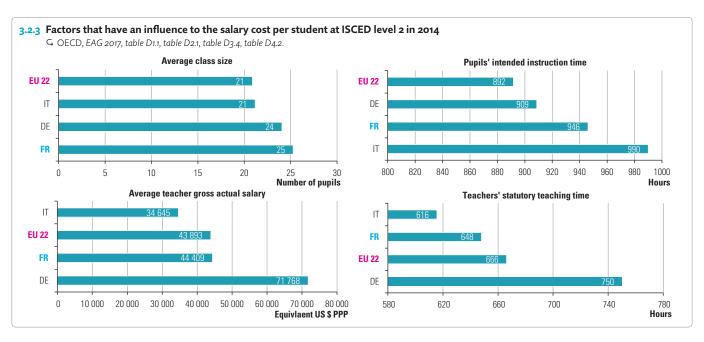
In 2014 the cumulative annual expenditure per student between 6 and 15 in the 22 EU OECD member countries was on average 91,620 USD PPP (3.3.3). The national configurations nonetheless varied within the EU itself. Hungary had the lowest cumulative expenditure (46,880 USD PPP) and Luxembourg the highest (213,100 USD PPP), or a 1 to 4.5 spread within the EU. Among the 18 countries presented, eleven (including Italy, Germany and Spain) were located between 50,000 and 100,000 USD PPP. With 92,150 USD PPP France was close to the European average.

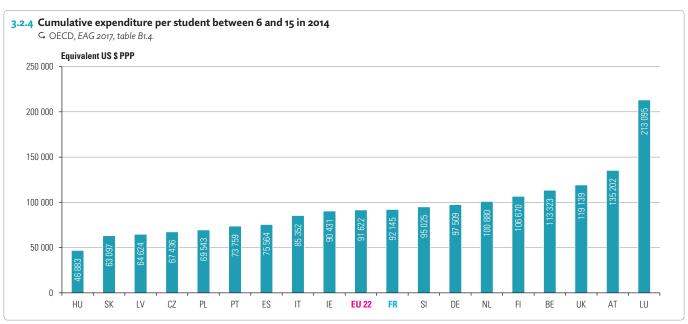
This method for counting the cumulative expenditure per student does not, however, make it possible to consider the burden of the ISCED 3 level, the length of which often largely surpasses the 15 year-old milestone and which concentrates a high level of expenditure per student in some countries such as France and Germany (3.2.1).

See definition p. 68.



Note: Data for Denmark and Italy only regard public educational institutions.





TUITION AND ADMINISTRATIVE FEES IN HIGHER EDUCATION AND STUDENT SUPPORT

GENERALLY CONTAINED UNIVERSITY TUITION AND ADMINISTRATIVE FEES

In 2017/2018 in the 28 EU countries tuition and administrative fees charged by subsidised public or private education institutions have been relatively contained (3.3.1). In 18 (including Finland, France, Germany, Greece and Poland) of the 30 (here England, Ireland, Scotland and Wales are all considered separately), the fees were less than 1,000 euros per full-time student for an academic year, and in 10 countries these fees are either inexistent or less than 100 euros.

Every year the **Eurydice** European network publishes a report called National Student Fee and Support Systems in European Higher Education. It deals with tuition and administrative fees (including, among other things, compulsory fees for social security) as well as indirect support (in the form of family allowances) and direct support (public-administration regulated grants and loans) given to students in subsidised public or private higher-education institutions. Only the bachelor's and master's cycles are taken into account here. Private higher education institutions and (for France) secondary education institutions (BTS, CPGE) are not included. The currency units used here are expressed either in euros or in national currencies without **purchasing power parity (PPP)**.

Fees are highest in England and Wales. The university tuition and administrative reform applied at the start of the 2012 academic year raised the fees to 9,000 pounds sterling (or about 10,200 euros in the 4th quarter, 2017) as the ceiling of these fees for the first cycle. To meet these high fees, students take out loans at prime rates that they are to repay only once their annual salary is higher than £21,000 (or about 23,800 euros in the 4th quarter, 2017). The fees in Northern Ireland are also very high, though not as high as those in England or Wales. Students in Italy, Latvia, the Netherlands and Spain also pay fees of over 1,000 euros per year for the majority of public or subsidised higher education programmes.

Estonia is an interesting case: it changed its system in 2013/2014 by linking the amount of fees to a student's performance. That is, students managing to attain 30 ECTSs (*European Credit Transfer System* – the university credits system) per semester and 60 ECTSs per year in an educational programme given in the Estonian language are exempted from fees. For students failing to attain the necessary credits, higher educational institutions are entitled (but not obliged) to have students pay for each missing ECTS credit. In the majority of programmes the maximum cost for

each missing ECTS is 50 euros. Certain fields however can raise the cost of the ECTSs, e.g. arts, medicine, veterinary medicine and dentistry (100 euros) and airplane pilot training (120 euros).

A WIDE INSTITUTIONAL VARIETY OF STUDENT-SUPPORT SYSTEMS

Student financial aid in the European Union takes many different forms, but direct financial support in the guise of grants and state-regulated loans is the most common (3.3.2). In the majority of cases these loans rely on distinct procedures (students receive either a loan or a grant), but they may sometimes be combined (in Denmark, for example, only scholarship students may benefit from public loans). In the 28 EU countries the majority offer several types of direct-aid solutions. Only the United Kingdom (excepting Scotland) offers only regulated loans, and 10 countries (including Austria, France and Italy) offer only grants. Grants may be awarded according to specific criteria, most often based on resources or specific needs (e.g. disabilities). In Denmark, the amount can be as high as 9,700 euros per year. Some grants are linked to students' performances without being resource-based (Estonia, Germany) or resource-based (Austria, Italy).

Indirect financial aid, consisting in tax benefits or family allowances for students or their families, is less common. Of the EU-28 countries, 16 offer indirect financial aid solutions to students and/or their families (3.3.3). Luxembourg alone offers only family allowances, and 6 countries (including Ireland and Slovenia) offer only tax benefits. The 9 other countries (including Belgium, France and Germany) offer both types of aid that coexist or are combined.

A CONSIDERABLE PROPORTION OF GRANT RECIPIENTS IN THE MAJORITY OF THE EU COUNTRIES

In 2016/2017 students in the EU-28 countries generally turned to financial aid. In 8 countries, including Austria, Belgium, Estonia and Poland, between 10 and 25% of the students received grants (3.3.4). At 35% France has a relatively sizeable proportion of grant-recipients, which is similar to Germany, Ireland, Slovenia and Spain. Lastly Denmark, Finland, Luxembourg, Malta, Sweden and the United Kingdom had an absolute majority of first-cycle students with grants in 2016/2017.

See definition p. 68.

