eua PUBLIC FUNDING OBSERVATORY

Public Funding Observatory 2020/2021

Part 1: Financial and economic impact of the Covid-19 crisis on universities in Europe

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EUROPEAN UNIVERSITY ASSOCIATION

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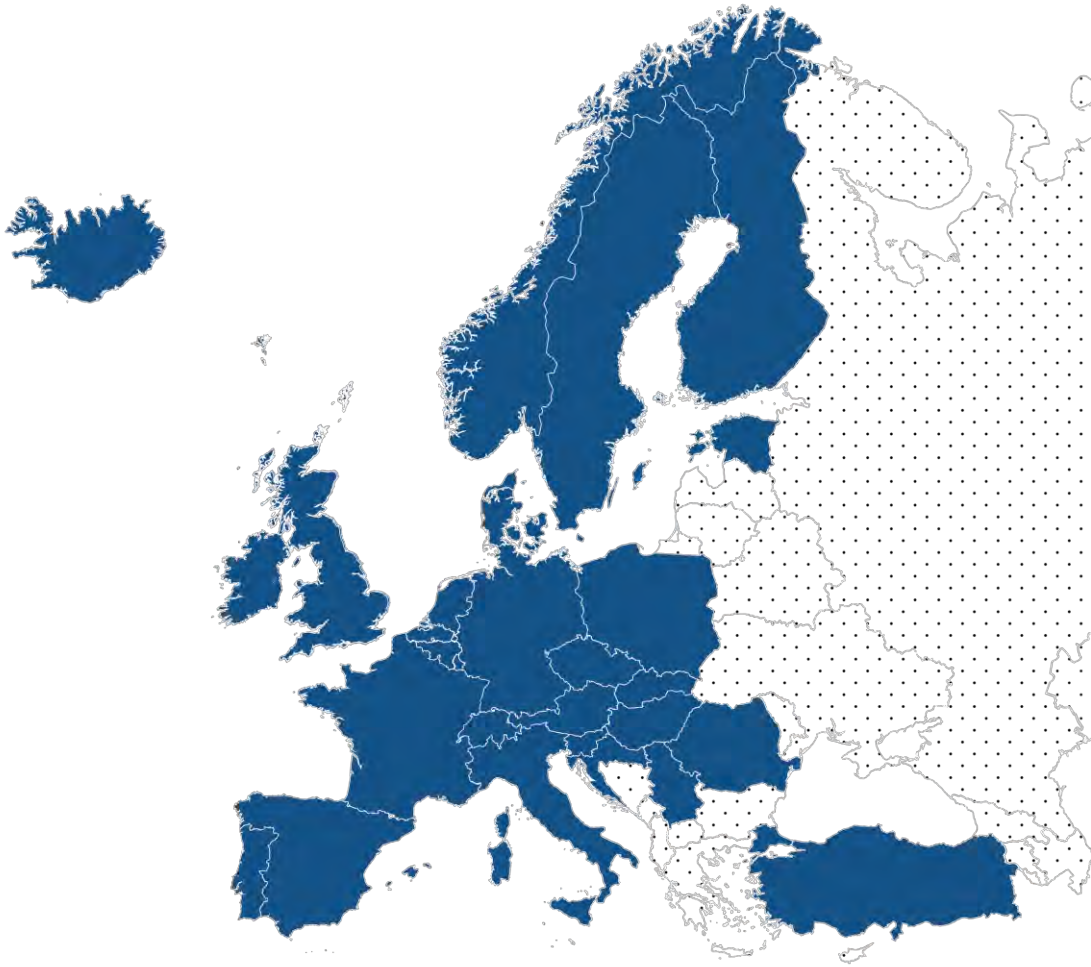
Introduction

This report presents part 1 of the results of the EUA Public Funding Observatory 2020/2021, focused on the impact of the Covid-19 crisis on universities in Europe.

During the summer of 2020, EUA collected data on the first part of its annual funding consultation with the national university associations. The aim was to obtain a more detailed picture of the immediate impact of the pandemic on university funding and governance in 2020 and to assess the medium-term expectations of the higher education sector. The second part, in the usual format, will be published in the spring of 2021.

A total of 29 national university associations provided quantitative and qualitative feedback to the survey. The following systems are included in the analysis: Austria, Belgium-Flanders, Belgium-French speaking community, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Luxembourg, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, the Netherlands, Turkey, and England and Scotland in the United Kingdom.



Structure of the report

This report consists of three sections:

- The first chapter is dedicated to the immediate impact of the Covid-19 crisis (including lockdown measures adopted in various countries in Europe) on universities and university funding in 2020. The analysis is illustrated by examples of public authorities' approaches to mitigate the financial impact of the crisis on universities.
- The second chapter provides insights into the expected implications of the pandemic for university funding over the next few years.
- The report concludes with a series of key messages and recommendations to universities and policy makers on how to mitigate the negative effects of the crisis and turn the most recent challenges into opportunities.

The report features several graphs that illustrate the feedback obtained from the respondents. The graphs refer to the number of higher education systems providing a response to the different questions.

1. Short-term impact of the Covid-19 crisis on university funding in 2020

"The primary financial impact on universities has been in relation to loss of income arising from the public health restrictions. Most notably international student fee income is expected to be very severely impacted with major losses for all universities. Restrictions on travel, delays in visa processing, availability of final academic results to meet entry requirements and general student and parent uncertainty all have an impact on enrolment". (**IUA, Summer 2020**)

"The system of public funding is based on annual and four-year plans. It is therefore characterised by stability. This is why the financial and economic consequences of the lockdown measures were rather low/medium between March and June 2020. However, it is foreseeable and of concern that the financial effects will arrive in the coming years and there will be austerity measures". (**swissuniversities, Summer 2020**)

1.1. Economic impact of the lockdown measures (1)

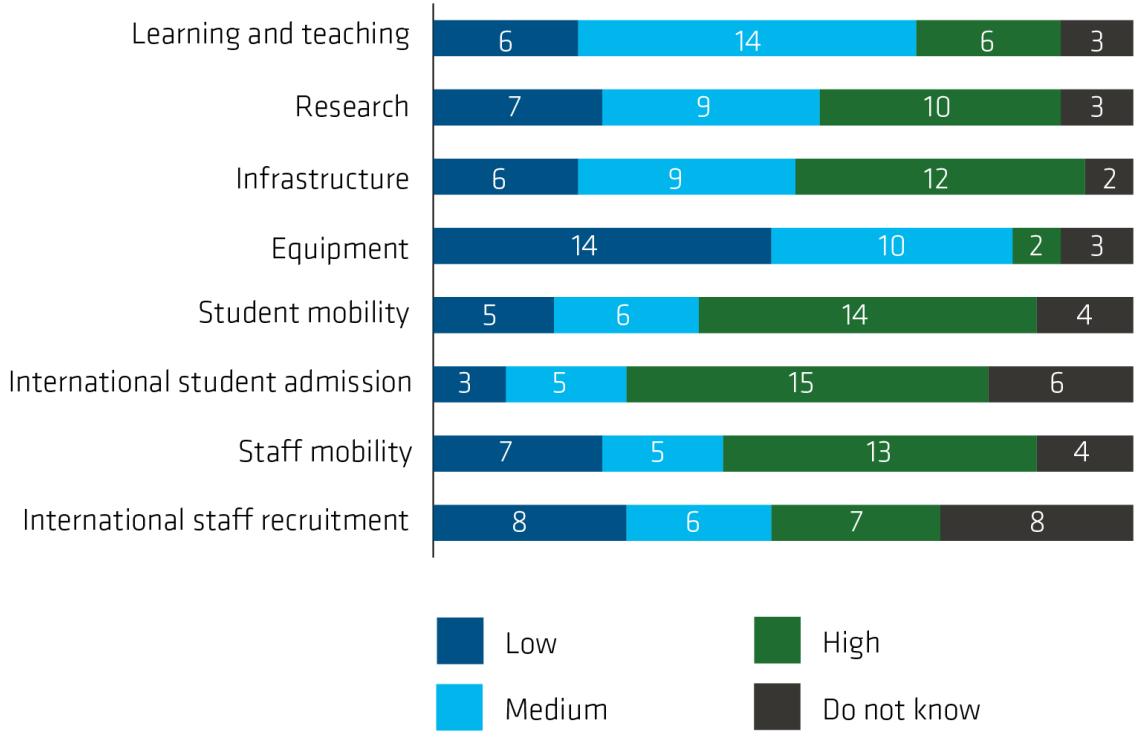
International student admission was highly affected in 15 higher education systems.

Many international students decided to postpone their studies due to restrictions on travel, delays in visa processing, issues with availability of final academic results to meet entry requirements and general student and parent uncertainty. As a result, enrolments for the summer 2020 semester and the related international student fee income were heavily impacted. Some universities also incurred losses from tuition fee refunds.

The impact on **student mobility is** "high" in 14 systems. The lockdown measures caused one-time costs incurred by repatriation of foreign and domestic students, compensations paid for cancelled study trips and foreign internships. Mobile students and staff received extra funding to meet unexpected costs due to Covid-19 (e.g. IS).

Additional costs also arose from the requirements for transportation and self-isolation of international students.

n=29, Q2 (see Appendices)



1.1. Economic impact of the lockdown measures (2)

Infrastructure, including student accommodation, was hit by the Covid-19 crisis highly in 12 systems and moderately in nine systems. The lockdown increased costs due to delays in investment projects and the completion of new buildings (e.g. BE-nl) and in view of ensuring safe conditions for labs and other campus spaces (e.g. RS). It also led to loss of income due to refunds to students from accommodation (e.g. SK, UK-en). Restricted access to buildings and facilities during the lockdown required the development of new management and maintenance procedures for facilities and equipment in a context of insufficient dedicated funding in countries that already suffer from systematic underinvestment in infrastructure (e.g. ES).

The financial impact of the lockdown measures on **learning and teaching** is estimated as "high" and "medium" by six and 14 systems, respectively. The shift to online learning and teaching involved rapid unplanned investments in IT systems, hardware and software (e.g. purchase of licenses) (e.g. AT, BE-nl, ES, UK-en), as well as additional staff costs related to moving all teaching activities and assessments online at short notice (e.g. IS).

In 10 systems, the impact on **research** is assessed as "high" and nine systems report "medium" impact in this area. Some financial difficulties were entailed by loss of research contracts, additional staff costs caused by delays in fixed-term research projects and loss of unused (expired) research materials (e.g. BE-nl, ES, IS).

International staff recruitment was also affected financially as recruited staff that had signed contracts were unable to start due to travel restrictions and lockdown (e.g. IS).

1.2. Financial impact of the lockdown measures

Additional costs incurred by universities at different stages in 2020 vary across the systems, depending on the applied calculation methodology and the scale of impact.

- In Norway, additional costs in the autumn of 2020 are estimated to reach NOK 1.29 billion (ca. EUR 118 million), but due to postponed activities and less traveling the additional cost will most likely be lower than the estimated number.
- Additional expenses incurred by universities in the Belgium-French speaking community amount to approximately EUR 17 million.
- In Poland, additional expenses on health protection measures and digital infrastructure, combined with tuition fee losses between March and September 2020, roughly amount to EUR 30 million (estimate based on ca. 40% of KRASP member institutions).
- Independent estimates suggest a high financial impact across most areas of university activity in the UK, with an estimated drop of GBP 3 billion to 19 billion (EUR 3.3 to 21 billion) in the higher education sector income depending on the scale of reductions in student demand and economic downturn.

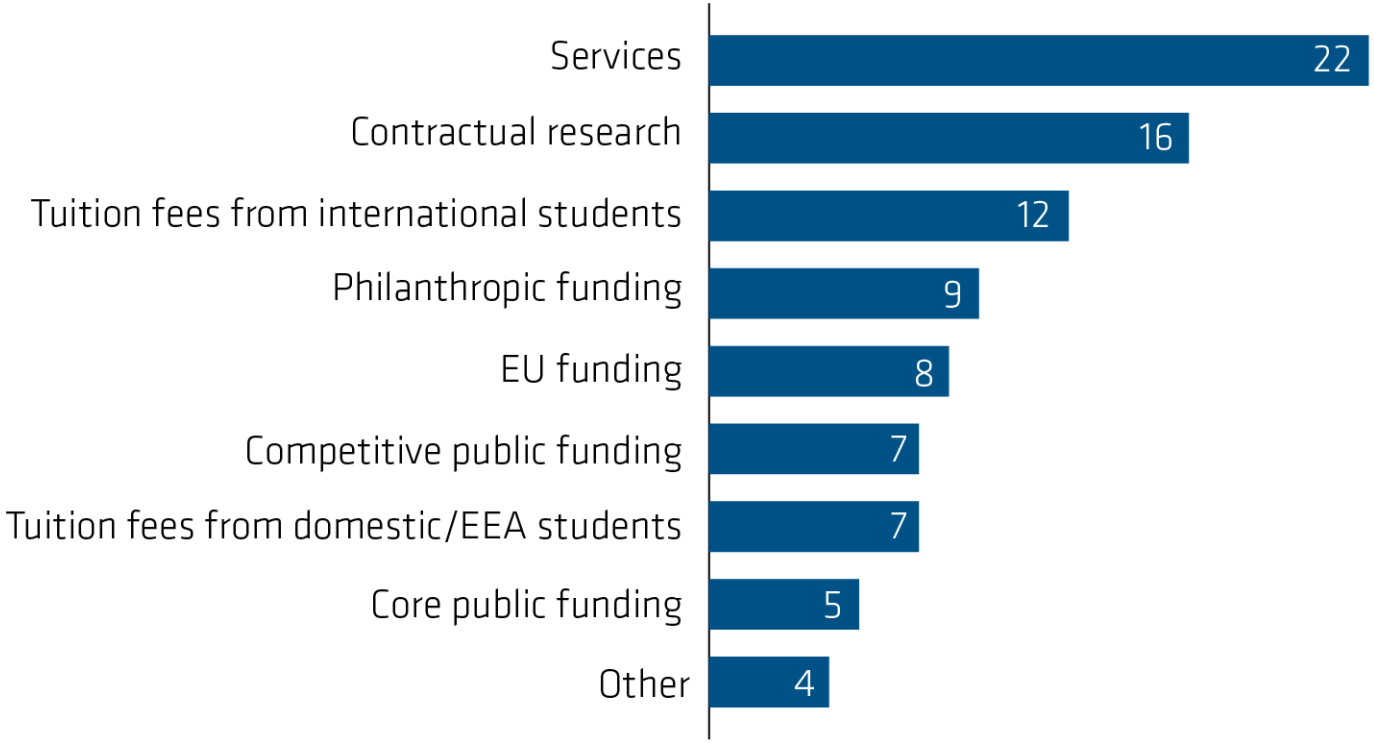
1.3. Impact on university income sources

In most systems (22), universities have seen their commercial services (e.g. room rentals, student accommodation, sports facilities, consultancy) severely hit by the closure of campuses and public health restrictions.

Contractual research income and tuition fees collected from international students are two other sources of income largely affected by the pandemic in 16 and 12 systems, respectively.

Philanthropic funding was impacted in almost one third of the systems.

n=29, Q4 (see Appendices)



1.3.1. Impact on commercial services and contractual research

In many systems, losses are associated with **non-public income** due to the immediate financial effects of the interruption of commercial activities and disruptions in private research and consultancy contracts. Refunds for accommodation costs to students leaving the campus have also caused a strain on university budgets.

Contractual research has been affected by the reduced or halted activity in sectors such as transport, aerospace and creative industries. Estonia also reports significant reductions in revenues from lifelong learning programmes.

The effect of such losses in private income are further amplified in systems in which public funding for universities has been under pressure for several years (e.g. ES and IE) or failed to cover the full economic costs (e.g. UK-sc).

1.3.2. Impact on tuition fees

The matter of tuition fees is particularly important for systems in which this type of income represents a significant percentage of the university budget.

Systems with a larger share of income generated from fees paid by international students (e.g. IE, UK-en) were immediately affected by the coronavirus pandemic, with knock-on effects in the years to come.

Direct effects on income earned from domestic tuition fees have been significant enough to be reported by seven systems. An even larger impact is expected for the 2020/21 academic year as a result of reduced family incomes, depending on the scale of corrective measures implemented by national governments (e.g. subsidised loans, unemployment benefits, student aid). The projected reductions in domestic tuition fees will lead to reduced income from this source for some universities (e.g. ES).

Debates about tuition fee levels, discounts and possible refunds are also gaining traction in systems such as England and Ireland.

1.3.3. Impact on EU funding

Eight systems report on the impact on income from EU funding sources. The financial losses are associated with:

- missed opportunities to generate income;
- project delays and cancellations.

Due to the lockdown, many universities had to scale down their activities involving external stakeholders (e.g. SK), including EU-funded projects. Participation in EU funding programmes requires extensive preparation and coordination with EU partners, which has been problematic for many institutions in a context of other more pressing tasks over the spring and summer of 2020.

Many EU grants were postponed or had to be redesigned in view of the newest limitations to physical meetings and mobility (e.g. AT), as well as the financial difficulties facing some sectors of the economy (e.g. aerospace, transport, creative industries). Marie Skłodowska-Curie Actions grantees also faced specific difficulties in completing their research and while the programme rules allowed for flexibility, no additional funding (paid extensions) was made available.

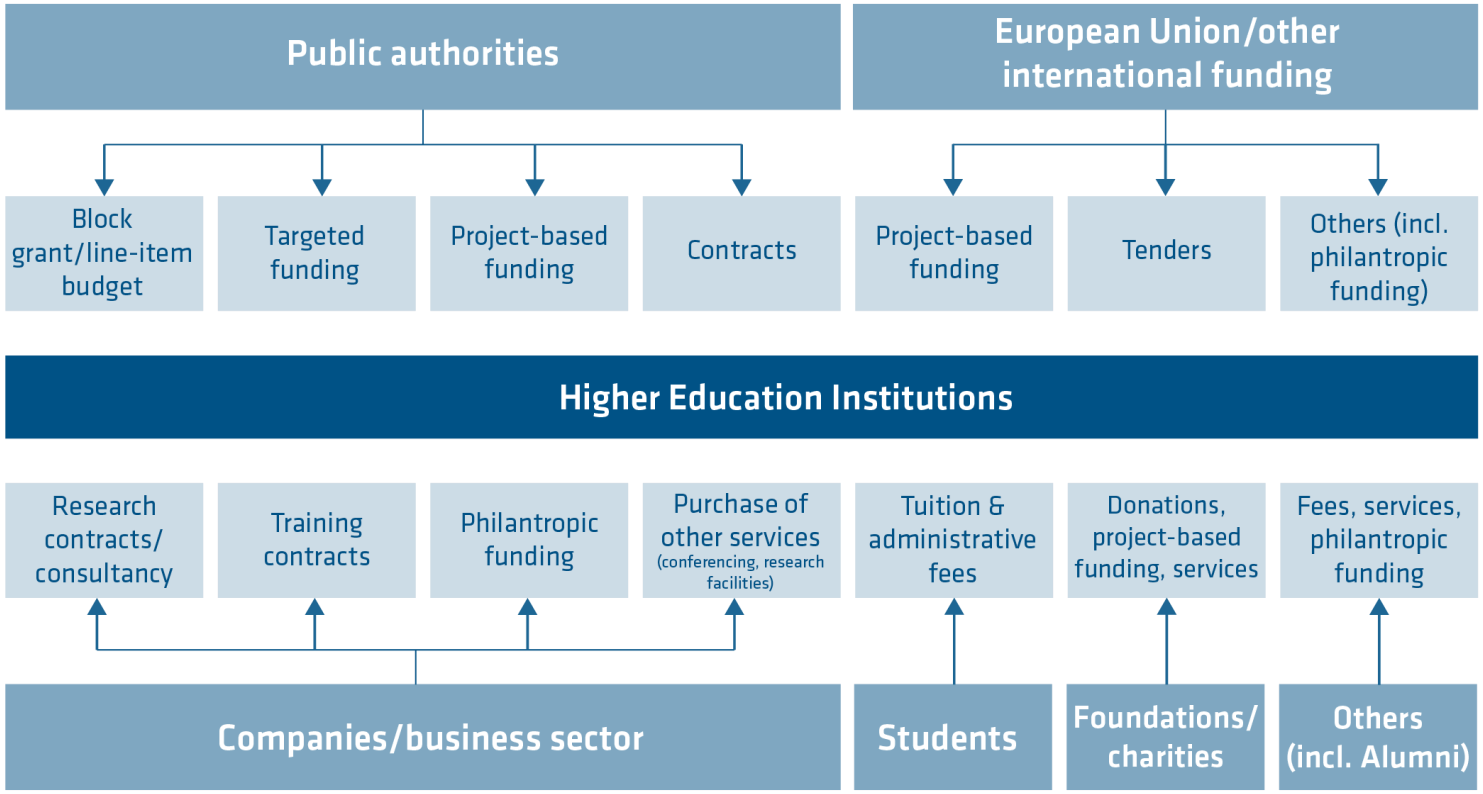
1.3.4. Impact on public funding to universities

In most systems that largely rely on public funding, the immediate financial and economic impact has been relatively moderate. Public funding was not reduced in 2020, as budgetary allocations had been secured for the current year.

Several systems (e.g. DE, FI, IS) reported increases in *ad hoc* competitive funding or philanthropic grants for public health research.

New investments in staff (e.g. promotions, creation of new posts) or infrastructure have been put on hold in several countries (e.g. HR).

NB: The graph provides an illustration of various sources of income and funding modalities.

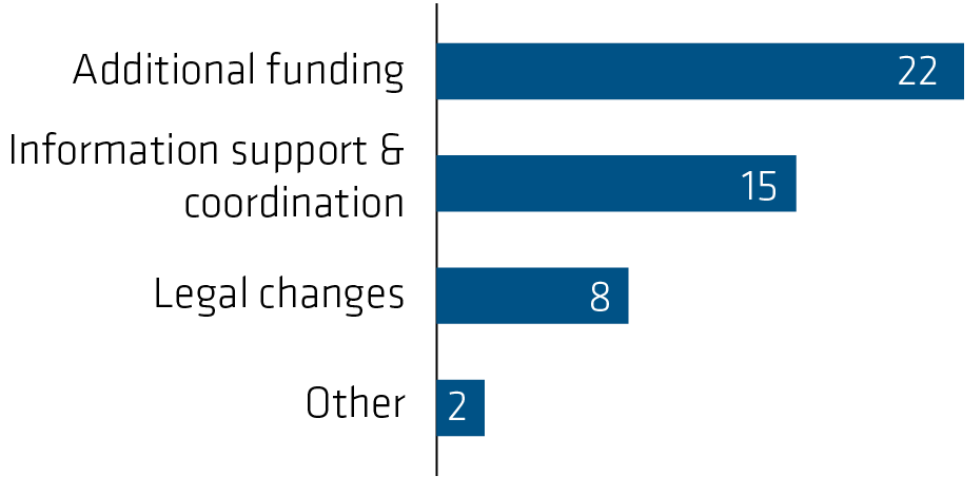


Source: Thomas Estermann and Enora Bennetot Pruvot (2011). Financially sustainable universities II: European universities diversifying income streams, EUA, p. 39.

1.4. Support from public authorities

In the vast majority of systems, public authorities offered financial, information or legal support to universities.

n=29, Q6 (see Appendices)



Additional funding was allocated in 22 systems for any of the following:

- Covid-19 related research;
- new student places;
- student aid;
- investment in digital and physical infrastructure;
- enhancement of universities' research and teaching capacity to resist crises.

Research deadlines were extended in several systems (e.g. CZ, SK and SE).

Legal amendments were adopted in eight systems (BE-nl, CZ, HU, NO, PL, SE, SK, UK-en) to enact extraordinary rules for universities (e.g. organisation of exams, validity of online qualifications, validity of decision-making processes).

Information support has been offered in the form of national guidelines and recommendations as well as coordination in 15 systems (AT, CH, CZ, EE, EN, ES, FI, HR, HU, SK, NO, PL, RO, RS, UK-sc).

Other support measures include promoting the societal value of science (FI) and development of online platforms (HR).

The table on the next slide provides further details about public financial support in various countries.

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1.4.1. Public financial support to universities

Coronavirus related research (new calls / programmes)	Strengthening of research & teaching capacity	Extra student aid	Additional student places	Investment in infrastructure or digitalisation
15 systems ▪ BE-fr ▪ BE-nl ▪ CH ▪ CZ ▪ DK ▪ EE ▪ ES ▪ FI ▪ HR ▪ IE ▪ RO ▪ SE ▪ SK ▪ UK-en ▪ UK-sc	**8 systems** ▪ ES (EUR 400 million) ▪ IE ▪ IS (additional summer semester) ▪ IT ▪ LU (paid staff leaves) ▪ SI ▪ UK-en ▪ UK-sc (GBP 75 million or ca. EUR 38 million)	**7 systems** ▪ BE-nl (social services) ▪ DK (larger loans available between April and August) ▪ FR (EUR 150 million; PhD) ▪ IE ▪ IS (summer jobs) ▪ NO (PhD & LLL) ▪ SE (better loan conditions)	**5 systems** ▪ DK (+2165 Bachelors) ▪ FI (+4800 places / EUR 124 million) ▪ FR (+10000 places) ▪ IE (+2500 places) ▪ NO (more study places in key areas) ▪ SE (in key areas, preparatory programmes, summer courses and shorter single subject courses as well as permanent study programmes)	**6 systems** ▪ DE (ad hoc digital actions) ▪ EE (research labs) ▪ NO (buildings customisation) ▪ RO (hardware for students) ▪ SE (digital capacity) ▪ SK (compensation for costs linked to safety measures, lower income from dormitories etc)

1.4.2. Example: public support to universities in the UK

In the UK, the higher education sector has been affected in a very immediate fashion, due to the characteristics of its funding system (strong reliance on private income sources). Public authorities have responded through a range of support measures:

- bringing forward GBP 100 million of funding for research (ca. EUR 110.4 million) and GBP 2.6 billion of tuition fee payments (ca. EUR 2.9 billion) to support the liquid assets of universities in the next academic year;
- a financial support package for university research including GBP 280 million (ca. EUR 309.2 million) in additional funding for publicly supported projects due to end in 2020/21 and a mixture of grants and loans to cover the majority of lost income from international students to support non-publicly funded research;
- providing universities with access to the government job retention scheme, and finance schemes providing loans to support liquidity.

The UK government has announced a restructuring regime for institutions at risk of closure. It also published a R&D Roadmap, restating its commitment to increase UK spending on R&D to 2.4% by 2027 and increasing public funding for R&D to GBP 22 billion (ca. EUR 24.3 billion) per year by 2024/25.

Source: UK Government

1.4.3. Example: public support to universities in Spain

"The switch to distance learning and teaching in Spain required rapid and unforeseen investments and expenditures in technical infrastructure, accessibility, tools and licenses to move the activities online but also to cap the digital divide and meet the new needs of students and staff to learn and teach online." (**CRUE, Summer 2020**)

Spanish authorities have sought to mitigate the impact of the pandemic through various packages of economic measures. The following support has been provided to higher education and research:

- In the short term, EUR 24 million were allocated to finance projects that improve knowledge about the virus and help handle the disease.
- The government launched a EUR 400 million fund, managed by regional governments, with the aim to support universities and preserve their research and teaching capacities.
- The Ministry of Universities offered information support and coordinated actions with other ministries and public authorities. It introduced a series of flexible measures to mitigate the impact of the pandemic and help universities successfully complete the academic year.

1.5. Support from national university associations

National university associations have played an active role during the Covid-19 crisis in supporting universities in their respective countries.

In most systems (22), national university associations engaged in a dialogue with national public authorities on Covid-19 related developments and regulations, and provided information on the existing research in the field. They also collected suggestions for legal changes from their members and fed them into the national dialogue process.

The national university associations fostered the exchange of good practices between their members (e.g. in crisis management, how to handle the state of emergency in HU, new safety requirements in BE-nl and NL); shared information (e.g. on the impact of the crisis in ES, HU, IE and PL); and facilitated coordination (e.g. on Covid-19 research in CZ or on measures related to international students in HU).

Promoting the role of science in general, and of universities in particular, in crisis management and recovery via external communication with stakeholders has been another key activity in more than one third of the systems.

Examples of other efforts include managing funds on behalf of external funders (ES), training the academic community in crisis management (PL) and offering access to digital tools and expertise (IT).

n=29, Q1 (see Appendices)

2. Medium-term impact on university funding in 2021-2023

"The Croatian Rectors' Conference is deeply concerned about the funding consequences of the Covid-19 crisis for higher education. Due the fact that the Croatian higher education system relies mostly on public funding, we will not have strong [financial] impact of internationalisation reduction. However, we are concerned about the announced cuts in public funding generally, as well as about autonomy issues connected with the overall circumstances." (CRC, Summer 2020)

"There is a significant risk that public funding for the higher education system will decrease when competition rises for public resources from various sectors of the economy and social obligations (pension system, health care etc.), especially considering the political decisions regarding the retirement age." (KRASP, Summer 2020)

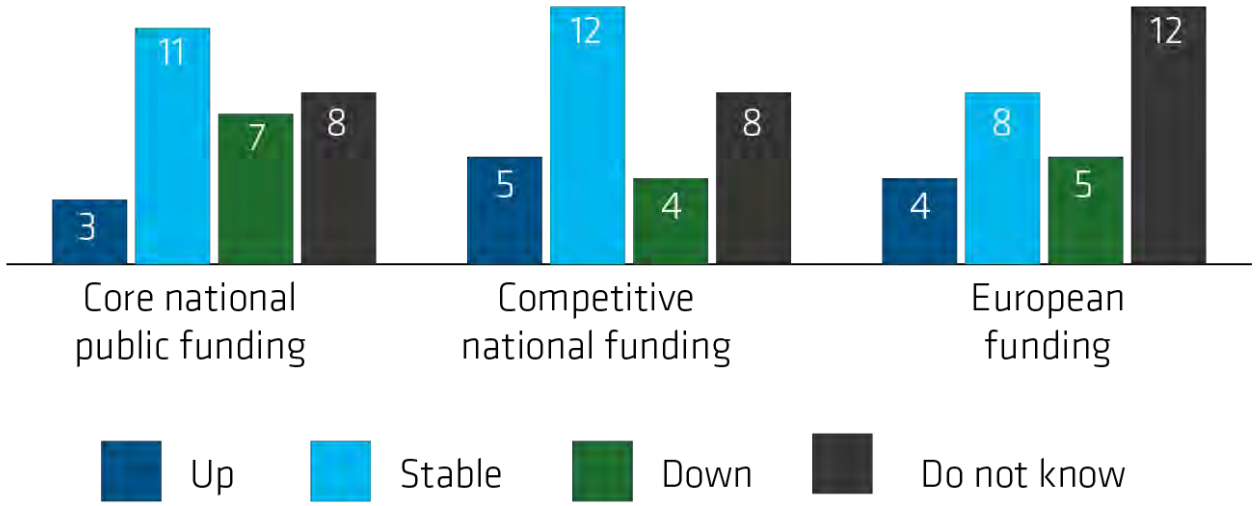
2.1. Sector expectations for public funding

Universities' expectations regarding public funding in the next few years are marked by a high degree of uncertainty and concern.

In seven higher education systems (BE-nl, CZ, ES, FI, HR, RO, RS), universities expect a decrease in **core national public funding**, while national university associations in eight other systems are uncertain about the levels of future funding. Hopes about increased core public funding for the sector are strong in three systems (CH, FR and IT), in connection to the higher recognition of the role of research and higher education.

Expectations about **public competitive funding** are slightly more optimistic: national university associations in 12 systems predict stability and five systems expect new investments. This raises questions on the evolution of the balance between core and competitive public funding in the near future.

n=29, Q7 (see Appendices)



European funding (EU funding programmes) is the funding source where national university associations indicate the highest level of uncertainty (12), which is largely due to the ongoing negotiations on the EU's future Multiannual Financial Framework (2021-2027) at the time of data collection.

2.2. Expected changes in the nature of funding

Most of the systems are either uncertain or predict relative stability about the future shares of core and competitive public funding, and the mix of public and private funding.

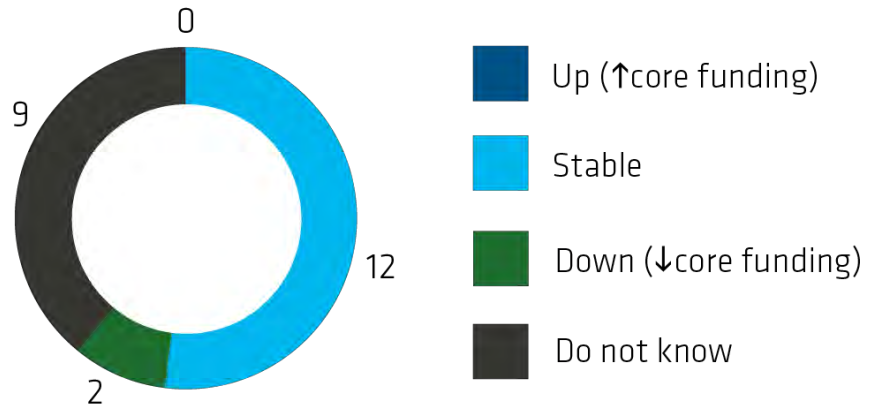
Public funding modalities:

National university associations do not have clarity on whether the Covid-19 crisis will further impact the nature of public funding in the medium term, or do not expect it to affect the balance significantly.

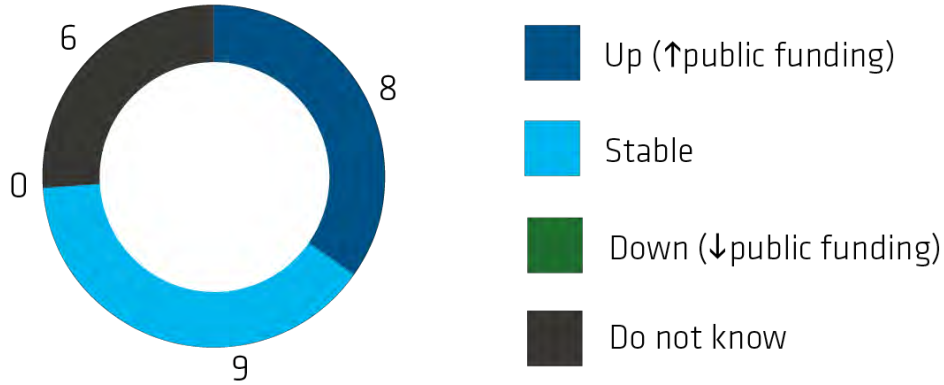
Overall funding mix:

National university associations expect public funding to become more important in the overall funding mix, or at least remain stable. This is connected to expectations of lower funding from private sources in the coming years. This trend may be accommodated even in a scenario in which public funding decreases in absolute terms.

Share of core vs competitive funding
(n=23, Q9 (see Appendices))

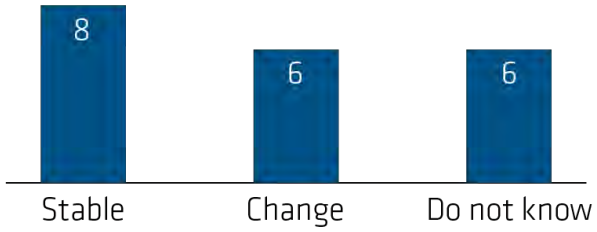


Share of public vs private funding
(n=23, Q9 (see Appendices))



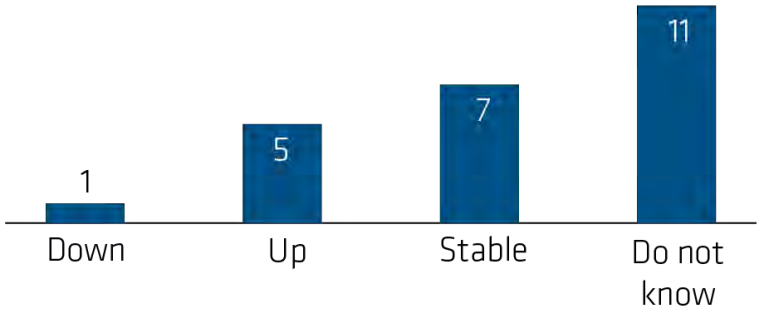
2.3. Expected changes in public funding mechanisms

Core funding mechanisms
(n=20, Q9 (see Appendices))



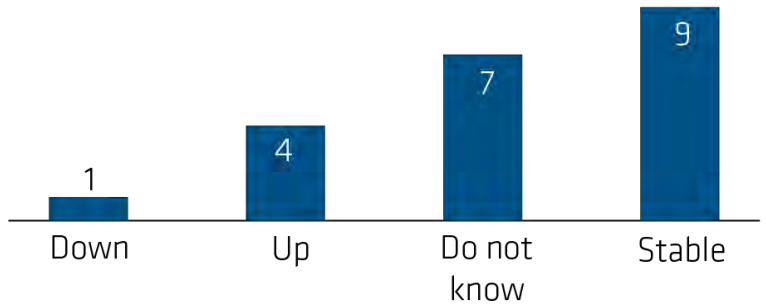
Expectations about **core funding mechanisms** vary across the systems, with national university associations almost evenly split between stability, change and uncertainty. Possible changes foreseen include the development of a new funding model (FI); adaptations to funding indicators (CZ and ES), or expectations of significant variations upwards (FR) or downwards (HR) in core public funding.

Targeted funding instruments
(n=24, Q9 (see Appendices))



There is even more uncertainty around the future use of **targeted funding instruments**. Targeted funding is projected to grow (as a share of public funding) in the following systems: ES (digitalisation); FI (additional student places); FR (research); IE (labour market and upskilling); IT (various specific goals). Conversely, the Croatian Rectors' Conference expected targeted funding to decline.

Efficiency targets
(n=21, Q9 (see Appendices))



Four systems expect a greater use of **efficiency targets**: IE; UK-en (efficient use of any additional funding); ES (academic efficiency and research activity); FI (education).

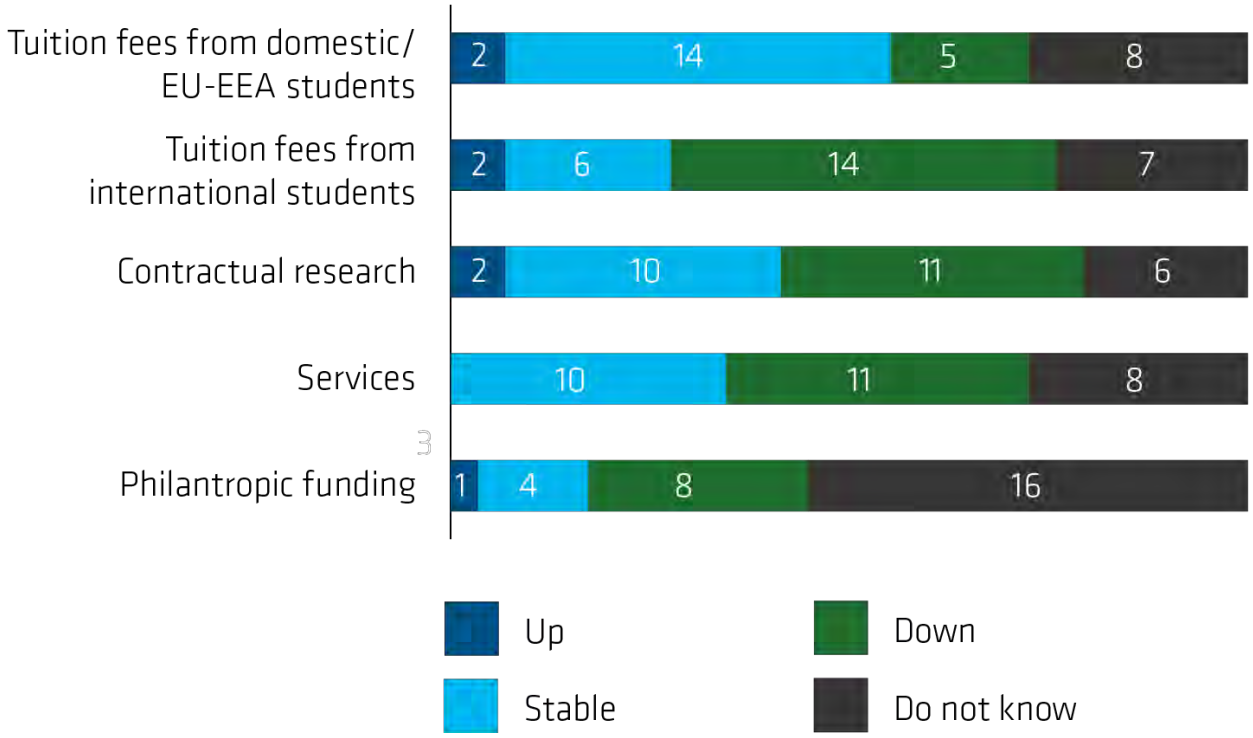
2.4. Expected changes in private funding

Tuition fees paid by international students are the private income source most often expected to decrease (14). This is linked to uncertainty around international student admission, linked to persisting travel restrictions. Tuition fees paid by domestic/EEA students are expected to remain rather stable (14).

Expectations across Europe align on **contractual research and services**, with a third of national university associations expecting stability and another third foreseeing a decrease due to interrupted contracts, discontinuation of fixed-term research contracts and delays in fulfilment of existing commitments.

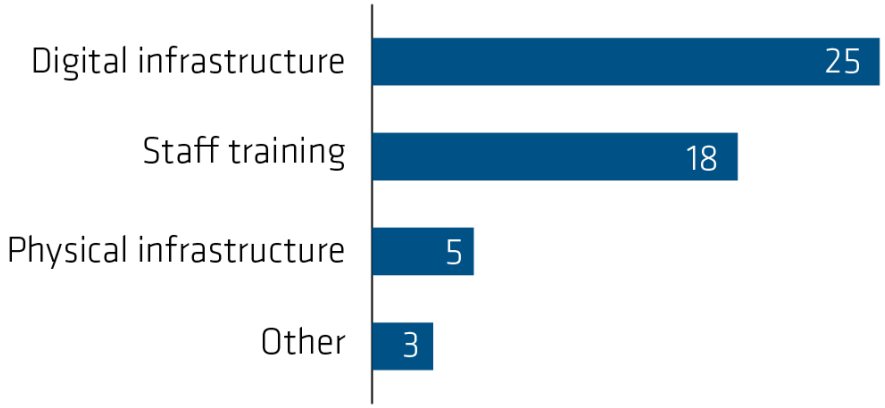
Philanthropic funding is marked by the highest level of uncertainty and is projected to decline in eight systems.

n=29, Q10 (see Appendices)



2.5. New investment needs in the higher education sector

n=29, Q12 (see Appendices)



The rapid shift to online learning and teaching has opened many gaps, in relation to IT infrastructure as well as digital competences of students and staff. It has also created a need for more investment in IT infrastructure.

- Most systems (25) recognise the need to invest in the upgrade and development of digital infrastructure to adapt it to the new realities of both blended learning and remote management and administration.
- More than half of the systems (18) recognise that new investments are needed in staff training, with special emphasis on technology-enhanced learning and teaching methods, as well as virtual mobility.

To foster efficiencies and funding synergies, some countries (e.g. BE-nl, FI, HR) share digital resources and infrastructure (e.g. online platforms) among universities and students. In Austria, for instance, sector-level committees on digitalisation were introduced, and universities created vice-rector positions with responsibilities for digitalisation and infrastructure.

New investments in physical campuses are mostly linked to adapting the use of infrastructure to new social distancing requirements and delivery models (e.g. IE, NL, UK-en). Large capital investment projects in infrastructure are either on hold or planned to be stopped.

Other investment needs concern new equipment and talent recruitment that are necessary to ensure universities' competitiveness and resilience in future crises (e.g. BE-nl, CZ, ES).

2.6. New opportunities for efficiencies in the higher education sector

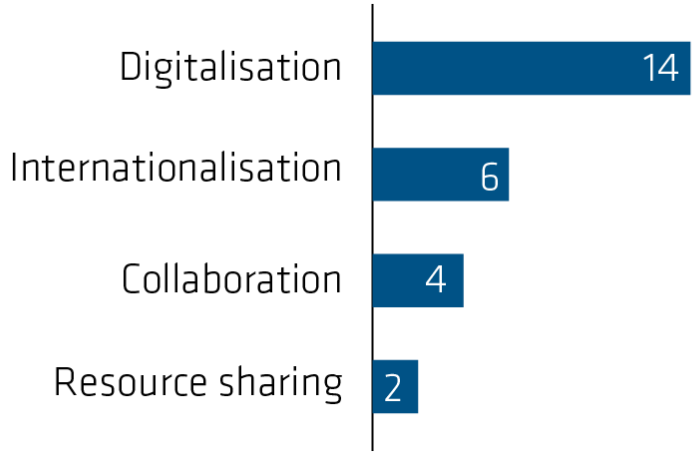
In more than half of the responding systems (14) digitalisation is viewed as a way to increase efficiency in all areas of university work, including learning and teaching, research, and university management and administration.

In six systems, fostering efficiency in internationalisation is linked to digital opportunities, particularly virtual mobility and virtual campuses.

Several systems emphasise the role of collaborations in achieving efficiencies, for example, partnerships between universities and university hospitals (BE-fr), or collaborations between education providers (UK-en).

Other areas where efficiency can be fostered include Open Science (FI); continuous learning models (EE, FI); research and innovation (ES); collaborative delivery overseas (UK-sc); green agenda (PL); sharing of good practices (HU); measures supporting both teaching and research (EE).

n=24, Q13 (see Appendices)



Ireland, England and Scotland highlight the substantial efficiencies that were achieved by the sector in the past and, thus, the more limited potential for further improvement. Spain points to the importance of national strategies and additional funding to improve the capacity of universities to become more efficient.

2.7. Impact on university autonomy

The pandemic has not yet affected university autonomy in most systems, in the sense that regulatory frameworks have not been revised in any significant way in connection to the crisis. However, several systems expect changes triggered by the pandemic (e.g. ES) or due to long-planned reforms (e.g. adjustments to autonomy, financing and governance provisions are foreseen in Norway in 2021).

The Italian and Turkish sector representatives expect positive changes in academic autonomy thanks to the universities' latest experience with online learning and teaching. In six systems, there is uncertainty around new regulations to be adopted to frame blended activities.

Positive expectations regarding organisational autonomy (CZ, FR, NO, RO) are associated with greater flexibility in planning and remote working processes.

Concerns about academic autonomy are mostly linked to greater public control over student numbers (e.g. IE, SE), which is expected in view of unemployment predictions and the drop in international student admissions. Staffing autonomy might be affected in terms of staff recruitment restrictions, a temporary measure adopted in countries like Ireland and Spain during the 2008 crisis.

In England and Ireland, there is a general concern that government guidance alongside further constraints on public resources might lead to an increase in centralised prescription of action.

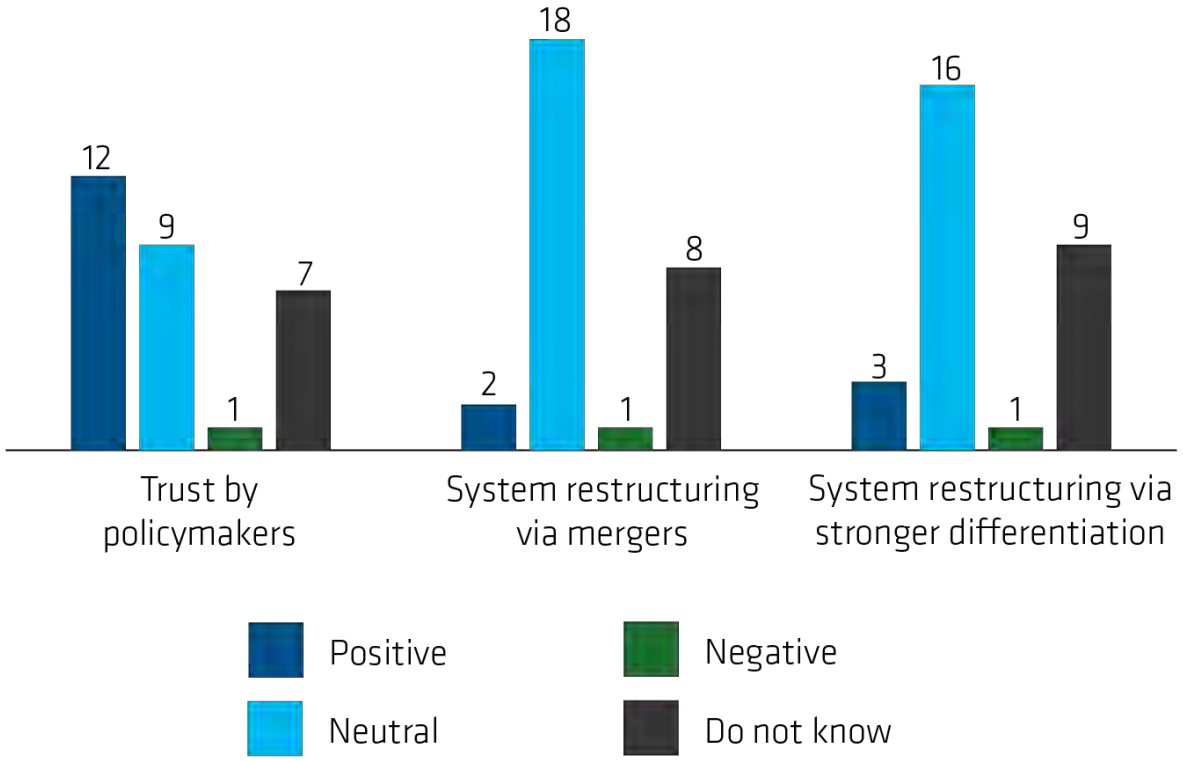
2.8. Impact on system governance

System governance may not be directly affected by the current crisis. However, 12 national university associations reported a greater level of trust in the higher education sector (AT, BE-nl, CZ, DE, EE, FI, FR, HR, IS, NL, NO, TR) due to the universities' prominent role in offering scientific and other responses to the Covid-19 crisis and support to public authorities.

Poland and Turkey expect some system restructuring via mergers, as many private higher education institutions have been severely hit by the crisis. The UK government has announced a restructuring regime for institutions at risk of closure. This may result in mergers or a stronger differentiation in the strategic mission for those institutions involved.

Three systems (IE, RO and TR) foresee system restructuring via a stronger differentiation between various types of institutions. In Ireland, the response of the university sector to the national emergency may help to differentiate research intensive institutions in a positive way.

n=29, Q16 (see Appendices)



Key Messages

1. The immediate financial impact of the pandemic on university funding is rather moderate across continental Europe. Universities incurred the biggest losses from interrupted services, contractual research and international student recruitment.

2. In most systems, universities have received public financial or information support. Additional public funding was most often provided for Covid-19 related research.

3. Sector projections about future income earned from both public and private sources are marked by high levels of uncertainty and concern, particularly when it comes to core public funding and international student fees. It is widely expected that most of the financial impact of the crisis will be felt in a few years.

4. Concerns about future funding shortages are amplified by the need for new investments in digital infrastructure and staff training, as well as adaptation of campus facilities to new health and safety regulations and modes of delivery.

5. The digital transition is accelerated by the pandemic and is largely viewed as an opportunity to foster efficiency at universities, provided that new investments are made to support institutional digitalisation processes.

Key Messages

6 The lack of investment in physical infrastructure will be aggravated in some systems that have been suffering from chronic underinvestment and where new public investments prioritise support to digitalisation.

7 The impact of the crisis on university autonomy and system governance is perceived as limited. Greater trust in universities due to their prominent role in crisis recovery is an asset upon which to capitalise.

8 Although more research is competitively funded in the short term, there is a risk that this will take place in a more focused, top-down way, putting basic research funding under pressure. Reduced contractual research, in turn, will increase applications for competitive research both at the national and European level and increase the risk of lower success rates.

9 Coherence between different funding policies at the European and national level and funding synergies between EU and national funding programmes are necessary to support universities in providing far-reaching, comprehensive solutions in response to the current and future challenges of social and economic transformation.

10 Leadership and management development, as well as the professionalisation of university staff, has proven to be key to universities' resilience in crisis and to their transformation capacity.

CONCLUSIONS

Solutions to overcome the crisis will come from research and skilled university graduates. The current enhanced confidence in research-related expertise and in university experts is an opportunity for universities to engage strongly with decision-makers and society.

RECOMMENDATIONS

Governments must invest ambitiously at European and national levels in those areas that can build a sustainable future.

Given the experience of the 2008 crisis, governments must recognise that long-term investment in higher education and research is crucial for the broader economic recovery as well as for the sector's resilience to economic turbulence.

Commitment to sustainable funding is needed in the long term to support the sector's flagship role in offering scientific solutions to the current public health challenges and spearheading the post-crisis recovery, also through reskilling and upskilling people temporarily affected by crisis.

Universities should continue to demonstrate value for society generated from the full scope of university research and innovation activities in all disciplines and the importance of education and training.

CONCLUSIONS

The overall impact of the current crisis will be large and long-lasting, and universities must prepare for operational and financial difficulties in the coming few years. Adequate responses of public authorities can help universities mitigate this over the long term.

RECOMMENDATIONS

Universities should develop detailed and forward-looking governance, income diversification, transformation and change management strategies with due attention to effectiveness, efficiency and value for society. They should also make risk assessment and crisis management a part of institutional operational planning.

Policymakers should grant universities sufficient autonomy enabling them to develop internal financial allocation mechanisms, adapt strategies and streamline the use of resources in accordance with key institutional objectives and goals.

European and national funders should support university leadership and management development, as well as the professionalisation of university staff, which is crucial for universities' resilience in crises and their transformation capacity.

Appendices: Survey questions

Q1: *"How did you support your members during the Covid-19 crisis? (e.g through a coordinated dialogue with policymakers; exchange of good practices; promotion of the sector's contribution to crisis management; science communication)"*

Q2: *"To what extend have your members been affected financially/economically by the lockdown measures?"*

Q3: *"Please comment on your choice."*

Q4: *"Which sources of university income were particularly affected by the Covid-19 crisis in 2020?"*

Q5: *"Please comment on your choice."*

Q6: *"Have public authorities provided any support to help universities in your country respond to the Covid-19 crisis? (e.g. dedicated financial support, information support). If yes, in which form?"*

Q7: *"What are your expectations regarding public funding for the next three years (2021-2023)?"*

Q8: *"Please explain why you expect such developments."*

Q9: *"How do you expect public funding modalities to change in the next three years (2021-2023)? Please comment on each option."*

EUROPEAN UNIVERSITY ASSOCIATION

Appendices: Survey questions (2)

Q10: *"How do you expect private funding (income from private sources) to evolve in 2021-2023?"*

Q11: *"Please comment on your choice."*

Q12: *"In your opinion, are there new / additional investment needs arising from the Covid-19 crisis (e.g. digital infrastructure, staff training)?"*

Q13: *"In your opinion, in which areas could the sector generate further efficiencies?"*

Q14: *"In your opinion, will the Covid-19 crisis have an impact on university autonomy in your country?"*

Q15: *"Please comment on your choice."*

Q16: *"In your opinion, will the Covid-19 crisis have an impact on system governance in your country?"*

Q17: *"Please comment on your choice."*

Q18: *"Please provide any additional comments on the topics covered in this questionnaire."*

Appendices: List of national university associations

Universities Austria (UNIKO)	AT
Flemish Interuniversity Council (VLIR)	BE-nl
Rectors' Conference, French Community of Belgium (CREF)	BE-fr
Croatian Rectors' Conference (CRC)	HR
Czech Rectors Conference	CZ
Universities Denmark	DK
Universities Estonia	EE
Universities Finland (UNIFI)	FI
Conference of University Presidents (CPU)	FR
German Rectors' Conference (HRK)	DE
Hungarian Rectors' Conference	HU
Icelandic Rectors´ Conference	IS
Irish Universities Association (IUA)	IE
Conference of Italian University Rectors (CRUI)	IT
University of Luxembourg	LU
Association of Universities in the Netherlands (VSNU)	NL
Universities Norway	NO
Conference of Rectors of Academic Schools in Poland (KRASP)	PL
Portuguese National Conference of Rectors (CRUP)	PT
Romanian Council of Rectors	RO
Conference of the Universities of Serbia	RS
Slovak Rectors' Conference	SK
Slovenian Rectors' Conference	SI
The Conference of the Rectors of the Spanish Universities (CRUE)	ES
Association of Swedish Higher Education (SUHF)	SE
swissuniversities	CH
Turkish University Rectors' Conference	TR
Universities UK (UUK)	UK / UK-en
Universities Scotland	UK-sc