



“SHADOW EDUCATION” AND ORGANIZED TUTORING EXPENDITURE IN CONTEMPORARY GREECE: FACETS AND DIMENSIONS OF EDUCATIONAL INEQUALITIES

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Abstract:

The phenomenon of “*shadow education*” has been a persistent and complex issue in contemporary Greece for decades. It is not only deeply embedded in Greek society but also prevalent in other countries where education plays a vital and highly competitive role. This study explores key aspects and dimensions of “*shadow education*” in Greece, with a particular focus on household expenditure (during the period 2013–2023) on private supplementary education in general education, highlighting and updating the current landscape of Greek household spending on educational services provided by organised tutoring centres according to the official data from the Hellenic Statistical Authority. Furthermore, we analyse private tutorial expenditure during the same period using the same data source and methodology, in an effort to reconstruct the “*shadowy puzzle*” of an educational pathway that operates parallel to the formal education system, at times visible and at others concealed, yet with significant implications. Among other things, our study focuses on highlighting educational and social inequalities, analysing enduring systemic dysfunctions, and interpreting a paradoxical reality that directly affects the socially disadvantaged and most vulnerable segments of the population within the country.

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1. Introduction

This study aims to highlight the phenomenon of *"shadow education"* in contemporary Greece by examining expenditures on tutoring centres and private lessons during the period 2013-2023. Although the phenomenon of *"shadow education"* is not uniquely Greek (Zhang & Bray, 2020), its impact on modern Greek society is significant, exhibiting class-based, intergenerational and intertemporal characteristics that reflect the unique features of contemporary Greek life.

Apart from placing a significant financial burden on households, *"shadow education"* is associated with a deeply rooted mentality of resorting to private out-of-school activities (Bray, 1999), generating tensions, disputes, controversies, contradictions and peculiarities within the educational system. This study seeks to assess and update the current landscape of *"shadow education"* in Greece by utilizing official data from the Hellenic Statistical Authority and conducting additional statistical analysis based on the categorisation of expenditure as defined in the institutional classification system.

Specifically, section 2 seeks to elucidate the fundamental elements of the term *"shadow education"* from a theoretical and conceptual standpoint. Section 3 presents the methodological framework of the study. It describes the data sources, the categorization of expenditures, the estimation methods, and the indicators used to contextualize private spending on supplementary education within the broader economic environment. Section 4 comprises two subsections and examines the evolution of household expenditure on private tutoring centres (within general education) and private tutorial lessons. More precisely, subsection 4.1 presents expenditures on general education tutoring centres for the period 2013-2023, while subsection 4.2 focuses on private tutorial expenditure during the same timeframe. Beyond the period under consideration, our analysis emphasises factors such as urbanization and household income level, in an effort to closely examine both the economic (income-related) and regional dimensions of the observed disparities.

In section 5, the general conclusions derived from the presentation of the findings are outlined, along with a critical synthesis and reframing of the characteristics that distinguish the Greek case in recent years, particularly during a period of economic and social sensitivity for Greece due to the debt crisis and the country's entry into fiscal discipline (Fotopoulos, Zagkos, & Fatourou, 2019).

In conclusion, the following discussion provides a series of reflective insights, reflections and considerations concerning the role and future of *"shadow education"*, the evolution of educational inequalities, and emerging trends in an era marked by profound shifts and transformations in the broader landscape of education and educational policy.

2. Theoretical and Conceptual Dimensions of "Shadow Education" through the Lens of Educational Inequalities

The term "*shadow education*" refers to private expenditure on educational services and products, reflecting an internationally expanding phenomenon. In this context, it represents a phenomenon that transcends national borders (Bray, 1999; Buchmann, Condrón, & Roscigno, 2010; Malik, 2017) and operates alongside public education systems, signaling the existence of a parallel out-of-school support structure that directly reinforces the role of private investment in the development of individuals' educational and skills capital (Yu & Zhang, 2022).

Consequently, the term "*shadow education*" refers to private tutoring expenditures, both overt and covert, ultimately highlighting the inability or inefficiency of public policy to meet the full range of educational demands across the entire spectrum of the education system (Yu & Zhang, 2022). Undoubtedly, millions of households worldwide are spending billions on out-of-school educational support for their children, while large-scale industries generating substantial turnover and profit margins continue to grow.

This phenomenon directly contributes to the deepening of educational and social inequalities (Entrich, 2020), an issue that calls for careful and critical examination. If we attempt to capture all the elements involved in the field of "*shadow education*", it would encompass tutoring centre expenditures, private tutorial expenditures in general education, foreign languages, and special courses, as well as services that provide study support, childcare, and even foster creative engagement for children. This phenomenon is expanding into new fields and even reaching countries with no previous precedents. For example, it is worth mentioning that "*shadow education*" is endemic in parts of North America, Southeast Asia and Southern Europe and even, albeit to a lesser extent, in countries of Central and Northern Europe (Aurini *et al.*, 2013, Lakshmanasamy, 2017).

However, according to recorded trends, the growth of "*shadow education*" is driven either by preparatory practices for university entrance examinations or by student participation in international assessments (e.g. PISA) (Byun, Chung, & Baker, 2018), contributing to increasing inequalities in educational access and success. Undoubtedly, the "*shadow education*" mechanism thrives in environments where the practice of "*numerus clausus*" prevails, reinforcing the competitive relationship between supply and demand for job positions, as educational mobility is closely linked to occupational and, by extension, social mobility. In any case, private initiatives seem to have a "*comparative advantage*" over the educational opportunities provided by the state and its requirements, as unfortunately, the services often offered by public systems are frequently ineffective, inadequate, and, in many cases, socially "*disrespectful*".

This is precisely where the key to interpreting and understanding the issue of "*shadow education*" lies. Apart from being linked to emerging privatization trends (Ball, & Youdell, 2008), it arises as a "*natural consequence*" of the failure of public education policies to provide credible career and mobility alternatives. This strategy, systematically cultivated for decades in the context of international labour market competition, has been

gaining ground in recent years and is politically and ideologically embedded in the sphere of economic neoliberalism (Ball, & Youdell, 2007).

In essence, it is a widespread trend that continuously challenges the state monopoly on education, criticizing it as qualitatively and effectively inferior, while proposing private services as a complementary strategy for households (Bray, 2014) in order to achieve better and more efficient educational outcomes. At the same time, within the context of a highly competitive logic dominating the education sector, "*shadow education*" through its presence is constantly legitimised and "*naturalised*" as a necessary and inevitable tool for students' educational pathway and social mobility (Kassotakis, & Verdis, 2013). In parallel, this phenomenon is steadily expanding across all levels, forms and dimensions of education, "*colonizing*" an increasing number of areas within the education system. In Greece, in particular, the phenomenon of "shadow education" is closely linked to the emergence of the phenomenon of tutoring centres as early as the late 19th century, continuing throughout the 20th century. As a result, these centres have flourished and today represent an integral and firmly established parallel and widely developed system of supplementary education in the country (Kassotakis, & Verdis, 2013). It is evident that private organized tutoring in general education and foreign language learning has deep roots in Greek society and is firmly embedded in the strategies and practices of the Greek family (Kassotakis, & Verdis, 2013). For decades, thousands of teachers have taught, and millions of students have studied in Greek tutoring centres. This social experience, as reflected in a recent survey, is positively evaluated by both parents and students who have studied at these centres (KANEP, 2025).

At the same time, the Greek state collects both insurance contributions and income taxes, while tutoring centres help reduce teacher unemployment, as the public education system absorbs educators at a slow pace and is unable to integrate them effectively into the workforce. Moreover, given the significant role of organized tutoring, despite persistent issues concerning labour relations, conditions, and teachers' earnings (KANEP, 2025), there is growing demand for stronger institutional recognition of its contribution to the formal education system through the acknowledgement of its prior educational experience and its integration into other forms or levels of education. Undoubtedly, these issues often provoke reactions and objections from teachers' unions and traditional guilds, yet they do not significantly impact the dynamics of private tutoring.

However, as has already been noted, the term "*shadow education*" is not limited to organized tutoring alone. A significant portion of out-of-school tutoring expenditure is linked to private lessons and "*black work*", as well as to the "*black economy*" associated with tutorial lessons, which are provided without oversight or quality and reliability safeguards to thousands of students daily. It is clear that this dimension is crucial, as it is linked to a pervasive mindset of out-of-school support for students in a highly competitive educational environment, where inequalities and family strategies to address gaps and issues inherent in the formal education system thrive (Giavrimis, Elefterakis, & Koustourakis, 2018).

Consequently, "*shadow education*" is spreading and expanding across the entire educational spectrum. To illustrate, tutoring centres and private lessons are not limited solely to university access but extend to Secondary and Primary education, Tertiary education, and other forms of online out-of-school support. A particularly common phenomenon is the combination of various forms of out-of-school support, which may include both tutoring centres and tutorial lessons, or other forms of non-formal and informal education. This demonstrates that, in addition to the extra private expenditure, the phenomenon reflects a distinct mentality that borders on a unique educational culture of "*compulsion*".

However, the sociological and research community in Greece has investigated the phenomenon of "*shadow education*", concluding that issues such as methods of teaching and learning, curricula, examinations etc. have contributed to the worsening of this phenomenon (Kassotakis, & Verdis, 2013) with no one being able to reverse this trend. At the same time, the high expectations of families for upward educational mobility and social achievement through education (Sianou-Kyrgiou, 2010) drive young learners primarily towards academic education at all costs, often overlooking other equally important and rewarding non-academic educational options, such as technical and vocational education/ training.

In recent years, Greece faced crucial challenges in the field of fiscal consolidation, which changed all the spectrum of social and economic areas. Specifically, between 2013 and 2023, Greek society tackled significant economic and social changes due to consecutive crises and policy transformations. The decade began with the ongoing effects of the sovereign debt crisis, which led to strict austerity measures, high unemployment, and a marked decline in household incomes (Petrakos *et al.*, 2023).

Austerity policies and structural reforms resulted in cuts to public spending, undermining social benefits and servicesⁱⁱ, thereby increasing economic hardship for many citizens. Although the economy showed signs of gradual recovery between 2014 and 2019, progress remained slow and uneven (ELSTAT, 2024a). In 2020, the COVID-19 pandemic introduced new difficulties, including lockdowns, economic downturnsⁱⁱⁱ, and renewed unemployment pressures. The years that followed were marked by surging inflation, rising living costs, and an energy crisis, all of which strained household budgets. Inflation peaked in 2022, further reducing people's purchasing power and adding to economic uncertainty (ELSTAT, 2025). It is within this challenging socioeconomic context that we analyse the evolution of Greek households' expenditures on private supplementary education, exploring how economic fluctuations and financial pressures influenced their ability to invest in additional educational support for their children.

However, the crucial issue is not just looking at the current image of "*shadow education*", but understanding the real dynamics of the problem and, most importantly,

ⁱⁱ Between the onset of the economic crisis in 2009 and 2014, general government expenditure in Greece declined by a total of 29.4%, following a continuous downward trend (Eurostat, 2025).

ⁱⁱⁱ In 2020, Greece's annual GDP contracted by 9.3% (ELSTAT, 2024a).

exploring the new challenges in education policy at a time when major changes are underway. These changes include the constant pursuit of qualifications, the development of vocational training and lifelong learning, the enhancement of workforce skills, the certification of qualifications, the provision of education through platforms, the integration of new technologies, digital learning, and artificial intelligence, among others. It is clear that these developments will bring about new changes and transformations, shaping a new landscape that will undoubtedly redefine expenditures and inequalities in the field of education, with direct consequences for socially vulnerable and economically disadvantaged populations.

3. Methodological Approach

This study aims to assess the magnitude of expenditures incurred by Greek households on private supplementary education, focusing on two key categories: tutoring centres and private tutorial lessons. The analysis considers both the total cost of these services and their relative burden on household budgets by examining long-term expenditure trends over the critical decade 2013–2023. In addition, we explore the influence of demographic and socioeconomic factors by disaggregating expenditures according to the degree of urbanization and household income level^{iv}.

To assess the broader economic significance of shadow education, we also compare the total annual household spending on tutoring centres and private lessons to two key national indicators: Greece's Gross Domestic Product (GDP) and public expenditure on education. This supplementary analysis provides a more comprehensive understanding of the scale and persistence of private investment in education within the national economic framework. Public education expenditure figures were calculated using the methodology developed by the Centre for the Development of Educational Policy (KANEP/GSEE), as outlined in the Annual Report on Education 2011 (pp. 109–123). This methodology was applied to data extracted from the annual Statement of Revenue and Expenditure of the State Budget, published by the General Accounting Office of the Ministry of Economy and Finance.

The analysis draws on data from the Household Budget Survey (HBS), conducted annually by the Hellenic Statistical Authority (ELSTAT). The HBS collects information from a representative sample of households and enables statistical analysis at the national level (ELSTAT, 2024c). Harmonized with equivalent surveys in other EU member states, it records the full spectrum of monthly household consumption using a standardized coding system for expenditure categories.

Expenditure items are classified based on the COICOP-HBS 2013 framework (Classification of Individual Consumption by Purpose). The following codes were used to identify and group the relevant types of expenditure:

^{iv} Owing to data limitations for 2013, income-level analysis is based on data starting from 2014.

A. Out-of-school Lessons in Tutoring Centres

- 1011104: Out-of-school lessons in tutoring centres for students of primary education
- 1021103: Out-of-school lessons in tutoring centres for students of secondary education
- 1041103: Out-of-school lessons in tutoring centres for students of tertiary education

B. Private Tutorial Lessons

- 1011105: Tutorial lessons (private) for students of primary education
- 1021104: Tutorial lessons (private) for students of secondary education

The HBS reports the average monthly expenditure per household for each of these categories. Since the authors do not have access to the HBS microdata – which are only accessible upon special permission from ELSTAT – the analysis relies on the published mean expenditure values provided by ELSTAT for each COICOP category. While this restricts the possibility of conducting weighted or inferential statistical analyses, the available data remain suitable for exploring long-term trends and group-based differences.

To estimate total annual expenditures, the average monthly figure is multiplied by 12 (to account for all months of the year) and then by the total number of households in the country, as reported annually by the survey. It is important to note that these figures reflect average spending across all households, including those that do not use these services. As a result, the estimates are considerably lower than the actual expenditure of users. Nevertheless, this approach allows for consistent comparisons over time and between population groups, helping to reveal structural patterns and inequalities.

Finally, all monetary values are reported in constant 2023 prices, using the Consumer Price Index (CPI) for deflation (ELSTAT, 2024b). This adjustment ensures that the reported trends reflect real changes in household spending, free from the distorting effects of inflation.

4. Results

4.1 Expenditure on Out-of-school Lessons in Tutoring Centres

Greek households spent a total of €614 million on tutoring centres in 2023 (Table 1), marking the highest amount recorded over the past decade. Between 2013 and 2021, expenditure on tutoring services followed a declining trend (-18.8%), whereas in 2022, there was a sharp increase of 30.2% compared to the previous year (2021). This surge is likely attributed to the increased demand for additional educational support following the COVID-19 pandemic. Over the full decade (2013–2023), spending on tutoring centres has recorded a real increase of 10.2%.

Approximately 4.2% of total tutoring expenditure is allocated to primary education (Table 1). Notably, this expenditure has quadrupled, rising from €6.1 million

in 2013 to €26.1 million in 2023. This sharp increase can largely be attributed to the recent expansion of study support centres catering to primary education. Over the last two years alone, the expenditure on primary education tutoring has increased by approximately 38%, reflecting the rapid expansion of such centres across the country. The secondary education sector accounts for the vast majority (94.6%) of tutoring expenditures, amounting to €580.8 million in 2023. This distribution reflects the substantial demand for academic support in secondary education, particularly in preparation for nationwide university entrance examinations. While this expenditure had been on a downward trajectory until 2021, it experienced a significant increase (+35.5%) in the last two years (2021–2023). Expenditures on tutoring for tertiary education amount to €7.2 million, representing only 1.2% of total tutoring expenditures. Despite minor fluctuations, this category has remained relatively stable over the past decade.

Table 1: Total annual expenditure of Greek households on out-of-school lessons in tutoring centres, by education level (constant 2023 prices, in millions of euros)

Year	Students of primary education (1011104)	Students of secondary education (1021103)	Students of tertiary education (1041103)	Total expenditure on out-of-school lessons in tutoring centres	% of Total household expenditure
2013	€6.1	€539.4	€11.7	€557.2	0.66%
2014	€7.3	€532.5	€14.0	€553.9	0.68%
2015	€5.7	€501.3	€14.2	€521.2	0.65%
2016	€13.7	€471.7	€21.6	€507.1	0.64%
2017	€15.7	€459.2	€22.4	€497.3	0.63%
2018	€13.9	€486.6	€12.8	€513.3	0.64%
2019	€15.0	€460.1	€11.1	€486.2	0.59%
2020	€11.2	€429.7	€10.1	€451.0	0.60%
2021	€18.9	€428.6	€5.0	€452.5	0.57%
2022	€27.6	€548.6	€12.8	€588.9	0.72%
2023	€26.1	€580.8	€7.2	€614.0	0.71%

Source: ELSTAT (n.d.), Household Budget Survey (2013–2023); ELSTAT (2024b).

The share of tutoring centre expenditures relative to total household spending offers insight into the financial burden associated with out-of-school educational support. Until 2021, the proportion of household spending allocated to tutoring centres remained relatively stable at 0.6% of total expenditures, with a slight decline during the pandemic period (2019–2021) (Table 1). However, in 2022, this share increased significantly (+25.5%), reaching 0.7%, where it has remained through 2023. Given that total annual household expenditures have increased by only 2.3% in real terms over the past decade, the consistent or even growing significance of tutoring centres in Greek students' educational trajectories is evident. This persistent trend underscores the resilience of demand for tutoring centres, despite broader economic pressures, including the economic disruptions caused by the COVID-19 pandemic, the energy crisis, and the rising cost of living.

Geographical disparities are also evident in household expenditures on tutoring centres. Expenditures on tutoring services are significantly higher among urban households compared to their rural counterparts (Table 2), likely due to both greater availability and higher demand for organized services in urban areas. Over the past decade, rural households reduced their average spending on tutoring by 5.2%, while urban households increased theirs by 14%, thereby widening the spending gap between the two.

Table 2: Annual average expenditure of Greek households on out-of-school lessons in tutoring centres classified by degree of urbanization (constant 2023 prices)

Degree of Urbanization	2013	2023	Rate of change (%)
Urban areas	€135.2	€154.1	14.0%
Rural areas	€104.0	€98.6	-5.2%
Total	€128.9	€144.2	11.9%

Source: ELSTAT (n.d.), Household Budget Survey (2013–2023); ELSTAT (2024b).

Household income emerges as a critical factor of differentiation in spending on tutoring centres. Higher-income households allocate more funds to these services, underscoring the link between income levels and private investment in supplementary education through organized tutoring centres (Table 3).

Table 3: Annual average expenditure of Greek households on out-of-school lessons in tutoring centres by monthly household income (constant 2023 prices)

Monthly Household Income (€)	2014	2023	Rate of change (%)
Up to €750	€19.6	€16.8	-14.3%
€751–1,100	€28.6	€46.9	64.0%
€1101–1450	€57.6	€59.6	3.5%
€1451–1800	€127.3	€174.6	37.2%
€1801–2200	€171.7	€196.4	14.4%
€2201–2800	€210.7	€272.4	29.3%
€2801–3500	€292.1	€355.1	21.6%
€3,501 and over	€322.9	€277.0	-14.2%
Total	€118.3	€144.2	21.9%

Source: ELSTAT (n.d.), Household Budget Survey (2014–2023); ELSTAT (2024b).

A clear indicator of this disparity is the top 3/bottom 3 ratio^v, which stood at 7.3 in 2023. Specifically, the average annual expenditure on tutoring centres for households with a monthly income above €2,200 (€301.5) was seven times higher than that of households earning up to €1,450 per month (€41.1). Examining the evolution over time, almost all income groups recorded an average increase of 28%, apart from the lowest-income households (monthly income ≤€750) and the highest-income households (monthly

^v The top 3/bottom 3 ratio serves as an index of expenditure inequality. It is computed by dividing the mean value of spending across the top three income brackets by the mean across the bottom three, illustrating the relative gap in financial investment in tutoring services between high- and low-income households.

income >€2,200), which saw a decline in tutoring expenditures between 2014 and 2023 by approximately -14%. This suggests that lower-income households may face growing difficulties in affording this educational support, while higher-income households may be shifting toward other forms of private education (e.g., private lessons, private schools, or studies abroad).

4.2 Expenditure on Tutorial Lessons (private)

In 2023, Greek households spent a total of €257.0 million on private tutorial lessons (Table 4). Between 2015 and 2018, this expenditure followed a declining trend (-26.9%). In 2019, however, it rose sharply (+21.2%), possibly reflecting growing parental concerns over learning outcomes, which intensified further during the COVID-19 pandemic the following year. Following the pandemic’s conclusion in 2021, spending dropped by 23.7% compared to the previous year. Yet in 2022, it rebounded significantly (+30.4%) and remained relatively stable in 2023, with a marginal decrease of 1.3% compared to the previous year. Over the entire decade (2013–2023), private tutorial expenditure decreased by 10% in real terms. When considered as a share of total household expenditure, a decline of approximately 12% is observed — from 0.34% in 2013 to 0.30% in 2023.

Approximately 13.9% of total private tutoring expenditure in 2023 was allocated to primary education. Notably, this figure has quadrupled over the decade, rising from €8.9 million in 2013 to €35.8 million in 2023. This remarkable increase reflects growing demand for early academic support. However, the vast majority (86.1%) was directed toward secondary education (€221.2 million in 2023), highlighting the persistent centrality of university entrance preparation in household educational strategies. Spending on secondary education tutoring decreased by 30.5% between 2015 and 2018, followed by a 25.9% increase in 2019 — again, likely related to pandemic disruptions. After a significant drop in 2021 (-23.2%), expenditure rebounded in 2022 (+23.7%) and stabilized in 2023. Overall, private tutorial spending for secondary education declined by 20% over the decade, indicating a notable shift in household spending patterns.

Table 4: Total annual expenditure of Greek households on tutorial lessons (private), by education level (constant 2023 prices, in millions of euros)

Year	Students of primary education (1011105)	Students of secondary education (1021104)	Total expenditure on tutorial lessons (private)	% of Total household expenditure
2013	€8.9	€276.7	€285.6	0.34%
2014	€11.2	€288.7	€300.0	0.37%
2015	€22.7	€282.2	€304.9	0.38%
2016	€27.3	€250.7	€278.0	0.35%
2017	€26.9	€225.1	€252.0	0.32%
2018	€26.8	€196.2	€222.9	0.28%
2019	€23.3	€247.0	€270.3	0.33%
2020	€26.4	€235.4	€261.8	0.35%
2021	€18.9	€180.8	€199.6	0.25%
2022	€36.7	€223.5	€260.3	0.32%

2023	€35.8	€221.2	€257.0	0.30%
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Source: ELSTAT (n.d.), Household Budget Survey (2013–2023); ELSTAT (2024b).

Households in urban areas spend more on private tutorial lessons (€61.9 per year) compared to those in rural areas (€52.9) (Table 5). While average expenditures have declined in both groups over the past decade, the decrease has been more pronounced in rural areas (-27.3%) than in urban ones (-3.9%). This pattern suggests that rural households may face greater financial or structural barriers to accessing individualized tutoring services, such as limited local availability or lower income levels.

Table 5: Annual average expenditure of Greek households on private tutorial lessons classified by degree of urbanization (constant 2023 prices)

Degree of Urbanization	2013	2023	Rate of change (%)
Urban areas	€64.4	€61.9	-3.9%
Rural areas	€72.8	€52.9	-27.3%
Total	€66.1	€60.4	-8.6%

Source: ELSTAT (n.d.), Household Budget Survey (2013–2023); ELSTAT (2024b).

Higher-income households allocate more funds to private tutorial lessons (Table 6). A key indicator of income-related disparities is the top 3/bottom 3 ratio (see Footnote 4), which in 2023 stood at 16.3. In other words, the average annual expenditure on private tutorial lessons for households with a monthly income above €2,200 (€171.9) was 16 times higher than that of households earning up to €1,450 per month (€10.5). Trends over time reveal notable shifts: lower-income households (earning up to €1,100/month) have substantially increased their spending on private tutorials — by 850% and 109.5%, respectively. Similarly, middle-income households (earning €1,451–1,800/month) recorded a 90.3% increase. In contrast, the two highest income brackets saw a marked decline in spending (-38% and -27%, respectively), which may suggest a shift toward other forms of private education or substitution with different educational strategies.

Table 6: Annual average expenditure of Greek households on private tutorial lessons by monthly household income (constant 2023 prices)

Monthly Household Income (€)	2014	2023	Rate of change (%)
Up to €750	€0.4	€3.8	850.0%
€751–1,100	€4.2	€8.8	109.5%
€1101–1450	€29.3	€19.0	-35.2%
€1451–1800	€22.7	€43.2	90.3%
€1801–2200	€50.9	€58.0	13.9%
€2201–2800	€104.6	€126.8	21.2%
€2801–3500	€233.0	€144.6	-37.9%
€3,501 and over	€334.6	€244.2	-27.0%
Total	€64.1	€60.4	-5.8%

Source: ELSTAT (n.d.), Household Budget Survey (2014–2023); ELSTAT (2024b).

4.3 Combined Expenditure on Tutoring Centres and Private Tutorial Lessons

The data highlight the central role of private supplementary education in Greece, with households consistently allocating significant resources to tutoring centres and private lessons. In 2023 alone, spending on these services approached €871 million, of which 70% was directed toward tutoring centres and 30% toward private lessons (Table 7). At the beginning of the decade, this distribution was notably different: in 2013, tutoring centres accounted for 66%, while private lessons represented 34% of total spending. This shift indicates a gradual but clear trend in favour of organised tutoring services. It may reflect their increasing availability and institutionalisation, as well as their relative affordability compared to private lessons — a factor that may have become more decisive under prolonged economic pressure.

Table 7: Total Household Expenditure on Tutoring Centres and Private Lessons Compared to GDP and Public Education Expenditure (Current prices, € million)

Year	Expenditure on Tutoring centres (€)	Expenditure on Private Tutorial Lessons (€)	% Private Tutorial Lessons	Total Expenditure on Tutoring centres & private lessons (€)	% of GDP	% of Public Expenditure on Education ^(*)
2013	€500.9	€256.7	33.9%	€757.6	0.43%	13.0%
2014	€491.3	€266.1	35.1%	€757.4	0.43%	13.5%
2015	€454.3	€265.8	36.9%	€720.1	0.41%	12.9%
2016	€438.3	€240.3	35.4%	€678.7	0.39%	13.1%
2017	€434.7	€220.3	33.6%	€655.0	0.37%	12.8%
2018	€451.5	€196.1	30.3%	€647.6	0.36%	11.6%
2019	€428.7	€238.3	35.8%	€667.1	0.36%	11.8%
2020	€392.8	€227.9	36.7%	€620.7	0.37%	10.5%
2021	€398.9	€176.0	30.6%	€574.8	0.31%	9.9%
2022	€569.2	€251.6	30.6%	€820.8	0.40%	13.7%
2023	€614.0	€257.0	29.5%	€871.0	0.39%	13.7%

Source: (1) ELSTAT. (n.d.). Household Budget Survey (2013–2023) [Data set].

(2) ELSTAT. (2023). Gross Domestic Product (1995–2023) [Data set].

(3) Ministry of Economy & Finance. (n.d.). State Budget Revenue and Expenditure Report (2013–2023) [Data set].

*Data on public education expenditure are based on calculations using the methodology of KANEP (2011, pp.109-123), applied to data retrieved from the State Budget Revenue and Expenditure Reports published by the Ministry of Economy & Finance (n.d.).

Total household expenditure on these services in 2023 amounted to nearly 0.4% of GDP (Table 7). Over the past decade, household spending on these services as a share of GDP has remained relatively stable, fluctuating only slightly between 0.31% and 0.43%. This consistency is particularly striking in the context of prolonged economic instability, and it highlights the extent to which families prioritize private educational support — even under adverse financial conditions. When compared to public education expenditure, private supplementary education represents a considerable parallel investment. In 2023, private household spending on tutoring centres and private lessons accounted for

approximately 14% of the total public education budget, a proportion that has fluctuated between 10% and 14% over the past decade. These figures underscore the growing reliance on private resources to fulfil educational needs and reaffirm the structural and unequal nature of shadow education in Greece.

5. Discussion and Conclusions

The issue of "*shadow education*" is a complex phenomenon with international characteristics. It clearly involves much more than just expenditures on tutoring centres and private tutorial lessons; it is also tied to a widespread culture of relying on the purchase of private tutoring services. Moreover, the development of "*shadow education*" aligns with the rhetoric and strategies that question and devalue the role of public policies, an assumption we must consider within the broader political and ideological context of reflecting on the role of education and educational policy. Undoubtedly, behind "*shadow education*" lie serious educational and social inequalities, perpetuating and reproducing irrationalities and distortions that maintain social and professional hierarchies for the benefit of privileged social groups.

In Greece, tutoring centres and private lessons are traditionally associated with students' preparation for nationwide university entrance examinations, as well as with the broader efforts of Greek families to achieve upward social and professional mobility through educational mechanisms. Therefore, the expenditure trends for the decade 2013-2023 show an upward trajectory that, despite the country's economic difficulties, underscores the influential role of tutoring centres in educational careers. This presents a contradiction that requires reflective consideration, particularly with regard to the future of the public education system. In particular, during the decade 2013-2023, expenditure on organized tutoring centres increased by 10%. Specifically, expenditure on primary education tutoring quadrupled, while spending on secondary education tutoring increased by about 8%. Expenditure on tertiary education, despite fluctuations, remained at relatively stable levels. At the same time, spending trends are increasing in urban areas and decreasing in rural areas, with urbanization continuing to have a decisive impact, highlighting the inequalities between the "*centre and periphery*". In terms of income, we see that spending on tutoring is increasing across almost all income levels, with the exception of the lowest and highest-income households, where a decrease is observed. It is clear that the lowest-income households continue to struggle, while the highest-income households are shifting towards other educational alternatives (e.g. private and international schools, foreign universities, etc.). Private tutorial expenditure has decreased by approximately 10%, which is clearly linked to the country's overall economic situation over the past decade. Specifically, expenditure on private lessons for primary education students has quadrupled, while spending on secondary education tutorials has fallen by 20%. While spending on private tutorials declined only slightly in urban areas, the drop was significantly more pronounced in rural regions. However, spending has (surprisingly) increased dramatically in the two lowest-income classes,

while it has decreased in the two highest-income classes. This contradiction highlights a paradoxical dynamic of the phenomenon, as today, beyond traditional University entrance, new educational options are continuously emerging, such as distance learning, international programs and direct studies abroad. It is clear that the elite social classes are gradually adopting a different approach to Greek Universities, and, by extension, to the admission process, leading them to opt for alternative pathways that move away from spending on tutoring centres or private preparation courses. In conclusion, total private tutoring expenditure in contemporary Greece remains high and has shown relative stability over the past decade — whether measured as a share of GDP or as a proportion of public education spending — despite the economic hardships and fiscal crises the country has faced.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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