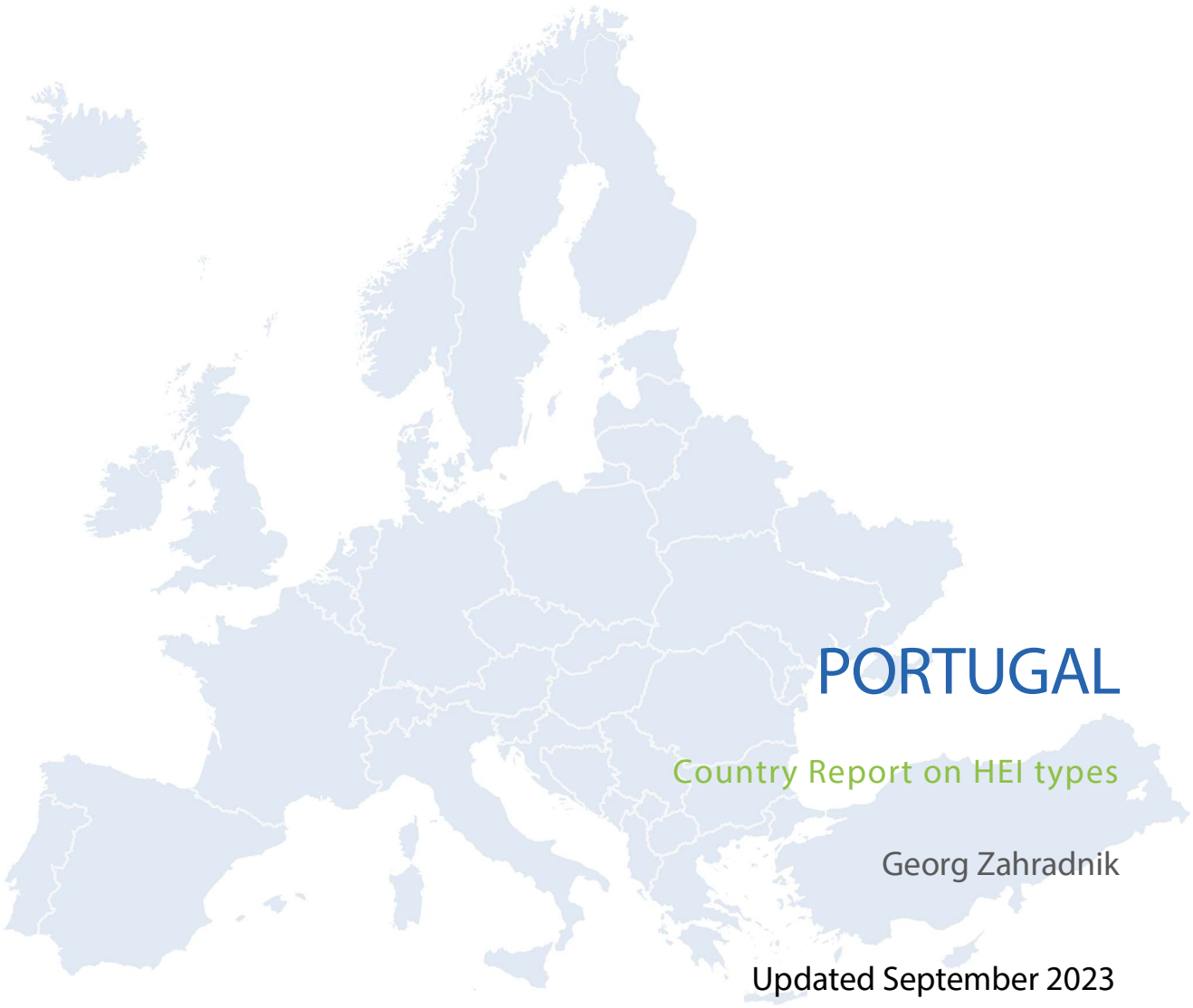
EUROPEAN TERTIARY EDUCATION REGISTER



PORTUGAL

Country Report on HEI types

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Portugal

This report describes the structure of the national higher education system in Portugal, focusing on the institutional types as defined by national categories. It builds on the Eurydice Report on the national higher education system but complements it with quantitative information on the role of higher education institution (HEI) types in national systems, based on data derived from the European Tertiary Education Register (http://www.eter-project.eu) for the period 2011-2020.

Types of Higher Education Institutions

According to Eurydice[1], the Portuguese higher education system is organised as a binary system that consists of the university and the polytechnic systems.

- **University** education is more geared towards scientific training, combining efforts and skills of teaching and research units and aims to guarantee a solid cultural and scientific preparation and to give technical training that allows students to exercise all kinds of cultural and professional activities, promoting the development of critical analysis, as well as conception and innovation skills. University education is taught at **universities**, university institutes, and other institutions within this area.
- **Polytechnic** education focuses on vocational and advanced technical training, concentrating on applied research and development. It is geared towards understanding and solving problems while providing a solid technical and cultural training at a high level. It also develops students' ability to innovate and critically analyse, teaching theoretical and practical scientific knowledge, and their

[1] https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/types-higher-education-institutions

vocational applications. Polytechnic education is taught at polytechnic institutes, and other institutions within polytechnic education.

Despite the Portuguese higher education system's binary character, polytechnic institutions can be integrated into universities without changing their institutional profile.

The Portuguese higher education system includes public higher education, made up of institutions belonging to the state and the foundations it has instituted, as well as private higher education, consisting of institutions belonging to private entities and cooperatives.

Main institutional characteristics. Legal status and the right to award a PhD

Table 1 below provides a quantitative overview on the main institutional characteristics by HEI type. All 14 Public Universities (Ensino Universitário Público) have the right to award PhDs. In contrast, while the total number of Private Universities (Ensino Universitário Privado) outnumbers their public counterpart with a total of 23 establishments (21 included in ETER), almost half of them do not award PhDs. The 20 public and 47 (35 included in ETER) private polytechnics (*Politécnico*) account for the majority of all HEIs in Portugal but do not award PhDs. The two public military and police universities (Ensino Militar e Policial Universitário) play a more limited role and one awarding PhDs.

Table 1. Institutional type and legal status by HEI type, 2020

Category		N	Public	Private	PhD awarding	Included in ETER
Private Polytechnic	Ensino Politécnico Privado	47	0	47	0	35
Private University	Ensino Universitário Privado	23	0	23	13	21
Public Military University	Ensino Militar Universitário	2	2	0	1	2
Public Polytechnic	Ensino Politécnico Público	20	20	0	0	20
Public University	Ensino Universitário Público	14	14	0	14	14
Total		106	36	70	28	92

Note: 2 Private Universities and 12 Private Polytechnics are not included in ETER and therefore not included in the remainder of this report.

Institutional history. Older and younger institutional types

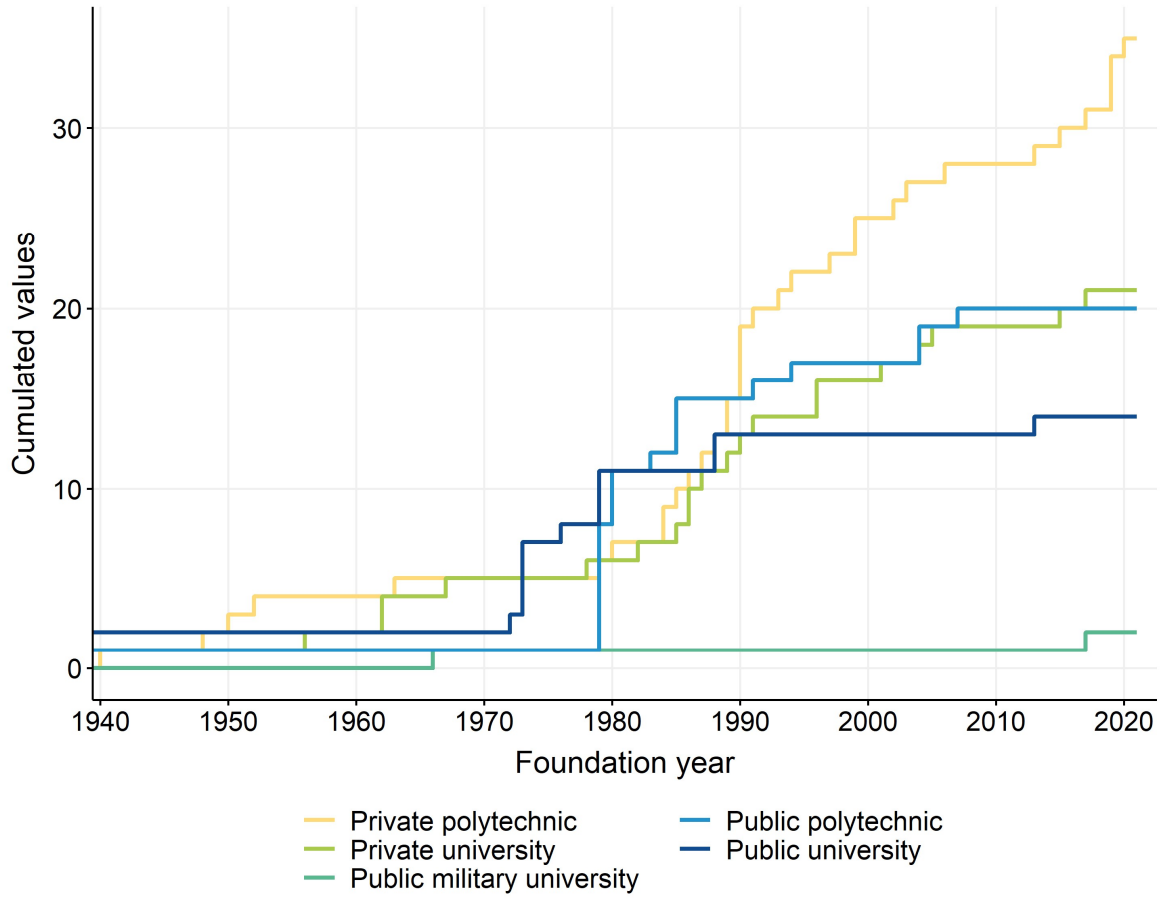
Data on the HEI foundation year provide information on the history of Portugal's higher education and its evolution over time.

Figure 1 overleaf shows that, despite ancient historical roots, the expansion of the system in terms of the number of HEIs is relatively recent. While the University of Coimbra, the oldest Portuguese university, dates back to 1290, only two more HEIs were founded before the 20th century, namely the Military Academy and the Navy Academy, both being Public Military Universities. Overall, however, Portuguese HEIs are much younger; only seven of the HEIs were founded before World War II.

The figure shows distinct patterns of expansion. During the 1950s and 1960s the number of Private Universities and Private Polytechnics slowly increased, while the number of their public counter parts remained stable. This was followed by an expansion of the number of public institutions in the 1970s with a peak in 1979 with the foundation of 7 Public Polytechnics and 3 Public Universities in one year. This was again followed by an increase of Private Polytechnics and to a smaller extend Private Universities from the early 1980s until the early

1990s. Since the 1990s the number of new HEIs per year declined. Among the 10 HEIs in ETER founded after 2009 are one Public University, two Private Universities and six additional Private Polytechnics.

Figure 1. Foundation year of HEIs by type

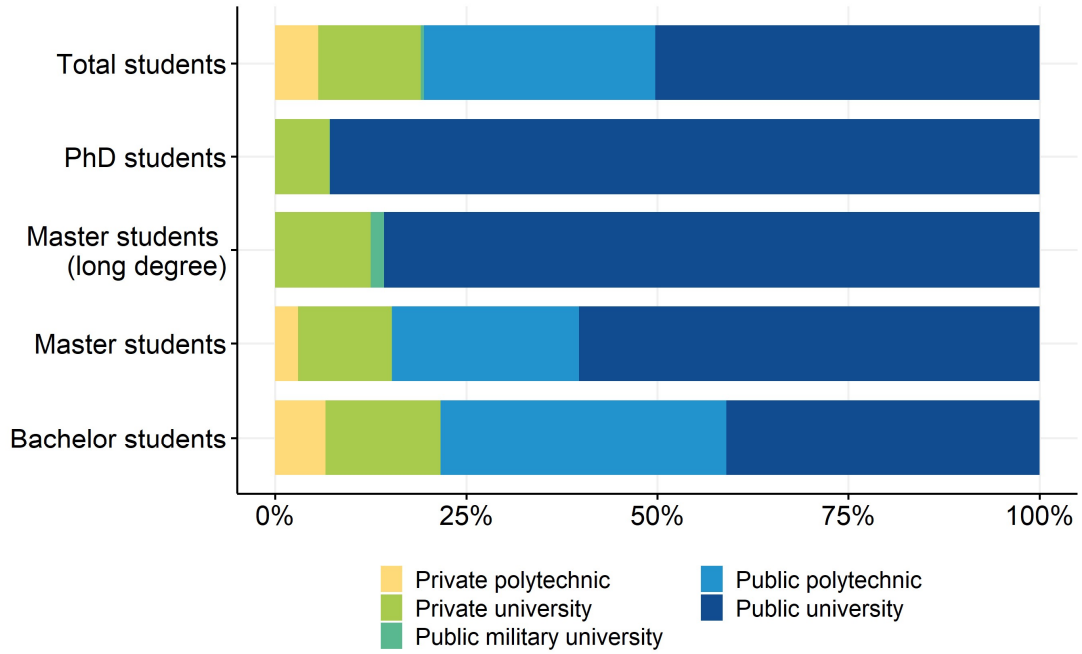


Students

In terms of the number of students enrolled, Public Universities account with 51% for the majority of all students and Public Polytechnics for another 30%. Their private counterparts combined account for only 19% of the total number of students. Public Military Universities play a minor role in the aggregate (see Figure 2). However, according to different institutional mandates, we also observe systematic differences between educational levels: Polytechnics (both public and private) account for 45% of the bachelor students and 28% of the master students, while doctorates and long master's degrees enrolments (without an intermediate

bachelor's degree) are exclusive to Public and Private Universities. With a share of 93% of all PhD students, Public Universities are of decisive importance in this respect.

Figure 2. Students by level and type of HEI, 2020



Note: Total students include ISCED 5-7

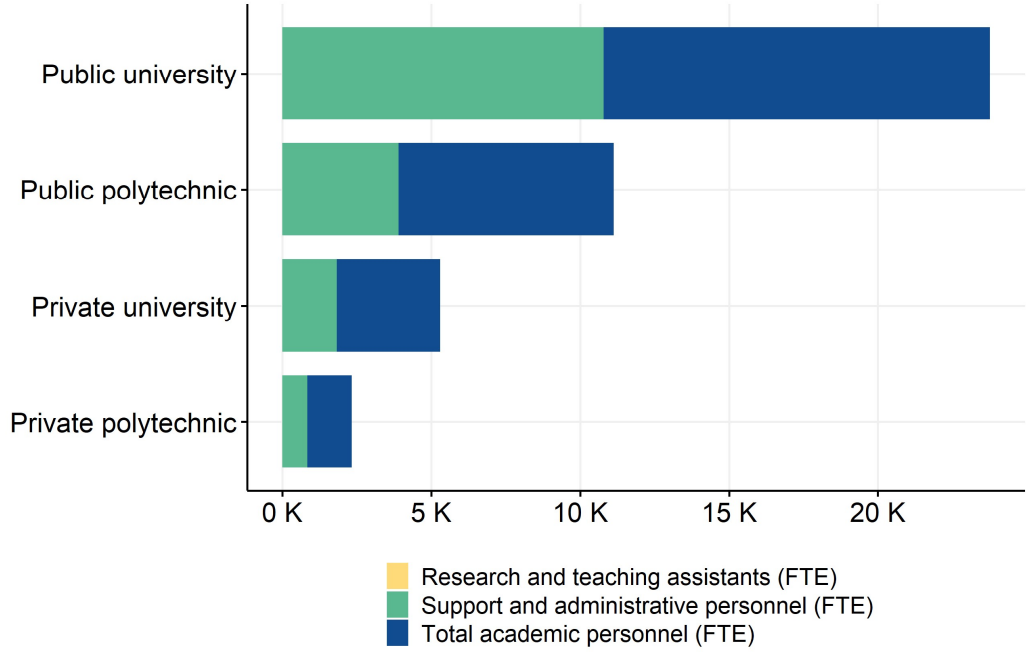
Personnel

People are a core resource for HEIs, as their competences are essential for teaching, undertaking research and producing scientific output. In that respect, ETER provides a rich set of data moving beyond the information available in EUROSTAT, which allows to analyse the composition of personnel by type of HEI and characteristics such as gender, nationality, educational field and, from 2020 onwards, levels of seniority.

As shown by Figure 3, there are major differences between HEIs in size, as measured by total personnel in full time equivalents (FTE), and in the personnel composition. Public Universities account with almost 24.000 FTE combined for almost half of the personnel in Portuguese HEIs. With an average of nearly 1,700 FTEs, the Public Universities are the largest HEIs in the country, followed by Public Polytechnics (average 550 FTE) and Private Universities (250 FTE). These differences reflect distinct levels of engagement in research and in education. As of the personnel composition, the share of administrative and technical personnel is with about 35% similar

for Public and Private Polytechnics as well as for Private Universities but slightly higher (45%) for Public Universities.

Figure 3. Personnel (FTE) by category and type of HEI, 2020



Note: No data on research and teaching assistants available for Portugal

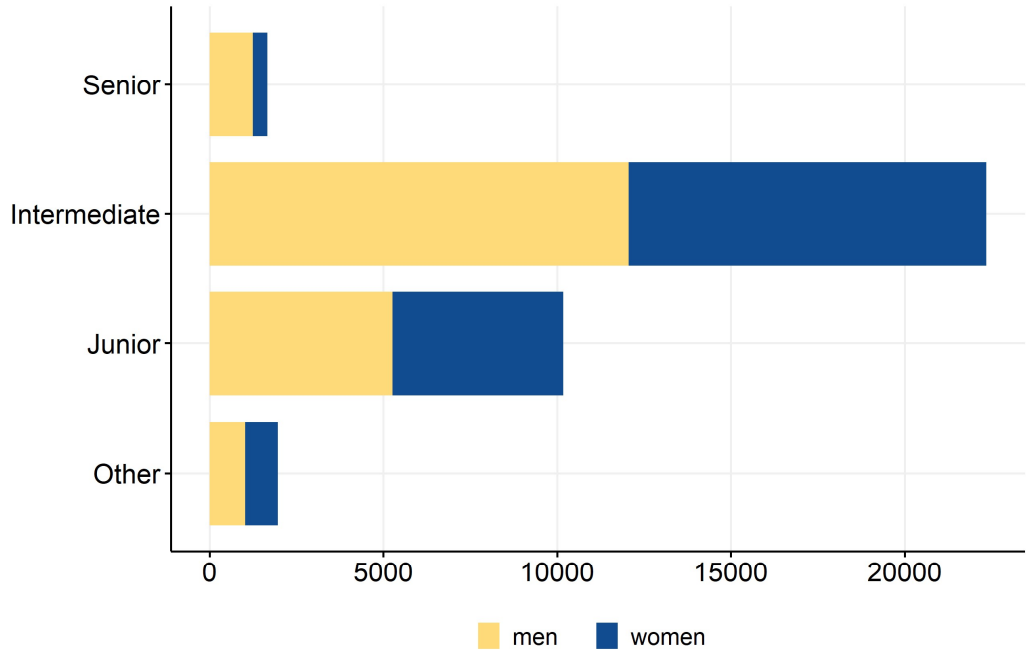
Since the data collection 2020, ETER also includes information on academic staff seniority level based on a classification jointly developed by OECD and EUROSTAT[2]. Combined with information on gender, this information allows measuring two critical issues, i.e. career prospects of academic staff and the so-called leaky pipeline, i.e. the fact that the share of female academic staff decreases systematically with seniority levels.

As of Portugal, data show a very steep hierarchy, with 90% of academic personnel at the junior and intermediate level combined and only 5% at the senior level; a reasonable gender balance has been achieved

[2] OECD (2022), Education at a Glance, Paris, pp. 412-413.

for junior and intermediate personnel, but only 25% of senior-level academic personnel are female (see Figure 4).

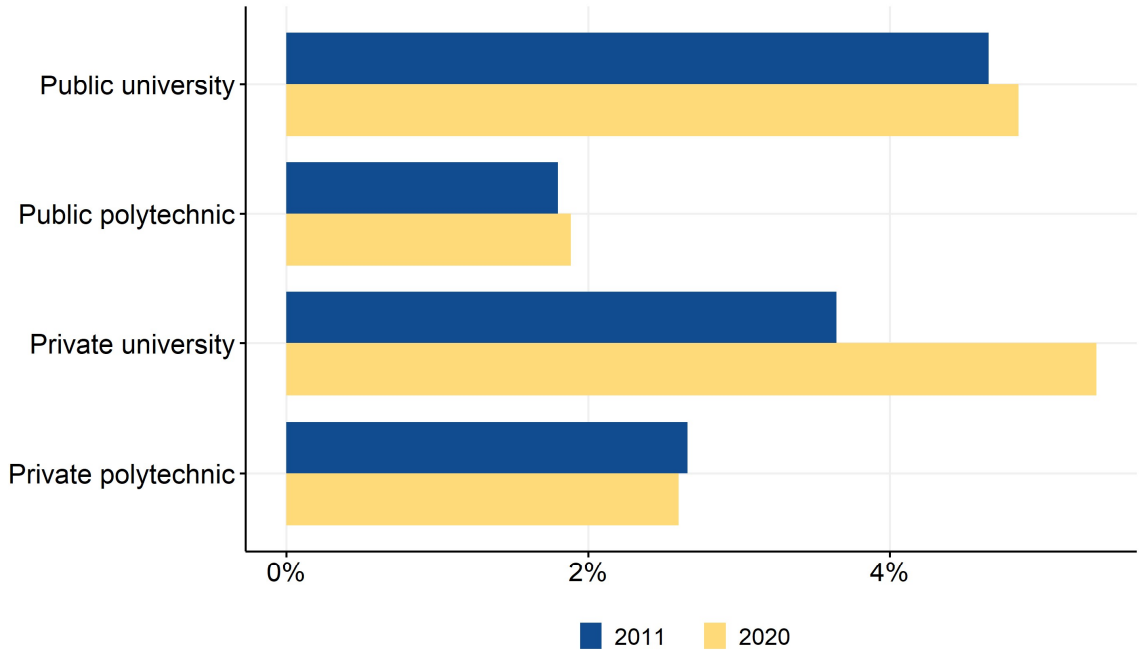
Figure 4. Academic personnel by seniority level and gender (HC), 2020



A final important dimension is internationality since it is generally considered as beneficial for the quality of research and education. In ETER, this is measured by the share of academic personnel not having the citizenship of the country ('foreigners'). As shown by Figure 5, the Portuguese higher education is

characterized by a low level of internationality with about 5% or less of foreign academic personnel in each institutional category. As slight increase over the last ten years can only be observed for Private Universities.

Figure 5. Share of foreign academic personnel (HC) by type of HEI, 2011 and 2020

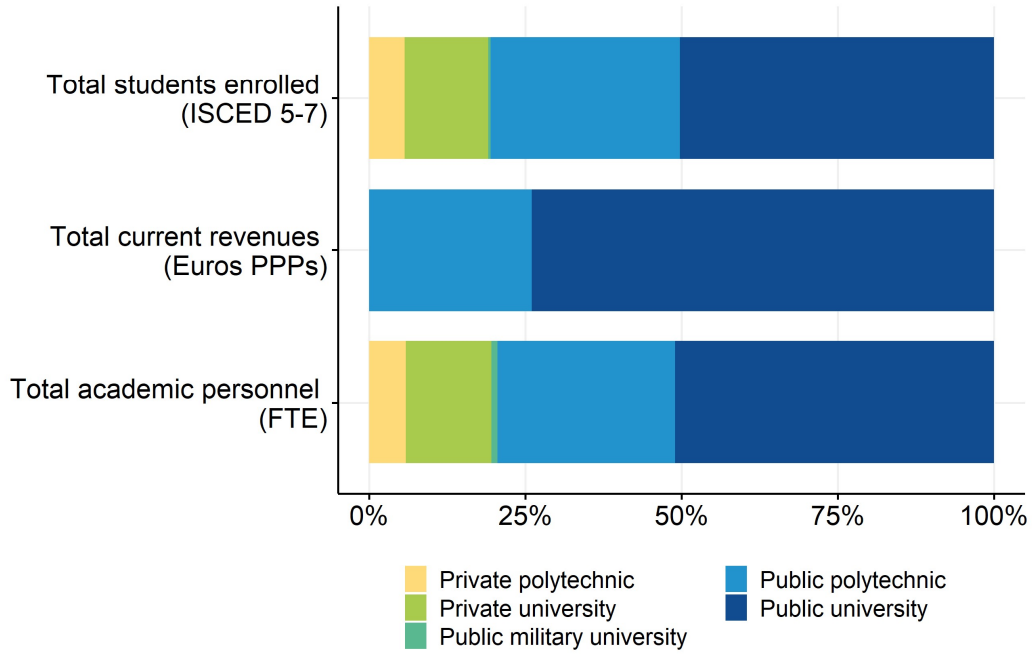


Financial resources

As illustrated by Figure 6, in the year 2020, Public Universities account for about three-quarters of financial revenues of the public HEI system (no data available for private institutions) and more than half of academic personnel of the whole HEI system, i.e., slightly more than their share of students. This difference is also reflected in the composition of revenues, where only Public Universities earn a relevant proportion of revenues (11%) from (research-related) third-party funds. Student fees play a similar role for both Public Universities

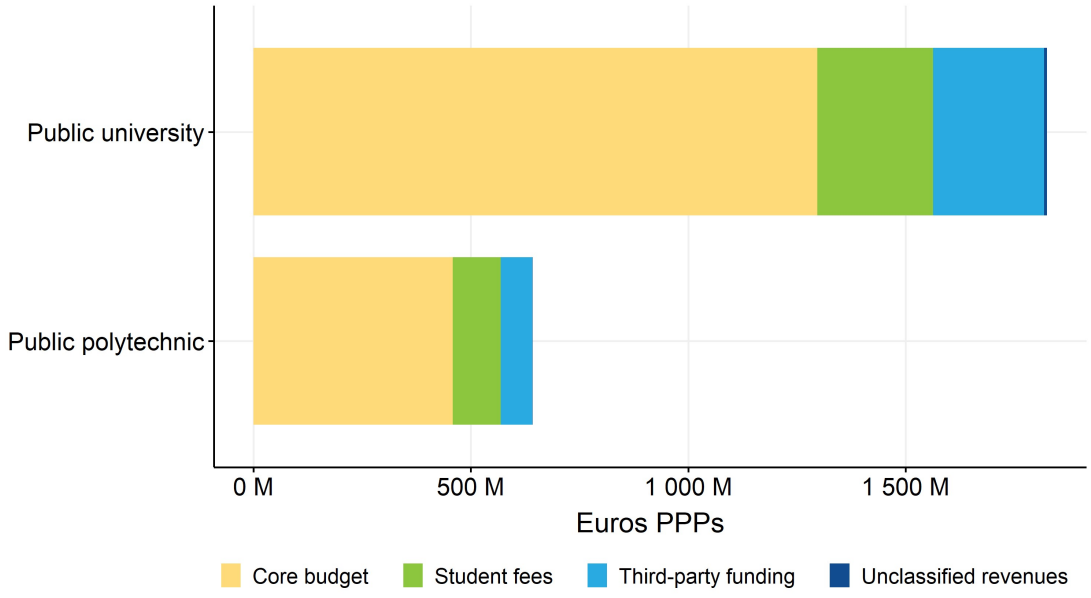
(14% of revenues) and Public Polytechnics (17% of revenues). Overall, state allocation remains dominant for all institutional types in Portugal.

Figure 6. Resources, academic personnel and total students enrolled by type of HEI, 2020



Note: No financial data available for private institutions

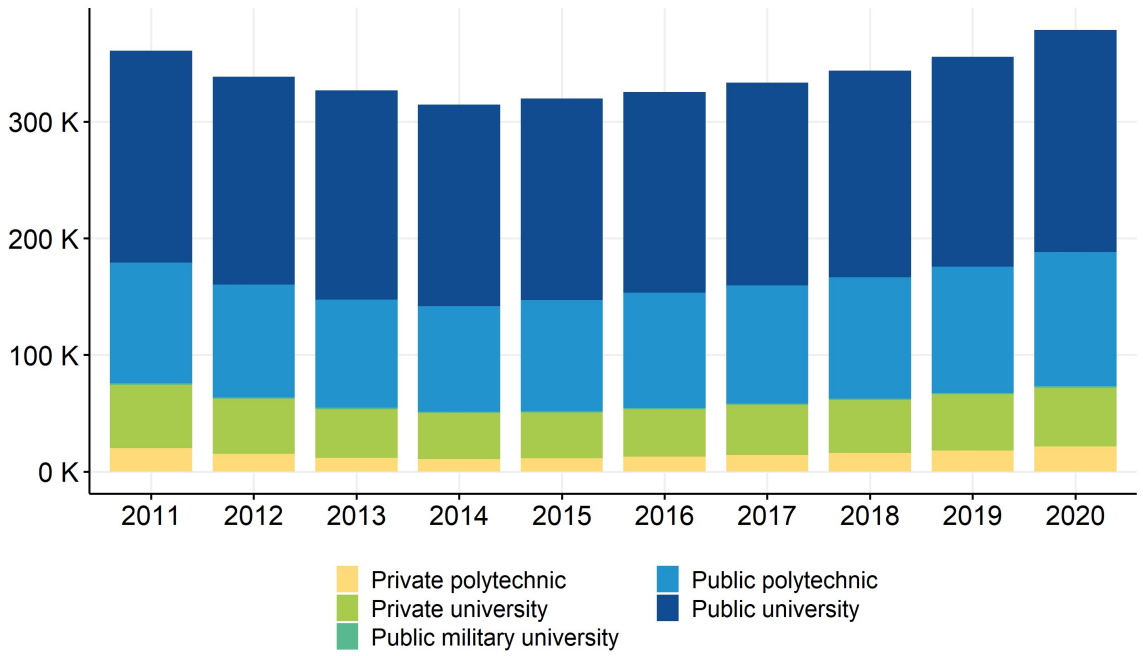
Figure 7. Composition of resources by type of HEI, 2020



Changing roles over time

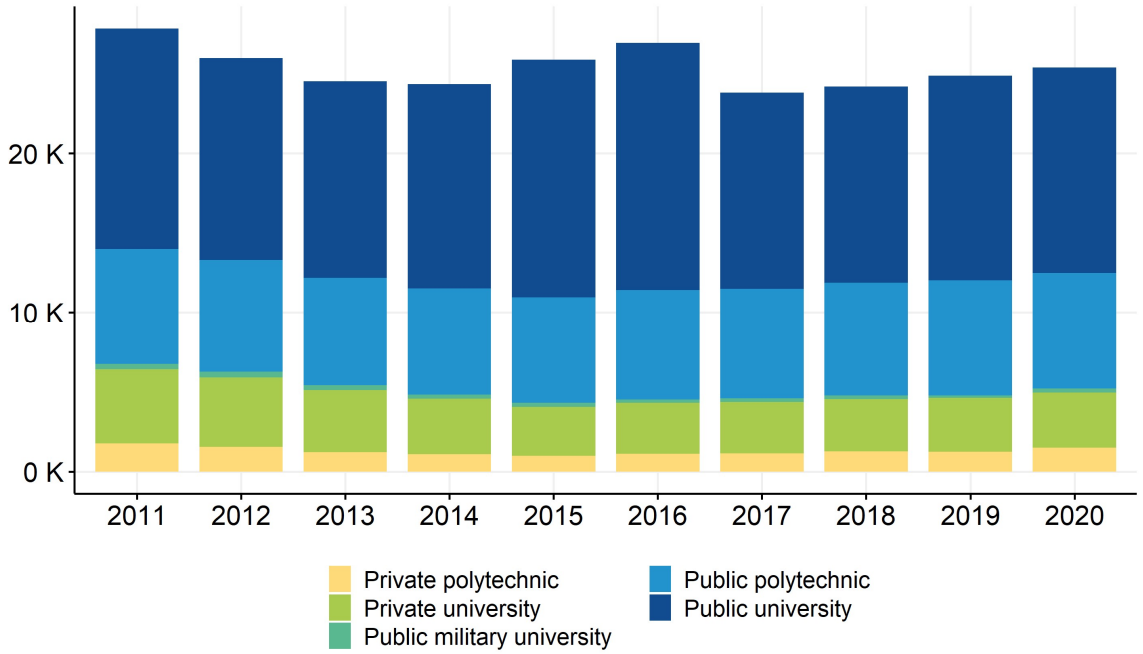
When observed through the lens of the number of students, data show first a pattern of decline with the number of enrolled students decreasing by 13% from 2011 to 2014. However, this decline is followed by an increase of total students enrolled from 2014 to 2020 and by 2020 the total is again slightly above the corresponding value for 2011. Similar, a decrease in the share of private institution from 21% to 16% of the students enrolled until 2015 is followed by an increase back up to 19% until 2020.

Figure 8. Students enrolled type of HEI, 2011-2020



As shown by Figure 9, the total number of academic personnel (FTE) first decreased from 2011 until 2014, in particular in private institutions, and started to increase again in the following years. Since 2017, an increase of the academic personnel can be observed, however, with annual growth rates significantly lower as the growth of the number of students.

Figure 9. Academic personnel (FTE) by type of HEI, 2011-2020



Note: Data up to 2016 is not fully comparable to data from 2017 due to changes in data source and definitions

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