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Abstract

The relationship between private education and social inequality has long been central to academic and policy debates. While private schools are often justified as mechanisms to diversify provision and accommodate parental preferences, extensive evidence shows that they also contribute to school segregation and the reproduction of privilege. This article examines how urban transformations - specifically gentrification- reshape the determinants of private school demand, and whether these dynamics differ between primary and secondary education. Focusing on Barcelona -characterised by a strong tradition of publicly subsidised private schooling, a choice-oriented admissions system, and ongoing neighbourhood change- the study explores families' decisions to opt out of local public schools. Drawing on population register data, the analysis investigates the determinants of private school demand in primary education, its evolution between 2014 and 2023, and patterns of transition to private secondary education. The findings show that private schooling operates as a form of selective exit associated with “white flight”, but that this relationship is strongly conditioned by local contexts. In gentrifying neighbourhoods, opting out of public education at the primary level is less pronounced, suggesting forms of selective tolerance, while transitions to private secondary schooling remain more weakly constrained.

Keywords: private education, school segregation, gentrification, school choice

Introduction

The relationship between private education and social inequalities has been at the centre of academic and policy debates for decades. While private schools are often presented as a way to diversify supply and accommodate parental preferences within local education markets (LEMs), a growing body of research reveals that they also play a central role in reproducing and deepening educational inequalities (Boeskens, 2016; Zancajo et al., 2025). Comparative analyses indicate that the expansion of private and publicly subsidised private school sectors is often linked to increased socio-economic segregation and the stratification of educational opportunities. Private schooling is associated with higher levels of social segregation (Molina and Gallo, 2025), inequalities in resource distribution that produce cumulative advantages to its users (Green, 2024) or the marginalisation of public schools, which often face reduced funding and an increasing proportion of disadvantaged students (OECD, 2024).

The role of private schools extends beyond simply diversifying provision. In many contexts, they operate as an “exit” option for families seeking to avoid local schools they perceive as undesirable, often because of rising shares of immigrant or low-income students (Jahnen and Helbig, 2022). This process—commonly conceptualised as *white flight*—illustrates how private schools provide middle-class families with the possibility of distancing themselves from the consequences of demographic and social change. White flight dynamics are not limited to residential mobility -from which the term originates- but are also manifested in the selective use of private education to bypass diverse public schools (Graves, 2024; Wilson, 2019). In this sense, the growth of private schooling is not only about “choice” but about risk management and the safeguarding of privilege by certain social groups (Bonal et al., 2024).

These risk-aversion strategies intersect with broader processes of urban transformation. Research in urban education suggests that gentrification can reshape local education markets by influencing parental school choice and, in some cases, increasing demand for private schooling. Middle-class households moving into gentrifying neighbourhoods may be attracted to culturally exciting inner-city areas but often avoid local public schools to secure quality educational opportunities for their children and reduce perceived risks associated with living in socially and culturally diverse areas, including concerns about peer composition and the social fit of local schools (Candipan, 2020; Boterman, 2022)

Such strategies of selective engagement and withdrawal could be especially visible at key educational transitions. The transition from primary to secondary education, when families reassess risks and opportunities in local markets, represents a particularly sensitive moment (Ball, 2003; van Zanten, 2009). Evidence suggests that many middle-class families who opted for the public sector during primary schooling transfer to private independent or publicly subsidised private schools at secondary level., Concerns about academic quality, peer composition, and social mobility. These concerns tend to intensify

as children get older and enter secondary education, driving this transfer (Moor and Branje, 2022; Boterman, 2013).

Against this background, the article addresses two main research questions. First, how does gentrification shape demand for private schooling in primary education, and how have these patterns evolved over time? Second, to what extent do the determinants of opting out of public education differ between initial enrolment in primary school and transitions to secondary education? While existing studies have explored how middle-class families respond to demographic change through residential mobility or selective engagement with local schools, less is known about how these mechanisms operate simultaneously across urban and educational transitions. Barcelona provides a particularly relevant context for analysing the role of private schools in facilitating white flight. The city's education system is marked by a strong demand for publicly subsidised private schools and persistent patterns of residential and school segregation along socio-economic and immigrant-origin lines (Bonal et al., 2019). Previous research has shown that middle-class families strategically navigate local education markets, mobilising resources and information to secure access to preferred schools, including publicly subsidised private ones (Bonal et al., 2024; Scandurra et al., 2022). The possibility to opt out of local schools is further reinforced by an admissions system that offers considerable school choice. In particular, the combination of catchment areas that are not entirely restrictive with a wide range of schooling options makes Barcelona a good case for analysis. Moreover, the city's gentrification processes have extended across highly diverse neighbourhoods (Lopez-Gay et al., 2020) —both socially and spatially— allowing for a comparative examination of how local contexts shape patterns of school choice and private school demand.

The article is structured as follows. The next section reviews the state of the art on private schools, gentrification and white flight. Section three introduces Barcelona as a LEM and outlines the role of private schools in its educational landscape. Section four presents the data and methods employed in the analysis. Section five presents the results addressing the two main research questions of the study: the evolution and drivers of private school demand and the determinants of transitions from public to private schools when entering secondary education. The final section reflects on the implications of these findings for understanding the role of private schools in white flight dynamics and their contribution to educational inequality.

Private Schools as Opting-Out Strategies in Gentrifying Urban Contexts

Gentrification has become one of the defining transformations of contemporary cities (Lees, 2008). Initially understood as the middle-class return to inner-city neighbourhoods, it is now seen as a multifaceted process driven by the interplay of market dynamics, state intervention, and cultural revalorization (Zukin, 2010). These forces reconfigure both the physical and social dimensions of urban life, reinforcing patterns of inequality and displacement even in welfare-oriented contexts (Musterd et al., 2017). As developers,

investors, and new social groups reshape neighbourhoods, gentrification emerges not merely as a spatial or economic process but also as a deeply social one—transforming everyday life, community relations, and access to key institutions such as education (Butler, 2007; Hyra, 2015).

Scholars are increasingly exploring the relationship between these urban processes and patterns of school choice. Research has focused on how parents navigate local education markets in gentrifying neighbourhoods, examining the factors that drive families to either enrol in or bypass nearby schools (e.g., Butler & Robson, 2003; Posey-Maddox et al., 2016). Parental decisions are shaped not only by perceptions of school quality but also by social networks, class-based dispositions, and broader concerns about safety, risk, and community belonging. Moreover, school market configuration and educational policies can profoundly shape families' choices and the overall dynamics of the educational landscape. The proliferation of school choice policies—including charter schools and voucher programs—has expanded the range of educational options available to families (OECD, 2019). The expansion of school choice allows families to separate where they live from where their children attend school, giving them greater flexibility in aligning educational options with their preferences. While these reforms are often promoted as a way to increase diversity in the educational marketplace, they can also reinforce segregation, understood here as the systematic sorting of students across schools that reflects and reproduces social and spatial inequalities. Research on urban education shows that such segregation is closely linked to neighbourhood inequalities and gentrification, contributing to the reproduction of social hierarchies even in mixed urban areas (Owens, 2016; Pearman, 2019). Interestingly, school choice functions simultaneously as a consequence and a catalyst of gentrification. Pearman and Swain (2017) show that expanded school choice accelerates gentrification in racially segregated urban areas. Their study finds that college-educated white households are more likely to move into communities of colour when school choice options exist, highlighting how educational policy and urban transformation are closely connected.

A key mechanism linking gentrification, school choice, and educational stratification lies in the decoupling of neighbourhood residence from school assignment. The expansion of school choice policies allows families to differentiate their tolerance for social and cultural diversity across domains of everyday life. While gentrifiers may embrace the heterogeneity of inner-city neighbourhoods -often valuing diversity as part of the symbolic appeal of urban living- they are considerably less willing to expose their children to the same diversity in schools. School choice thus enables a form of selective tolerance, making it possible to remain residentially embedded in diverse neighbourhoods while simultaneously enacting educational withdrawal through private or quasi-private options. Rich et al. (2021), for example, show that charter and private schooling options allow advantaged families to avoid local public schools without relocating, thereby maintaining high levels of school segregation even as neighbourhoods become more mixed.

The dynamics of school choice in urban areas undergoing gentrification have become increasingly complex. Middle-class families are often drawn to inner-city neighbourhoods, where they engage in forms of elective belonging, selectively participating in the social and cultural life of the area while maintaining the option to opt out of certain local institutions (Savage, 2010). At the same time, they enact strategies of partial exit (Andreotti et al., 2013), selectively disengaging from local public services, (especially schools) while continuing to participate in neighbourhood life.

A substantial body of research points out that such strategies often translate into patterns of white flight. Historically, white flight referred to the residential relocation of white families away from racially diverse neighbourhoods in the United States, but scholars now commonly extend the concept to include schooling strategies in which families avoid local public schools in favour of private or more socially homogeneous alternatives (Orfield & Lee, 2005; Boterman et al., 2019). Partial exit involves selectively disengaging from certain local public services —most notably schools— while continuing to participate in neighbourhood life, a strategy made possible by the institutional separation between residential location and school enrolment in choice-based systems.

Research has widely shown that school choice decisions are shaped by class and racial biases, influencing patterns of mobility and educational demand. Opting out of local schools is, in fact, a central mechanism through which school segregation is reproduced (Bonal & Zancajo, 2022). Boterman (2022), in his analysis of Amsterdam, shows that families with higher cultural capital selectively choose high-SES schools even in socially mixed neighbourhoods, highlighting the role of educational strategies in reproducing social hierarchies within mixed urban spaces. Research in Spain shows that the school-related commuting choices of highly educated families are closely tied to the availability and perceived quality of local schools (Bonal et al., 2024). In particular, the decision to enrol children in private subsidized schools is strongly shaped by the social composition of nearby public schools: when local public schools are perceived as higher status, families are less likely to opt for private alternatives (Scandurra et al., 2022). Yoon et al. (2017) demonstrate that in Vancouver, families with relatively higher socioeconomic and cultural capital predominantly enter over-subscribed schools in affluent areas and leave under-subscribed neighbourhood schools. In other words, families from advantaged neighbourhoods bypass low-demand schools and cluster in high-demand ones, reinforcing the advantages of affluent social groups and deepening educational stratification.

Evidence remains inconclusive regarding the persistence of opting-out logics of school choice in gentrifying urban contexts. In US gentrifying school districts, Pearman (2019) observes a strong association between the influx of white, middle-class residents and the declining enrolment of local students in neighbourhood public schools. Pearman points out that gentrification not only triggers white flight but also pushes economically disadvantaged families out of both the neighbourhood and local schools. This twofold displacement undermines the role of neighbourhood schools as sites of social mixing,

instead reinforcing existing educational inequalities. At a broader national level, Candipan (2020) shows that gentrifiers are considerably more prone than long-term residents to seek schooling alternatives, producing a growing mismatch between the demographic composition of local schools and that of the neighbourhoods where they are located. Li (2009) similarly finds that in gentrifying areas, white middle-class families often opt out of local public schools in favour of private education, reinforcing social and racial separation even within ostensibly mixed neighbourhoods.

However, while much research highlights middle-class families' tendencies to opt out of local schools, recent scholarship suggests that gentrification produces more differentiated and selective schooling responses. In some contexts, neighbourhood social change is associated with limited forms of school diversification, particularly at the primary level. Studies from New York City show that although many gentrifiers continue to avoid local public schools, a minority opt in, sometimes contributing to modest reductions in school segregation under specific institutional conditions (Mordechay & Ayscue, 2020; 2022). Likewise, in their study of London, Butler and Robson (2003) describe "circuits of schooling" as closely intertwined with local processes of gentrification. They show that the organization of school markets—particularly the distribution and reputation of primary and secondary schools—plays a central role in shaping whether middle-class families engage with or withdraw from local education. Educational choices, in turn, are not solely the outcome of parental values or economic capital but are embedded in the spatial and social configurations of the neighbourhoods where families reside. Through these circuits, housing decisions, schooling strategies, and social networks become mutually reinforcing, illustrating how education both drives and reflects urban restructuring.

However, other studies reveal a more complex reality. In some cases, gentrifiers contribute to an increasing demand for public schools, particularly in neighbourhoods undergoing social change. Boterman (2013), for instance, identifies strategies such as "engaging diversity through colonising," where middle-class parents—especially those with high cultural but limited economic capital—choose mixed local schools and become active participants in their transformation. Other studies also point to this selective engagement. Posey-Maddox et al. (2016), studying gentrifying areas in Boston, Chicago, and Philadelphia, show that some families actively choose local schools once they perceive a "critical mass" of similar parents, fostering networks of mutual support. In the UK, Reay et al. (2011) and Crozier et al. (2011) describe comparable patterns: middle-class families who, despite moral tensions about inclusivity and school quality, increasingly opt in to public schools, seeking to align educational choices with their social and ethical values.

Overall, evidence from diverse urban contexts reveals mixed evidence regarding the impact of gentrification on the dynamics of school demand. Rather than producing uniform patterns of either exit or integration, gentrification generates selective responses shaped by families' resources, institutional opportunity structures, and the extent to which

school choice allows neighbourhood and school trajectories to diverge. On one hand, private and publicly subsidised private schools remain key routes of exit from local public education, allowing middle- and upper-middle-class families to reconcile their residential choices with classed aspirations and to preserve social advantage. Such strategies contribute to what Butler and Hamnett (2011) describe as “micro-segregation,” where social divisions are reproduced not only through residential patterns but also through differentiated access to educational spaces. On the other hand, other studies argue that gentrification may also incentivise renewed engagement with public schools. Some middle-class households—particularly those with high cultural but less economic capital—choose to enrol their children in local public schools, seeking to align educational practices with ideals of inclusivity and civic responsibility. These families often play an active role in reshaping school reputations and practices, thereby increasing demand for local institutions.

Our study contributes to the literature in two main ways. First, it examines school choice behaviour in gentrifying contexts in Europe, where evidence remains relatively scarce compared to the US, and particularly in contexts like Barcelona, where private schooling constitutes a substantial share of local education. This allows us to explore how gentrification interacts with diverse schooling options to shape patterns of educational stratification in a Southern European setting. Second, rather than focusing solely on rates of opting out or opting in, our approach highlights how local contextual factors—such as school market structure, neighbourhood composition, and institutional opportunity—interact with family resources and perceptions to shape school choice decisions. This perspective illuminates the mechanisms linking urban transformation to educational inequality, offering a more nuanced understanding of selective tolerance and partial exit.

Gentrification and private educational demand in Barcelona

Over the past two decades, Barcelona has experienced profound urban transformations linked to processes of gentrification and shifting patterns of residential mobility (Cocola-Gant & Lopez-Gay, 2020; Lopez-Gay et al, 2020). The 2008 financial crisis marked a critical moment in this trajectory, reshaping the city’s housing market and the social composition of many neighbourhoods. As in other European urban contexts, economic restructuring, real estate speculation, and the expansion of short-term rental platforms have intensified gentrification, often supported by urban renewal policies benefiting middle- and upper-income groups (García-Lamarca, 2017; Cocola-Gant, 2018). These dynamics led to the displacement of lower-income populations and the transformation of local commercial landscapes (Smith, 2002). Tourism growth and digital nomadism further amplified these pressures, with the expansion of platforms pushing rents upward and reducing housing availability (Cocola-Gant & Lopez-Gay, 2020). As a result, the social geography of the city has been redefined: gentrified neighbourhoods have attracted more affluent and highly educated residents, while lower-income households have been

increasingly displaced to peripheral zones (Lopez-Gay et al., 2020; Sorando & Ardura, 2018).

The effects of gentrification extend beyond housing and intersect with the structure of Barcelona's local education market. The city has a particularly high concentration of privately managed schools, most of which are publicly subsidised (*escoles concertades*). Currently, 54% of primary and lower secondary students are enrolled in these subsidised private schools, compared to 45% in public schools and only 1% in fully independent private institutions. The demand for private education is especially high at the secondary level, where 61.1% of students attend subsidised private schools, compared to 51.1% in preschool and primary education (CEB, 2024). This shift suggests that the transition to secondary schooling alters the school choice preferences of numerous families.

Access to public and private subsidised schools are regulated through an admissions system that combines territorial proximity with a wide range of choice options. Barcelona is divided into 29 school catchment areas for primary education and 26 for secondary education, where residents have priority access to both public and subsidised private schools located within their designated area. These catchment areas were defined in 2012 and have remained stable since then, ensuring that comparisons across cohorts are not affected by changes in geographic boundaries. Since then, however, the admissions policy has been designed to extend families' choice beyond these boundaries. The reform introduced additional proximity criteria, granting priority to the three nearest public and three nearest subsidised private schools, as well as all schools within 500 metres of a family's residence. When necessary, further schools were added to guarantee at least six public and six subsidised private options per student. Consequently, the average number of schools for which families had geographical priority nearly doubled—from 7.9 to 16.7 in 2012 (CEB, 2012). On average, this meant access to 9.0 public and 9.6 subsidised private schools.

While this policy aimed to equalise opportunities across the city, substantial geographical inequalities persist. The density and diversity of available schools vary sharply between districts and even within catchment areas. Central and northwest neighbourhoods have the highest concentration of schools within walking distance, while peripheral zones offer fewer nearby options. Moreover, subsidised private schools are disproportionately located in affluent areas, often accompanied by additional fees that restrict access for low-income families (Bonal et al., 2019). These schools typically enrol fewer students from disadvantaged or immigrant backgrounds than public schools, reinforcing a pattern of social stratification across the city's educational landscape.

Figure 1. Percentage of private seats in primary education by catchment areas

[Insert Figure 1 here]

Source: own elaboration

Although Barcelona's controlled choice model formally combines proximity and choice, in practice it creates the conditions for high student mobility and social sorting. The unequal spatial distribution of school types gives middle-class families, especially in gentrifying areas, the opportunity to opt out of the public sector through enrolment in subsidised private schools.

Given trends in gentrification and privatization in the city, this article aims to answer two main research questions:

RQ1: How has enrolment in private primary schools in Barcelona evolved in the last decade, and what factors explain parents' choice of private schools?

RQ2: How do preferences for private schools change during the transition from primary to secondary education in Barcelona, and which factors explain this transition?

Data and methods

To answer these questions, we collected data across three dimensions: household-level characteristics, local educational market conditions, and socioeconomic features of the neighbourhood, including gentrification levels.

Individual-level information was obtained from administrative records covering pre-primary and primary education for the 2021-2022 and 2022-2023 school years. The analysis draws on multiple data sources. First, we accessed official datasets from the Catalan Government's Department of Education, including all students aged 3 to 16. These records contain detailed demographic information such as student number, birthdate, country of birth, gender, special educational needs, and home address. To complement these data, we linked the records to census information, allowing us to infer parental education levels and migrant background, which were incorporated as household-level variables in the analysis.

To characterise local education markets, we used a comprehensive school database containing information on school identifiers, sector (public, subsidized private, or independent private), district, catchment area, enrolment, capacity, social composition indicators, and other relevant attributes. Using the catchment area as the unit of analysis, first, we computed the proportion of available private school places, including both subsidized and independent ones. We grouped subsidised and independent private schools together because there is substantial heterogeneity within both subsystems in terms of costs, educational orientation, and social exclusivity. Evidence from the Spanish context shows that many subsidised schools charge fees that vary substantially across institutions, and both subsidised and independent schools tend to enrol fewer disadvantaged and migrant students than public schools (Bonal et al., 2024). Second, we calculate the proportion of places in schools classified by the local authority as facing high or very high socio-educational disadvantage in each catchment area, based on the share of students eligible for free school meals, migrant students, and other vulnerability indicators.

Neighbourhood characteristics were drawn from the Spanish National Institute of Statistics (INE), providing detailed socioeconomic context for each area. We used census tract data to capture family disposable income and the proportion of residents originating from low-income countries, covering all 73 Barcelona neighbourhoods. To account for urban change, we incorporated the Gentrification Index by Lopez-Gay et al. (2021), which measures sociodemographic shifts from 2011 to 2019. This index combines six dimensions—age, origin, socioeconomic status, household composition, population turnover, and pace of change—integrating both static census snapshots and dynamic migration and mobility flows to quantify neighbourhood transformation comprehensively.

The general dataset covers all stages of compulsory education and includes 175,118 students aged 3 to 16 during the 2022–2023 school year. To analyse changes over time, we work with three subsets of this dataset, corresponding to key transition points in the education system: I3 (first year of preschool education, N = 11,136), PRI6 (last year of primary education, N = 13,889), and ESO1 (first year of secondary education, N = 14,296). Each subset captures school choices made at a different point in time, as students in PRI6 entered their current schools in 2014/2015, whereas those in I3 and ESO1 made their school choice in 2022/2023. Table 1 presents the key descriptive statistics for the variables used in the analysis, by dataset.

Table 1. Descriptives of the variables included in the model

[Insert Table 1 here]

Source: own elaboration

In this paper we examine two dependent variables:

- (i) **Opting for a private school** – This binary variable indicates whether a student attends a private school instead of a public school. Both subsidized private and independent private schools are classified as private. This analysis is conducted separately for students in the first year of pre-primary education, the final year of primary education, and the first year of secondary education to examine changes over time and across educational levels.
- (ii) **Transition from public primary school to private secondary school** – This binary variable indicates whether a student, upon completing their final year of primary education (2021/2022) in a public school, enrolled in a private secondary school in the following school year (2022/2023). The variable thus captures transitions from public to private institutions at the end of primary education.

The two dependent variables —opting for a private school and transition from public primary to private secondary school— reflect different dimensions of school choice. These choices are influenced by a combination of family characteristics, school market conditions, and neighbourhood contexts. By analyzing the factors shaping these decisions, we aim to understand how gentrification interacts with parental choices and contributes to broader patterns of educational stratification.

Our analysis employs logistic regression models for both outcomes. Model 1 focuses on family characteristics, including parental education (distinguishing university-educated parents, with those without higher education as the reference category) and socioeconomic background (comparing families of low-income foreign origin to natives and families from higher-income countries). Model 2 adds school market characteristics measured at the catchment-area level, which often encompass multiple neighbourhoods: the share of private school places, and the proportion of seats in schools classified as vulnerable based on their social composition. Model 3 introduces neighbourhood-level socioeconomic variables, including the percentage of foreign residents from lower-income countries, the average neighbourhood income, and the gentrification index to capture urban transformation. The three models are built sequentially to allow for a comprehensive assessment of how individual, school market and neighbourhood characteristics shape school choice patterns.

Trends and drivers of change in private education demand

Enrolment in private pre-primary and primary schools has declined over the past decade in the city (Figure 2). Overall, the share of students attending private schools in primary education fell from 54% in 2014 to 48% in 2023. The decline has been gradual and especially pronounced among families with higher educational attainment. As a result, the gap in private school attendance between families with and without higher education has narrowed. The trend in secondary education has been different. On the one hand, demand for private education is higher than in primary education (62% vs. 48% in 2023). On the other hand, average enrolment in private secondary schools has remained relatively stable throughout the last four years (the only period for which data are available). However, this apparent stability results from two contrasting dynamics: a decline in enrolment among students from families with higher educational attainment and a compensating increase among those from families without higher education since 2020.

Figure 2. Evolution of private education demand in primary and secondary education in Barcelona, 2014-2023

[Insert Figure 2 here]

Source: own elaboration

In both primary and secondary education, the growing preference for public education has been particularly pronounced in highly gentrified neighbourhoods (Figure 3), where families with higher education show -with few exceptions- a clear and consistent shift towards public schools. In contrast, the pattern is more irregular in low- and mid-gentrified areas, where trends in private school enrolment among both higher- and lower-educated families appear more erratic.

Figure 3: Evolution of private education demand in primary and secondary schools in Barcelona, by level of neighbourhood gentrification, 2014–2023

[Insert Figure 3 here]

Source: own elaboration

To examine the drivers of private school demand, we estimate a logit model assessing how family characteristics, school market factors, and neighbourhood features affect the likelihood of enrolling in a private school in the first year of pre-primary education, when families choose the school they will attend for the following 9 years (pre-primary and primary education). Table 2 reports the coefficients for the three cumulative models. Families with higher education are more likely to choose private schools, though this effect diminishes when accounting for all factors. Migrant families from low- and middle-income countries are less likely to enrol their children in private schools, but this effect is smaller once contextual variables are considered. School market conditions also matter: a higher supply of private school seats and a larger share of children in socially vulnerable schools both increase the probability of private school enrolment. Neighbourhood characteristics play a role as well. Higher neighbourhood income and the presence of foreign populations from low-income countries are associated with greater private school enrolment. In contrast, living in gentrified neighbourhoods reduces the likelihood of choosing a private school, consistent with the trend shown in Figure 3.

Table 2. Logit Model for private school choice, first year of enrolment in pre-primary education, 2022-23

[Insert Table 2 here]

Source: own elaboration

Following a decade of urban transformation, we test whether the effects of family, educational market, and neighbourhood characteristics on the choice of private education have changed over time. To do this, we compare results for children entering the school

in 2022/2023 (I3) with those from an identical logit model estimated for families who started the education system nine years earlier (PRI6), that is, in the academic year 2014–2015 (PRI6). Figure 4 displays the change in the standardized coefficients of the two models (see Table A1 in Appendix for full estimates). The results reveal notable shifts in the determinants of private school enrolment between 2014–15 and 2022–23. While in 2014–15 the probability of enrolling in a private school was strongly associated with having higher education ($\beta = 0.38$), this effect weakens considerably by 2022–23 ($\beta = 0.08$). This suggests that the influence of parental education on private school choice has declined over time, consistent with the descriptive trend showing a narrowing social gap in private schooling. Coming from a low- or middle-income country has a negative and significant effect in both years, though the magnitude decreases substantially over the period. While immigrant families remain less likely to choose private education, the participation gap has narrowed, largely due to local education policies aimed at improving the distribution of vulnerable students across public and publicly subsidised private schools (Bonal & González Motos, 2023).

School market-level variables show stable and positive associations with private school enrolment: both the proportion of students already attending private schools in the catchment area and the percentage of socially vulnerable students are positively related to private enrolment, and these effects remain largely unchanged across the two periods. By contrast, neighbourhood variables have shown substantial shifts in their influence on the patterns of private school choice. Higher average income in the area increases the likelihood of private school enrolment, and this effect has strengthened over time (from 0.36 to 0.56 standard-deviations). Interestingly, the share of low-income foreign residents becomes positively significant in 2022–23, suggesting a possible compensatory middle-class reaction to perceived demographic change. Finally, the gentrification index shows no significant effect in 2014–15 but a small negative effect in 2022–23 ($\beta = -0.007$), suggesting that gentrifying areas may increasingly retain families within the public sector rather than pushing them toward private schooling. The results may also reflect that the 2022–23 data reflect gentrification processes more accurately, as these dynamics were less pronounced or had not yet begun in 2014–15, and earlier measures may not fully represent pre-gentrification conditions.

Overall, the analysis shows that demand for private education in Barcelona has slightly declined and diversified over the past decade. While it remains socially and spatially structured, its drivers have shifted: parental education and migrant background have become weaker predictors, suggesting a decline of social inequalities. In contrast, neighbourhood wealth and local school-market dynamics continue to play a central role, with emerging signs that demographic change and gentrification are reshaping middle-class strategies toward public schooling.

Figure 4: Standardised effects on the probability of attending a private school in the first year of enrolment, 2014-15 and 2022-23.

[Insert Figure 4 here]

Source: Own elaboration

Our second research question aims to compare patterns of educational demand between primary and secondary education in order to identify whether different dynamics exist in each stage. Figure 5 shows that although demand for private education is higher at the secondary level, the factors explaining families' preferences for private schooling are not significantly different between the two stages. All predictors keep the same direction, and there are no substantial changes in their magnitude (see Table A2 in Appendix for full estimates).

Figure 5: Standardised effects on the probability of attending a private school in the first year of enrolment in primary and secondary education, 2022-23.

[Insert Figure 5 here]

Source: Own elaboration

However, this stable picture changes when we examine the factors influencing the transition to private schooling at the secondary level. Most students remain in the same school sector when moving from primary to secondary education. Between 2021 and 2022, 53.9% of students stayed in the private sector, 36.6% remained in the public sector, only 1.5% moved from private to public, and 7.9% switched from a public to a private school.

Figure 6 shows the spatial distribution and intensity of transitions to private schools across catchment areas. The map reveals that the rate of transitions to private schools is higher in the northeastern part of the city, where the wealthiest neighbourhoods are located and characterised by a greater provision of private schools. However, transitions to private secondary schools are also notable among students living in adjacent areas. Overall, access to private secondary education is more pronounced in the northern catchment areas and exceptionally high in one catchment area located to the west of Barcelona.

Figure 6. Percentage of students transitioning from public primary schools to private secondary education

[Insert Figure 6 here]

Source: Own elaboration

To investigate the factors that explain the transition to private secondary education, we estimate a logistic regression on the probability of moving from a public to a private school between the 2021–22 and 2022–23 school years (Table 3).

The results of the logistic regression highlight how both family background and local educational contexts shape the probability of moving from a public to a private school at the transition to secondary education. In the first model, which includes only family

characteristics, two clear patterns emerge. Students whose parents have higher education are significantly less likely to transfer to a private school. This finding suggests that, despite having the cultural and economic means to choose a private secondary school, highly educated families who opted for public primary education tend to remain in the public sector for secondary education as well. In contrast, students from low educated families or low- or middle-income countries show a much higher likelihood of moving to private schools during the transition to secondary education. This pattern may reflect the strategies of immigrant and low-educated families seeking upward social mobility or a safer, more controlled learning environment for their children. It may also be influenced by the aforementioned recent desegregation policies in the city.

When contextual variables are added in Model 2, the picture becomes more nuanced. The local composition of the school market appears to strongly influence family decisions: where there is a higher concentration of private schools in the catchment area the probability of moving to a private school rises significantly. The same pattern is observed with the proportion of school places in vulnerable schools within the area: the higher this proportion, the greater the probability of switching to a private school. This suggests that families respond to the opportunities and constraints of their local educational environment—school choice is shaped not only by preferences but also by availability and accessibility. In the full model (Model 3), which includes neighbourhood-level socioeconomic indicators, the effects of broader contextual variables—such as the proportion of migrant from poor countries, average income, or gentrification—are not statistically significant. This suggests that the characteristics of the school market, rather than the general socioeconomic context of the neighbourhood, is what most directly conditions school transitions.

Conclusions

The results presented in this study reveal a gradual but significant transformation in the patterns and determinants of private school demand in Barcelona. Over the past decade, enrolment in private primary schools has declined gradually, particularly among families with higher educational attainment, narrowing the social gap in private schooling. In secondary education, demand remains comparatively higher but has stabilized, with recent increases driven largely by families without higher education. These findings suggest that private schooling in Barcelona might be losing part of its traditional social exclusivity, a trend that distinguishes the city from other metropolitan contexts where private education continues to be a central mechanism of middle-class distinction (Li, 2009; van Zanten, 2009).

This shift coincides with a broader reconfiguration of middle-class educational strategies in gentrifying cities. Interestingly, the preference for public education in Barcelona has grown even as residential segregation (Blanco and Nello, 2018) and gentrification in the city have both intensified (López Gay et al., 2020). Contrary to what has been observed in Anglo-American contexts -where gentrification often triggers “white flight” or the

reinforcement of elite schooling enclaves (Butler & Hamnett, 2011; Candipan, 2020; Cucchiara, 2013)- the Barcelona case shows that middle-class families' residential and schooling choices are largely aligned. Middle-class families remain in gentrifying neighbourhoods and keep their children in public schools, reflecting renewed confidence in the public system while strategically aligning educational choices with aspirations, peer composition, and social integration. The increasing preference for public education among highly educated families, particularly in gentrified neighbourhoods, challenges the dominant narrative that urban middle classes systematically withdraw from local public schools as they increase presence in central urban areas. This apparently counterintuitive trend can be partially explained by education policies that have improved the quality and reputation of public schools, making them increasingly attractive to middle-class families (Bonal & González Motos, 2023).

At the same time, the study highlights a nuanced pattern among low-educated and migrant families, who are increasingly choosing private schools. This behaviour can be interpreted through the lens of evolving parenting norms. Recent research shows that strategies traditionally associated with middle-class concerted cultivation—such as intensive involvement in children's education and deliberate investment in schooling—are spreading across social groups (Ishizuka, 2019; Cano, 2022). In this context, low-educated and migrant families in Barcelona may be expressing aspirational mobility by investing both time and financial resources in private schooling (Dotti Sani & Treas, 2016). Their choices thus reflect broader processes of social repositioning, indicating that intensive, child-centered educational strategies are no longer exclusive to the middle class. Importantly, this shift must also be understood in relation to desegregation policies, which have expanded the likelihood that disadvantaged families enrol their children in private schools. By altering access, incentives, and perceived opportunities within the public sector, these policies can create conditions under which private schooling becomes a viable—or strategically attractive—option for low-educated, migrant, and economically vulnerable families, rather than the traditionally exclusionary choice it has historically represented.

The regression results reveal these dynamics. The predictive power of parental education and immigrant background has weakened over time, signalling a modest decline in the social polarization of school choice. In contrast, structural factors related to the local school market—such as the concentration of private schools and the proportion of socially vulnerable schools in the catchment area—remain strong and stable determinants of private school enrolment. This persistence indicates that while individual-level inequalities may have softened, spatial inequalities tied to the educational supply continue to shape opportunities for school choice (Boterman, 2022; Oberti and Savina, 2019). The growing effect of neighbourhood income on private school attendance reinforces this spatial dimension, suggesting that the geography of educational opportunity is increasingly stratified, even within a context of declining overall private enrolment, highlighting the spatially embedded nature of school choice.

The findings on the transition from primary to secondary education offer additional insights. Although most students remain in the same school sector, those who do change reflect distinct school choice rationalities: highly educated families are less likely to move to private education, but students from low-educated and immigrant families are more likely to do so. These differentiated strategies highlight two simultaneous processes: middle-class families maintain their confidence in the public system, while low-educated and migrant families are increasingly expressing aspirational investment in private schooling. These dynamics reflect broader processes of social repositioning within an urban context shaped by both gentrification and diversification (Bridge et al., 2012).

Interestingly, the decision to move from a public to a private school is strongly conditioned by the local educational environment rather than by broader socioeconomic neighbourhood characteristics. The density of private provision and the concentration of socially vulnerable schools within the catchment area have significant influence, consistent with research highlighting how school market conditions constrain and mediate parental preferences (Bunar, 2010; Butler & van Zanten, 2007). These findings thus stress the need to analyse school choice as a spatially embedded process shaped by institutional and market configurations as much as by family preferences or cultural capital.

Overall, the Barcelona case challenges the dominant assumption that gentrification necessarily leads to educational privatization and segregation. Instead, it reveals a more complex interaction between urban change, educational policy, and class strategies. The relative strengthening of public education, supported by municipal and regional initiatives to improve quality and reduce social imbalances, appears to have mitigated processes of white flight (Bonal & González Motos, 2023), while the partial uptake of private schooling by low-educated and migrant families reflects the diffusion of intensive parenting and aspirational investment strategies across social groups. In doing so, it has fostered a partial re-legitimization of public schooling among the urban middle classes. However, this shift coexists with persistent inequalities structured by the geography of educational markets.

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Table 1. Descriptives of the variables included in the model

	<i>General dataset</i>	<i>I3</i>	<i>PRI6</i>	<i>ESO1</i>
<i>Family variables</i>				
Family with Higher Education	48%	55%	47%	46%
Family with foreign background from low-income countries	16%	15%	15%	16%
<i>School Market in Catchment Area</i>				
% private school seats	56%	49%	55%	62%
% seats in vulnerable schools	13%	16%	15%	10%
<i>Neighbourhood variables</i>				
% foreign population from low- income countries	Mean (12.9%), min (3.6%), max (39.3%)			
Income mean	Mean (99,1), min (51.37), max (174.55)			
Gentrification Index	Mean (41.8), min (13.3), max (86.9)			

Table 2. Logit Model for private school choice, first year of enrolment in pre-primary education, 2022-23

	Dependent Variable: Schooling in Private Schools		
	(1)	(2)	(3)
<i>Family variables</i>			
Family with Higher Education (ref. No Higher Education)	0.152*** (0.039)	0.152*** (0.046)	0.088* (0.047)
Family with foreign background (ref. native family)	-0.291*** (0.054)	-0.181*** (0.062)	-0.181*** (0.063)
<i>School Market in Catchment Area</i>			
% public school seats		0.030*** (0.001)	0.018*** (0.002)
% seats in vulnerable schools		0.003*** (0.001)	0.010*** (0.002)
<i>Neighbourhood variables</i>			
% foreign population from poor countries			0.028*** (0.006)
Income mean			0.022***

			(0.002)
Gentrification Index			-0.007***
			(0.002)
Constant	-0.068**	-1.585***	-3.348***
	(0.031)	(0.079)	(0.199)
Observations	11,136	9,606	9,606
Log Likelihood	-7,689.790	-6,336.798	-6,259.088
Akaike Inf. Crit.	15,385.580	12,683.590	12,534.180

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Own elaboration

Table 3. Logit Model for transiting from a public to a private secondary school, 2022-23

	Dependent Variable:		
	Transition from public to Private Secondary Schools		
	(1)	(2)	(3)
<i>Family variables</i>			
Family with Higher Education (ref. No Higher Education)	-0.164***	-0.177**	-0.186**
	(0.052)	(0.081)	(0.082)
Family with foreign background (ref. native family)	0.496***	0.527***	0.535***
	(0.059)	(0.092)	(0.092)
<i>School Market in Catchment Area</i>			
% public school seats		0.017***	0.017***
		(0.002)	(0.002)
% seats in vulnerable schools		0.008***	0.010***
		(0.002)	(0.003)
<i>Neighbourhood variables</i>			
% foreign population from poor countries			-0.005
			(0.010)
Income mean			0.001
			(0.003)
Gentrification Index			0.0004
			(0.003)
Constant	-1.574***	-2.656***	-2.720***
	(0.036)	(0.145)	(0.345)
Observations	11,644	5,193	5,193
Log Likelihood	-5,393.272	-2,323.946	-2,323.471
Akaike Inf. Crit.	10,792.540	4,657.892	4,662.943

Note: *p<0.1; **p<0.05; ***p<0.01

Table A1. Standardised Estimates for primary education 2022/2023 and 2014/2015 (Logit Model for private school choice)

	2022 / 2023			2014 / 2015		
	Coefficient	CI		Coefficient	CI	
Intercept	-0.08	-0.15	0.00	0.04	-0.02	0.10
Family with Higher Education	0.09	0.00	0.18	0.39	0.31	0.47
Family Low-income country	-0.18	-0.30	-0.06	-0.57	-0.68	-0.46
% private school seats	0.32	0.26	0.38	0.33	0.28	0.38
% seats in vulnerable schools	0.24	0.16	0.31	0.19	0.13	0.26
% foreign population low-income countries	0.20	0.11	0.28	0.00	-0.07	0.08
Income mean	0.56	0.47	0.65	0.36	0.28	0.44
Gentrification Index	-0.11	-0.16	-0.05	-0.01	-0.05	0.04

Table A2. Standardised Estimates for first year of primary education and secondary education 2022/2023 (Logit Model for private school choice)

	Primary Education			Secondary Education		
	Coefficient	CI		Coefficient	CI	
Intercept	-0.08	-0.15	0.00	0.42	0.36	0.48
Family with Higher Education	0.09	0.00	0.18	0.21	0.13	0.29
Family Low-income country	-0.18	-0.30	-0.06	-0.15	-0.26	-0.05
% private school seats	0.32	0.26	0.38	0.27	0.23	0.32
% seats in vulnerable schools	0.24	0.16	0.31	0.19	0.13	0.25
% foreign population low-income countries	0.20	0.11	0.28	0.06	-0.02	0.13
Income mean	0.56	0.47	0.65	0.45	0.37	0.53
Gentrification Index	-0.11	-0.16	-0.05	-0.08	-0.12	-0.04

Figure 1

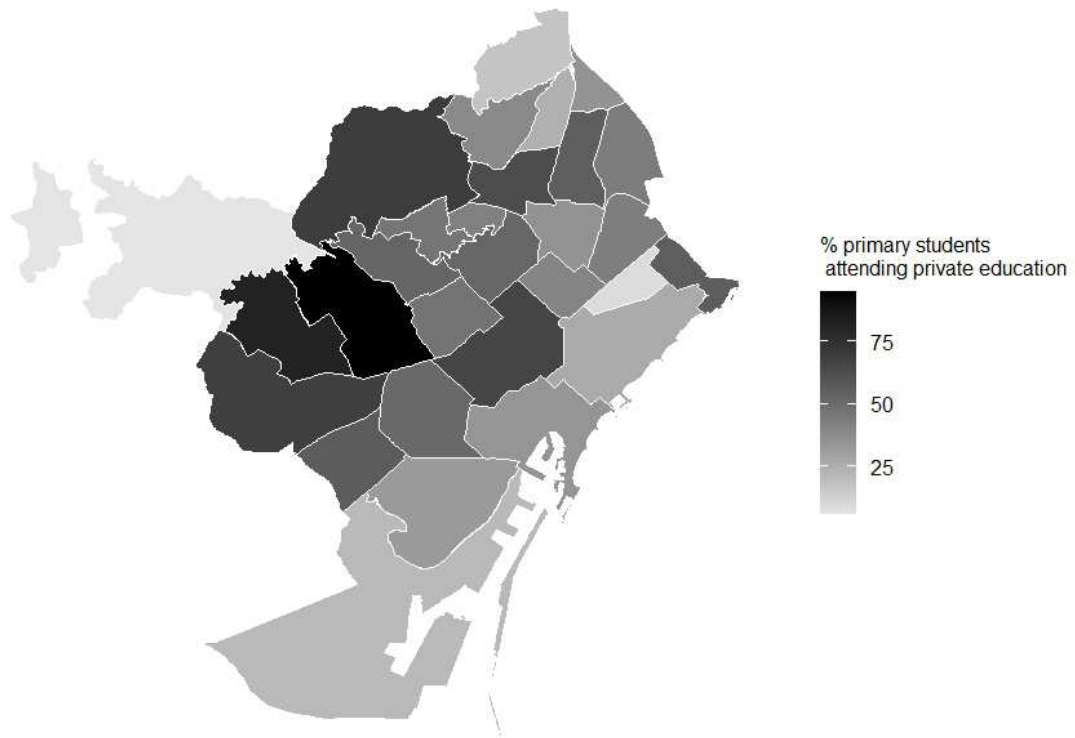


Figure 2

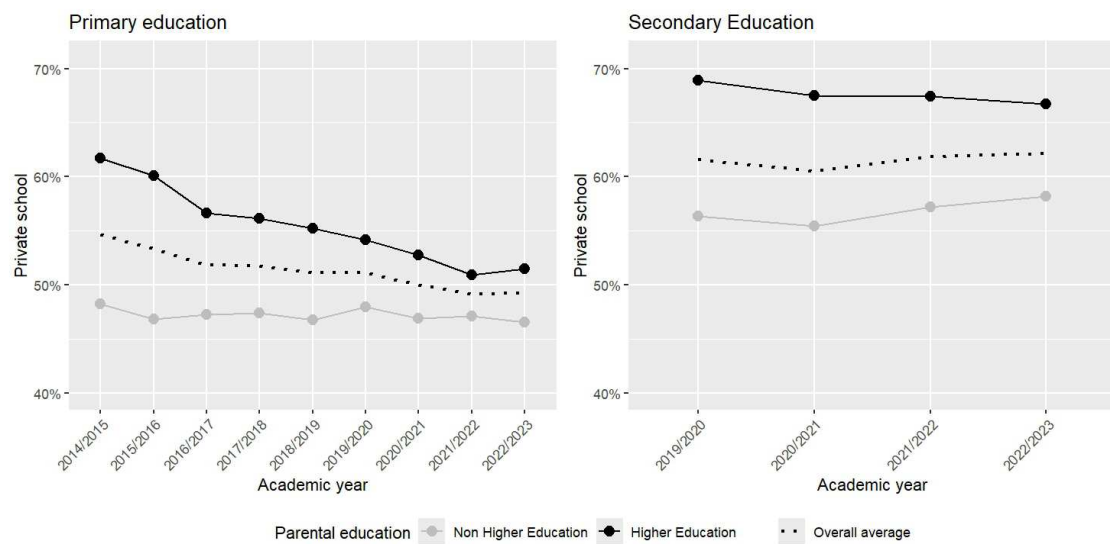


Figure 3

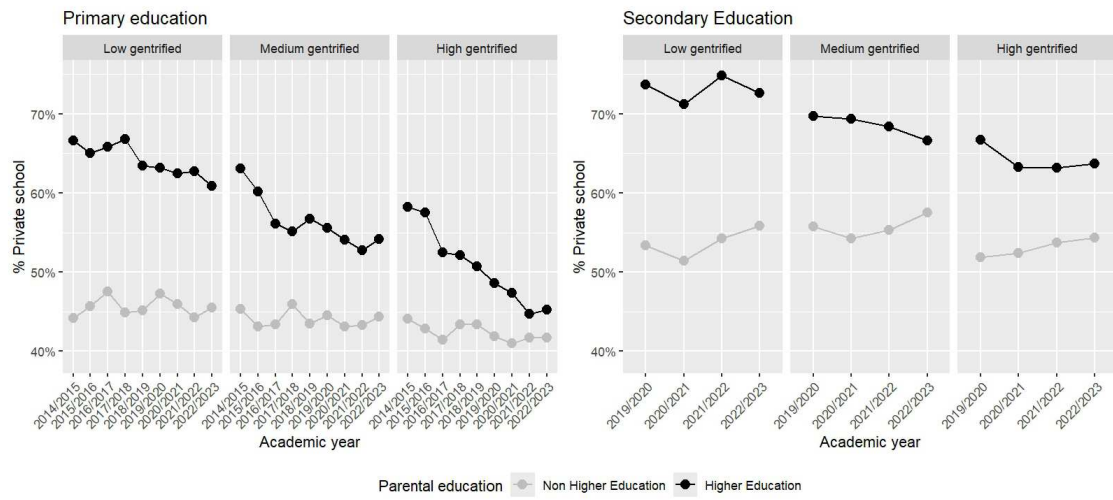


Figure 4

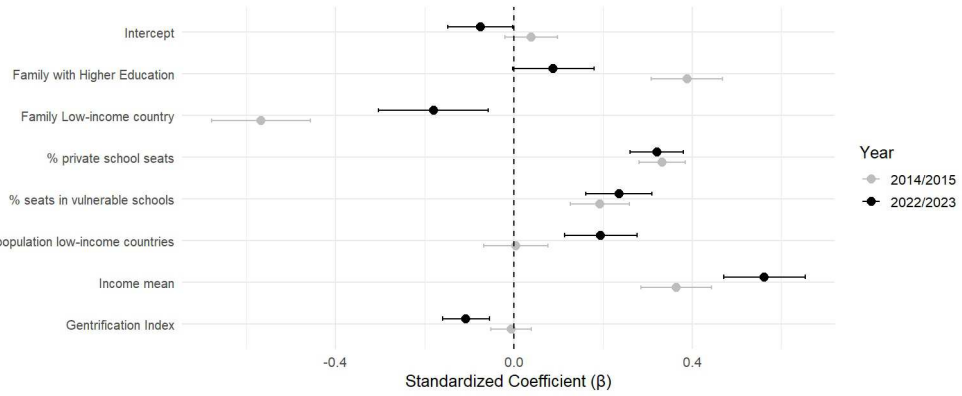


Figure 5

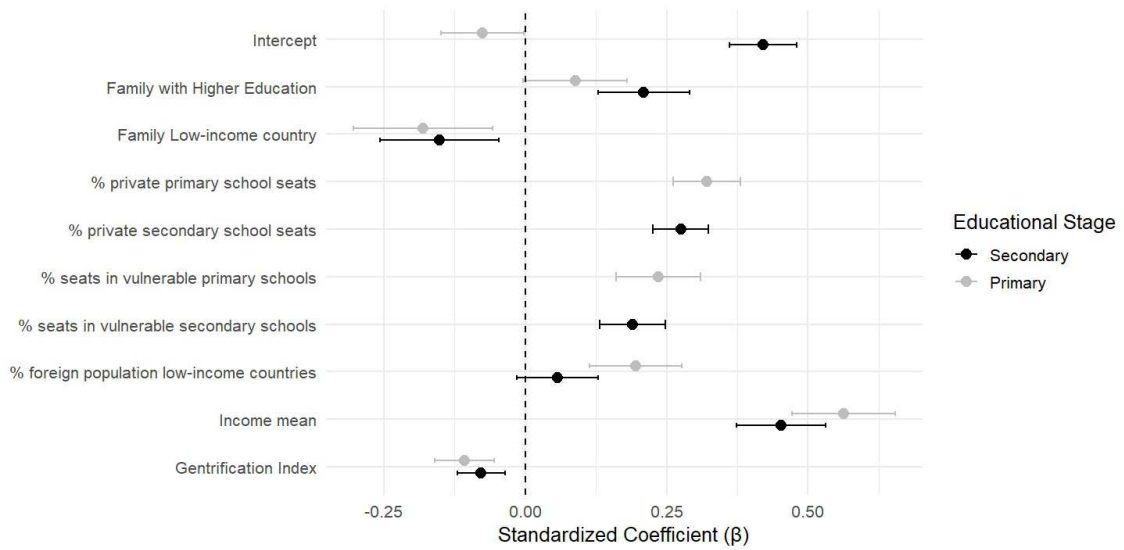


Figure 6

