"la Caixa" Foundation

2026

Shadow education in the iberian peninsula

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TheSocialObservatory

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We are grateful to Fundación "la Caixa" for financial support (LCF/PR/OB23/90000003).
We thank Maria Gutiérrez-Domènech for all the assistance throughout the process
and for critical discussions that helped us improve the survey.
We also thank Pedro Luís Silva for his help in analyzing the official Portuguese data.

The Social Observatory
of the "la Caixa" Foundation
2026

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Executive summary

Private tutoring – often referred to as *shadow education* – provides students with personalised instruction that addresses individual learning needs more effectively than instruction in traditional classroom settings. In countries such as Portugal and Spain, where families frequently rely on private tutoring to help their children overcome learning difficulties or prepare for exams, measuring this market is essential for promoting equity in education.

Private tutoring markets in both Portugal and Spain were studied through nationally representative, stratified, online surveys conducted in 2024. The sample comprised 2,300 households in Portugal and 2,500 in Spain, enabling a detailed study of the market, including by socio-demographic groups.

Most students in both countries attend state-run schools (Portugal: 92.8%, Spain: 96.7%). Academic performance is broadly comparable across education levels, although students in Portugal are more frequently placed in higher academic performance categories. Disciplinary actions and reports of giftedness are more common in Spain, whereas special educational needs are slightly more frequent in Portugal.

Private tutoring is more common among students in Spain (25%) **than among students in Portugal** (20%). Its prevalence varies notably across educational stages, peaking in upper secondary education, where approximately 1 out of 3 students in both countries are enrolled in private tutoring. This highlights the importance that families attach to this educational stage and the growing reliance on private tutoring during this critical period before the eventual transition to higher education.

Mathematics is the dominant subject for tutoring in Portugal (69.4%) **and ranks second in Spain** (40.2%). In Spain, English leads with 52.7%. The mother tongue (Portuguese/Spanish) ranks second in Portugal (45.8%) but is far less common in Spain (11.5%). The weight of Mathematics in the private tutoring market is likely related with the high level of competition in access to STEM (Science, Technology, Engineering, and Mathematics) degrees.

In both countries, most tutoring sessions occur at tuition centres (Portugal: 51.8%, Spain: 53.3%). Where that is not the case, students in Portugal are more likely to attend tutoring at the tutor's home (34.1% vs. 21.9%), while students in Spain more often receive tutoring at their own home (21.4% vs. 9.6%). Group sessions are the most common format in both Portugal (approximately 50%) and Spain (approximately 60%), whereas individual lessons are more prevalent in Portugal (41.8%) than in Spain (25.3%). The high prevalence of individual tutoring sessions indicates that parents attach strong value to the personalised support that these sessions offer, which is often not possible in a traditional classroom environment, and is also related to the higher tutoring cost in Portugal. Although average weekly tutoring hours are similar in both countries (Portugal: 3.1 hours; Spain: 3 hours), households in

Portugal spend nearly €30 more per month than their Spanish counterparts: average monthly spending per student amounts to €126.40 in Portugal, and €97 in Spain. In Spain, Mathematics accounts for the highest spending (€108/month), while in Portugal, spending is more evenly distributed across subjects.

Households in more comfortable financial situations spend 18% more on tutoring in Spain and 28% more in Portugal than those who report their income as hard to live on. Given the likely positive impact of tutoring on academic outcomes, this result indicates that the access to private tutoring amplifies educational inequalities.

The proportion of students enrolled in tutoring also increases with improved financial situation, from 17.9% to 25.9% in Portugal, and from 23.1% to 25.6% in Spain, for households reporting hard-to-live-on incomes and comfortable financial situations, respectively.

Taken together, these figures suggest that **the income gradient is more important in Portugal than in Spain**. Moreover, the data also shows that a significant share of families facing financial strain invest in private tutoring, which may come at the expense of reduced spending in other consumption categories and implies a higher opportunity cost of tutoring expenditure for these households. These facts have relevant policy implications regarding the impact of household income on educational inequalities in both countries.

In both countries, **the main reason for enrolling in private tuition is the student struggling with a subject** (40.8% Portugal, 28.6% Spain). In Portugal, exam preparation ranks second (31.3%), while in Spain it is a minor factor (5.3%), with "need for extra support" taking second place (24.9%).

Students with weaker academic outcomes are more likely to attend tutoring: a background of poor performance (failing a subject or a year) correlates with higher tutoring rates (e.g., 33.5% vs. 19.9% among those who never failed, in Portugal; 29.6% vs. 24.8% in Spain). Subjective measures of performance show that low performers are also more likely to receive tutoring (30%+ in both countries), as are students with behavioural issues or special educational needs (up to 48.8% in Spain). Overall, tutoring demand is closely linked to academic struggles and special learning needs. These findings suggest that families turn to private tutoring primarily as a form of complementary support when students face difficulties in achieving strong academic performance.

We estimate a private tutoring market in Portugal of €30 million per month or approximately €300 million annually. Around 235,000 households buy this service, covering over 269,000 students. Notably, only 58% of services are invoiced, implying the existence of an informal economy worth €127 million. In Spain, the total market is estimated at over €148 million monthly and €1.48 billion annually.

1. Introduction

This report explores the private tutoring markets – often referred to as shadow education – in Portugal and Spain. Its primary objective is to understand how families supplement formal schooling with additional instruction for children aged six to eighteen.

Private tutoring offers students individualised, tailored support that can directly address their specific learning challenges. It serves as a form of intervention designed to meet students at their actual level of understanding – something often difficult to achieve in standard classroom settings, where teachers must address the needs of a diverse group.

Growing evidence suggests that tutoring is a highly effective education policy tool, with significant positive impacts on student learning outcomes. A recent review of over 96 tutoring programmes in OECD countries – covering between 500 and 700 students each – highlighted both the strong overall impact of tutoring and the programme designs that most effectively enhance learning (Nickow et al., 2020).

Other studies have explored the effects of targeted tutoring in contexts such as underprivileged neighbourhoods in the U.S. (Guryan et al., 2021) or in response to pandemic-related learning losses in Italy, often using online tutoring platforms (Carlana et al., 2023). Both show strong impacts on academic results but also on behavioural outcomes. Tutoring emerged as a crucial policy instrument during and after the covid-19 pandemic, helping to reverse learning setbacks. However, questions remain about how this form of support can be implemented effectively and sustainably at scale (Kraft et al., 2024).

When such support is not available within public education systems, families often turn to private providers outside of the school system. This report focuses specifically on the demand for out-of-school private tutoring in Portugal and Spain. In both countries, families are particularly likely to seek tutoring when students are facing academic difficulties or are preparing for high-stakes exams, yet little information about the prevalence or the characteristics of these private markets is available for these two countries.

This issue is especially important because access to private tutoring can exacerbate educational inequalities. Families with greater financial resources are more able to afford these services, potentially widening the gap in educational outcomes. Extensive research shows that family income and parental education levels play a significant role in shaping students' academic performance. According to data from the 2019 EU Statistics on Income and Living Conditions (SILC), in both Portugal and Spain, children whose parents attained higher education have a 70% to 80% likelihood of also pursuing higher education. In contrast, this probability drops to less than 20% in Portugal and below 30% in Spain for children whose parents did not complete lower secondary education (Economic Bulletin, 2022). These disparities are likely to be further exacerbated by unequal access to private tutoring markets.

Drawing on two purpose-built in-depth surveys – one focused on Portugal's private tutoring sector and another on non-formal education activities in Spain – this report presents comparative findings on key aspects of the shadow education market. We examine how prevalent tutoring is, which subjects are covered more often, how much households spend on it, and the socioeconomic differences driving demand. Moreover, our data allows us to estimate the size of the private tutoring market.

The wealth of information collected also enables a more detailed analysis of differences in prevalence and spending across socio-demographic characteristics of households and students. In particular, we study how access varies based on factors such as household income, parental education, student performance, and school type. We also assess the most common formats of private tutoring sessions and parents' perceptions about their impact on student outcomes.

The report begins by outlining the broader educational contexts in Portugal and Spain, followed by a description of the survey design and methodology. Subsequent sections explore the prevalence and characteristics of tutoring and examine the main factors driving demand for these services.

Extensive research shows that family income and parental education levels play a significant role in shaping students' academic performance.

1.1. Portuguese context

Portugal has significantly improved its education system in recent decades, with upper secondary school early leaving rates decreasing from 40% in 2000 to 9% in 2022, and higher education attainment among young adults rising from 12% to 40%. Concomitantly, student performance has improved in international assessments such as PISA between 2006 and 2015.

In Portugal, education is mandatory until the student completes year 12 or until the age of 18, spanning four different education stages.[1] Private school enrolment varies, with 13% in lower primary and 25% in upper secondary education. Upper secondary education offers both academic and vocational pathways, with 35% of students choosing vocational programmes as of 2022.

Despite progress, inequalities persist, with lower-income students more likely to fail key exams. In PISA results, the gap between the most and least socioeconomically privileged students has remained unchanged from 2000 to 2022 (Nunes et al., 2024). Investment in private education, including tutoring, is a critical factor explaining such disparities. Data collected by the Ministry of Education for upper secondary education students between 2014 and 2018 showed that 34% were enrolled in private tutoring or extra support classes. Of those enrolled, 78% had the objective of improving grades and preparing for exams (Pereira et al., 2021). Public alternatives exist but have limited reach, covering only 1,581 students in 2022 (DGEEC, 2023), which represents around 1% of secondary school students enrolled in public institutions.

1.2. Spanish context

In 2019, the average Spanish adult had completed 10.4 years of formal education – more than double the average of 1960. In response to the growing normalisation of educational qualifications, families have increasingly allocated resources to their children's education, particularly to private tutoring.

In Spain, mandatory education covers children and adolescents from six to sixteen years old, typically spanning the six-year primary stage and four years of compulsory secondary education (ESO). Many then proceed to a post-compulsory level, either *Bachillerato* or a vocational pathway, from which they graduate at around eighteen.

Previous tutoring data provided by Statistics Spain reveals a growing share of students in Spain enrolled in tutoring, up from 19.7% in 2016, to 21.6% in 2019. The drop during the pandemic reverted to previous levels in 2022. This data also shows that inequality is determinant in tutoring access, with the first income quintile exhibiting an average prevalence of 12.3%, 15.1 percentage points lower than that of the fifth, 27.4%, on average, from 2016 to 2022.

1. The first (year 1 to year 4) and second stage (year 5 and year 6) correspond to the international benchmark of "primary education". The third stage corresponds to lower secondary education (year 7 to year 9), while the fourth corresponds to upper secondary education (year 10 to year 12).

2. Survey and data

This analysis summarises the findings of two representative surveys conducted in Portugal and Spain, focusing on the shadow education market. The Spanish survey also covered other out-of-school activities; however, this report focuses on the comparable metrics available in both surveys relating to the out-of-school tutoring market.

2.1. Portugal

The Portuguese survey uses data from a purpose-built representative online survey, that questioned Portuguese-resident households with at least one member aged between 6 and 18 years old, and enrolled in compulsory education (i.e., year 1 to year 12). The data was collected between June and July 2024, and refers to the 2023/2024 academic year.[2] The survey is representative of the target household population, following a stratified sample according to region (NUTS II level), student's educational level (primary, lower secondary, or upper secondary) and mother's educational attainment (no secondary school, secondary school, or tertiary education). The resulting sample covers 2,312 households, encompassing 3,256 students (Table 1).

The survey included information on household composition and socio-economic characteristics, as well as students' information such as school, grade, tutoring enrolment and academic performance. Finally, the survey reports tutoring sessions' characteristics for the students enrolled.

For the sake of brevity and to minimise the risk of attention loss of the respondents, in households with more than one school-aged member, some questions were directed only at one randomly selected child or teenager, whom we label the *Reference Student* henceforth.

Table 1 presents the comparison between the survey and the target population according to the characteristics used to define the survey quotas. With few exceptions, the sample closely mirrors the population's geographical distribution. Regarding the mother's education, the data has a higher share of mothers with higher or upper secondary education completed than the population. Moreover, it displays a higher share of students enrolled in the academic pathway of upper secondary education compared to its vocational counterpart. The majority of the students are enrolled in primary and lower secondary education (73.3%), followed by 18.6% enrolled in the upper secondary academic pathway. Finally, 6.7% are enrolled in the upper secondary vocational pathway.

2. The survey was conducted following the approval of Nova SBE's ethical committee.

Table 1: **Comparison of sample characteristics and target population (Portugal)**

Region
(N = 2312)

	Norte	Algarve	Centro	AML	Alentejo	RAA	RAM
Sample:	32.3%	5.5%	22.1%	30.4%	5.2%	2.6%	2%
Population:	30%	6%	22%	30%	7%	3%	3%
Difference:	2.3**	-0.6	0.1	0.4	-1.8***	-0.4	-1.0

Mother's education
(N = 2312)

	Lower secondary or lower	Upper secondary	Higher education
Sample:	26.9%	32.3%	40.8%
Population:	32%	30%	38%
Difference:	-5.1***	2.3**	2.8***

Student's education
(N = 3256)

	Primary & lower secondary	Year 10-12, academic	Year 10-12, vocational	Not at school
Sample:	73.3%	18.6%	6.7%	1.4%
Population:	73%	16%	11%	
Difference:	0.5	2.6***	-4.3***	

Number of households
2,312

Number of students
3,256

*Note: statistically significant at *10%, **5% and ***1% for one sample z-test proportions.*
The regional proportions in the target population are based on Eurostat's Survey on Income and Living Conditions 2022.
The share of students per educational stage in the target population is based on the Perfil do Aluno *(https://www.dgeec.medu.pt/api/ficheiros/66e439aa7f2923f0747f399a).*

Source: own calculations from the data collected in the surveys.

Regarding the mother's education, the data has a higher share of mothers with higher or upper secondary education completed than the population.

2.2. Spain

The Spanish survey relied on an online representative questionnaire administered between April and May 2024 to 2,500 parents or guardians. All participants had at least one child aged between six and eighteen years old in primary, compulsory secondary (ESO, *Educación Secundaria Obligatoria*), or post-compulsory education (*Bachillerato* or vocational programmes). The sample is stratified according to autonomous regions, size of the locality of residence, and respondent age. As in the Portuguese survey, some questions refer to a randomly chosen student within the household, also named as the *Reference student* (Table 2).

The Spanish survey included information on households, students, and tutoring sessions, besides other extracurricular activities. The latter are not explored in this report, due to the focus on academic tutoring.

Table 2 presents the sample composition. Again, the majority of the students are also enrolled in primary and lower secondary education (83.5%), while 16.5% are enrolled in the upper secondary levels.

Table 2: **Comparison of sample characteristics and target population (Spain)**

Region

	Andalucía	Cataluña	Galicia	Madrid	C. Valencia	País Vasco	Other autonomous communities
Survey Share:	18.6%	14.7%	5.3%	15.8%	11.2%	4.6%	29.8%
Population:	18.9%	15.3%	5.3%	15.2%	11.1%	4.5%	29.6%
Difference:	-0.3	-0.6	0.0	0.6	0.1	0.1	0.2

Household's highest educational level

	Lower secondary or lower	Upper secondary	Higher education
Survey Share:	5.6%	32.9%	61.5%
Population:	13.5%	33.4%	53.1%
Difference:	-7.9***	-0.5	8.5***

Student's education

	Primary education	Lower secondary	Upper secondary
Survey Share:	49.9%	33.6%	16.5%
Population:	48.6%	35.7%	15.7%
Difference:	1.2	-2.1**	0.8

Number of households
2,500

Number of students
2,500

*Note: statistically significant at *10%, **5% and ***1% for one sample z-test proportions. All statistics for Spain are presented considering a re-weighting of sample which takes into account the population distribution.*

Source: own calculations from the data collected in the surveys.

2.3. Overall sample characteristics

Table 3 provides further descriptive statistics of both samples. Household size averages 3.9 in Spain and 3.6 in Portugal, while the average age of respondents is 46.4 and 42.5, in the Spanish and Portuguese surveys respectively. Interestingly, the survey includes 16.8% of foreign respondents, in the case of Portugal, and 3.1% in that of Spain.

The distribution of respondents across education levels is similar in both samples, with 41% in Spain and 44% in Portugal holding a higher education degree, followed by upper secondary completion, with 34% and 36.6%, respectively. Finally, 25% of the respondents in Spain and 19.4% in Portugal completed the lower secondary level or below.

Respondents' kinship with the students in the household differs slightly between the two samples: in Spain, 98.1% of the respondents are parents, while in Portugal this share drops to 93.4%.

We turn to the socioeconomic characteristics of the sample in Table 4. The median income lies in the interval of €2,501 to €3,000 of monthly disposable income in the case of Spain, and in the interval of €1,600 to €2,100 in the case of Portugal. Respondents were also asked about subjective income; 50.8% (Spain) and 53.4% (Portugal) of the respondents report a level of income which is enough to meet usual expenses.

The large majority of the students attend state-run schools (96.7% in Spain and 92.8% in Portugal).[3] According to 2023 official data, the share of students in state-run schools

Table 3: **Demographic characteristics of the samples**

Average household: Spain: **3,9** | Portugal: **3,6**

● Spain ● Portugal

Respondent's relationship to student

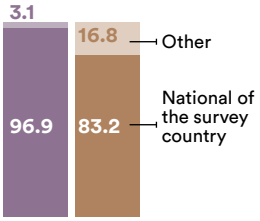
	Spain	Portugal
Parent:	98.1	93.4
Step-parent:	-	3.5
Grandparent:	0.4	0.6
Aunt/Uncle:	0.3	1.3
Other:	0.2	1.2

Average age of respondents

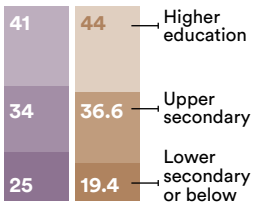
46.4 years

42.5 years

Nationality



Respondent's education



Note: statistics for the Spanish sample are weighted, while those for the Portuguese sample are unweighted.

Source: own calculations from the data collected in the surveys.

3. The Spanish system encompasses fully state-run and private schools but also state-assisted schools (centros concertados). Although privately owned, these schools receive public funding which subsidises tuition. As a result, we consider these schools as state schools in the report.

Table 4: **Socioeconomic characteristics**

● Spain ● Portugal

Disposable income intervals (€)		
Spain	< 2,000	24.1
	2,001 to 2,500	13.3
	2,501 to 3,000	14.7
	3,001 to 4,000	16.7
	> 4,000	15.1
Portugal	< 1,000	10.1
	1,000 to 1,600	21.9
	1,600 to 2,100	21.8
	2,100 to 2,400	14.1
	> 3,300	17.4

Is your current income...	Spain	Portugal
Enough to live comfortably	28.3	24.9
Enough to live on	50.8	53.4
Hard to live on	17.9	21.8
Type of school		
State	96.7	92.8
Of which, state-assisted	26.7	-
Private	3.3	7.2
Cultural capital		
At least one book	78.7	79
At least one theatre visit	36.3	37.2
At least one museum visit	59.9	61.1

Note: state-assisted *refers to schools known as* centros concertados *that are neither fully public nor private, as they receive public funds but operate independently from the regular state-run school system.*

Source: own calculations from the data collected in the surveys.

in Portugal ranges between 86% in primary education and 75% in upper secondary. Thus, our sample overrepresents students in state-run schools, which may result from the fact that this characteristic was not used as a stratification variable.

We also measure the cultural capital within the household using questions about frequency for a set of cultural activities in the past six months. The distributions are quite similar for both surveys. Most of the respondents visited a theatre in the past six months (36.3.% and 37.2.%, in Spain and Portugal, respectively), visited at least one exhibition (59.9% and 63.7%, idem) and read at least one book (78.7% and 79%, idem).

Table 5 displays the *reference students'* characteristics in terms of educational performance and behavioural dimensions. To analyse students' academic achievements, we gathered the most recent score awarded by teachers during the 2023/2024 academic year, in the subject of Portuguese or Spanish language, which is common to all stages and fields of education. Since scores vary according to education stage and sometimes

school, we converted the scores to appropriately defined categorical variables, distinguishing between primary, lower secondary and upper secondary school (more information is available in the note to Table 5).

The distribution of students among these levels is similar between countries. The second-highest class, "Positive score – Middle", concentrates the larger groups of students: in primary and lower secondary (41.5% in Spain and 46.1% in Portugal) and in upper secondary (35.9% in Spain and 48.5% in Portugal). The bottom class displays low shares in all four groups, between 1.8% and 3.6%. The rest of the students are evenly distributed between the second, "Positive score – Low" and top, "Positive score – Top" intervals.

Although the majority of respondents in Portugal believe the reference student shows high overall academic performance, the Spanish data shows a more even distribution.

Table 5: **Students' academic performance**

Academic achievement (objective)

● Spain ● Portugal

		Primary and lower secondary		Upper secondary	
Mother Tongue (Portuguese/ Spanish) - Most recent score	Failing score	3.6	1.8	3	2.5
	Positive score – Low	20.8	19.7	19.1	22.8
	Positive score – Middle	41.5	46.1	35.9	48.5
	Positive score – Top	32.6	26	19.5	17.4
Failed an academic year:		5.8	7.8		
Failed subjects:		19.2	20.2		

Note: for both countries, the tables refer to the data for the reference student. *For the "Final score – Mother tongue" variable, we divided the students in Portugal into four groups according to the grading scale of each education stage, namely,1-5 until the Year 9, and 0-20 from the Year 10 to 12: 1. Faling Score (<2/<10); 2. Passing Score – Low(3/ [10, 14[); 3. Passing Score – Middle (4/ [14, 18[); 4. Passing Score – Top (5/ [18, 20]).* ***Percentages may not add up to 100% due to responses labelled as 'Don't know'****. For households with more than one school-aged member, this analysis focuses on the reference student. For students in Spain, we collapse the five groups available into four groups for comparability:* "Sobresaliente" *(Positive Score – Top),* "Notable" *(Positive Score – Middle),* "Bien" *and* "Suficiente" *(Positive Score – Low), and* "Insuficiente" *(Failing Score).*

Source: own calculations from the data collected in the surveys.

We also find that, overall, 19.2% (Spain) and 20.2% (Portugal) of students had failed at least one subject, while 5.8% and 7.8% have failed an academic year at some point in their academic past.

The subjective measures of student performance are presented in Table 6. Although the majority (75.4%) of respondents in Portugal believe the *reference student* shows high overall academic performance, the Spanish data shows a more even distribution, with 44.5% of the students in the "Average performance" category. The share of students labelled as "Low performance" shows substantial differences between the two countries – around 1% in the Portuguese survey, but 26.8% in the Spanish one.

Table 6 also exhibits statistics on behavioural dimensions, showing that 13.9% (Spain) and 6.9% (Portugal) of the *reference students* received a disciplinary action (verbal warning) at least once. With regard to students' traits, 14.8% in Spain and 4.1% in Portugal are reported as gifted, a difference of over 10 percentage points, and 5.6% and 7.9%, respectively, are identified as having special educational needs.

Table 6: **Students' academic performance and behavioural dimensions**

Academic achievement (subjective)		Spain	Portugal
Overall performance	Low performance	26.8%	1.1%
	Average performance	44.5%	23.4%
	High performance	28.7%	75.4%
Behaviour and traits	Disciplinary warning (Amonestación / Falta disciplinar)	13.9%	6.9%
	Gifted	14.8%	4.1%
	Special educational needs	5.6%	7.9%

Note: for both countries, the tables refer to the data for the reference student. *In Portugal, students' overall performance was collected on a 6-level scale ranging from 0 to 5, then recoded to a 3-level scale from Low performance (0/1), through Average performance (2/3) to High performance (4/5)*

Source: own calculations from the data collected in the surveys.

3. Characterisation of the tutoring market

3.1. Tutoring prevalence

Graph 1 reports the share of students who attend private tuition, considering all the children in the household. There are about 5 percentage points more students in Spain enrolled in private tutoring (25%), than in Portugal (20%) at the time the surveys were conducted.

The prevalence of tutoring varies similarly across academic year and study pathway in both countries. In primary education (Graph 2) tutoring rates in both Portugal and Spain are below the average level (Graph 1). The difference in prevalence is consistent, estimated at 6.5 percentage points.

At the lower secondary level, the percentage of students attending private tuition is higher than the overall percentage in both cases. The difference remains consistent, with Spain reporting almost 5 percentage points more than Portugal.

For the academic track of upper secondary, however, the difference narrows to just 3 percentage points, with tutoring prevalence peaking at 35.6% in Spain, and 32.6% in Portugal.

Finally, in the upper secondary vocational pathway, the difference slightly reverses, with Portugal showing a 0.4 percentage point higher prevalence than Spain. However, in both countries, the share of students attending private tutoring remains well below the overall average, between 13 and 14%.

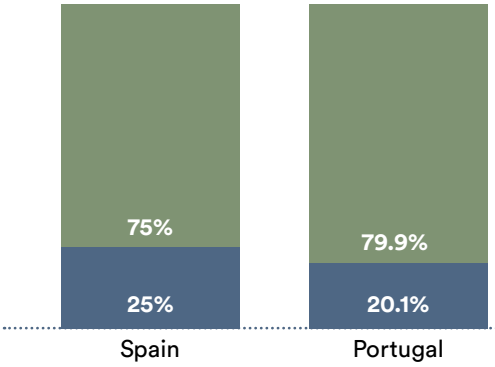
Overall, private tutoring is used by 1 in 4 students in Spain, and 1 in 5 students in Portugal, with the prevalence increasing to approximately 1 in 3 for upper secondary education in both countries. The concentration of tutoring in upper secondary education suggests that parents prioritise this extra support in those academic years involving high-stakes exams that significantly influence future higher education opportunities. Such figures also indicate that families in both countries are committed to helping students improve or to complementing formal teaching activities, which may increase the performance gap between students who get extra support and those who do not.

Private tutoring is used by 1 in 4 students in Spain, and 1 in 5 students in Portugal, with the prevalence increasing to approximately 1 in 3 for upper secondary education in both countries

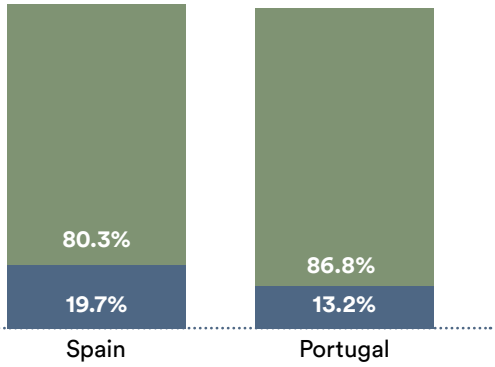
Prevalence of tutoring

● With tutoring ● Without tutoring

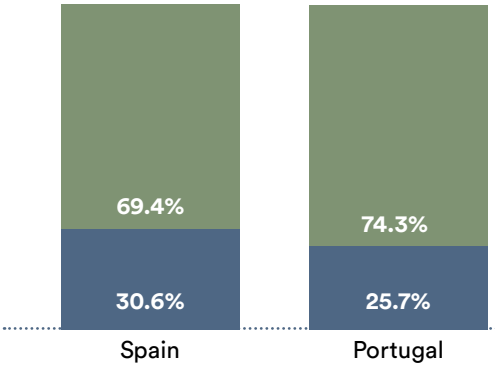
Graph 1:
All students within the household



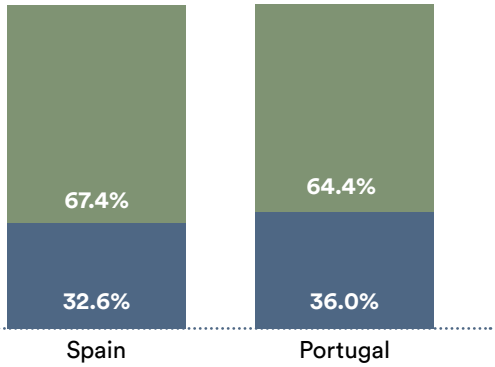
Graph 2:
Primary education



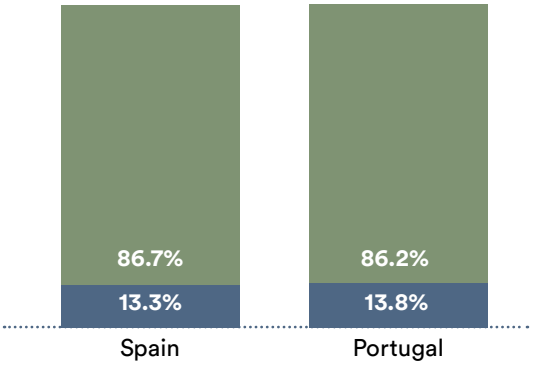
Graph 3*:
Lower secondary education



Graph 4*:
Upper secondary education - Academic track



Graph 5:
Upper secondary education - Vocational track



**Note: considering that study stages in Spain are not divided exactly in line with ISCED, the prevalence reported for Spain in this graph lacks the first year of upper secondary education academic pathway.*

Source: own calculations from the data collected in the surveys.

The prevalence of tutoring is also different across subjects, as shown in Graph 6. As expected, Mathematics is one of the leading subjects in both countries. However, while in Portugal it concentrates almost 70% of the students attending tutoring, in Spain it represents only 40.2%, behind English tutoring with 52.7%. Finally, the mother tongue comes in second place in Portugal (45.8%), and third place in Spain, with only 11.5%.

The differences in prevalence by subject are likely connected to the subjects in which parents believe students exhibit more difficulties, or that might be more relevant for their future studies or professional activities. The grade obtained in the national exams in Mathematics (*Selectividad*, in Spain, or *Exame Nacional*, in Portugal) often has a high weight in the admission grade for university studies in more competitive STEM programmes and in some social sciences with strong quantitative contents, such as Economics and related disciplines. This may induce households who can afford the extra spending to rely on private tutoring to improve students' knowledge and performance.

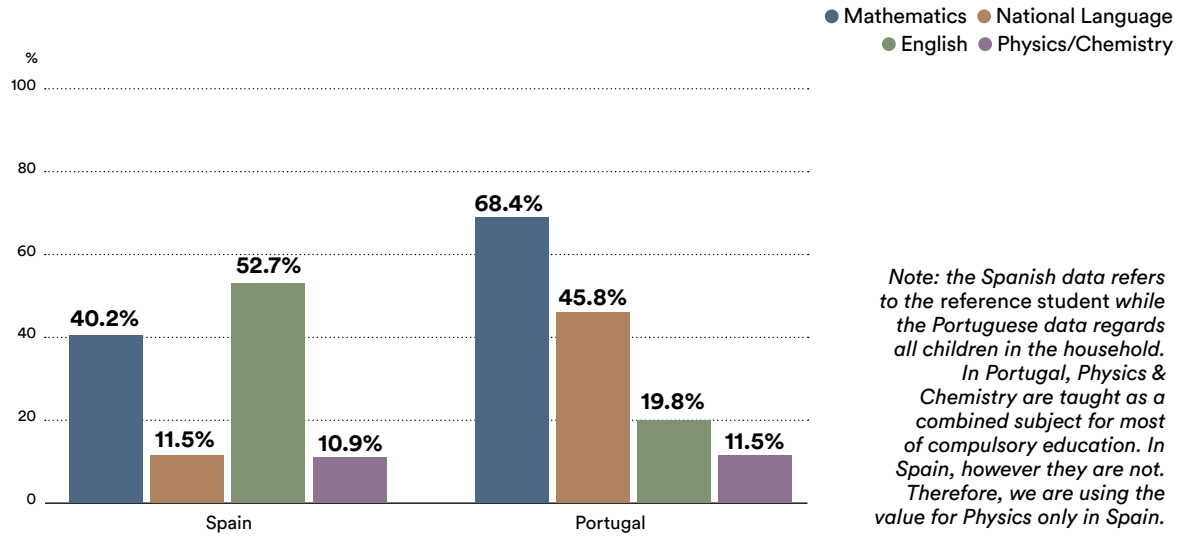
3.2. Tutoring characteristics

Both surveys collected information about the characteristics of the tutoring sessions, namely regarding the place where the sessions take place and their format. This information allows us to better understand which features of tutoring make it more enticing to students and parents.

The distribution of students along these characteristics is similar in both countries, with the majority of the tutoring sessions taking place at tuition centres (51.8% in Portugal, 53.3% in Spain). Importantly, while in Portugal 34.1% of the sessions are the tutor's home, the same figure decreases to 21.9% in Spain. Symmetrically, 9.6% of the students in Portugal have tutoring at home, while the share increases to 21.4% for the students in Spain.

With respect to the tutoring format, most students have group sessions, i.e., around 50% in Portugal, and 60% in Spain. Conversely, 41.8% of the students in Portugal and 25.3% in Spain have individual lessons. The high prevalence of individual sessions suggests

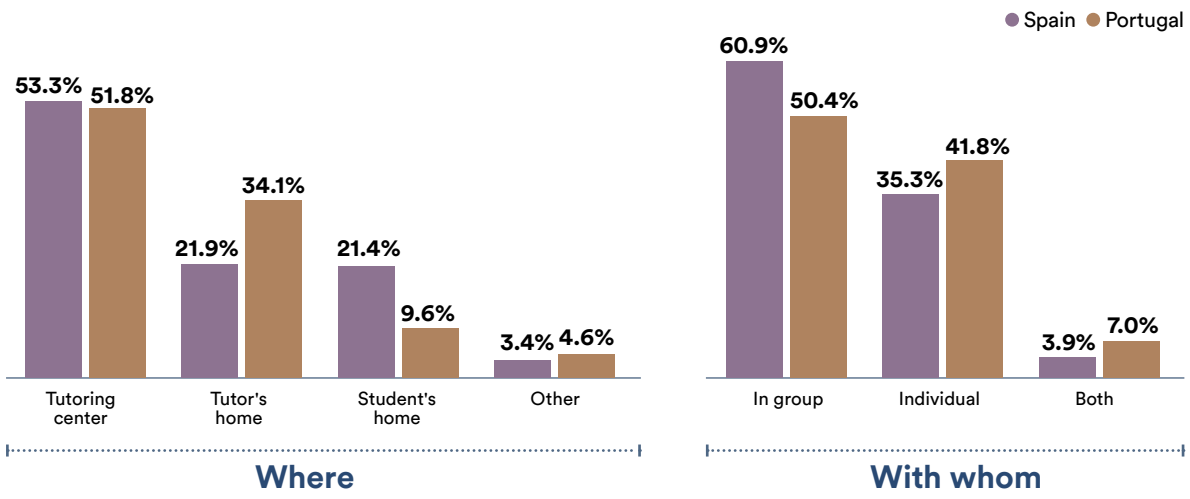
Graph 6: **Subjects distribution across all education stages (all years)**



Note: the Spanish data refers to the reference student while the Portuguese data regards all children in the household. In Portugal, Physics & Chemistry are taught as a combined subject for most of compulsory education. In Spain, however they are not. Therefore, we are using the value for Physics only in Spain.

Source: own calculations from the data collected in the surveys.

Graph 7: **Tutoring session characteristics**



Note: both the Spanish and Portuguese data refer to the reference student.

Source: own calculations from the data collected in the surveys.

parents value the more individualised support to students that may be provided in tutoring sessions, which is often not possible in larger groups of students in formal teaching settings.

3.3. Spending on tutoring

Both surveys collected information about the total monthly spending on tutoring for the reference student, i.e., the randomly selected individual among the households' children (Table 11). This is an important dimension for assessing the financial burden imposed by private tutoring. The cost of private tutoring may impose barriers to access, potentially enlarging gaps in academic performance between students from low and high-income families; and impose higher financial strain on the low-income families that may dedicate a larger share of their resources (vis-à-vis the more affluent households) to private tutoring.

For the overall market, the average weekly hours of tutoring is similar in both countries: 3.1 hours in Portugal and 3 hours in Spain. However, the average spending per children/

Table 11: **Spending on tutoring**

Overall market

Average hours/week

3	3.1
SPAIN	PORTUGAL

Households' monthly spending (1 child)

€97.0	€126.4
SPAIN	PORTUGAL

Note: while in the Spanish survey respondents were asked directly how much they spent per month on a single student, in Portugal they were asked how much is spent overall (regardless of the number of students). To improve comparability, to build this table we used data for Portugal's households with only one child enrolled in tutoring. In both countries, the data refers to the reference student.

Source: own calculations from the data collected in the surveys.

month is almost €30 higher in Portugal than in Spain. Therefore, households in Portugal are willing to pay a larger amount for private tutoring than in Spain, for a comparable number of hours of tutoring. Note also that individual sessions are more prevalent in Portugal, which may partly explain this price gap.

The price of tutoring sessions varies with the subject and the grade, as shown in Table 12. In Spain, the highest monthly spending goes to Mathematics, €108, and the mother tongue has the lowest spending of the three subjects. In Portugal, in turn, the average monthly spending is similar across the three most popular subjects. With regards to the education level, while in Spain the average monthly spending peaks at the lower secondary level (€108.9), €30 above that of the primary education; in Portugal it peaks at upper secondary education (€146.20), also €30 above that of the primary education (€115.60).

By computing the average prices based on the three categories of household subjective income (shown in Table 4), we can assess how household income conditions spending on tutoring. Results are also shown in the last panel of Table 12 and suggest that households with higher levels of income spend more per month in both countries. Households with difficulties to make ends meet (i.e., who report their income is "Hard to live on") spend €114 in Portugal and €94 in Spain, while those who live comfortably spend €150 in Portugal and €105 in Spain. While the absolute difference in monthly spending between households with and without financial strain is small (€17 in Spain and €35 in Portugal, it amounts to 18% and 28% higher spending for households who live comfortably, respectively. Combining this evidence with that of Graph 12, which shows a clearer income gradient for the prevalence of private tutoring in Portugal, suggests that private tutoring plays a more important role in educational inequalities in the latter country.

Table 12: **Spending on tutoring by educational stage and subject**

● Spain ● Portugal

Spending by subject		Spending by stage		Spending by subjective income level	
Mother tongue (Portuguese/Spanish)	€94.0	**Primary education**	€78.1	**Hard to live on**	€88.0
	€131.0		€115.6		€114.3
Mathematics	€108.0	**Lower secondary**	€108.9	**Enough to live with**	€95.5
	€126.9		€117.3		€118.6
English	€96.0	**Upper secondary**	€103.0	**Enough to live comfortably**	€105.0
	€129.7		€146.2		€149.8

Note: both the Spanish and Portuguese data refer to the reference student.

Source: own calculations from the data collected in the surveys.

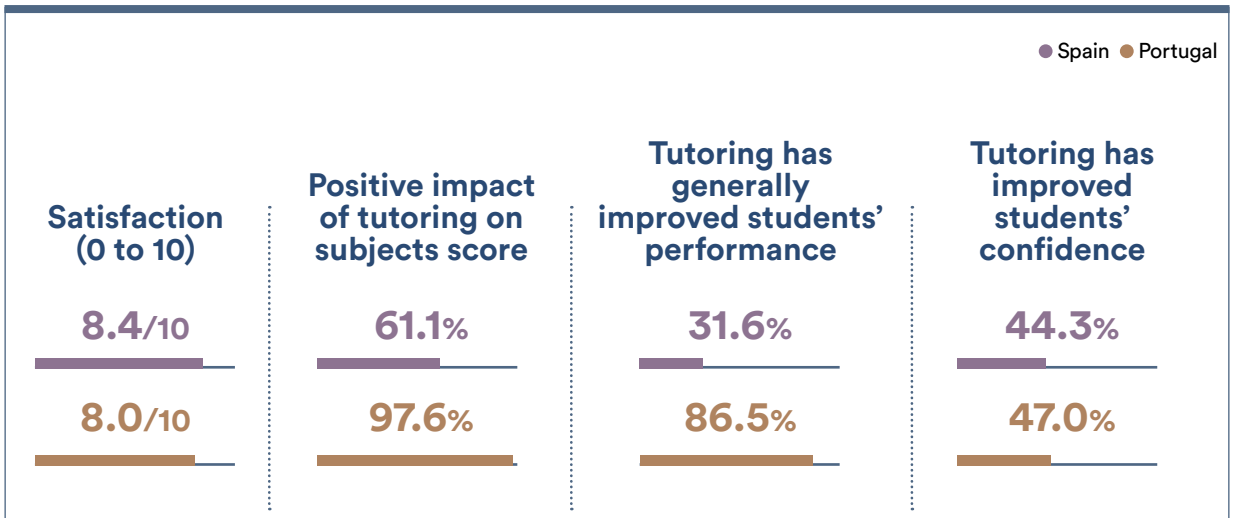
3.4. Impact and satisfaction with tutoring

Satisfaction with tutoring and the assessment of the impact of the sessions are important for determining the households' engagement with private tutoring. Moreover, since our data does not allow us to measure the impact of tutoring on student's achievements with hard evidence such as standardised exam results, this question complements the one about the parents' subjective assessment of the usefulness of tutoring to improve our understanding of the phenomenon. Both surveys collect information on these two dimensions, measured with Likert-type questions with 10 levels, and the results are summarised in Table 13.

In both countries, respondents report high levels of satisfaction (8 out of 10 in Portugal and 8.4 in Spain). Respondents in Portugal, however, are more confident about the positive impact of the tutoring sessions than those in Spain – while 61.1% of the Spanish agree with the positive impact on the subjects' score, almost 98% of the Portuguese do. Moreover, 87% in Portugal agree that it improved the student's general performance, an assessment that is made by only 31.6% in Spain. Notwithstanding, similar shares agree that tutoring improved the student's confidence (47% in Portugal, 43% in Spain).

In both countries, respondents report high levels of satisfaction with tutoring

Table 13: **Level of satisfaction and perceived impact**



Note: while the Portuguese survey asked respondents to rate the impact on the subjects score, the Spanish asked respondents to select an option if they agreed. As such, we considered as satisfied all those who rated satisfaction positively. In both countries, the data refers to the reference student.

Source: own calculations from the data collected in the surveys.

3.5. Market size

We now use the information in the surveys to estimate the size of the tutoring market in both countries. Data on household spending and participation in private tutoring is crucial for two main reasons. First, it informs policy design, particularly when aiming to incorporate part of this market into the formal education system. Second, it enhances understanding of the shadow market's size, which has important tax implications.

Relying on the regional stratification of the sample, Table 14 reports Portugal's main components for this exercise. We estimate that close to 235,000 households, encompassing over 269,000 students, pay for out-of-school tutoring sessions[4]. Based on the total number of households with tutoring by region, we estimate the total average monthly spending using the values gathered from the survey. We estimate that per month household spending in private tutoring in Portugal amounts to €30 million, with total annual spending amounting to close to €300 million[5].

The Spanish survey allows us to estimate the market size using the total number of students enrolled in school, the average monthly spending per student and the share of students enrolled in private tutoring.

For a population of 6,404,230[6], we estimate 5,946,746 attended school. Considering 25.7% of students attend private tutoring, and private spending averaging €97, we estimate a total monthly market of over €148 million, corresponding to an annual market size of €1,480 million.

The estimated Spanish annual market is about 4.5 times larger than that of its Portuguese counterpart, in line with the differences in resident population size between the two countries.

Although the Spanish survey does not collect information about the degree of informality of the market, the Portuguese survey inquires about the share of households whose tutoring services were invoiced – about 58% of the overall sample. Based on this estimate, the informal economy in this sector amounts to €127 million.[7]

We estimate an annual market size of 300 million in Portugal. The estimated Spanish annual market (€ 1,480 million) is about 4.5 times larger.

4. This estimate is based on the total number of households with children between 6 and 18 years old in the official Survey on Income and Living Conditions data, a yearly representative survey of the resident population conducted by Statistics Portugal.

5. For the total annual cost, we consider 10 months, assuming 2 months of summer break both for Portugal and Spain.

6. This is obtained by applying 2022 census microdata on student enrolment by age to the 2024 population data for individuals aged 6 to 18 years, both sourced by INE.

7. Tutoring became exempt from VAT in 2024. Therefore, the activity is currently taxed only as personal (IRS) or corporate (IRC) income tax, depending on the type of provider, which precludes us from estimating foregone tax revenue.

Table 14: **Market size in Portugal**

By region:

	Population (number of households with children aged 6-18)	Share of households with tutoring	Average family monthly spending	Number of households with tutoring	Total spending per household (monthly/€)
Norte	290,375	27.2%	121.3€	79,016	9,659,737
Algarve	49,092	29.4%	144.2€	14,416	2,078,773
Centro	191,058	23.1%	123€	44,119	5,427,969
AML	280,726	23.3%	141.6€	65,489	9,273,302
Alentejo	69,932	29.2%	105.2€	20,387	2,124,330
RAA	22,019	25%	115.6€	5,505	636,349
RAM	24,398	23.9%	128.6€	5,834	750,525
	Source: SILC (2023)	*Source: Own survey*	*Source: Own survey*	*Source: Estimate*	*Source: Estimate*

Total estimate:

Number of students with tutoring	Total spending per households (monthly/€)
234,777	29,950,986

Note: annual spending totals €300 million by multiplying monthly spending by ten months.

Source: own calculations from the data collected in the surveys.

Table 15: **Market size in Spain**

Population of interest (number of students aged 6-18)	Share of students with tutoring	Average family monthly spending	Number of students with tutoring	Total spending per households (monthly/€)
5,946,746	25,66%	€97	1,525,935	148,015,697
Source: INE (2022)	*Source: Survey*	*Source: Survey*	*Source: Estimate*	*Source: Estimate*

Note: annual spending totals €1,480 million by multiplying monthly spending by ten months.

Source: own calculations from the data collected in the surveys.

4.
The determinants of private tutoring

In this section, we discuss the determinants of private tutoring decisions. We first focus on the answers to a set of self-reported determinants for deciding whether (or not) to enrol in private tutoring, and how and who is typically selected tutor. In Section 4.2, in turn, we study how the prevalence of tutoring correlates with a comprehensive set of students' and household socio-demographic characteristics.

4.1. Self-reported determinants

Respondents were asked to select the reasons they considered most important in the decision to enrol a student in private tutoring. The reason most often selected was the student "struggling with the subject" (28.6% in Spain and 40.8% in Portugal).

However, while in Portugal, preparation for high-stake exams is the second most cited reason to enrol in private tutoring (31.3%), in Spain it was only chosen by 5.3% of the respondents. "Need for extra support" is the second most preferred reason for Spanish respondents with the same share as in Portugal, 24.9%, representing the third-ranked alternative in the latter.

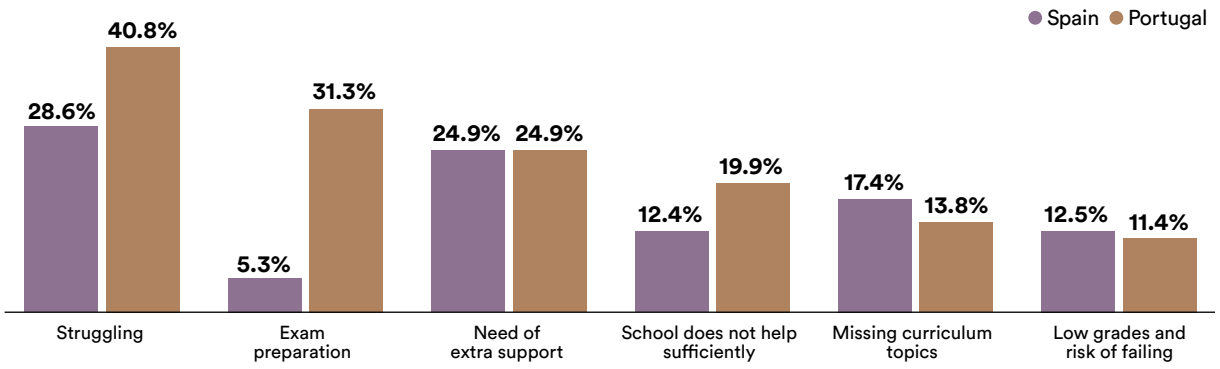
Although "Missing curriculum topics" is the third most chosen option in Spain, with 17.4%, this share is smaller in Portugal. In turn, the "School does not help sufficiently" option is chosen by 19.9% of the households in Portugal, and 12.4% of those in Spain. Overall, parents seem to be more driven by student-specific factors than school-specific ones; however, this conclusion should be taken with a cautionary note, since students' characteristics correlate very strongly with school quality.

Respondents were also asked how they met the student's tutor (Graph 9). Answers are consistent between the two countries. Word of mouth seems to be the most relevant driver of choice of tutor: 44.2% in Portugal and 39.2% in Spain report the tutor the students currently have was referred by a "friend, an acquaintance or a neighbour". In both countries "Other school families or school parents' association" is the second most chosen option, with 25.5% in Portugal and 18.6% in Spain.

Information was also collected relating to the education level of the tutor (Graph 10). Over 70% of the tutors hold a graduate degree in both surveys. The Spanish report reveals a higher share of tertiary students (14.2%), which compares with 8.2% in Portugal. Non-tertiary students represent a similar (small) share in both cases: 5.8% in Portugal and 5.5% in Spain.

It is also informative to understand why parents choose *not to enrol* students in private tutoring. The reasons selected most often by respondents are shown in Graph 11. Among the respondents who do not hire private

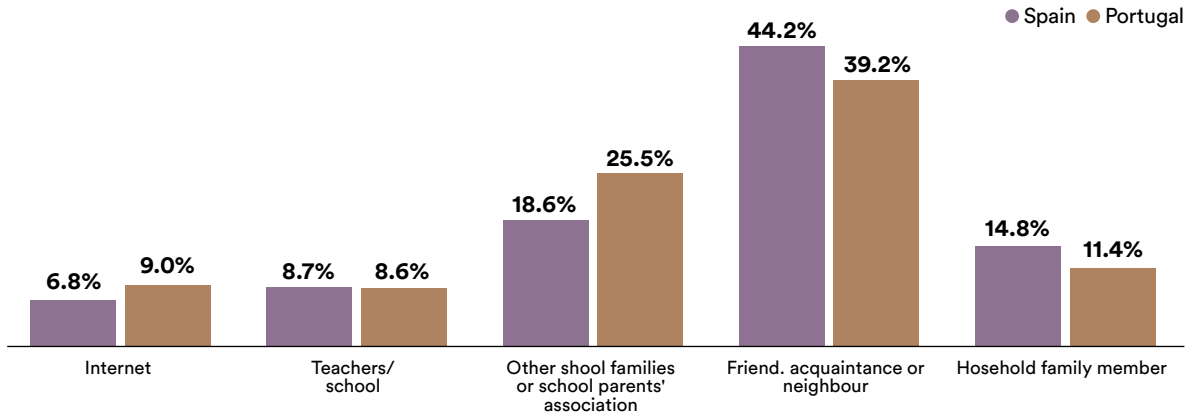
Graph 8: **Why is the student enrolled in tutoring?**



Note: both the Spanish and Portuguese data refer to the reference student.

Source: own calculations from the data collected in the surveys.

Graph 9: **How was the tutor selected?**



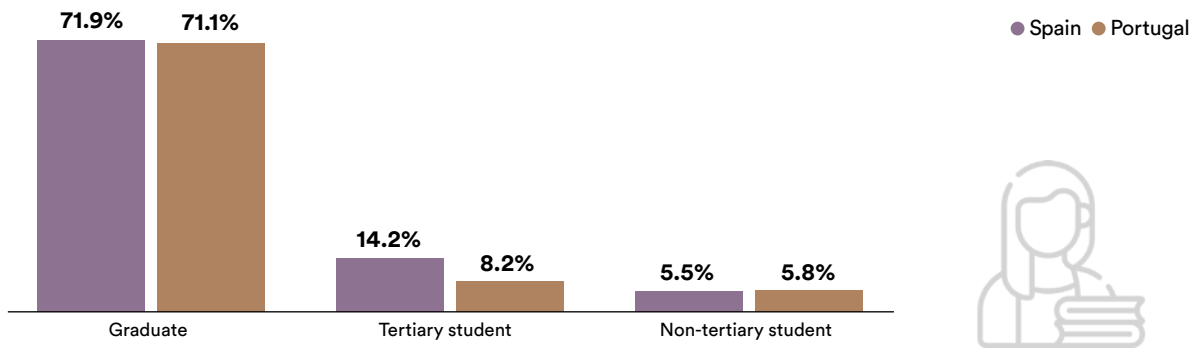
Note: both the Spanish and Portuguese data refer to the reference student.

Source: own calculations from the data collected in the surveys.

tutors, the most frequently cited reason for not enrolling in private tutoring, in both countries, is that students have good grades (66.3% in Portugal and 71.3% in Spain). Importantly, financial constraints seem to be more often referred to by respondents in Portugal. While 24.4% of the respondents in the latter country claim the high cost of private tutoring is one of the reasons not to enrol the student, only 8% of the Spanish respondents do so. Additionally, 11.1% of the respondents in Portugal state they do not believe tutoring is useful, which compares to only 3.7% in Spain.

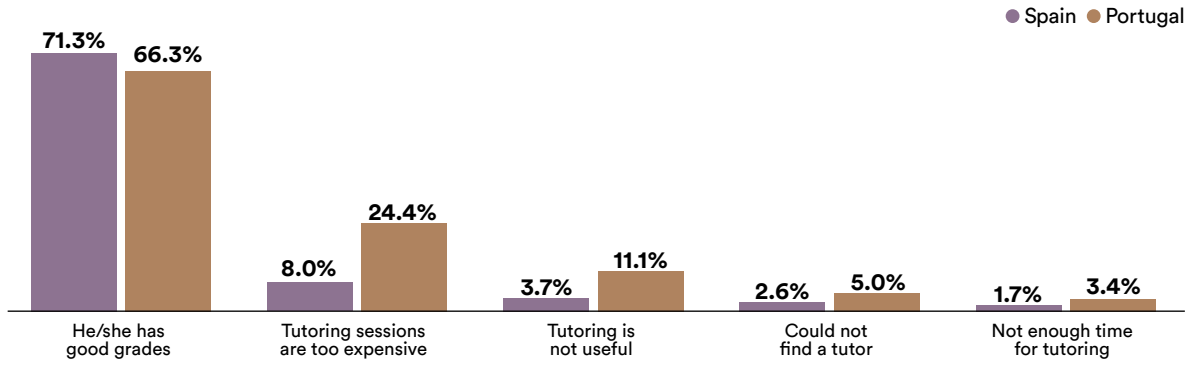
Taken together, the evidence on the self-reported determinants of enrolling in private tutoring presented in Graphs 8 and 11 suggests that households are mostly driven by their perception regarding the student's need for additional support. The financial burden is the second most cited reason. Concomitantly with the higher tutoring cost in Portugal and the higher income gradient observed in the latter country, the financial barrier is three times more important in Portugal than in Spain and is reported by one in every four families who do not hire private tutoring services.

Graph 10: **His/her tutor is a...**



Note: both the Spanish and Portuguese data refer to the reference student.
Source: own calculations from the data collected in the surveys.

Graph 11: **Why is the student not enrolled in private tutoring?**



Note: both the Spanish and Portuguese data refer to the reference student.
Source: own calculations from the data collected in the surveys.

4.2. Socio-demographic determinants

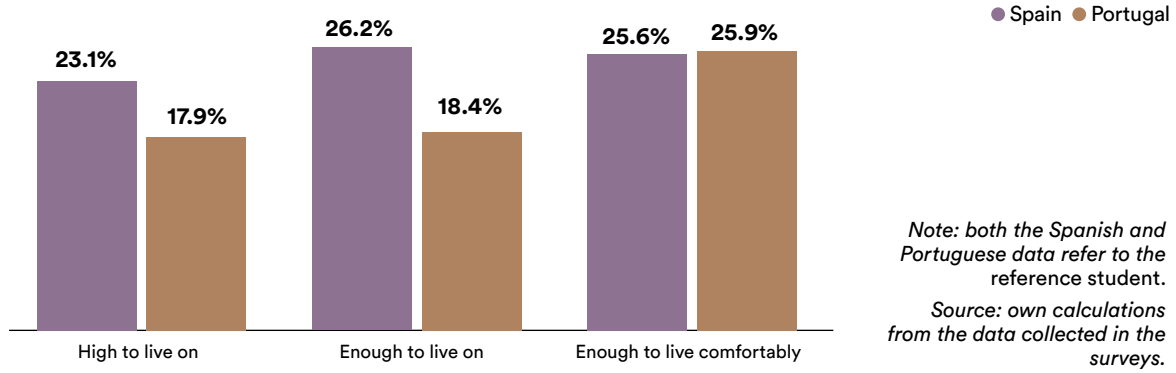
In this section we rely on the comprehensive set of student and household characteristics collected in the surveys to assess whether they play a role in the decision to enrol students in private tutoring.

INCOME

Graph 12 reports the prevalence of tutoring according to the subjective make-ends-meet situation of the household. The probability of enrolling in tutoring increases with income in Portugal, particularly from the middle (18.4%) to the top class (25.9%), while in Spain it peaks in the middle class (26.2%) exhibiting lower heterogeneity among income classes.

Still, in both countries, the proportion of households which state their income level is "hard to live on" and have students enrolled in private tutoring is relatively high. Among these financially strained families, almost 1 in 5 households in Portugal and 1 in 4 in Spain hire private tutoring. These results seem to support one of the main findings from the previous section: even if tutoring spending represents a high burden on the household budget, parents are willing to bear this expense if they believe students need it.

Graph 12: **Prevalence of tutoring by ability to make ends meet**



Note: both the Spanish and Portuguese data refer to the reference student.

Source: own calculations from the data collected in the surveys.

RESPONDENTS' EDUCATIONAL ATTAINMENT

Table 16 reports the share of students enrolled in tutoring according to the respondent's education level. Interestingly, in Portugal the demand for tutoring increases with the respondent's educational level, while in Spain the opposite happens.

In fact, the prevalence of tutoring among students in Portugal whose respondent holds a higher education degree (21.7%) is almost 4 percentage points higher than that of those with less than upper secondary education (18.1%). In Spain, the prevalence amongst respondents with a lower education level than upper secondary (28%) is almost 7 percentage points higher than those who hold a higher education degree (21.8%). These figures are compatible with the finding of more unequal access to private tutoring in Portugal. Moreover, the availability of lower priced services in Spain allows less educated families to hire private tutoring, possibly making up for their relative disadvantage in supporting their child's academic work.

The prevalence of tutoring by the respondent's nationality follows a similar pattern in both countries: nationals have a higher propensity to hire private tutoring, compared to foreign nationals. The gap is larger in Spain (9.1 percentage points, *vis-à-vis* 5.9 in Portugal).

Table 16: **Prevalence of tutoring by respondents' education and nationality**

		Spain	Portugal
Educational attainment	Less than upper secondary	28%	18.1%
	Upper secondary	24%	19.2%
	Higher	21.8%	21.7%
Nationality	National	25.5%	23.6%
	Foreign	16.4%	17.7%

Note: both the Spanish and Portuguese data refer to the reference student.

Source: own calculations from the data collected in the surveys.

TYPE OF SCHOOL

The prevalence of private tutoring is quite similar across school types in both countries (table 17). In the Portuguese survey, the prevalence of tutoring amongst private school students is 2 percentage points above that of students at state-run schools (24.3% vs 22.4%); conversely, in Spain, the prevalence amongst state-run school students is less than one percentage point higher than that of private school students (24.4% vs 23.6%). The Spanish system also includes state-assisted schools (*centros concertados*), for which the prevalence of tutoring is slightly higher (26.9%) than for wholly state-run schools.

Overall, the type of school does not seem to be a major determinant of private tutoring sessions enrolment in either country. Note that the educational inequalities stemming from the different school qualities would be compensated by a higher prevalence of tutoring amongst state-run school attendees. The similar prevalence implies that private spending in tutoring is not compensating for the different income-driven school quality.

Table 17: **Prevalence of tutoring by school type**

Type of school:	Spain	Portugal
State-run	24.4%	22.4%
State-assisted	26.9%	-
Private	23.6%	24.3%

Note: both the Spanish and Portuguese data refer to the reference student. State-assisted *refers to schools known as* centros concertados *that are neither fully public nor private, as they receive public funds but operate independentlyl from the regular state-run school system.*

Source: own calculations from the data collected in the surveys.

STUDENT PERFORMANCE (OBJECTIVE AND SUBJECTIVE) AND TRAITS

The importance of the student-performance dimensions reported in Section 4.1, regarding self-reported reasons for enrolling (or not) in tutoring, merits further investigation. Table 18 reports the share of students enrolled in tutoring sessions according to several measures of objective and subjective academic achievement, student behaviour, and personal traits.

In Portugal, one third (33.5%) of students who failed a subject are enrolled in private tutoring, compared with 19.9% amongst those who have never failed a subject during their academic career. By comparison, 29.6% of students in Spain that failed an academic year attend tutoring sessions, compared with 24.8% of those who did not.

Based on the most recent assessment in Spanish and Portuguese, 45.2% of the students who failed the Spanish assessment receive tutoring, a proportion very similar to that observed in Portugal, where the figure is 45.7%.

Considering only the mother tongue, the prevalence of private tutoring is around 20 percentage points higher among students who recently failed in the subjects of Portuguese or Spanish. In the Spanish case, we also observe a higher prevalence of private tutoring among students who previously failed an academic year (29.6%, which compares to 24.8% for those who never failed one).

The type of school does not seem to be a major determinant of private tutoring sessions enrolment in either country.

Table 18: **Prevalence of tutoring by educational situation**

		Spain	Portugal
Failed subject	Yes	-	33.5%
	No	-	19.9%
Mother Tongue (Portuguese/ Spanish) - Most recent assessment	Failed	45.2%	45.7%
	Passed	24.7%	22.8%
Failed an academic year	Yes	29.6%	21.1%
	No	24.8%	22.8%
Students' performance (overall)	Low performance	36.3%	30.8%
	Average performance	24.4%	30.4%
	High performance	15.6%	20.1%
Disciplinary warning	Yes	29.7%	33.8%
	No	24.3%	21.6%
Special needs	Yes	48.8%	33.0%
	No	23.6%	21.8%

Note: both the Spanish and Portuguese data refer to the Reference Student.

Source: own calculations from the data collected in the surveys.

We also compare the prevalence of tutoring services according to a subjective measure of overall academic performance. Students perceived by respondents as low performers have a prevalence of tutoring of over 30% in the Portuguese survey and 36% in the Spanish one, which is significantly higher than the prevalence amongst high performers, of 20.1% and 15.6%, respectively.

Finally, we document how behaviour and personal traits drive the demand for private tutoring. Students with previous disciplinary warnings report a higher prevalence of private tutoring of around 33.8% in Portugal and 29.7% in Spain than those without warnings. Similarly, in both countries, students with special educational needs are more likely (33% and 48.8%) to be enrolled in private tutoring than those who do not have them.

Overall, these results show that demand for private tutoring sessions is higher for students with lowest achievement levels and stronger educational needs in both countries, which emphasises the importance of student characteristics when households decide whether to enrol them in private tutoring.

Conclusion

Mounting evidence shows the positive impact that individualised or small-group tutoring can have on students' academic outcomes. When educational systems are unable to provide this kind of support at scale, families often turn to private, out-of-school tutoring services. However, the scope, pricing, and inequality of access to these services remain largely unknown.

In this study, we measure the size and characteristics of the "shadow education market" in both Portugal and Spain. These two countries have experienced significant increases in average educational attainment in recent years, yet continue to exhibit deep inequalities in educational outcomes, often driven by disparities in family income and parental education levels.

We used purpose-built nationally representative online surveys of approximately 2,300 households in Portugal and 2,500 in Spain to assess the prevalence of private tutoring, the determinants of demand, and the price and characteristics of the tutoring services. Our findings show that, on average, 25% of students in Spain and 20% in Portugal are enrolled in private tutoring. This prevalence varies significantly by educational stage, peaking during upper secondary education, where it reaches 36% in Spain and 33% in Portugal. This trend likely reflects the high-stakes nature of examinations at this stage, which can have critical implications for students' future academic pathways.

Overall, we estimate that over 200 thousand students in Portugal and 1.4 million students in Spain participate in private tutoring. In terms of monthly spending, Portuguese families report higher average expenditures – €126 per month compared to €97 among Spanish families.

Mathematics is one of the most in-demand subjects for private tutoring in both countries. However, subject-specific trends diverge between the two: Portuguese sees high demand in Portugal, while English is

the subject most frequently tutored in Spain. More than half of the surveyed students who receive tutoring do so through organised sessions, with the majority attending group rather than one-on-one lessons.

Academic performance is a very significant factor driving demand for tutoring: among students perceived as low-performing, tutoring rates rise to 31% in Portugal and 35% in Spain, compared to just 20% and 16%, respectively, among high-performing students. Our analysis also shows a relevant income gradient in the demand for private tutoring, more so in Portugal than in Spain. Households in comfortable financial situations spend 18% more on tutoring in Spain and 28% more in Portugal than those who report that their income is hard to live on, and the proportion of students enrolled in tutoring increases from 17.9% to 25.9% in Portugal, and from 23.1% to 25.6% in Spain, for households reporting hard-to-live-on incomes and comfortable financial situations, respectively.

As a result, a relevant share of families facing financial strain invest in private tutoring, which may come at the expense of reduced spending in other consumption categories and implies a higher opportunity cost of tutoring expenditure for these households. These facts have relevant policy implications regarding the impact of household income on educational inequalities in both countries.

Overall, private tutoring represents a significant market in the Iberian Peninsula, amounting to over €1.78 billion annually across both countries. These results underscore the need for policies that offer more individualised support within the school system itself. Without such measures, the shadow education sector will continue to serve as an essential – yet unequal – resource for families, especially during periods of high-stakes academic assessment.

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Shadow education can constitute a significant amplifier of inequalities in access to learning opportunities. In Portugal and Spain, between 20% and 25% of students make use of these out-of-school services, representing an estimated 1.78 billion euros in annual economic activity across both countries. Difficulties with specific subjects and the existence of national exams are important drivers of this demand.

In Portugal in particular, household income strongly influences both the prevalence of tutoring and its cost. Nevertheless, many families facing financial hardship still make considerable efforts to ensure their children can access these services. For this reason, the provision of tutoring within schools is especially relevant, as it can play a key role in reducing educational inequalities in both the Portuguese and Spanish systems.

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