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The EUA Public Funding Observatory was launched in 2008 with the aim to monitor the impact of the financial crisis on higher education in different countries across Europe. Since then, EUA has been collecting quantitative and qualitative data on public funding received by European higher education institutions, and analysing both long-term trends and recent changes.

The funding data and other relevant figures are made available to EUA by its collective members, the national rectors’ conferences, whose support has been invaluable. Processed and analysed in view of evolving student numbers, as well as the overall economic context adjusted to inflation and GDP growth, this data provides some empirical evidence on public funding trajectories in the field of higher education in Europe.
Structure of the report

The EUA Public Funding Observatory (PFO) consists of the present report and an online tool, providing access to the full dataset on public funding to universities in Europe. The data can be consulted by country and by year of funding. The period of study spans from 2008 to 2017. The PFO also includes analysis of latest developments in 2018.

Country data sheets accompany this report to provide key figures for each higher education system covered. The country data sheets can be consulted individually or as part of the 2018 compendium.

The PFO report consists of two parts. The first chapter offers analysis of the long-term trends captured over the period between 2008 and 2017. The second chapter presents the overview of the latest public funding developments in 2017 and 2018.

A separate note describes the methodological approach and offers further data and clarifications.

The 2018 PFO report features 33 higher education systems. Data from various higher education systems within the UK (England, Northern Ireland, Scotland and Wales) are reported separately.
This chapter outlines the long-term developments in public funding to universities across Europe. EUA's monitoring tracks the evolution of funding allocated by public authorities to universities since 2008.

Long-term developments are best contextualized against a set of key factors, such as student enrolment, inflation and economic growth.
1.1 Evolution of public funding to universities

The map shows the level of public funding to universities in 2017 compared to 2008.

Different colour codes indicate whether the country invested or cut funding to universities in the period analysed. Top investors appear in dark green. Countries represented in red and orange registered lower funding levels in 2017 compared to the pre-crisis years.

Compared to last year’s long-term trend, the overall situation has only slightly improved in Europe. Flanders, Poland, Iceland, Slovakia and Hungary moved upwards due to their recent investment efforts. In the UK, Northern Ireland moved downwards.

Croatia and Iceland now caught up with their 2008 funding levels.

The map is based on data adjusted for inflation. This allows to better assess the performance of countries across the years, especially for those with high or volatile inflation rates over the period (e.g. Iceland).
The higher education systems under review follow various long-term funding trajectories over the period 2008-2017. However, several groups of systems that follow similar patterns can be identified: “sustained growth”, “sustained decline”, and “improving patterns”. This categorisation is relative since the scale of variation may differ significantly across various countries and throughout the period. Three graphs below describe the evolution in three cases (Germany, Iceland and Lithuania) and illustrate the identified trends.
1.2.1 Long-term funding trends: Sustained growing patterns

Systems such as Austria, Germany or Sweden are subject to sustainable investment patterns, characterised by both significant and comparatively sustained funding growth. France and the Netherlands feature more limited investment, although on a relatively stable trajectory. Luxembourg and Turkey are outliers and show overall increases of about 95% (LU, 2009-2017) and 73% (TR, 2008-2017).
1.2.2 Long-term funding trends: Sustained decline

Other systems continue to apply regular cuts to their higher education budgets. The Czech Republic and Spain nevertheless recorded slightly positive trends in 2017 (respectively +3.65% and +2.11%), while Italy has been stabilising at low funding levels in the last four years. The situation of the UK nations is explained in detail in section 1.8 (direct public funding trends are not representative of the funding model).
Several systems embarked on a recovery pattern, whereby signs of improvement can be detected after a period of either cuts or limited investment. In most cases, the improvements took place after 2013.

Croatia, Portugal and Iceland offset earlier cuts. Poland experienced three consecutive years of cuts before significant renewed investment.

Ireland is included in the “improving patterns” category due to the 2017 re-investment by nearly 5% compared to 2016. Yet this trend remains fragile and insufficient to redress the sector’s financial situation in view of the large-scale cuts implemented since 2008.
1.3 **Evolution of public funding to universities against student enrolment**

Considering funding trends in isolation only shows part of the picture for the countries analysed. Trends in student enrolment are crucial to better apprehend the developments in various systems.

While the scope of the data collected for the period 2008-2017 does not allow for the establishment of a direct relation between public funding and student numbers at the system level, it helps to understand the pressure universities face in a given system.

EUA performed the analysis for 33 systems, for which it obtained complete funding and student number datasets. The sample is divided into two groups, capturing positive and negative trends in all systems.
1.3.1 Systems with increasing funding

The graph shows changes in both funding and student numbers for 16 systems where public funding in 2017 was higher than in 2008*

When compared to student population trends, contrasted situations emerge across Europe. A major distinction can be made between:

- 6 systems where funding growth can be qualified as “sustainable”, i.e. superior to student enrolment growth;
- 10 systems where the demographic pressure is not met by sufficient investment.

Pressures nevertheless vary significantly, with two extreme cases being Turkey (highest demographic pressure) and Poland (declining student body).

*Shorter timeframes are used for the following systems:
LU (2009-2017)
CH (2008-2015)
BE-fr (2008-2016)
Student numbers for TR were capped at 100% to enhance the readability of the graph. The actual figure is +206.99%.
1.3.2 Systems with declining funding

The gravity of cuts in 17 systems varies upon student enrolment numbers:

- **5 systems**, where funding to universities decreased in 2017 compared to 2008, whilst student numbers increased, are considered to be “in danger”.

- **12 systems**, where both funding to universities and student numbers decreased in 2017 compared to 2008, are considered to be “shrinking” or “declining systems under pressure”, depending on the relative pace of funding cuts and demographic decline.

Shorter timeframes are used for the following systems:

UK data: see description of the UK situation in section 1.8. Calculations do not include publicly subsidised student loans.

Finland: the change in student numbers over 2010/2016 is -0.28%.
1.3.3 Long-term financial and demographic pressures

This matrix captures different trends in public funding and student enrolment for the systems with data in place for the period 2008-2017.

“Frontrunners” and “growing systems under pressure” are placed on the positive ends of the axes. Norway and Sweden follow sustainable funding trajectories, allowing them to preserve student/staff ratios. Portugal is showcased among the frontrunners because of the country’s investment efforts since 2013. Nonetheless, the divide has grown between the countries that sustained investment over the period.

Austria is temporarily included in the category “growing systems under pressure” despite the marked increases registered in the years under review. Funding levels are fixed for three years, which means in 2017 (second year of the cycle), funding growth was flat, while student numbers registered a minor increase, leading to an overall funding increase inferior to student growth. Other countries in Northwestern Europe (e.g. Germany and Denmark) tend to be under higher pressure due to rising student enrolment. Turkey is a special case subject to massification of higher education, which is difficult to match in terms of funding.

Central and Eastern European countries, placed in the left-hand bottom corner of the matrix, experience negative patterns both in terms of student enrolment and public funding. Poland is one exception to this trend, as the country continues to invest in public universities to respond to continuing brain drain and reducing student cohorts.

Finally, “systems in danger” include those systems that have cut funds over the monitored period, while facing growing student populations – namely, Ireland and Serbia.

The situation in the UK is detailed in section 1.8. Other systems were not featured on the graph because of incomplete datasets: BE-fr, CH, EE, FI, GR, LU, LV, SI.
1.4 Public funding to universities and GDP growth

In addition to evolving student numbers, it is also important to take account of the country’s investment capacity while assessing the progression of public funding to universities over time. Comparing the average real GDP growth rate and the average real funding growth rate over the period 2008-2017 makes it possible to identify some general patterns.

The first group in the table refers to the most ‘committed’ systems, which increased their investment in public universities at a larger scale than their current economic growth.

In the second group, there seems to be some unused margin for maneuver, as the investment level remains lower than GDP growth over the period.

Systems in the third group proved their commitment to investing in higher education despite the overall economic decline during the period.

Crucially, the fourth group of countries reduced funding for universities despite the overall positive GDP growth. Although the picture is highly complex at the national level, this is a warning signal for the countries that may miss an opportunity to strengthen their knowledge economy.

The fifth group is characterised by funding cuts against the economic decline.

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<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Systems</th>
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</thead>
<tbody>
<tr>
<td>Funding ↑ &gt; GDP ↑</td>
<td>Investment above economic growth</td>
<td>AT, DE, DK, LU*, NL, NO, SE, TR, CH*</td>
</tr>
<tr>
<td>Funding ↑ &lt; GDP ↑</td>
<td>Investment below economic growth</td>
<td>FR, HU, IS, PL</td>
</tr>
<tr>
<td>Funding ↑ - GDP ↓</td>
<td>Investment despite economic decline</td>
<td>HR, PT</td>
</tr>
<tr>
<td>Funding ↓ - GDP ↑</td>
<td>Disinvestment despite economic growth</td>
<td>CZ, EE*, ES, FI*, IE, LT, LV*, RS, SK</td>
</tr>
<tr>
<td>Funding ↓ &gt; GDP ↓</td>
<td>Disinvestment greater than economic decline</td>
<td>GR*, IT, SI*</td>
</tr>
</tbody>
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Systems not included: BE-fr, BE-fl, UK (all 4 systems).
1.4.1 Public funding to universities and GDP growth: systems investing in universities

The systems where funding increased on average over the period 2008-2017 include Luxembourg, Switzerland, Germany, Norway, Austria and Denmark. These top investors supported their universities at a considerably faster pace than their GDP levels.

Among the countries with GDP growth rates higher than funding increases, both Poland and Hungary have a large margin for manoeuver to increase the sector’s funding.

Portugal proves its commitment to invest in higher education despite a GDP growth level close to zero.

*Systems not included: BE-fr, BE-fl, UK (4 systems).
Shorter timeframes:
1.4.2 Public funding to universities and GDP growth: systems disinvesting in universities

The Irish case stands out among the countries disinvesting in higher education despite economic growth since Ireland has one of the highest average GDP growth rates in Europe.

Aside from Slovenia, Italy and Greece, other systems record negative trends in university funding in a context of positive average GDP growth, suggesting possibilities for corrective measures in the coming years.

*Systems not included: BE-fr, BE-fl, UK (4 systems).
1.5 A sustained divide in Europe

This graph shows the yearly changes in the number of systems cutting or increasing funding for universities in the period from 2008 to 2017 (reference year: 2008).

2012 appears to be the most difficult year for universities in Europe. After that year, some recovery can be detected, as more countries started to re-invest in the HE sector. The effects of some countries' renewed investment in the sector are visible in 2017 (with Croatia and Iceland overcoming the funding gap that emerged in the previous years). Recovery nevertheless remains slow, and many university systems throughout Europe still operate with lower funding volumes than in 2008.

Trends remain in line with the previous edition of this Observatory pointing to the negative impact of austerity measures and budget cuts over the long run. Despite positive economic growth forecasts, and therefore in theory capacity for public authorities to re-invest in universities, restoring funding levels proves difficult. This investment divide undermines the sector's attempts for greater collaboration at European level.

The graph above includes the 25 systems for which the funding dataset is complete between 2008 and 2017. Excluded: CH, EE, FI, GR, LU, LV, SI, UK-sc, UK-wa.
This figure presents different groups of systems according to the changes in the number of students and staff (academic and non-academic) over the period 2008-2017.

The financial and demographic pressures are reflected in the student/staff ratio. Given the varying scope of the data collected, no direct estimates of student/staff ratios can be made. Nevertheless, comparing the dynamics for student numbers and staff can help detect certain trends across Europe.

The situation is particularly challenging for Irish and Northern-Irish universities that experienced growing student numbers, but had to reduce staff.

Conversely, Hungarian universities register an increase in the number of employees despite the diminishing student population, while Poland maintains a stable university workforce in a similarly negative demographic context.

*Systems where the growth in staff numbers is slower than that of students.
1.7 **Staff numbers against public funding**

For those systems where complete datasets are available for the period 2008-2017, some indications are provided for academic and administrative staff numbers against the backdrop of public funding.

While France, Italy and Sweden show trends in staff that are more in line with the related trends in public funding, the situation appears to be more complex for other countries.

Among those systems that invest in staff at a higher rate than public funding growth are Flanders, Germany (for academic staff), Croatia, Denmark and the Netherlands (academic staff). Hungary (non-academic staff) and England register increased staff numbers in a context of lower funding.

In some cases, the effort is entirely focused on (or significantly higher for) academic staff (Belgium, Germany, Denmark, Netherlands, Sweden and England). Hungary is an exception with an investment focusing on administrative staff. Croatia and Norway display more coherent growth of both staff categories.

An outlier, Poland, shows stability in staff numbers while public funding has been increasing, although in a context of dwindling student numbers. By contrast, in England staff numbers increased despite the overall decline of public funding (the case of the UK nations is detailed in section 1.8).
1.8 Focus on the United Kingdom

This edition of the Public Funding Observatory, as for the previous year, collected data for the four higher education systems of the United Kingdom, allowing to distinguish between different patterns over the period 2008-2017. Following reforms to student funding, a large and increasing proportion of public funding for teaching at HEIs in England, Wales and Northern Ireland has been replaced by financial support for students in the form of loans for tuition and living costs. Loans are subsidised by government. Recent estimates of the long term cost to government of these subsidies for full-time undergraduates is around 45% of loan outlay each year. When considering the publicly subsidised fee loans together with direct public funding, the analysis reveals a slightly positive situation for English universities, but inferior to the pace of growth of the student population. In Northern Ireland, the 5 HEIs are left in a difficult financial situation, while being placed under similar demographic pressure (+7% over 2008/09-2016/17).
1.8 Focus on the United Kingdom

Data for Wales covers the 9 Welsh HEIs since 2010. Wales implemented a reform of the university funding model in line with the reforms in England and Northern Ireland. The Welsh sector is transitioning to a new student funding model (mix of grants and loans). Corrective funding increases are expected to redress previous cuts, notably to capital and infrastructure. While the reference year is different than for England and Northern Ireland (2008), the downward trend for Welsh universities is even steeper than in the other parts of the UK.

The funding model in Scotland does not feature a heavy loan component. Figures represent all funding from the Scottish Funding Council and the Student Awards Agency (SAAS) for the Fee element of funding. Scottish universities have increased levels of borrowing significantly as they look to pursue their strategies. At least half of the institutions in the sector have recorded a budget deficit over recent years. The system is facing significant challenges to its sustainability and competitiveness.
Part 2 **Short-term trends in funding to universities**

This chapter provides the overview of the most recent university funding trends in Europe. It explores the short-term trajectories of total direct public funding to universities, allocated over the last two years, and investigates their impact on various university activity areas.

Funding and inflation data for 2018 is not yet available for all 33 systems covered in the PFO. Therefore, the analysis centers on the changes in nominal public funding for 2018 and in real public funding adjusted to inflation for 2017.
2.1 Public investment in universities in 2018 (in nominal terms)

Funding figures for 2018 are only available for 17 of 33 higher education systems in the sample.

Iceland remains in the top investors for the second year, while England* continues to feature among the systems with most significant cuts. Wales* stands out: from a large cut, in real terms, in 2017, to the largest announced increase in 2018.

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<tr>
<th>TOP INCREASES 2018 (nominal terms)</th>
<th>TOP INCREASES 2017 (real terms)</th>
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<tbody>
<tr>
<td>Wales (14.5%)</td>
<td>Hungary (26.5%)</td>
</tr>
<tr>
<td>Czech Republic (13.8%)</td>
<td>Iceland (13%)</td>
</tr>
<tr>
<td>Iceland (11.6%)</td>
<td>Ireland (4.8%)</td>
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<th>LARGEST DECREASES 2018 (nominal terms)</th>
<th>LARGEST DECREASES 2017 (real terms)</th>
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<tbody>
<tr>
<td>England (-5.1%)</td>
<td>Northern Ireland (-16.8%)</td>
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<tr>
<td>Wales (-7.9%)</td>
<td></td>
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<tr>
<td>England (-6.5%)</td>
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* UK data: see description of the UK situation in section 1.8

- >10% increase: CZ, IS, UK-wa*
- 5% – 10% increase: HR, HU, NL, TR
- 1 – 5% increase: BE-fr, ES, IE, NO, PL, SE, SK
- -1% – +1% change: AT, UK-sc*
- 1 – 5% decrease
- 5% – 10% decrease: UK-en*
- >10% decrease
- No data: BE-nl, DE, DK, EE, FI, FR, GR, IT, LT, LU, LV, PT, RS, SI, UK-ni*, CH
2.2 Evolution of public funding to universities in 2016-2017 (in real terms)

The adjustment of 2017 public funding data to the inflation rate for that year complements the analysis of the short-term funding trends.

11 systems still showed negative short-term funding trends in 2016-2017. UK systems featured cuts exceeding 5% (England, Wales, Northern Ireland – see section 1.8), while the rest remained for the most part below -1%.

The largest investments in real terms took place in Hungary (26.5%), followed by Iceland (13%). Ireland registers the third-biggest increase for the first time since the beginning of the monitoring period.
2.3 Short-term funding trends

Considering the long-term trajectory of the individual systems together with the latest developments witnessed over 2017 and economic growth forecasts*, several patterns emerge:

**Continuing commitment to investment** can be observed in Luxembourg, Norway and Switzerland. In these systems, the latest funding increases either match or surpass the average annual growth of public funding for universities. Austria will renew with this positive trajectory in 2018.

**Recovery under consolidation** may described the trend in Iceland and Portugal, which have both reached their pre-2008 funding levels, and where proper consolidation will depend on the political commitment to higher education.

**Relative stagnation** characterises the situation in Belgium, Denmark, Germany, Poland and Sweden, countries where comparatively large increases in investment since 2008 are no longer sustained. In the Netherlands and France, recent stagnation is combined with more modest long-term trends and stronger financial pressure on universities.

**Signs of recovery** of public investment in universities can be detected in Central Europe – as last year, Croatia, Hungary and Slovakia show some positive developments, and are joined this year by Slovenia. However, aside from Croatia, none of the countries in this group are reaching their pre-crisis funding levels.

**Other countries seem to be changing course** – renewing with investment, as in the Czech Republic, Ireland or Spain, while Turkey shows signs of shifting towards a negative trend, in a particular context of high inflation and continued expansion of the student body.

Finally, **failure to re-invest in higher education** is leading some countries to **fall behind**, although to different extents. Finland and Italy seem unable to renew with a positive pattern and Latvia does not mobilise enough resources to close the funding gap; elsewhere in the Baltics, Greece and Serbia, most indicators are still in the red.

More detailed analysis of these patterns is presented below.

* Source: [European Commission’s Autumn 2018 Economic Forecast](https://ec.europa.eu/commission/).
2.3.1 Continued commitment to investment

**Luxembourg** almost doubled public funding for its university in eight years. The pace of investment has been slowing down in the last few years, with nevertheless still a +4.32% increase in real terms in 2017. The current performance contract between the Ministry and the University (2018-2021) includes for the first time a competitive "bonus" element rewarding success in EU research funding programmes. After two years of slightly negative growth in student numbers, Luxembourg registered a sizeable increase of +3.5% in 2017/18. In the same academic year staff grew by nearly 10%.

Data for **Switzerland** is available until 2015. Although the previous year had seen a sizeable increase in funding (+7.5%), in 2015 investment levels were basically stable (+0.5%). A “staircase” pattern of investment alternating with flat growth seems to be emerging. Since 2015, the student population continues to expand at an average annual rate of 2%, revealing continued pressure on universities and requiring further investment.

Public funding for universities in **Norway** grows in line with student numbers, allowing universities to continue recruiting staff. The return to moderately growing GDP levels in 2017 should further support this positive trajectory. Public funding to universities grew by 3.5% in 2017 compared to the 2016 increase of 1.6%.

The increase on 2018 should be somewhat lower (+3.9% in nominal terms). Student numbers grew by 1.9% in 2017/18 compared to the previous academic year, accompanied by a comparable increase in staff (+2.5%).
2.3.1 **Continued commitment to investment**

The ‘staircase’ progression in funding in Austria reflects the three-year contractual framework between the state and universities, eroded by inflation in the second and third year of each cycle. In 2016/17, the combination of inflation and a minor increase in student numbers temporarily put the system among those under pressure despite a public investment effort in line with GDP growth. Indeed, data adjusted for inflation shows a decrease of -2.15% in 2017 compared to 2016, and the funding level in 2018 is identical in nominal terms to that of 2017.

Nevertheless, the latest data available show student numbers going down (-1%), while the 2019-2021 budget negotiations concluded positively for Austrian universities with higher investment secured for the next period. Austria therefore is set to return to its position of "frontrunner" and is included in the category of “continued commitment to investment”. The increased budget is set to support objectives related to the number of active students.
2.3.2 Recovery under consolidation

Iceland is on a positive track since 2013, with an average annual increase over 7% since that year (exceeding the average GDP growth in that period) in a context of stabilising student numbers. The large real-terms increase of 13% in 2017 (compared to 2016) and the projected increase of 11.6% in 2018 (compared to 2017), in a context of low or even negative inflation, confirm that the system is recovering from the austerity of the first part of the period (2009-2012). Iceland has now reached its pre-2008 level of funding. The current government has made it an objective to “attain the OECD average as regards funding of university education in 2020 and the Nordic average by 2025”. Additional funding has been earmarked for the sector in the budget plan for 2019-2023. The increased funding is particularly concerning teaching, and to a more moderate extent research and infrastructure.

Portugal confirms recovery observations made last year, with a real-term increase slightly over 3% for 2016-2017 in a context of slowly growing student numbers. Projections for 2018 suggest a 3% increase in nominal terms. Funding levels therefore seem to stabilise towards moderate increases. The significant increase reported in 2014, which followed the lowest point of the funding curve, served to (partially) compensate for salary corrections decided by the government. Universities continue to face a difficult situation, as the increases fail to cover higher staff expenditure. Portugal is nevertheless re-investing at a faster pace than its real GDP growth would suggest. In the context of a slower economic growth forecast for 2019-2020, investment in higher education needs to remain a national priority.
2.3.3 Stagnating public funding

**Sweden** is in a comparatively better position than many when considering the full period. However, since 2016 universities receive slightly less funding every year in real terms (-0.48% in 2017 compared to the previous year), a phenomenon likely to happen again in 2018 (projected nominal increase +1.9%, with an inflation rate expected to be superior to this figure). A new funding mechanism is currently being discussed, with a proposal expected in early 2019, and possible implementation as of 2021. University infrastructure is considered under pressure, while teaching activities have benefited from moderate funding increases.

**Denmark** shows an overall funding trajectory remarkably similar to that of Sweden. Following years of small but sustained increases, university investment came to a halt in 2017 (-0.17%). Both research and teaching at Danish universities have been affected by an annual 2% cut, leading to layoffs and reduced activity levels. Latest data show continued rise in student numbers while staff is cut down.

**Germany**’s pace of investment appears sustainable, despite a lower funding effort in 2017 (+0.64% in real terms). The investment level remains above GDP growth, but has to be considered in the context of a student population that has been expanding until 2015. This results in broadly stagnating basic funding to universities. The sustained economic growth forecast can support greater investment in the sector.
2.3.3 Stagnating public funding

After a few years of remarkable growth (between 5 and 9% annually), public investment to universities in Poland slowed down since 2016 (+0.73% in 2017) and is expected to remain stable in 2018 (just under 2% in nominal terms). Investments focus on research activities. Poland has been consistently increasing its GDP share of public funding for universities since 2008. In view of the declining enrolment, the funding formula was modified in 2017 to focus on student-to-staff ratio, leading some universities to put a curb on admissions. The new Law on Higher Education and Science, which came into force in October 2018 with gradual implementation planned until 2020, should lead to “streamlined financing principles” and enhance the universities’ capacity for financial management.

In Flanders, Belgium, revised funding data shows relative stability after the large investment of 2014, accompanying the incorporation by universities of academic programmes previously provided by university colleges. Funding nevertheless fell by 2% in 2016, corrected the following year by a 2.35% increase in real terms. While student numbers are stabilising (+0.14% in 16/17 compared to 15/16, -0.1% the following year), universities struggle to adapt to the overall growth of the student population following the 2013 “shock” (+26% over one year).

In the French-speaking Community of Belgium 2017 investment was limited to 1.53%, lower than the two previous years (5.70% and 4.14%). 2018 should follow this downward trend, with estimates slightly over 1% in nominal terms. Pressure is high considering a faster-expanding student population (+4% in 2015/16 compared to 14/15) and a weaker economic growth forecast. Investment in staff remains too low to adequately cater for the larger student cohorts.
2.3.4 Standing still... losing ground?

The quasi-sustained investment effort in universities in the Netherlands (excepted 2012) remains limited, and never exceeded 2.5% annually. In 2017, investment grew by a little over 1.5%, with better projections for 2018 (+5.5% in nominal terms). The increase is meant to compensate for a combination of inflation, growing student numbers and previous budget cuts. However, the system is confronted with student numbers increasing at a faster pace and still projected to grow in the coming years (+4.55% for 2017/18 compared to 2016/17). Since 2018 a redistribution of € 70 million from student support to grants for teaching for universities is implemented. In 2023 this will increase to € 190 million to improve the quality of education by means of performance agreements. The new government announced its intention to strengthen the link of funding of academic research to quality and impact and to pay special attention to technical sciences and cost intensive research.

Real investment in universities in France was close to zero in 2017, after a 1% increase the previous year. Expectations for 2018 included marginally enhanced funding for teaching activities. Student enrolment is slowly growing (annual increase inferior to 2%).
2.3.5 Signs of recovery in Central Europe

**Croatia**'s investment in universities moved into the green in 2016, with 7% in growth. However the real-terms increase in 2017 fell short of 2%. This allowed Croatia's funding effort to reach for the first time the pre-crisis level after years of expansion of the student body and a difficult economic situation. Sustained economic growth forecast for the next year can support greater investment in the sector to adjust to the larger student population. The outlook for 2018 is positive (+5.7% in nominal terms).

**Hungary** continues on the recovery path started in 2014, with large investments every second year. The funding increase between 2016 and 2017 reached slightly over 26%, to be followed by a more moderate increase in 2018 (nominal terms projection: 7.9%). As previously, all areas were concerned (teaching, research, staff and infrastructure). Staff numbers have been going up over the last year (in particular non-academic staff, the category that has most increased since 2008). The country nevertheless still fails to reach per-crisis investment levels (currently 10% below the 2008 figures). The student population continues to fall, although at a slower pace (-1.3% compared to 2016/17). Renewed investment in the sector comes with increased state control on funding allocation. Similarly, negative trends can be observed since 2017 with regard to university autonomy and academic freedom in Hungary.
Since 2015 Slovakia’s funding trajectory is moving upwards. The increase of funding in real terms registered in 2017 was the largest of the last years (+4%) and the forecast for 2018 is positive (4% in nominal terms). The country is near to reaching its pre-crisis funding level, and the economic growth forecast for the next two years is positive, with an expectation that Slovakia’s economic expansion continues to strengthen. Investments notably target accommodation and facilities for students. The halt in the decline of student numbers (+5.5% in 17/18 compared to 16/17) is not consolidated for 18/19 with a projected -7%.

For the first time in 2016, Slovenia registered a modest increase in university funding levels (1.95% in real terms), after four consecutive years of cuts. The student population continues to decline (-5.2% in 2017/18 compared to 2016/17). Over the period student numbers fell faster than funding levels. A reform of the funding model for universities passed at the end of 2016 aims at refinancing and providing stable, long-term funding to HEIs, particularly with regard to research activities. The system is therefore in transition.
For the first time after almost a decade of regular cuts, recurrent funding in Ireland increased in 2017. Universities received 4.75% more (in real terms) than in 2016. Projections for 2018 hint at a marginal increase (+2.11% in nominal terms). The increased funding targeted teaching activities. The growth of the student population is slowing down (+1% in 17/18 compared to 16/17) but funding per student has declined dramatically during the period. Restrictions remain in place in respect of core staffing numbers and capital infrastructure remains underfunded.

Along with the 2018 increase in State funding, an Employer contribution to the funding of HE was introduced (as recommended by the Expert Group established by the Ministry for Education to examine the future funding of Higher Education) by way of an increase in the Employer national training fund levy. The overall impact of these measures however falls short of where the sector needs to be if the 2021 interim target funding requirements identified by the Expert Group are to be met.

The long-term sustainability of the HE sector remains an issue, despite the fact that high GDP growth suggests possibilities for renewed investment in universities.

Spain is showing signs that it seeks to renew with investment in higher education. After a first and limited increase in 2015, it registered a funding increase of +2.11% in 2017 and has announced a nominal increase of +4.52% for 2018. Revised student data shows a slow decline in the enrolment (on average -1.75% annual decrease since 2016/17). Despite the latest investments, Spain’s university funding is still in the red as compared to 2008. The Spanish economy is in expansion and robust economic growth forecast can support renewed investment efforts to close the gap.
2.3.6 Changing course?

In line with observations made in the previous report, the Czech Republic seems to have renewed with investment. After three consecutive years of cuts, 2017 showed a real-term increase of 3.65%, and prospects for 2018 were positive with an announced 13.8% increase (nominal terms). Since the beginning of the monitoring, the country has not known an investment period sustained over one year, and will need to upscale the effort to reach pre-crisis levels (currently -20% compared to 2008), in the context of positive GDP growth. The recent increases have a moderate positive impact on education and research activities as well as staff, but the lack of investment in infrastructures remains problematic.

In Turkey, the additional financial effort in 2017 in nominal terms was annihilated by high inflation, which turned a +8.6% increase into a -2.25% cut. A worse scenario is expected for 2018, with an announced increase of +7.97% and projections for even higher inflation. The previous pattern which saw high investment phases alternate with flatter growth seems to evolve towards a negative trend. In the meantime, student numbers continue to grow, albeit at a slower pace (+5% in 2017/18 compared to the previous academic year). The large growth of academic staff (+86% between 2008/09 and 2016/17) may have also come to a halt (-12% in 2017/18 compared to the previous year).
The first increase in funding levels in Finland (2015) was not consolidated in 2016, when the country renewed with moderate cuts (-2.07%), in line with the pre-2015 period. Cuts on core funding of universities as well as on public research funding introduced by the government in the last years have forced institutions to reduce expenses and cut down costs by adjusting all operations. The capacity of universities to recover from austerity measures is hindered by the new cuts, while recent data shows that the student population is slowly growing again. The funding model is under reform, with possible implementation as of 2021.

The Finnish Government introduced tuition fees for non-EU/EEA students, starting from August 2017. The tuition fees concern Bachelor's or Master's degree programmes offered in English. The tuition fees have so far had no or only little effect on total funding of universities. After the introduction of tuition fees, the number of applicants/students from non-EU/EEA dropped down a little, but have now levelled or even exceeded the figures before tuition fees.

Unlike other countries to the West of Europe, Italy has been confronted with a drop in student numbers during the period (-8.8% since 2008), although there are signs that this is changing (the country even registered a 0.79% increase of the student population in 2016/17 compared to the previous academic year). In the meantime, cuts implemented at the beginning of the period have not been compensated by renewed investment. In spite of economic growth, funding has been stabilising in the recent years at a worrying low level (-17% compared to 2008, and -0.41% in 2017 compared to the previous year). Staff numbers continue to fall and went down by -2.65% in 2016/17. Discussions on the reform of public funding allocation is ongoing after its implementation came to a halt.
2.3.7 Falling behind

Public funding to universities in Lithuania dropped by more than one third in 2008-2017, whereas student numbers declined by more than 40%. In 2017, consolidated figures still show a real cut of nearly -4% compared to the previous year. Lithuanian universities lose over 5% of their student population every year for the last 3 years. Data communicated by the Ministry for 2018 nevertheless shows for the first time a sizeable increase in public funding (+12.5% in nominal terms). Combined with significantly higher levels of EU structural funds this year (representing one-third of the total public funding), Lithuanian universities may start addressing some of the pressing issues in a system that continues to suffer from negative demographics and substantial emigration.

Serbia continues to show a negative trend, for the third consecutive year, although the decrease is more moderate (-0.43% in real terms in 2017, -2.06% in 2016), while student numbers started to grow again (+1.16% in 2016/17 compared to the previous year, after three years of marginal decline). Staff numbers were broadly stable.

Greece and Estonia reported data until 2016, which in both cases reveal continued negative trajectories, after temporary stabilisation in 2015 in Estonia (+0.87% followed by -7.26% in real terms in 2016). The Estonian student population has been declining by close to 6% on average each year, while Greece reported limited increases until 2015 (under +2%).

Latvia, which also reported date until 2016, continues to feature a sustained and modest positive trajectory, insufficient to offset the impact of early cuts. Minor increases are projected in 2018 and 2019 due to rise of pedagogical staff salaries and the reinforcement of a scientific funding programme. Consolidated data for 2017 nevertheless shows a significantly smaller investment compared to the previous year (4.87% against 8.41% in 2016). Student numbers seem to have stabilised.
Latest data shows that direct public funding to English universities continues to fall; taking into account the overall value of publicly-subsidised fee loans, the aggregated level of public funding records a small hit (-6.51% considering direct public funding only; -0.89% including value of loans, in real terms in 2017 compared to 2016).

In May 2017, the Higher Education and Research Act 2017 was passed by Parliament, representing a significant change to higher education legislation in England. The Act introduces several changes that are likely to impact on the trends in funding, students and staff at higher education institutions. These changes include:

- introduction and roll-out of the Teaching Excellence Framework, which allocates ‘awards’ to institutions based on qualitative and quantitative assessments of teaching quality
- a greater focus on encouraging the entry of new providers of higher education, including the power to award degrees on a probationary basis, and removing some restrictions on gaining university title
- reorganisation of the architecture overseeing research funding and strategy

The government has announced that the fee cap in England will be frozen at £9,250 for 2018-19 and 2019-20. From 2016-17 academic year, non-means tested loans of up to £10,000 are also available to English domiciled postgraduate students taking masters courses, to contribute to tuition and living costs.

The government is currently conducting a review of post-18 education and funding in England which will conclude in early 2019.
2.3.9 Short-term analysis for the UK systems: Wales

Following publication of the Diamond Review of higher education funding and student finance (Welsh Government, 2016), the Welsh government will be implementing a number significant changes to higher education funding in Wales from 2018-19 onwards.

The current tuition fee grant for full-time undergraduate students from Wales will be replaced with an additional subsidised student loan, up to the current maximum fee level applicable (currently £9,000 in Wales, and £9,250 in the rest of the UK for 2018/19).

UK nationals who are resident in Wales will have increased support for living costs, including a £1,000 non-means-tested grant and an additional means tested grant. Maintenance loans will be available to cover the remainder to provide a package of support equivalent to the Living Wage. Part-time students will receive similar grant and loan support on a pro-rata basis. Overall, there will be enhanced student support for postgraduate full-time and part-time students.

There will also be an increase in funding for HEIs to be phased in over a period of years from 2018/19, seeking to redress issues caused by the reductions in public funding (announced increase for 2018 in nominal terms +14.47% compared to 2017). The reductions up to 2018/19 mean that support is currently limited to critical areas only including expensive subject provision, part-time provision and core research funding (in 2017, direct public funding fell by -7.92% in real terms compared to 2016, and by -2.92% when including the value of publicly subsidised loan). Capital and infrastructure funding to support business engagement, commercialisation and leverage of other innovation funding sources in particular are currently not supported. The accepted Diamond recommendations seek to redress these issues. Notably, capital funding will be available from 2018 (including £6m for 2017/18 and £10m for 2018/19).

Transition to the new student funding system, and wider funding environment, means that the sector in Wales is faced with considerable forecasting uncertainty. There are significant financial uncertainties related to Brexit, including student and staff mobility, and the future of the EU replacement funding schemes, which have been a significant source of income for HEIs in Wales.
2.3.10 Short-term analysis for the UK systems: Northern Ireland and Scotland

Universities in **Northern Ireland** continue to face significant funding challenges and an uncertain political environment. A funding gap of between £900 and £2,500 per student (depending on the course of study) has emerged between universities in Northern Ireland and England. Under-resourced compared with their UK competitors, universities in Northern Ireland have had to take corrective action, primarily through reducing their undergraduate student intakes and staff numbers, to maintain the quality of their provision.

**Scotland** is confronted with a real terms decrease for the third consecutive year (-2.14% in 2017 compared to 2016), while student numbers start to grow again since 2016/17 (just under 1.50% on average annually since that year).

Universities Scotland reported an expected 1.79% cut in real terms to the total funding available to universities for the academic year 2019/20, following announcements of the Scottish Government. Individual allocation plans drawn up by the Scottish Funding Council show that every university faces a real terms cut and half of institutions are facing real term cuts of 2% or more, against a background of rising pension costs for universities.
2.4 Impacted areas

Sixteen systems provided some assessment of the impact of funding changes per area of activities. Compared to the previous edition of this report, more countries reported increased funding and positive impact on research and teaching activities in 2018 (8 systems compared to 5 systems, in both categories). Investments linked to staffing policies and management of infrastructures are more scarce. The latter is the category that is most often left aside, with five systems mentioning specifically that this is a negatively affected area. In a context of slow recovery, it seems that investment focuses on core activities of universities (teaching and research), while often failing to address underlying issues such as ageing and inadequate facilities.

Among the systems that register funding increases/positive impacts, these can be transversal and address both research and teaching, or focus on one of the two missions (focus on teaching in France, Ireland and Sweden; focus on research in Latvia and Poland).

### Table: Impacted areas

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<tr>
<th>Funding</th>
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<th>Teaching</th>
<th>Staff</th>
<th>Infrastructure</th>
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<td>DK, IE, IT</td>
<td>CZ, IE, ES, SE, UK-sc</td>
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</table>
2.5 Fostering funders’ alignment to enhance efficiency

The economic recovery remains slow in the higher education sector in Europe and it cannot afford wasting limited resources.

At a stage where new EU funding programmes for higher education and research are being negotiated, simplification bears the potential to release funds from administrative processes into the core activities supported.

This requires achieving a coherent set of rules that is mindful of the diversity of actions and beneficiaries accommodated in a programme, and that ensures both high-quality processes and an effective use of resources.

Accepting beneficiaries’ accounting practices under Horizon Europe – the future EU programme for research & innovation – has the potential to not only enhance efficiency, but also reduce error rates and improve cross-reliance between national and EU audits. EUA collected relevant good practices at national level in a compendium, where they are also compared to current Horizon 2020 rules in an exploration of new possibilities for a better alignment of rules between the EU and the national level in Horizon Europe.

In essence, improving the alignment of funders’ practices for both accounting and auditing purposes between the national and the EU level would be a major, further step towards achieving impactful simplification, release resources and support the financial sustainability of universities throughout Europe.

*EUA calculation based on European Commission’s Horizon 2020 Monitoring flash (September 2018) data.
3 Key messages

• **Across the full period of analysis**, three types of trends can be distinguished: sustained growing funding; sustained declining patterns; and improving patterns. Nevertheless, these trends should be considered in connection to student growth, a key element to assess the type of pressure universities are operating under.

• Those countries that invest at a rate that allows to preserve student/staff ratios are the exception. Out of 16 systems that have higher funding in 2017 than in 2008, **only 6** have a funding growth that exceeds student enrolment growth.

• The investment effort can be also approached in connection to GDP growth. **9 countries** fail to re-invest in universities even though positive GDP growth suggests this would be possible.

• At least **8 countries** started re-investing (improving patterns), but for half of them the scale of the effort remains too limited to adequately address the cumulated funding gap over the period.

• **17 systems** still had lower levels of direct public funding in 2017 than in 2008, with 5 of them experiencing larger student cohorts.
3 Key messages

• **Over the short term**, different situations can be identified. A handful of countries project continued investment; recovery appears under consolidation in Iceland and Portugal, that are now exceeding their 2008-funding levels.

• Relative stagnation of funding levels is characterising an increasing number of countries across Europe (8 systems), both for systems that previously sustained a relatively ambitious funding strategy, and for those that have maintained more modest funding curves.

• Four countries of Central Europe continue to show positive signs of recovery, in a context of positive GDP growth.

• In 2017, special cases emerged with hints of a changed course in the Czech Republic, Ireland and Spain, that seem to renew with investment.

• Where increased funding is reported, it tends to focus on both or either one of the core missions of universities, frequently leaving aside investment in infrastructures (only two countries reported increased funding for infrastructures).

• To support the incipient recovery detected, it is more than ever important that resources are efficiently managed at all levels. Not only is more funding needed, both at the EU level and at national level, it is also crucial to effectively simplify competitive funding schemes and foster greater alignment of funders’ practices.
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Resources

- EUA Public Funding Observatory online tool
- EUA Public Funding Observatory country sheets 2018
- EUA Public Funding Observatory methodological note

All available here:
www.eua.eu/publicfundingobservatory

For additional information, please contact:
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