Executive summary

Investment in higher education in OECD countries has increased substantially over the last 20 years, largely because of higher enrolment, increasing costs, government priorities related to skills, and research and innovation. Public authorities in OECD member and partner countries regularly need to make and justify decisions about how to mobilise, allocate and manage financial and human resources in higher education. This can be challenging, as not only are the effects of individual policy choices difficult to predict and prove, but the core objectives of higher education – notably the quality of student learning – are hard to measure. Despite these limitations, knowledge of international trends, alternative policy approaches, and evidence from research, evaluation and the practical experience of peers in other countries can be invaluable for those making crucial policy decisions in higher education.

The OECD Higher Education Resources Project aims to identify and share promising policies that public authorities can deploy to guide the allocation and use of financial and human resources in higher education. It will do this in the coming years by analysing existing resourcing policies through country reviews and system-specific thematic policy briefs. This report helps guide and structure the work in the project by identifying the main contemporary challenges relating to resourcing higher education and identifying what research-based evidence can tell us about these challenges.

Key messages from this report for the policy makers and the wider OECD Higher Education Resources Project include:

- Government policy functions alongside the actions of non-governmental actors and market forces in influencing the behaviours of higher education institutions, students and staff, and thus the results achieved by higher education systems. Policy makers must recognise these complex contextual interactions – and the limits on government capacity to effect change – in the design and implementation of resourcing policies.
- Irrespective of the specific contexts and policy environments in place, the cost of providing higher education has increased considerably in OECD countries and productivity gains have proved hard to achieve. After accounting for rising student numbers and inflation, average real expenditures per student by higher education institutions in 13 selected OECD countries roughly doubled between 1995 and 2015. As in other industries dependent on expensive human capital, such as medicine and law, higher education has found it difficult to produce its outputs (learning, research and engagement) more efficiently than in past.
- Policy choices are only one factor affecting how much countries spend on higher education and where funds are raised. Wealthy countries with comparatively young populations spend the most on higher education, while a range of historical and cultural factors influence the sources from which this spending is drawn. Although many governments establish ambitious higher education strategies, it is rare for these to be closely tied to financial resources and examples of significant policy-led shifts in the level or sources of higher education funding are rare in the OECD.
- The fiscal impact of the COVID-19 crisis will be significant, meaning many policy makers will increasingly need to find ways of supporting higher education objectives with fewer resources.

Maintaining the scale and quality of provision at a lower cost is unlikely to be achieved through increasing student-to-staff ratios, relying more on temporary staff or reducing spending on support services – all of which negatively affect study outcomes. Widening the scope of digitalisation in teaching and learning is a possible way to maintain access and quality at a lower cost of instruction and raise efficiency.

- Higher education study is costly for learners due to tuition fees and non-study costs, such as housing. Costs borne by learners vary widely among OECD countries, as does the level and means of repayable (loan) and non-repayable (grant) support provided to meet these costs. Properly designed, both loans and grants can successfully address the liquidity constraint faced by learners: costs are faced upfront, but benefits occur after the completion of studies. Widely identified as an efficient and effective policy instrument, income-contingent lending has proven more difficult to adopt and more costly to implement than anticipated. Means-tested grant assistance can be highly effective in promoting access and study completion, though less so in shaping study and career choices.
- Most higher education institutions earn revenue from a variety of sources, although reliance on public funds – and thus the likely influence of public funding levers – varies considerably between OECD countries. Although funding allocation based on historical patterns and negotiation remains prevalent, many higher education systems have adopted formula-based allocation models to distribute operating funds to institutions. Most formula use input measures, such as student numbers, although the use of output criteria, such as graduation or progression rates, is increasing. Assessing the cost of educational provision in different fields of study and the selection of the most appropriate criteria and weights in the design of formula remain key challenges for policy makers across OECD countries.
- Research evidence suggests output or performance-linked funding can have positive effects on the behaviour of higher education institutions. Adequate differentiation between institutional missions and goals is required for effective performance-linked funding, while institutional responses appear to be improved if performance indicators are stable and if the funding consequences of performance-linked funding are clearly and transparently specified in advance.
- Expenditure on human resources in higher education accounts for about two-thirds of current expenditure by higher education institutions in OECD countries. The extent to which governments regulate the conditions under which academic and non-academic staff are recruited, employed and rewarded for their work varies considerably between countries. Key trends in most higher education systems have been an increase in non-permanent employment of academic staff – with potentially negative implications for the student experience – and the expansion of non-academic professional roles related to the management of higher education institutions. Progression opportunities in many higher education systems are limited, and robust systems of staff appraisal and rewards are often lacking.
- Governments have often sought to reshape higher education systems through promoting expansion and diversification of higher education provision or the concentration of higher education activities – or some types of higher education activity – in a smaller number of institutions to build critical mass, promote excellence or achieve efficiency savings. The development of new institutional and programme types, as well as the expansion of private sector provision and online learning have facilitated large-scale widening of access to higher education in many systems. In contrast, concentration policies, including complementary specialisation, institutional collaboration, alliances and mergers, have often been pursued with the aim of increasing quality and lowering costs. The success of these policies is challenging to measure.