Resourcing higher education in the Flemish Community of Belgium

Key findings and recommendations from the OECD country review

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12 January 2022





Structure of today's presentation

- **1 Context for the review, objectives, inputs and known limitations**
- 2 Key findings and recommendations from the review :
 - a. Core operating funding for higher education institutions
 - b. Institutional funding for research
 - c. Funding for students
 - d. Human resources (academic staff)
 - e. System strategy



CONTEXT FOR THE REVIEW

Objectives, inputs and limitations

OECD Resourcing higher education project

The review is part of a wider, ongoing, OECD initiative



To build a **shared knowledge base** on effective higher education resourcing policies by:

- Exploring and mapping financial inputs and policy choices related to higher education resourcing in member countries
- Exploring the relationship between policy choices and the outputs and outcomes observed, based on international research evidence (initial report June 2020)
- Providing **analysis**, **knowledge exchange** and **peer learning** through:
 - a) System-level research and analysis through thematic policy briefs and broader country reviews (published from autumn 2021 onwards)
 - b) Knowledge exchange activities (e.g. Webinar on 15 November)
 - c) Future synthesis and targeted briefing notes

Summer 2022

Resourcing higher education in the Flemish Community Objectives of the review and inputs used

Objectives

- 1. To **compare** resourcing policies in the Flemish Community / Flanders with those in comparable OECD jurisdictions
- 2. To provide an **external perspective** on strengths and challenges in the system
- To contribute to a broader knowledge base on resourcing policies and knowledge exchange – in which the Flemish Community / Flanders will remain involved.

Inputs

- Domestic policy documents, data, evaluations and studies from the Flemish Community
- Consultation with institutions, stakeholders and policymakers in the Flemish Community (Spring 2021)
- International data (incl. Unesco-OECD-Eurostat)
- Information on policy and practice in other OECD jurisdictions (incl. Higher Education Policy Survey - HEPS) + available evidence on effects
- Judgements of the review team (including peer reviewers from IRL and FIN)

Resourcing higher education in the Flemish Community Known limitations – for this review and comparative policy analysis in general

Issue	This review	General	Responses
Wide coverage of resourcing topics – limits depth to which any one topic can be analysed	X		 Keep focus on key issues, while being as specific as possible Highlight where further enclysis is
This is a policy review, not an audit or financial modelling exercise	X		 Fightight where further analysis is required
Limitations to international data (e.g. timeliness & differentiation by institution type)		X	 Explain what international data do and do not show Use national data sources
Detailed information on policy in approaches in different OECD systems is not readily available		X	 OECD HE Policy Survey Complementary research into national examples
Robust evidence on the effects of [some] policy options is scare and sometimes inconclusive		X	 Highlight what evidence does and does not show



FINDINGS AND RECOMMENDATIONS



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- 1. How does the level of funding compare?
- 2. Is funding distributed in a way that is equitable, transparent and predictable?
- 3. Does the funding system promote and reward achievement of societal goals?

Funding HEIs – how much is invested?

Total per-student spending on Flemish HEIs is above the OECD average

Total expenditure per FTE student on higher education institutions by source of funds Averages for all institution types, expressed in USD adjusted for PPP in 2017



Funding HEIs – how much is invested?

Public spending per student on core and ancillary services is comparatively high

Expenditure per student on higher education institutions by destination of funds Averages for all institution types, expressed in USD adjusted for PPP in 2017



Funding HEIs – trends from international data

Total per-student spending on core operations declined in the period up to 2017

Change in public and private expenditure per student in five OECD jurisdictions Expenditure per FTE student on public and private HEIs in USD adjusted for constant prices (2015) and constant purchasing power parity (PPP) between 2012-2017



- **Total** spending per student on HEIs increased in real terms in the Flemish Community between 2012-2017
- This was driven by increases in public spending on research and private spending
- Public spending on core operations decreased, albeit to a lesser degree than in some comparator systems

Source: OECD Education at a Glance Database https://stats.oecd.org/. Data for the Flemish Community provided by the Flemish Department of Education and Training.

Core funding for HEIs – trends from Flemish data

Core operating funding has not kept pace with increasing enrolment

Operating grant per student 2015-19 – universities and university colleges Funding expressed in constant (2015) prices (Index 2015 = 100)



Flemish Government (2020) Verslag over de financiële toestand en de evolutie van het personeelsbestand van het hoger onderwijs in 2019 Deel Universiteiten https://www.vlaanderen.be/publicaties/verslag-over-de-financiele-toestand-en-de-evolutie-van-hetpersoneelsbestand-van-het-hoger-onderwijs (accessed on 12 January 2021); Flemish Government (2020[19]) Verslag over de financiële toestand en de evolutie van het personeelsbestand van het hoger onderwijs in 2019 Deel I - Hogescholen https://www.vlaanderen.be/publicaties/verslag-over-de-financieletoestand-en-de-evolutie-van-het-personeelsbestand-van-het-hoger-onderwijs (accessed on 16 January 2021).

Amount allocated per funding point through the allocation model 2013-21 Values in constant (2015) euros per funding point by programme type



Note: Values in euros are adjusted using the Health Index with reference year 2015 = 100 Source: Data provided by the Flemish Agency for Higher Education, Adult Education, and Student Grants (AHOVOKS). Statbel (2021) Health Index Qualifications https://statbel.fgov.be/en/themes/consumer-prices/health-index (accessed on 11 August 2021).

Different domestic measures show • slightly different patterns: but the broad trend is downwards

Core funding – the impact of budgetary restraint "Growth paths", indexation and "clicks" have not been implemented consistently

Impact of indexation on the budget envelope for the operating grant to universities and university colleges

Indexation implemented vs impact of full indexation in line with Higher Education Code 2007 = 100



Source: VLIR

- Three key adjustment mechanisms set in law:
 - Budget trajectories ("growth paths")
 - Indexation (staff vs non-staff components)
 - "Click system" (to account for enrolment change)
- Budgetary constraints have led to nonimplementation or delayed implementation
- 1. Seek to increase the value of the budget envelope for the operating grant to higher education institutions to restore the real-terms value of payments to institutions.
- 2. Revise the budget trajectories (growth paths) for the budget envelope for the operating grant to ensure they are realistic and can be respected in practice.

Core funding – budgeting for student numbers

The Flemish system combines open access with a semi-open budget envelope

Features of funding models that influence calculation of the budget envelope

	Type of budget envelope	Open or capped recruitment of students	Formula allocation method			
			Fixed unit payments	Mixed (unit costs + distributive)	Purely distributive	
Ireland	Closed	Open ⁽¹⁾		X		
Denmark	Closed	Capped in certain fields	X (2)			
Flemish Community	Semi-open	Capped in certain fields			X	
Finland	Closed	Effectively capped			X	
Australia	Closed	Effectively capped	X			
Scotland	Closed	Capped	X			
Netherlands	Closed	Capped in certain fields			Х	

Notes: (1) In Ireland, institutions set their own admission requirements.

(2) The Danish model allocates a fixed level of funding (differentiated by subject field) for each student that successfully completes the equivalent of 60 credits each year (25% of core funding is allocated as a fixed historical allocation). The unit price paid by government is derived from the available envelope, but fixed in legislation in advance.

Source: Drawing on Golden, Troy and Weko (2021_[24]) *"How are higher education systems resourced? Evidence from an OECD policy survey*", OECD Education Working Papers, No. 259, Paris, <u>https://doi.org/10.1787/0ac1fbad-en</u>.

- Semi-open budget envelope + largely open access admission = <u>fluctuation</u> in unit payments (i.e. N euros for doing X)
- Fixed unit payments create
 clearer and more stable
 relationships between efforts
 and rewards (payments) = one
 way to address complaints
 heard in the Flemish Community
- 3. Analyse the budgetary implications of a funding model for the operating grant that establishes fixed unit payments in advance.

Core funding – aligning payments to costs

The Flemish system is similar to comparator systems, but more complex for UCs

Subject-area weightings in selected OECD jurisdictions

Weighting factors for undergraduate students used in funding allocation formula in selected OECD jurisdictions

	Fler Comr	nish nunity	Netherlands ²		Scotland (United Kingdom)	Ireland	Denmark (Universities)	Finland ³
	Univ.	UC	Univ.	UAS				
Non-laboratory subjects (e.g. humanities and social sciences)	1	1	1	1	1	1	1	1
Subjects with fieldwork (e.g. computer science, education)	2	1.1 to 1.6	1.5	1.28	1.2 / 1.4	1.3	1.4	1
Laboratory subjects (e.g. engineering, physical sciences)	2	1.6	1.5	1.5	1.6 / 1.8	1.7	2.1	1.75
Clinical medicine	3.9 ¹	-	3	-	3.2	2.3	2.1	3
Veterinary studies / dentistry	3.9 ¹	-	3	-	3.2	4	2.1	3

Notes: 1. Since 2017, university programmes in medicine in the Flemish Community have been funded through a ring-fenced budget with variable component of the teaching grant; the weighting for veterinary studies is 3;

2. The Dutch funding formula applies these weightings to enrolments and degrees awarded for the instruction component of public funding to institutions and to degrees awarded for the allocation of 15% of basic funding to universities for research;

3: Finland introduced multipliers from 2021, with the same multipliers used for universities and universities of applied science.

- Broadly similar weights across countries
- Rationale for differences in OBEs for university college subjects (+ number of distinct weights) not always clear
- Discussions appear to focus on difficulty of change rather than underlying rationale
- 4. Analyse the impact of using a simplified set of subject-area weightings for professional programmes.

Core funding – output-related funding

The inclusion of output parameters in the funding formula has had no clear impact

Drop-out rates among first-time students in the Flemish Community Proportion of first-time students (*generatiestudenten*) who drop-out of bachelor's programmes after 1, 2, 3 and 4 years.

Drop-out after 1 year Drop-out after 2 years Drop-out after 3 years Drop-out after 4 years or more Still enrolled in a Bachelor's Degree obtained



Source: Translated from Statistiek Vlaanderen (2021) Drop-out in het hoger onderwijs (Drop-out in higher education), <u>https://www.statistiekvlaanderen.be/nl/drop-out-in-het-hoger-onderwijs</u> (accessed on 1 June 2021).

- Drop-out rates have changed little since 2008
- This is consistent with international evidence (notably US)
- Measures outside funding formula (incentives, student guidance and support) more likely to succeed
- 5. Revisit previously proposed reforms to promote student progression, including changes to the "learning credit" system.
- 6. Continue to support initiatives and tools to help students to make sound choices about what and where to study.

Governance of core funding

Accountability mechanisms are less developed in the FC than in comparator systems

Higher education systems with institutional (performance) agreements

OECD member countries where institutional agreements are in place nationally, in some sub-national jurisdictions or are being introduced



- International evidence suggests can be an effective tool for articulating policy priorities and institutional strategies in small to medium-sized systems
- Allow more qualitative approach tailored to each institution, while enhancing accountability for public funds
- Consider introducing a system of institutional agreements between government and higher education institutions to provide a clear accountability framework.

7.

Investing in the future

The Flemish Community provides limited funding for strategic investments in HEIs



Core Recurrent

Grant

Free Fees

Grant

Core Funding for Recognised Costs

Access

- Government funds specifically for futureoriented investments are limited
- Earmarked capital grant appears insufficient
- Independent evidence on investment need is required
- Earmarked capital grants may not be most efficient instrument
- 8. Create a future-oriented "strategic investment fund" to support higher education institutions achieve key goals
- 9. Quantify the capital investment needs of the higher education sector as a basis for redesign of the approach to capital funding



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- 1. Level of spending
- 2. Allocation model for universities
- 3. Overhead and full costing
- 4. Research in university colleges

Funding for research in higher education Spending on research in Flemish higher education remains below some comparators

Spending on R&D performed in the higher education sector HERD as a proportion of GDP and in euro per capita (2018)



- HERD is lower than in some leading comparator systems – role of government research centres in Flanders
- In 2019 government spending on research (in HE and elsewhere):
 - Flemish government 0.7% of GDP.
 - Belgian federal spending (Flemish share) 0.1%
 - EU funding 0.07%
- 0.87% of GDP = < formal target of 1% of GDP
- 10. As public finances allow, continue to increase public funding for research in higher education.

Eurostat, Main database, <u>https://ec.europa.eu/eurostat/web/main/data/database</u> (accessed on 2 June 2021); Data for the Flemish Community: Debackere et al. (2021) Totale O&O-intensiteit in Vlaanderen 2009-2019 "3% nota" (Total R&D intensity in Flanders 2009-2019 "3% report"), <u>https://www.ewi-vlaanderen.be/sites/default/files/bestanden/3_nota_2021.pdf</u> (accessed on 10 August 2021).

Research funding for universities

The BOF and research operating grant: sophisticated and successful policies

Allocation models for core institutional research grants

No performance-based research metrics	Limited performance- based research metrics	Formulas using bibliometric indicators	Peer review with reference to bibliometric indicators	Peer review without systematic use of bibliometric indicators
Bulgaria Cyprus Greece Hungary Ireland Luxembourg Latvia Malta Romania Spain Switzerland	Austria (PhD graduates + performance agreements) Germany (although variation between <i>Länder</i>) Netherlands (PhD graduates + performance agreements)	Belgium (nl) Belgium (fr) Croatia Denmark Estonia Finland Norway Poland Sweden Slovakia	Czech Republic Italy Lithuania Portugal	United Kingdom

Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, <u>https://doi.org/10.1787/3f0248ad-en</u>.

- The design of allocation formulas appears to have promoted (≠ caused) increased research output / impact
- Recent reform of BOF reduces weight of output + introduces positive signals (e.g. inter-disciplinarity)
- 11. Analyse the impact of allocating the research component of the operating grant using the same parameters as for the BOF
- 12. Analyse the detailed effects of allocating the BOF to universities, for four or five-year periods at a time.
- 13. Consider requiring universities to publish institutional research strategies, potentially as part of institutional agreements

The cost of research in higher education Un(der)funded overhead costs associated with research projects are a concern

Typical overhead rates applied by research funders in selected **OECD** jurisdictions

Funding body	System	Overhead rate applied in grants		
Independent Research Fund Denmark (DFF)	Denmark	44%		
Science Foundation Ireland	Ireland	30%		
European Union Horizon Europe Programme	European Union	25%		
Irish Research Council	Ireland	20%		
FWO Strategic Basic research	Flanders	17%		
FWO Junior and Senior Research projects	Flanders	6%		

Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, https://doi.org/10.1787/3f0248ad-en.

- Increases in externally funded research = increased calls on institutional overheads
- Approaches to overhead in research council funding vary considerably: e.g. DNK vs NI D
- FWO overhead rates appear comparatively low
 - 14. Take steps to increase the overhead rates applied for resource-intensive research projects funded through external competitive public funding mechanisms
 - **15.** Higher education institutions should be required to apply the same overhead rates for research financed by private funders

The cost of research in higher education

Government and society lack comparable data on costs in higher education

System-wide activity-based costing approaches in OECD jurisdictions

Jurisdiction	Approach (sector of application)	Universal in publicly funded institutions?	Year introduced
Australia	Transparency in Higher Education Expenditure exercise	No	2018 (2011/2016) ¹
Finland	Full cost model developed by Academy of Finland (universities)	Yes (universities)	2009 [National regulation 2016]
Ireland	Full Economic Costing – FEC (Universities)	Yes	2006 (revised 2017)
	Unit Cost Approach (IoTs)	Yes	2006
Norway	TDI cost accounting model	Yes (universities)	2015
Sweden	SUHF (Sveriges universitets- och högskoleförbund) model (universities + university colleges)	Yes	2009
United Kingdom	Transparent Approach to Costing (TRAC)	Yes	1999

Source: OECD (2022 - Forthcoming) Resourcing Higher Education in Ireland.

- Transparent information on the costs of activities in higher education is important for policy design – including decisions on overhead rates
- Major comparator systems have implemented activity-based costing standards – providing useful learning opportunities
- 16. The Flemish higher education sector should develop and introduce common standards for activity-based cost accounting.

Research in university colleges

There is scope to increase investment in practice-oriented research

Structure of core public funding for higher education institutions Proportion of core public funding allocated through different funding streams (most recent year for which data were available: 2017-2020)

	Fler Comm (20	nish unity ⁽¹⁾ 19)	sh Denmark iity ⁽¹⁾ (2019) 9)		Finland ⁽²⁾ (2020)		Ireland ⁽³⁾ (2017)		Netherlands ⁽⁴⁾ (2019)		Scotland (2017)
	Uni.	UC	Uni.	UAS	Uni.	UAS	Uni.	UAS	Uni.	UAS	Uni.
Teaching grant	43%	94%	46%	94.5%	42%	76%	39%	64%	55%	97.4%	50%
Fees paid by public authorities	-	-	-	-	-	-	51%	32%	-	-	22%
Research grant	54%	4%	54%	5.5%	34%	19%	-	-	42%	2.6%	19%
Capital grant	2%	3%	-	-	-	-	10%	4%	-	-	4%
Grant for strategic development	-	-	-	-	24%	5%	-	-	3%	-	4%
Average proportion of institutional revenue from core public funding	52%	72%	57%	77%	63%	79%	34%	62%	58%	72%	39%

Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, <u>https://doi.org/10.1787/3f0248ad-en</u>.

- An increasingly common policy discussion in OECD countries: what role of research in non-university institutions?
- 17. Develop a system-wide strategy to guide the future of practice-oriented research.
- 18. Progressively increase the share of total public funding for research (and level of funds) provided to university colleges
- 19. Require university colleges to develop institutional strategies for practice-oriented research, complementing the system strategy



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Funding for students

The Flemish system: comparatively high grant support + low fees

Public spending on student aid in OECD jurisdictions

Public expenditure on grants, scholarships and loans, compared to household expenditure on higher education institutions – in USD PPP per full-time equivalent student (reference year 2015)



Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, <u>https://doi.org/10.1787/3f0248ad-en</u> (Figure 5.1)

- The Flemish higher education system provides comparatively strong direct financial support to students through its carefully designed grant system
- There is scope to build on previous work on the full "cost of attendance" in higher education to improve information for (prospective) students
- 20. Examine options for improving information for students about the full cost of study on relevant websites.
- 22. Ensure alignment is maintained between grant credit and study credit if changes are made to the study credit system (see Recommendation 5).

Funding for student services STUVO funding does not take into account differing levels of need between institutions

Grant awards to students in universities and university colleges Proportion of total degree-seeking students in receipt of a grant in 2019/20



- The profile of students varies considerably between Flemish HEIs, creating variation in demand for targeted student services
- The STUVO funds are currently allocated based on credit data, without taking into account differences in need
- Concerns exists that reform could lead to losers
- 21. To inform possible reform, analyse how the allocation of the funds for student services could be adapted to take better account of variation in student needs between institutions.
- Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, <u>https://doi.org/10.1787/3f0248ad-en</u> (Table 5.1)



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Student-to-staff ratios in Flemish higher education are among the highest in the OECD

Ratio of FTE students to FTE teaching staff in OECD jurisdictions (2018)



- Classification of academic staff
 and recording of teaching time
 varies between OECD systems –
 complicates international
 comparison
- 19 FTE students per FTE teaching staff member in Flemish HE (OECD average = 15.2)
- 23. Ensure that a proportion of additional public funding for higher education (see 1) can be used to create new staff posts.

Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, <u>https://doi.org/10.1787/3f0248ad-en</u> (Table 6.2)



Proportion of women among academic staff by age category

Headcount (persons), proportion of academic staff in each age category who are women (2018)



- In 2019, < 30% of senior academic staff (ZAP) in Flemish universities were women (57% of lecturers in university colleges)
- 25% ZAP aged over 45 are women: senior posts are disproportionally occupied by men
- Signs of improvement, but other OECD systems have made greater progress
- 24. Closely monitor progress towards the goals of the Charter on Gender in Academia, introducing binding targets if required.
- Source: OECD (2021) Resourcing Higher Education in the Flemish Community of Belgium, <u>https://doi.org/10.1787/3f0248ad-en</u> (Figure 6.4)

Human resources

Dutch-language requirements limit attractiveness for international talent

DEEL 2 STRUCTUUR EN ORGANISATIE VAN HET HOGER ONDERWIJS

TITEL 4 Organisatie van de opleidingen

Hoofdstuk 8 Taalregeling

Afdeling 2 Onderwijstaal in initiële bachelor- en masteropleidingen

Artikel II.261. (01/09/2021- ...)

§1. De onderwijstaal in de hogescholen en universiteiten is het Nederlands.

In de initiële bachelor-en masteropleidingen kan evenwel een andere onderwijstaal dan het Nederlands worden gebruikt, conform de bepalingen in deze afdeling. Als een instelling gebruik wil maken van die mogelijkheid, moeten de waarborgen inzake kwaliteit en democratisering, vermeld in artikel II.270 en II.271 vervuld zijn voorafgaand aan de start van de opleiding.

§2. Een instelling kan in de volgende gevallen beslissen dat in initiële bachelor-en masteropleidingen voor opleidingsonderdelen een andere onderwijstaal dan het Nederlands wordt gebruikt:

- 1° de opleidingsonderdelen die een vreemde taal tot onderwerp hebben en die in die taal worden gedoceerd;
- 2° de opleidingsonderdelen die gedoceerd worden door anderstalige gastprofessoren;

3° de anderstalige opleidingsonderdelen die, op initiatief van de student en met instemming van de instelling, worden gevolgd aan een andere instelling voor hoger onderwijs;

4° de opleidingsonderdelen waar uit de expliciet gemotiveerde beslissing de meerwaarde voor de studenten en het afnemende veld en de functionaliteit voor de opleiding blijkt.

5° de opleidingsonderdelen die deel uitmaken van een bachelorof masteropleiding die kadert binnen een 'European Universities Initiative' dat als pilootproject werd goedgekeurd in 2019 of 2020, zoals beschreven in artikel II.151.

§3. Een anderstalige initiële bacheloropleiding is een initiële bacheloropleiding waarvan de omvang van de opleidingsonderdelen, uitgedrukt in studiepunten, aangeboden in een andere onderwijstaal dan het Nederlands in het modeltraject van die opleiding hoger is dan 18,33% van de totale omvang van de in die opleiding aangeboden opleidingsonderdelen, uitgedrukt in studiepunten, in het modeltraject.

- A clear rationale exists for protecting the place of Dutch in higher education
- In 2020, 48% of post-docs in Flemish universities held non-Belgian nationality: only 12% of permanent academic staff (ZAP)
- Other systems (FIN, NLD, Quebec (CAN)) tend to allow greater flexibility in language requirements
- 25. Introduce greater flexibility in the formulation and application of the Dutch-language requirements for initial appointments to permanent academic posts.



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System lacks a coherent overarching strategy to guide future policy and investment



- Key (shared) challenges:
 - Digitalisation
 - HE as a player in upskilling and reskilling
- Strategy development: opportunity to create shared view about future direction of higher education and to make this explicit for stakeholders and citizens
- 26. Collectively develop an overarching Flemish strategy for higher education, encompassing all key missions of the sector, as a core reference document.



OECD Resourcing Higher Education Project

https://www.oecd.org/education/