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Between Merit and Chance: Social Inequality and
School Choice in Mexico City's Upper Secondary
Education Admissions Reform

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Abstract

In 2025, the admission system for public upper secondary education in Mexico City was reformed, intending to end the use of the standardized test used to assign students to schools and replace it with a lottery. However, because the most selective high schools decided to keep the exam, the reform resulted in a two-track system: a test for the most selective ones and a lottery for the rest. This increased the differences in applying to each segment of schools in a context already marked by institutional heterogeneity and social segmentation in access to selective schools. While the reform aimed to increase equality of opportunity in the transition to upper secondary schooling, increased institutional heterogeneity changed the conditions under which applicants choose schools, leading them towards diverging decisions depending on their socioeconomic and educational backgrounds.

Using rich administrative data and logistic regression, this thesis analyses how this reform affected the relationship between an applicant's social origins and educational characteristics and their decision to apply to the schools that require an exam. It finds that under the new system, the share of applicants choosing exam schools decreased from 78.7% to 59.4%. This drop was associated with a strengthening of the link between applicants' social origins and educational characteristics and their choice of exam-requirement schools, as these variables became stronger predictors in the new system. These findings highlight the difficulty of isolating the admissions reform, in its pursuit of equality of opportunity, from the broader inequalities it operates within. They also show how the design of educational systems interacts with social inequality, pointing to school heterogeneity and the dynamics that result in differences in students' social and educational characteristics as necessary targets for increasing equality of opportunity in the transition to upper secondary schooling.

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1. Introduction

Filing into a school early in the morning, surrounded by thousands of other young people, to take an exam and then nervously awaiting its results for weeks had become a rite of passage for those applying to public secondary education in Mexico City. That changed in 2025, when the government announced it would stop using the test that had been used to distribute applicants among high schools since 1996. The exam, according to the government's argument, presented itself as a fair competition, but obscured how differences in its results reflected applicants' disparities in socioeconomic origins rather than abilities or effort. In their view, the exam legitimized social inequality, rather than neutralizing it. The test was replaced with a lottery, a change that was presented as more than a policy modification. It was described as a philosophical reorientation from meritocracy to undifferentiated access, meant to distribute the chances of admission more evenly across applicants regardless of their background, rather than consistently rewarding those who were already advantaged.

The transition to upper secondary education in Mexico City is shaped by a combination of heterogeneous schools and applicants from highly unequal socioeconomic origins (E. Rodríguez, 2015; S. A. Rodríguez, 2018; Solís, 2014). Some high schools, especially those that are a part of the National University (UNAM) or the National Polytechnic Institute (IPN), offer much better pathways to higher education and are far more selective. Under the old system, this combination resulted in the social segmentation of students among schools, as applicants from higher socioeconomic origins were more likely to access the most selective schools (Blanco, 2014; Cobos, 2023; E. Rodríguez, 2015; Solís, 2013). This segmentation was a result of applicants' choices of schools but also of their exam results, opening the door to critiques of the exam's effects on reproducing social inequality (Blanco, 2014; Solís, 2014).

Although the reform intended to stop the use of the exam altogether, it did not achieve its goal. After the UNAM and the IPN schools pushed to retain the exam, the result was a hybrid admissions system. It mixes a lottery track for most schools with an exam track for the UNAM and IPN high schools. Which track an applicant entered was determined by the schools they applied to. Applicants who included any UNAM or IPN school in their school selection had to prepare for and sit the exam, competing for admission based on their results. Those who applied to the other schools simply entered the lottery and waited for the draw. The reform had set out to eliminate the exam, but instead, it made opting into it a deliberate decision linked to school choice.

The existence of two tracks in the admissions system changed the conditions under which applicants decide which schools to apply to. Their school choices became even

more bound up with calculations about the costs, likely outcomes and advantages of the admissions tracks, each representing a different logic of accessing opportunities: merit in the exam and chance in the lottery. Considering the strong association between applicants' school choices and their socioeconomic and educational backgrounds, it is important to analyze if these deliberations increasingly led applicants from different social positions to apply to dissimilar schools, as part of their strategies to secure access to one of their preferred schools.

This thesis analyzes how the introduction of the new two-track admissions system altered the relationship between applicants' social origins and educational characteristics and their school choices. It contributes to research on inequality of opportunity in the transition to upper secondary education, and to questions about how the institutional context of education interacts with social inequality to shape students' educational trajectories. By highlighting the difficulty of isolating the admissions reform from the broader social and educational inequalities it operates within, it points to the obstacles in translating views of fairness in education into equality of opportunity. At the same time, it supports previous studies that show how the design of educational systems shapes, rather than merely reflects, the dynamics of social inequalities (Solís & Dalle, 2019).

This thesis is organized in six sections. Section 2 reviews research on educational inequality, specifically in upper secondary schooling in Mexico City. Section 3 provides an overview of education in Mexico and of the changes to Mexico City's admission system. Section 4 describes the data sources and methodology underpinning the results and the discussion presented in Section 5. Finally, Section 6 concludes by outlining its theoretical and policy implications around social inequality in educational trajectories.

2. Inequality in Educational Trajectories

2.1. Social Mobility and Education

Education is a key determinant of the socioeconomic position that individuals attain in society. One schematic way to analyze the links between education and social status is through Blau and Duncan's model of status attainment (Solís & Dalle, 2019). This model separates the effects of social origin on status attainment into its direct and indirect effects, the latter referring to those operating through schooling. Since a significant part of the link between social origin and status attainment is mediated indirectly through education, this model also splits the indirect effects into two components (Solís & Dalle, 2019). First, the effect of social origin on educational

attainment refers to its influence on the amount and type of education individuals achieve. Then, the effect of occupational returns to education on status attainment describes how achievement in schooling influences outcomes outside of education. In other words, the first component indicates how much your starting position affects your trajectory through education, while the second focuses on how that trajectory impacts the positions you reach in society.

In intergenerational social mobility, education plays a dual role. It is the primary pathway for socioeconomic reproduction and the main route for social mobility (Torche, 2010). It is the main avenue through which the family conditions of origin are transmitted to the next generation, but also an important way in which individuals of similar origins achieve different outcomes. In the process of intergenerational mobility, parents' attainment becomes children's social origins, directly influencing the positions children reach in society and exerting indirect effects through schooling, transmitting its effects from one generation to the next.

As this thesis focuses on the relationship between applicants' origins and their school choices in upper secondary schooling, it examines one factor in the link between social origin and educational attainment, the first of the two components of the indirect effects of social origin. By focusing on the effects of admission system reform, it centers on how this link is shaped by its interaction with the institutional design of the education system. More specifically, it contributes to understanding how unequal socioeconomic origins interact with a segmented set of educational institutions to lead students to diverse educational trajectories, which, ultimately, take them to unequal status positions that limit intergenerational social mobility (E. Rodríguez, 2015).

2.2. The Analysis of Education Trajectories

Differences among socioeconomic groups are central to theories of school trajectories, which refer to the diverse paths students follow in the education system from entry until they either complete or discontinue their studies (López-Ramírez & Rodríguez, 2020). The role of social inequality in education is usually analyzed through two perspectives: social reproduction and rational action theories (Blanco, 2014). Social reproduction theory highlights how structural processes condition students from different class backgrounds, turning arbitrary class differences into relationships of subordination legitimized by the mechanisms of the educational system and by subjective beliefs that internalize such subordination. Conversely, rational action theory views patterns in students' trajectories as reflecting, in their central tendencies, cost-benefit evaluations by them and their families, while highlighting how these assessments are influenced by the typical opportunities and constraints of social

positions and institutional contexts (Blanco, 2014; Breen & Goldthorpe, 1997). Given its framing of school choice as a deliberate, reflexive decision that results from applicants' strategies as they navigate the admissions system, this thesis follows a framework derived from rational action theory.

Early studies of inequality in educational achievement focused on the distribution of completed school years and later expanded to explore the relationship between these outcomes and individuals' socioeconomic characteristics. A further analytical development is the trajectory perspective, which breaks down educational paths into a series of transitions between grades or levels. It then examines each transition to understand how the effects of social origin on the likelihood of continuing vary across different stages in students' trajectories (Solís, 2013). In this view, the education individuals attain is seen as the cumulative outcome of a series of decisions to continue schooling made at each transition, which partly determine how far students advance academically (Lucas, 2001).

In addition to examining how far students move across educational levels, trajectory research also focuses on where they transition to and from. As it understands each grade as composed of a set of stratified positions that differ in curricula, credentials, learning quality, and opportunities to advance to higher levels, a trajectory perspective analyzes students' location in the system as both an outcome of their previous trajectory and a factor that influences future achievement (Lucas, 2001; Solís, 2014). Solís (2013) uses the concepts of horizontal and vertical mobility to refer to two dimensions of transitions between schooling levels: vertical mobility concerns the continuity between levels, while horizontal mobility indicates the distribution across different types of institutions within the same level.

Analysis of school trajectories considers both continuity (verticality) and stratification (horizontality), as both are part of a comprehensive explanation of the role of social origin in educational trajectories (Lucas, 2001). As Lucas's theory of effectively maintained inequality describes, 'socioeconomically advantaged actors secure for themselves and their children some degree of advantage wherever advantages are commonly possible' (Lucas, 2001). When access to education at a given level is not universal, families and students use their resources to secure a quantitative edge in access. As access approaches universality, the focus shifts to securing available qualitative differences within the level, such as the type of school or study program. This shift in the focus of conflict explains why inequality in education can persist even as access increases among all socioeconomic groups, reinforcing the importance of analyzing the horizontal dimension of transitions between schooling levels.

Considering the position students hold at each grade level is especially important in education systems with a diverse range of socially selective schools, such as in Mexico City's upper secondary education. When stratified positions are distributed along socially selectively lines, it results in a process referred to as social segmentation (Solís, 2013). In such institutional contexts, a student's position within the stratified systems of positions within each grade is heavily influenced by their social and educational background and moving between positions has effects as significant as transitioning to the next level (Lucas, 2001). One consequence of segmentation is that, even among students at the same educational level, there are distinctions that significantly affect their life chances and, therefore, intergenerational social mobility (Breen et al., 2009).

Breen and Goldthorpe (1997) use the concepts of primary and secondary effects to categorize the effects of social class on students' school paths, depending on where they originate and what aspects of educational trajectories they influence. Primary effects are those that impact how students perform in school and stem from better conditions at home, such as more resources, greater intellectual stimulation, more supportive parents with more familiarity with education, and improved nutrition and health, among other factors (Breen et al., 2009; Breen & Goldthorpe, 1997; Breen & Jonsson, 2005). In contrast, secondary effects arise from the choices families and students make during educational trajectories, which often differ across socioeconomic groups even when students have similar performance levels, according to these authors. These choices influence how much and what type of education individuals attain, in ways comparable to primary factors (Breen et al., 2009; Breen & Goldthorpe, 1997; Breen & Jonsson, 2005).

Faced with segmented educational options at each transition, parents and students navigate constant choices from the beginning of their paths through schooling. Segmentation dynamics begin early in educational trajectories and affect both vertical and horizontal continuity, operating independently of social origin through school effects yet often reinforcing it. (Solís, 2014). According to Solís (2013, 2014), as school effects are reinforced at each transition, they create cumulative impacts that amplify the role of social origins that initially shaped student placement in the earliest stages. This occurs as social background influences initial school placement during entry and early transitions, creating school effects that affect subsequent vertical and horizontal transitions, even among students with similar socioeconomic origins.

When approaching the transition to the next educational grade, students and their families must decide whether to continue and, if so, which school to enroll in. Seen

from a rational action framework, the choices students make when they transition across levels are evaluations of the expected costs of remaining at school, the likelihood of success at the level, and the expected benefits attached to each of the options available at a given educational level (Breen & Goldthorpe, 1997; Breen & Jonsson, 2005). With these parameters in mind, students and their families decide whether continuing in education is worthwhile and, if so, which sort of school is more desirable and accessible. These decisions are not objective evaluations. Rather, as they are conditioned by the differences in constraints and opportunities typical of different class positions, they vary according to students' contexts and criteria (Breen & Goldthorpe, 1997).

There are three mechanisms that produce class differentials at the level of secondary effects, by influencing the evaluations students make about these parameters (Breen & Goldthorpe, 1997). First, differences in family resources affect the costs and expected benefits of education, and the balances made between them. Not only do families from higher socioeconomic backgrounds have more resources, but their educational experiences also make them more likely to recognize when and how it is most worthwhile to invest in schooling (Lucas, 2001). Second, the likelihood of success is affected by differences in ability, which are shaped by both objective and subjective measures, as they are also influenced by how students and families perceive them (Breen & Goldthorpe, 1997). Third, the degree of relative risk aversion refers to how the level of resources families are willing to invest is linked to the outcomes needed to at least avoid downward social mobility (Breen & Goldthorpe, 1997). Together, these three mechanisms affect students' aspirations—the level of education they wish to attain—and their expectations—what they consider possible to attain—. Thus, as students set their goals by balancing their aspirations and expectations, the underlying influence of their different origins interacts with the institutional context to push them towards diverging choices in their trajectories.

The concept of adaptive strategies describes the actions that students plan to pursue their goals within the constraints of their social background and the institutional context of the education system they are part of (Cobos, 2023). Students' educational strategies result from reflexive processes undertaken by students and families, in varying degrees of closeness, as they adapt to the characteristics of the schooling system they navigate. In that sense, students' strategies condense their goals, expectations, and aspirations, as they are shaped through their trajectories in school. These goals, expectations, and aspirations are conditioned by social structures, through the interplay of primary and secondary effects. Yet they are enacted through individual experiences and subjective evaluations, allowing a margin for students'

agency as they develop adaptive strategies (Sifuentes, 2025). In that sense, aspirations and expectations have a dual role in the choices students make in education: they mediate the socioeconomic and institutional effects that shape them, but they are also determinants of their future attainment (Solís et al., 2013).

2.3. Fairness in Education: Beyond Meritocracy

Due to the role of social inequality in educational trajectories, there is much academic and policy debate on what constitutes a fair distribution of opportunities in education. These arguments are framed by a persistent tension in which modern schooling in liberal democracies operates: all students have an equal right to education, but positions within schooling systems are often unequal (Dubet & Duru-Bellat, 2007). Since the most advantageous opportunities are scarce, only a few will have access to them. Nevertheless, denying individuals equal access to education is considered improper because of its status as a right, unless the need for and the process to do so are perceived as just (Hernández-Fernández, 2020). When allocating opportunities in schools, policymakers apply a specific concept of fairness. However, they must also legitimize it by referencing broader principles of justice, which, in turn, should align with their overarching political ideology (Bolívar, 2005).

Both an exam and a lottery regulate access to upper secondary education and distribute students among schools. Nevertheless, they are based on fundamentally different ideas about distributing opportunities, reflecting distinct theories of fairness (Bolívar, 2012; Cobos, 2017). The mechanism chosen indicates the type of equality being pursued and, consequently, the kinds of inequalities that are tolerated (Bolívar, 2012). The exam presents itself as fair because all applicants answer under the same conditions, although it overlooks pre-existing inequalities in students that influence their performance. The lottery can be considered fair because it offers everyone an equal chance, but critics argue that it disregards applicants' effort and ability to succeed.

Both admission methods aim to give applicants equal opportunities for success, even if they have different understandings of equality of opportunity. Generally, the concept of equality of opportunity refers to a situation where an individual's chances of achieving certain outcomes are not affected by their conditions of origin (Breen & Jonsson, 2005). However, there are more specific interpretations of what equality of opportunity means, with Villa (2007) identifying three main ideas. First, meritocratic equality of opportunity, where ability and effort are the key factors in determining success. Second, universal equality of opportunity, which aims to give everyone the same chance to achieve an outcome, regardless of their characteristics. Finally,

compensatory equality of opportunity, which entails giving preferential treatment to those from disadvantaged backgrounds with the intention to offset them.

Meritocracy has a long history in education. As the idea that talent and effort should determine success in school, it gained prominence alongside the selection processes that arose from the massification of schooling, aiming to ensure that those with the greatest potential received the best possible education (Mijs, 2015). Meritocracy has long attracted education policymakers as a fairness criterion because of its dual role in incentivizing individual effort and legitimizing unequal outcomes (Mijs, 2015). By holding a competition under equal circumstances, it claims that differences in outcomes result from individual merit, maximizing the efficiency of outcome distribution (Cobos, 2017). However, within schools, the logic of meritocracy creates conflict between two trends: on one hand, efforts to promote open and equal access that aim to eliminate barriers to schooling, and on the other hand, competitive, individual processes that constantly rank and separate students based on their alleged talent and effort (Bolívar, 2005).

These tensions are found in the criticisms that research and policymaking have raised against the modern, meritocracy-based ideas of fairness in education. Critiques focus on the failure of meritocracy to fulfill its promise of fairness because of obstacles outside and inside schools. External barriers are mainly related to how the meritocratic competition begins from unequal and non-meritocratic origins that characterize children outside of school (Bolívar, 2005; Dubet & Duru-Bellat, 2007; Mijs, 2015). Internally, obstacles come from how educational institutions themselves distort the meritocratic process, as the ways they allocate students between and within schools provide them with unequal types and quality of education further on (Mijs, 2015).

A stronger critique of meritocracy argues that even if schools managed to give everyone an equal starting point and prevented distortions in the competition, they would still fail to produce fair outcomes, because any definition of merit is shaped by history, is specific to the institutional context, and can never measure solely effort and ability (Bolívar, 2005; Dubet & Duru-Bellat, 2007; Mijs, 2015). In that view, meritocracy is not an unfulfilled promise, but an unfulfillable one (Mijs, 2015). While a pure meritocracy can, in principle, align with the idea of equality of opportunity, in practice it often conflicts with and comes at the expense of other aspects of fairness.

By ignoring these barriers and claiming that any student can succeed if they try hard enough, meritocratic schools shift responsibility to the individual, even as structural injustices in the education system persistently affect outcomes (Bolívar, 2005). As Mijs (2015) nicely phrases it, meritocracy 'adds insult to injury by providing the moral

legimitation of failure’. Not only do students fail to achieve goals that are consequential for their life chances and for which they might have made great efforts, but they are made to bear the full weight of their ‘defeat’ in a supposedly fair and even competition. This focus on competition in schools can lead to a disregard for the role of education in building character, community, and citizenship that should be common to all students (Osnaya, 2025). Reasserting that role leads to privileging unrestricted, undifferentiated access to education over competitive access, as the reform to the admissions system in Mexico City intended to do (Mijs, 2015; Osnaya, 2025).

If purely meritocratic schools can never be sufficiently fair, policymakers must turn to other principles of justice. Dubet and Duru-Bellat (2007) propose three alternative ideas for examining fairness in education systems, which align well with the different conceptions of equality of opportunity as described by Villa. The first idea links fairness in schools to compensatory practices that give more resources to those with fewer, aiming to improve the conditions of the most vulnerable. The second suggests that fairness involves ensuring a minimum level of achievement for everyone, creating a common ground that anchors the gap between the most and least advantaged. The third focuses on reducing the impact that schooling has outside of education, to prevent the reproduction of advantage for those who succeed in competitive school environments. While the reform to the admissions system intended to increase fairness compared to a meritocracy, translating its view of fairness into increased equality of opportunity was complex, in part due to the particularities that characterize the transition to upper secondary education in Mexico City.

3. The Transition to Upper Secondary Education in Mexico City

3.1. Education in Mexico

The Mexican Education System is divided in five levels: preschool (*prescolar*), elementary school (*primaria*), middle school (*secundaria*), high school (*media superior*), and university (*superior*). Each level includes various school types, with distinct pedagogical and operational features, such as general and indigenous elementary schools; general and technical middle schools; and general, technological, and professional high schools. According to international classifications, middle school and high school correspond to lower and upper secondary education. Students typically start high school at 15 years of age, being the second or third transition in their trajectories, depending on whether they entered the system in preschool or elementary school.

There are three types of public high schools in Mexico: general, technological, and professional high schools (E. Rodríguez, 2015). General high schools provide preparatory education for higher education, while technical high schools combine preparatory studies with certification in technical skills. Meanwhile, professional high schools focus on direct entry into the labor market, although their graduates can now also continue to university. General high schools have historically been the most populous and most prestigious, while technological high schools are a more recent addition that has grown significantly, and professional high schools have long been a minority (Villa, 2007).

In the second half of the 20th century, Mexico sought to universalize access to primary education and increase enrollment in secondary schools. This effort increased the average number of years of schooling completed from 6.5 in 1990 to 9.2 in 2015 (S. A. Rodríguez, 2018). This growth in primary and secondary education resulted in significant improvements in access for marginalized groups, especially after middle school became nearly universal following its mandatory status in 1993 (E. Rodríguez, 2015).

However, since enrollment grew much more in middle school than in high school, the expansion of education shifted inequality in access toward upper secondary and tertiary education, rather than reducing overall inequality (S. A. Rodríguez, 2018; Solís, 2013, 2018; Torche, 2010). Socioeconomic class differences remained a key factor influencing gaps in educational attainment (S. A. Rodríguez, 2018; Solís, 2014). These differences not only affect how much education individuals achieve but also the type of schooling they attend: enrollment in private schools and the type of public school attended are closely linked to socioeconomic status (Solís, 2014).

In the first decade of the 21st century, demographic growth and increasing absorption rates from middle school led to growth in upper secondary education enrollment (Villa, 2007). After a 2012 reform classified upper secondary schooling as mandatory, federal and state governments made substantial policy efforts to expand access. Although this reform aimed for universal high school access by 2021, enrollment has stalled since 2018 and has even decreased in some states (Blanco, 2024). Access to high school remains limited, with an enrollment rate of 73%, compared to 102%¹ in elementary and 95% in middle school (Sifuentes, 2024).

Accessing high school is a crucial step in students' educational trajectories. The transition between lower and upper secondary education is characterized by higher

¹ The enrollment rate over 100% results from students from out-of-age groups.

dropout rates than previous levels and by the increased importance of students' decisions about the type of school and study programs attended, as these influence their chances of graduating and pursuing higher education (Sifuentes, 2025). In particular, differences among school types become more significant when entering high school, given the varied types of institutions and the greater private coverage compared to middle and elementary levels (Solís, 2014).

3.2. The Transition to High School in Mexico City

The transition to upper secondary education in Mexico City is characterized by the diversity of available high schools. There are 735 public high schools, divided into 12 institutions depending on their administrative or educational profile (ECOEMS, 2026a). Examples of these institutions are the UNAM and IPN high schools, the National College of Professional Technical Education (CONALEP), and the Institute for Upper Secondary Education of Mexico City (IEMS). There also exists a large and heterogeneous sector of private high schools.

Two particularly relevant institutions are the IPN and the UNAM. These are higher education institutions that operate affiliated high schools, which are highly sought after for their quality but, most of all, for the preferential access they offer to university admissions. Graduates of these high schools are admitted to the higher education institutions their schools are part of without taking the entrance exam, provided they meet grade requirements. This preferential access is especially attractive for UNAM, as the alternative entrance route to university through the exam is limited, admitting only 9.7% of applicants in 2025 (Hernández, 2025). While there is little data to compare learning quality across high schools in Mexico City, those affiliated with UNAM are also generally perceived as superior (Cobos, 2023; E. Rodríguez, 2015; Sifuentes, 2025).

In 1996, the Secretary of Education created the COMIPEMS² admissions process to manage the growing number of middle school graduates and high school institutions in Mexico City. This system aimed to provide applicants with an equitable and transparent process for accessing high school, based on a test to reliably and impartially measure applicants' knowledge and abilities (Secretaría de Educación Pública, 2015). The process had three stages: registration, examination, and assignment. Applicants registered by completing a background questionnaire, ranking up to 20 high school options to apply to, and paying about 500 pesos (29 USD). Then, they answered a 128-question, multiple-choice exam. Finally, applicants were assigned to schools based on

² COMIPEMS is the Spanish-language acronym for Metropolitan Commission of Public Upper Secondary Education Institutions.

their ranking of options, test scores, and the schools' capacity (E. Rodríguez, 2015). Assignment started with the applicants with the highest scores and moved down the order, assigning applicants to their top choice with available space. If no spots were left from an applicant's choices when their turn came, they could select from schools with remaining openings.

The benefits COMIPEMS provided in managing the transition to high school supported its legitimacy as an efficient and fair solution (Sifuentes, 2024). COMIPEMS was portrayed as efficient because it centralized the public admissions process into one system, and as fair because it differentiated students based on their test scores, claiming to reward those with higher ability and knowledge (Sifuentes, 2024). It was based on the principle of meritocratic equality of opportunity, holding that since all applicants took the same exam under the same conditions, differences in scores reflected their abilities and effort, making it a fair basis for granting access to high schools.

However, criticism of this view of fairness grew over the years during which COMIPEMS operated, even among supporters of the practical advantages it offered. Although COMIPEMS claimed to promote equality of opportunity, it faced criticism from students, academics, and politicians for failing to do so (Sifuentes, 2024). These criticisms drew on a large body of research showing a strong link between applicants' socioeconomic origin and the high school they are assigned to. Other critiques argued that the exam became a source of profit for those offering preparatory courses and for the institute responsible for the exam (Herrera, 2010; Osnaya, 2025). Social movements and organizations of 'rejected' applicants long demanded that authorities stop using the exam, viewing it as an obstacle to their right to education.

Due to its significance, the transition to upper secondary schooling in Mexico City has been widely studied, both from qualitative and quantitative frameworks. Qualitative studies have focused on the role that students' subjective perceptions of their opportunities play in shaping their experiences, aspirations, and strategies during the transition (López-Ramírez & Rodríguez, 2020). Quantitative research has focused on the association between students' characteristics and their vertical and horizontal transition, identifying four key factors: social origin, institutional context, academic performance, and academic aspirations (López-Ramírez & Rodríguez, 2020; Solís, 2013).

Social origin directly affects educational attainment through parental education, occupation, and socioeconomic status. The institutional context, academic performance, and academic aspirations influence performance and choices through

the mechanisms by which social origin is mediated through educational processes. Institutional context impacts how students navigate school options and admission policies, while academic performance, as a measure of ability and motivation, determines the options available to students. Aspirations and expectations, influenced by family support and school climate, independently affect outcomes by shaping the choices students make.

Mexico City is highly urbanized, with better educational opportunities and socioeconomic conditions compared to the rest of the country (Blanco, 2014). In education, its dropout, grade repetition, and out-of-age student rates are significantly lower than the national average (Solís et al., 2013). Despite these favorable circumstances and the fact that gaps between socioeconomic groups in accessing elementary and middle school in Mexico City are relatively small, there is a considerable drop in the number of students who enter and complete high school, with large disparities across socioeconomic groups (Solís, 2013, 2014). These disparities start from the fact that not all students in Mexico City graduate from middle school, with approximately 88% completing this level (Blanco Bosco, 2014). However, the main obstacle in students' trajectories is gaining access to high school, not graduating from middle school.

The COMIPEMS admissions process had three key moments at which to examine the effects of social inequality: the decision to apply, the assignment results, and the decision to enroll (Blanco, 2014). The largest disparity among socioeconomic groups lies in the decision to apply to public admission processes, with much smaller gaps in the assignment outcomes and enrollment decisions (Blanco, 2014). While the dropout rate in the transition between middle and high school among the highest socioeconomic quartile is comparable to that between each grade in middle schools, the two lower quartiles experience a significant increase in dropout rate in the transition (Blanco, 2014). In fact, the lowest quartile has a 7.6 times higher chance of not enrolling in high school compared to the highest quartile (Blanco, 2014). This reflects how entry to the application process serves as a key filter, with disparities in high school enrollment stemming from students' own decisions to register to the admissions process (Blanco, 2014).

Narrowing the focus to those who enter the public admissions process reveals further dynamics that produce social segmentation. These effects begin with applicants' self-selection into choosing selective schools, then follow with the distribution of test results by social origin, and conclude with the assignment of applicants to schools (Blanco, 2014). The final result is a distribution of applicants among schools that, as it

passes through these consecutive filters, is increasingly influenced by socioeconomic position, leading to wide differences between groups in school choices, exam results and enrollment decisions (Blanco, 2014; S. A. Rodríguez, 2018; Sifuentes, 2024; Solís, 2014).

In addition to its impact on the likelihood of transitioning to high school, socioeconomic status also significantly influences the type of school students attend in Mexico City. Individuals from higher socioeconomic positions are more likely to attend private high schools and, when enrolling in the public sector, to attend the most selective schools (E. Rodríguez, 2015; Solís, 2013; Solís et al., 2013). While part of the effect of socioeconomic status acts directly on horizontal and vertical mobility, another part is mediated through its influence on prior education (S. A. Rodríguez, 2018). Students from private middle schools are more likely to continue in private high schools, though many transition to public schools, especially those affiliated with UNAM, to access the increased university opportunities these schools offer (Solís, 2014).

In turn, the type of high school attended is strongly connected to the likelihood of graduating from this level and advancing to university (Solís, 2014). Between 30 and 40% of high school dropouts are linked to school and institutional factors, such as inadequate facilities and poor teaching staff (Blanco, 2024). In fact, a large part of those who drop out of high school in Mexico City, particularly in the first semester, are those who didn't secure access to their preferred educational choices (Hernández-Fernández, 2020; Solís et al., 2013). The choice of school thus acquires a much more consequential role in the transition to upper secondary schooling in Mexico City, compared to previous transitions.

The interaction of Mexico City's institutional context of highly heterogeneous schools with pronounced socioeconomic stratification is evident in applicants' ranking of high schools. There's a strong link between socioeconomic position and greater chances of applying to more selective schools: applicants from higher socioeconomic backgrounds are far more likely to apply to UNAM and IPN high schools, contrasting with those from lower socioeconomic backgrounds who are more likely to apply to less selective schools (Rodríguez Rocha, 2015; Solís et al., 2013).

Socioeconomic status is the strongest predictor of school choices, but educational experiences and expectations also play a role, especially aspirations to attend university, which have a significant independent effect beyond their mediation of social origin (Rodríguez Rocha, 2015). In fact, the impact of socioeconomic origin is notably reduced when educational background and aspirations are controlled for (Solís et al., 2013). Another factor influencing school choice is the distance from applicants'

homes, though it has less effect on those aiming for the most sought-after schools (Cobos Marin, 2023; Rodríguez Rocha, 2015).

For applicants, selecting and ranking high schools to apply to is a complex task, considering the range of options available, the scarce information about them, and the fact that this selection is a new situation for applicants, in which the rules and implications are not always clear to them (García, 2016). When selecting and ranking school options, applicants balance their aspirations with their expectations, aiming to improve their chances of being assigned to their top-ranked options. In that sense, the resulting patterns of school rankings are part of applicants' adaptive strategies, in which they respond to the admissions process's design in ways that seek to advance their educational goals.

There are distinct logics in the construction of school preferences, and most applicants choose following a pattern (García, 2016; E. Rodríguez, 2015). According to García, the existence of patterns supports the idea that, to simplify the choice from a large pool of options, applicants use cues to narrow their choices. One such simplification is focusing on the institutions to which educational options belong rather than on the school itself (Solís et al., 2013). When focus is placed on the institutions, patterns that vary by social groups become most evident: applicants from higher socioeconomic backgrounds often included schools from the same institutions, mainly UNAM, among their first five options (García, 2016). On the other hand, the top-ranked choices of applicants from lower socioeconomic origins included both selective and non-selective options (García, 2016).

According to qualitative studies, the association between applicants' socioeconomic and educational characteristics and their school-ranking patterns indicates applicants' varying degrees of reflexivity in their adaptive strategies (García, 2016; E. Rodríguez, 2015). Some applicants have more reflexive choice processes, linked to greater access to cultural resources within the family and, especially, closeness to people who have experienced the admissions processes (Cobos, 2023; E. Rodríguez, 2015). On the other hand, other applicants have less-defined preferences. Applicants from lower socioeconomic origins often exhibit patterns reflecting a lack of access to information that makes it harder for them to be sure which schools are their best options (Cobos, 2023; García, 2016). However, although more selective schools tend to be occupied by applicants from higher socioeconomic positions, those from lower positions can do so through a combination of school selection and exam preparation strategies (Cobos, 2023).

The COMIPEMS admissions process acted as a filter in several stages. Not only did students from lower socioeconomic backgrounds have fewer chances of registering, but once inside the process, they tended to lower their aspirations to the most selective schools to reduce the risk of rejection (Solís, 2014). Then, among those who applied to the same schools, social background once again served as a filter through the exam results, determining who was admitted to their preferred schools and who was relegated to other options. COMIPEMS's legitimacy depended on its meritocratic process being perceived as fair. However, the strength of the link between socioeconomic origin and admissions results tarnished that perception and made it vulnerable to deep criticism, especially when shifts in politics brought new policymakers to office, whose political ideologies and theories of fairness were at odds with meritocracy.

3.3. The Reform to the Public Admissions System

Since the left-leaning Morena party won the presidential elections in 2018, it brought a significant shift in narrative and practices across various social policies. In education, Morena has described earlier governments as neoliberals whose education policies were exclusionary, individualistic, competitive, and focused on the labor market, while depicting its current policies as inclusive, community-oriented, and state-led (Blanco, 2024; Osnaya, 2025).

Inequality in education has long been a concern for policymakers, in part because Article Three of the Mexican Constitution establishes that public education should take measures to address socioeconomic, regional, and gender differences. Under Morena, this concern became an even more salient priority (Osnaya, 2025; Sifuentes, 2024). In upper secondary education, Morena has criticized previous policies for not considering the diversity of schools and students, and its effects on social inequality (Osnaya, 2025). A common target of its criticism has been the reliance on entrance exams in admissions, echoing complaints made by some academics and student organizations. In 2024, the issue became a policy goal through a review of the admission and selection mechanisms included in Morena's core policy priorities (Osnaya, 2025).

The use of entrance exams can be seen from a sociological and an economic perspective. While the sociological view focuses on its role in social selection, the economic explanation argues that exams are used to efficiently balance schools' capacity with students' demand, selecting students with the aim to reach certain objectives, such improving graduation rates (Hernández-Fernández, 2020). Morena's critique of the use of exams falls closer to the sociological view, centering its criticism on the tension between their meritocratic image and their skewed

results, which consistently placed students from higher socioeconomic backgrounds into the most selective schools.

On the surface, Morena's critique was aimed at the failure of entrance exams to deliver the fairness promised by meritocracy, but on a deeper level, it questions the underlying principles behind meritocracy itself. As Osnaya Moreno (2025) explains, Morena critiques meritocracy for promoting individualism and competition, describing 'merit as a tyrant in a fair judge's clothing.' It argues that these exams, by disguising themselves as a fair competition, portray the differences in students' trajectories that feed into and result from their use not only as acceptable but, in fact, as desirable. By normalizing the influence of social inequality in the functioning of the education system, these exams legitimize the unequal outcomes that students attain in school, framing them as a result of differences in educational performance and hiding the influence of social inequality on a skewed system.

In January 2025, President Claudia Sheinbaum announced that, to end exclusion and ensure access to education for everyone, there would be no COMIPEMS exam starting that year ([Presidencia de la República, 2025](#)). At the same time, the Secretary for Education announced the creation of a new National High School system aimed at expanding and integrating upper secondary education into a more homogeneous system (Osnaya, 2025). In this way, policymakers intend to address the heterogeneity of the institutional offerings, which causes some high schools to be much more sought after by students than others, and what they see as an unfair admissions process, which privileges access to those high schools for students from the highest socioeconomic origins.

A new admissions process, called ECOEMS³, replaced the COMIPEMS system. This new admissions system seeks to ensure that every student who graduates from middle school has fair access to upper secondary schooling, describing itself as 'fostering equity and equality of opportunity' (ECOEMS, 2026c). The main goal of this reform was to stop the use of the exam and to replace it with a lottery, but it did not achieve it. The UNAM and IPN high schools pushed to retain the exam and were able to do so, in part due to UNAM's constitutional autonomy to manage its own affairs. The result was a hybrid admissions system with dual mechanisms: a lottery track for most schools with an exam track for the UNAM and IPN schools that require it.

In ECOEMS, applicants registered using a similar platform as before, selecting and ranking between 1 and 20 high school options. Depending on their selection of schools,

³ ECOEMS is the Spanish-language acronym for Space for Coordination of Upper Secondary Education.

applicants are divided into one of three modalities: direct access, when choosing only non-exam requirement schools; exam access, when choosing only exam-requirement schools; and mixed access, when choosing schools from both types. Applicants in the exam modality must pay a 400-peso fee (23 USD) to participate in the exam. For other applicants, the admissions process is completely free.

Once applicants have selected schools, the different modalities operate in parallel. In the direct access modality, when a school has sufficient space for all its applicants, they are admitted directly. Only when demand for a school exceeds its capacity are applicants admitted through a lottery. In addition to students' ranking, the lottery considers distance from home to school and a gender quota, with 51% of each school's admissions reserved for women. Applicants in the exam modality who are not admitted to any of their selected schools are assigned to one with remaining capacity via the direct access modality, ensuring that no applicants are left without an offer of admission to high school. In all other regards, the exam modality functions just like it did in COMIPEMS.

The reform to the admission system aimed to diminish the influence of applicants' socioeconomic origins on the schools they attend, altering how educational and life opportunities are distributed. As ECOEMS' official website states, the transition between admissions systems is more than just an administrative change. It describes itself as a "philosophical reorientation" of the admissions process, aiming to adopt an alternative approach that fulfills the constitutional mandate that education in Mexico must work to reduce inequalities (ECOEMS, 2026b). In contrast with what they saw as an over-reliance on an admission exam, Morena argues that the new admissions system adheres to the principle that access to high school "should not be a privilege conditioned to the result in an exam, but a right which the Mexican State has the obligation to guarantee" (ECOEMS, 2026b).

Replacing the exam with a lottery follows a different understanding of fairness in access to education, moving away from meritocracy toward a model closer to universal equality of opportunity. It resembles Dubet and Duru-Bellat's second idea of fairness, in that providing everyone with equal chances to access any high school is the minimum guarantee for all applicants. By reserving a gender quota by school, it also incorporates ideas of compensatory equality of opportunity. In its effort to achieve a more uniform high school system, the reform also resonates with another of Dubet and Duru-Bellat's arguments: that to achieve the fairest education possible, policymakers must maintain a unified system that ensures that schools remain as equal as possible.

COMIPEMS, according to Solís (2014), exemplified how social inequality interacted with an uneven institutional context to increase social inequality in educational trajectories. Even with the reform to the admissions system, the interaction of heterogeneity of upper secondary education institutions and social inequality remains at the core of inequality of opportunity in the transition to high school. Replacing the exam with a lottery will not tackle the root causes of differentiated access to high school, unless institutional stratification is also addressed (Sifuentes, 2024). Neither does it challenge the social conditions that lead to gaps in academic background and aspirations in the first place (Solís et al., 2013).

Motivated by a philosophical shift from meritocracy to undifferentiated access, the reform to the admissions system intended to lessen the weight of applicants' social origins on their educational trajectory. However, the root causes of inequality of opportunity remain. In fact, the unintended introduction of two-track, exam- and lottery-based mechanisms, each linked to more and less selective schools, increased the differences in applying to each segment of schools, likely leading applicants to adapt their strategies for choosing which schools to apply to. As applicants' evaluations of the costs and likely outcomes of each admissions track are shaped by their socioeconomic origin and educational trajectories, their adaptive strategies likely depended more upon applicants' backgrounds than under the previous system. Due to the availability of rich administrative data, the reform of admissions in Mexico City offers a unique opportunity to analyze how this change in the institutional context affected the association between students' social origin and their selection of schools, as the next section describes.

4. Research Design

4.1. Aim, Question, and Hypothesis

The introduction of two fundamentally different tracks into the admissions system, the exam and the lottery, is likely to have altered how applicants choose schools in their application to upper secondary education. As a key stage in the admissions reform, school choice is one of the moments at which the effects of class differentials operate in the transition to upper secondary schooling. By focusing on the association between school choice and applicants' background, this thesis aims to explore if the reform to the admission system resulted in decreased social segregation in school choices, as it intended. This aim is expressed in the following research question:

Q: How did the change in the admissions system affect the relationship between an applicant's social origins and educational characteristics and their decision to apply to exam-requirement schools?

As an answer to this question, this thesis proposes the following hypothesis:

H: Under the new admissions system, applicant's socioeconomic origin, educational aspirations, and expectations increased their weight as predictors of applying to schools that use the exam as an admissions mechanism, resulting in increased social segregation.

This hypothesis is motivated by the theory and literature on inequality in educational trajectories, particularly by the mechanisms that produce class differentials at the level of secondary effects—that is, of choices—as described by Breen and Goldthorpe (1997). These suggest that when the costs and expected outcomes of selecting high schools from different institutions diverged under the new system's institutional context, as this choice now determined assignment to the exam or lottery track, applicants changed their adaptive strategies by modifying their school choices. As applicants' socioeconomic and educational backgrounds influence how they evaluate the characteristics of each track, changes in school selection occurred along socioeconomic and educational lines. Therefore, students' socioeconomic origins played a larger role in school choice under the new admissions system, leading to divergent patterns of school choice that indicate greater social segmentation between the exam and lottery tracks, as a proxy of school selectivity.

There is one important clarification regarding the reform's hypothesized effects. Under the old system, socioeconomic origin, expectations, and aspirations were already strong predictors of school choice (Blanco, 2014; Cobos, 2023; E. Rodríguez, 2015; Solís et al., 2013). This thesis argues that, spurred by the increased importance of distinctions between the exam and the lottery track, applicants now choosing schools differently are those whose socioeconomic origins, aspirations, and expectations lie near the threshold at which the exam tips their decision. Thus, the role of those variables as predictors has likely increased under the new system, driven by changes in the behavior of specific segments of applicants.

4.2. Data and Variables

The data sources used are the 2024 and 2025 databases for the admissions process, obtained through public records requests to the Secretary of Education and complemented by data obtained directly from that institution. These databases contain information on applicants' registration to the admissions process, including

the secondary schools they attended, rankings of high school options, a background questionnaire, exam results, and the school to which they were assigned.

The 2024 dataset contains 285,280 applicant registrations, while the 2025 dataset comprises 288,216. Of the 573,496 applicants in the pooled dataset, 22,341 (3.9%) were excluded due to missing data. Two sources of missingness were identified: cases from 2025 that lacked responses to some questionnaire modules and cases from both years with missing grade records, indicating applicants who had not graduated from middle school. Once these cases have been excluded, the result is a final dataset with 551,156 records.

Outcome Variable

To highlight the key difference between the two systems, applicants are classified according to two school selection strategies: choosing only schools that do not require an exam or selecting at least one school that does. Although these categories formally correspond to the ECOEMS rules, they were applied to the 2024 COMIPEMS cohort records. This is justified by the fact that the schools classified as exam-requirement institutions under ECOEMS correspond exactly to those that were the most sought-after and most selective under the old system: the UNAM- and IPN-affiliated high schools. The distinction is thus not a retroactive imposition but captures a substantively meaningful division in school desirability that existed across both systems.

This outcome variable was constructed from variables indicating the ranking of schools that applicants select during the registration process. The schools requiring an exam under the 2025 rules are 31 high schools belonging to the UNAM or IPN systems. The outcome variable is binary: whether an applicant selected at least one exam-requirement school (coded 1) or only non-exam schools (coded 0). However, constructing this variable as binary is a simplification intended to focus on the key difference between the two admissions systems, even at the cost of omitting distinctions such as the number of exam schools chosen or their positions in the ranking, which are also important components of applicants' adaptive strategies.

Focal Predictor Variables

Based on previous studies, the variables whose effects are the primary focus of analysis to answer the research question are socioeconomic origin, educational aspirations, and expectations. To distinguish them from other variables, this thesis refers to them as focal predictor variables. Each of these variables is considered a proxy

for one of the mechanisms that produce class differentials at the level of secondary effects, according to the framework developed by Breen and co-authors.

Socioeconomic origin (SES) is operationalized as a continuous index constructed from items in applicants' background questionnaires, which capture dimensions of parental education, household monthly income, and access to goods and services. This construction follows the use of aggregated measures of socioeconomic characteristics in similar studies, prioritizing parsimony even at the cost of obscuring the effects of individual variables (López-Ramírez & Rodríguez, 2020). Because these items are measured on ordinal and binary scales, the index is derived using polychoric principal components analysis (PCA). The first principal component, which explains 38% of the total item variance, was retained because it sufficiently captures the shared SES gradient across all included dimensions (see [Table 3](#) in the appendix for the full PCA). The resulting component score was standardized using the pooled distribution across both cohorts, so that each applicant's score reflects their SES position relative to the full 2024–2025 applicant pool.

According to the theoretical framework, student and parental aspirations both play a role in education decisions (Breen & Jonsson, 2005). The questionnaire includes two relevant items: one asking applicants about the highest education level they would like to achieve, and another about the level their parents would want them to reach. To capture both sources in a single variable, each was converted into a numerical value ranging from 1 to 4, corresponding to high school, technical university degree, university degree, and postgraduate studies. Both variables were then averaged and standardized, resulting in a continuous variable called aspirations.

On the other hand, expectations are approximated through the block of self-assessed ability items in the questionnaire: memorizing concepts, synthesizing information, interpreting results, and applying knowledge. These were selected as the most plausible proxies for exam-related self-efficacy to approximate the theoretical mechanism of confidence in performing well on the exam. While the questionnaire includes other self-efficacy variables, they address broader social and academic aspects. Before averaging the selected variables and standardizing this score, their internal consistency was verified (Cronbach's $\alpha = 0.79$), and using a PCA, it was confirmed that all four items contribute positively to the scale.

Covariates

Prior educational trajectory and prior performance are included in the analysis, even if they are not theorized to have changed their effect due to the policy reform. Rather, as they are included to decompose the effects of SES into its direct and indirect

components, they are referred to as covariates to distinguish them from the predictor variables. Both educational trajectory and performance are part of the pathway between the focal predictors and the outcome variable, so their inclusion is a theoretical choice intended to decompose the SES effect rather than simply to remove confounding. In that sense, these two covariates are considered mediators rather than control variables, being endogenous to social stratification (Solís et al., 2013).

Prior educational performance is operationalized as applicants' middle school grade average, a proxy for their performance throughout their educational trajectory. Grades were standardized for each school category constructed in the prior educational trajectory variable to create a more comparable measure of relative performance within each category. Applicants' prior educational trajectory is approximated using two variables: the administrative type of the middle school attended (public or private) and the curricular type (general, vocational, community, or other modalities). Because these two dimensions combine to form meaningful configurations, they are crossed to create a single categorical variable that captures the most relevant combinations. To reduce the number of combinations, curricular types were collapsed into general, technical, and other. All private schools were categorized in the general type, as the number of private schools in other types is minimal. The result is a categorical variable with four groups of middle schools: private, public general, public other, and public technical. This approach reflects the cumulative nature of educational trajectories and is consistent with research showing that prior school placement has independent effects on subsequent transitions, operating through mechanisms that are not fully captured by SES alone (Breen & Jonsson, 2000; Solís, 2013, 2014).

Figure 1. Distribution of key predictor variables

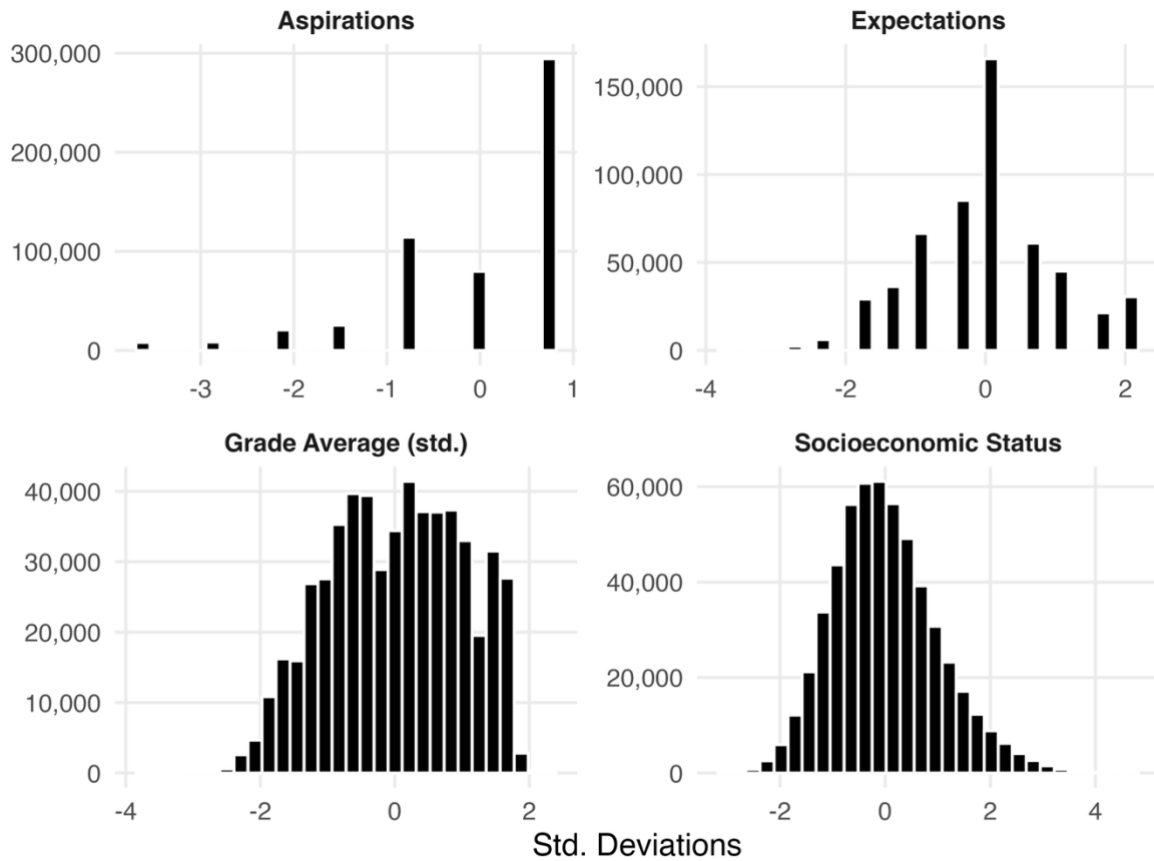


Figure 1 shows the distribution of the key predictor variables. SES and, to a lesser degree, grade average are reasonably close to a unimodal distribution. Expectations shows a slight skew to the right, with most applicants clustered around 0. However, aspirations is heavily skewed toward the top of the scale, as most respondents cluster around 1, with a long thin tail down to -3. While this results from this variable being derived from ordinal variables in which most applicants report high aspirations, its distribution is important to keep in mind when comparing different values within it, as most applicants lie in the range of 0 to 1.

4.3. Statistical Strategy

Because this study is concerned with the change between the two systems and not with a longer timespan looking at the increase in enrollment in upper secondary education, it does not test Lucas' theory of effectively maintained inequality. However, it does use some of its elements to define the study's methodology. This theory sees the outcome variable as a set of discrete ordered locations, in this case the stratified tracks of exam-requirement school and non-exam-requirement schools (Lucas, 2001). Then, it

focuses on how students' predicted probabilities of reaching each location is associated with differences in social background and, in this case, certain educational characteristics (Lucas, 2001). It does so to test whether the advantages of the socioeconomically privileged are enough to secure for them desired outcomes, such as access to a school as near as possible to the top of their school choices, considering social background to be effective if it can move students over the threshold of these positions (Lucas, 2001). While this study stops short of analyzing access to schools, it does focus on its first filter in the admissions process: students' decision to apply to those schools, which is taken to be a threshold itself.

This research question is addressed using a binary logistic regression model that estimates the probability that an applicant selected at least one exam-requirement school, given their socioeconomic background, prior educational trajectory and performance, aspirations, and expectations. Rather than fitting separate models for each cohort and comparing coefficients, the two cohorts are pooled into a single dataset, and a system dummy variable called *System* is included to distinguish the 2024 COMIPEMS (0) and 2025 ECOEMS (1) cohorts.

The primary theoretical interest concerns whether the relationships among socioeconomic status, academic self-efficacy expectations, aspirations to advance in schooling, and exam-school selection changed between the two systems. These relationships are modeled using interaction terms between the system dummy and each of those three variables. The resulting interaction coefficients capture the extent to which the reform altered the socioeconomic, aspirations, and expectations gradients in selection behavior. Prior educational trajectory and performance are entered as main effects, reflecting the theoretical position that while these variables shape school selection behavior, the reform is not hypothesized to have changed their associations with the outcome. The full model can be expressed as:

$$\text{Logit}[P(Y = 1)] = \beta_0 + \beta_1(\text{System}) + \beta_2(\text{GradeAverage}) + \beta_3(\text{SchoolType}) + \beta_4(\text{SES}) + \beta_5(\text{Expectations}) + \beta_6(\text{Aspirations}) + \beta_7(\text{System} * \text{SES}) + \beta_8(\text{System} * \text{Expectations}) + \beta_9(\text{System} * \text{Aspirations}) + \varepsilon$$

Where *Y* indicates selection of at least one exam-requirement school, *System* is the cohort dummy, *GradeAverage* is the middle school grade average, *SchoolType* is the crossed prior trajectory variable, *SES* is the continuous socioeconomic index, *Expectations* are the exam-related self-efficacy expectations, and *Aspirations* is the mean aspirations level of educational achievement. The interaction terms β_7 , β_8 and β_9 are the coefficients of primary interest. These coefficients indicate the change in the gradient of their respective variables between the two systems, reflecting the

hypothesis that, under the old system, these variables were already strong predictors of school choice and that, under the new system, they became even stronger predictors.

The analysis focuses on the 2024 and 2025 application cohorts, corresponding to the last year of COMIPEMS and the first year of ECOEMS, respectively. This comparison is a direct test of the change in institutional context, though it comes with an important limitation: because only one post-reform year of data is available, it is not possible to rule out that differences between cohorts reflect year-specific factors unrelated to the change in the admissions mechanism. This concern is partly addressed by comparing the distribution of relevant variables: all predictor variables are compared across the 2024 and 2025 cohorts using descriptive statistics and formal tests of distributional difference to evaluate whether the two applicant pools are comparable in their observable characteristics.

As this thesis uses publicly available data and does not involve direct contact with any participants, it poses no obvious ethical risks. The datasets used were anonymized by the government institutions responsible for their production before being made available for this research. The data processing and statistical analysis are fully reproducible using R scripts that cover all stages, from the datasets as originally received through all models and graphs. The author will make these scripts available online. Beyond its aim to contribute to the sociological literature, this thesis has a positive ethical intent to produce knowledge and evidence that helps increase equality of opportunity in education.

5. Results and Discussion

5.1. Distributional Comparison of Variables

Table 1 compares the distribution of the predictor variables and the covariates across the 2024 and 2025 cohorts. Due to the large sample size, Cohen's d test was used as a formal test of difference for the continuous variables and Cramer's v for the categorical variables. As expected, given the sample size, all tests are statistically significant. More substantively, effect sizes are uniformly small, except for educational expectations. While the difference between cohorts in expectations is relatively larger than that of other variables, it is small in absolute terms. Overall, these results support the conclusion that the cohorts are compositionally similar in their observable characteristics, suggesting that differences in school selection patterns between years are unlikely to reflect systematic changes in the applicant pool.

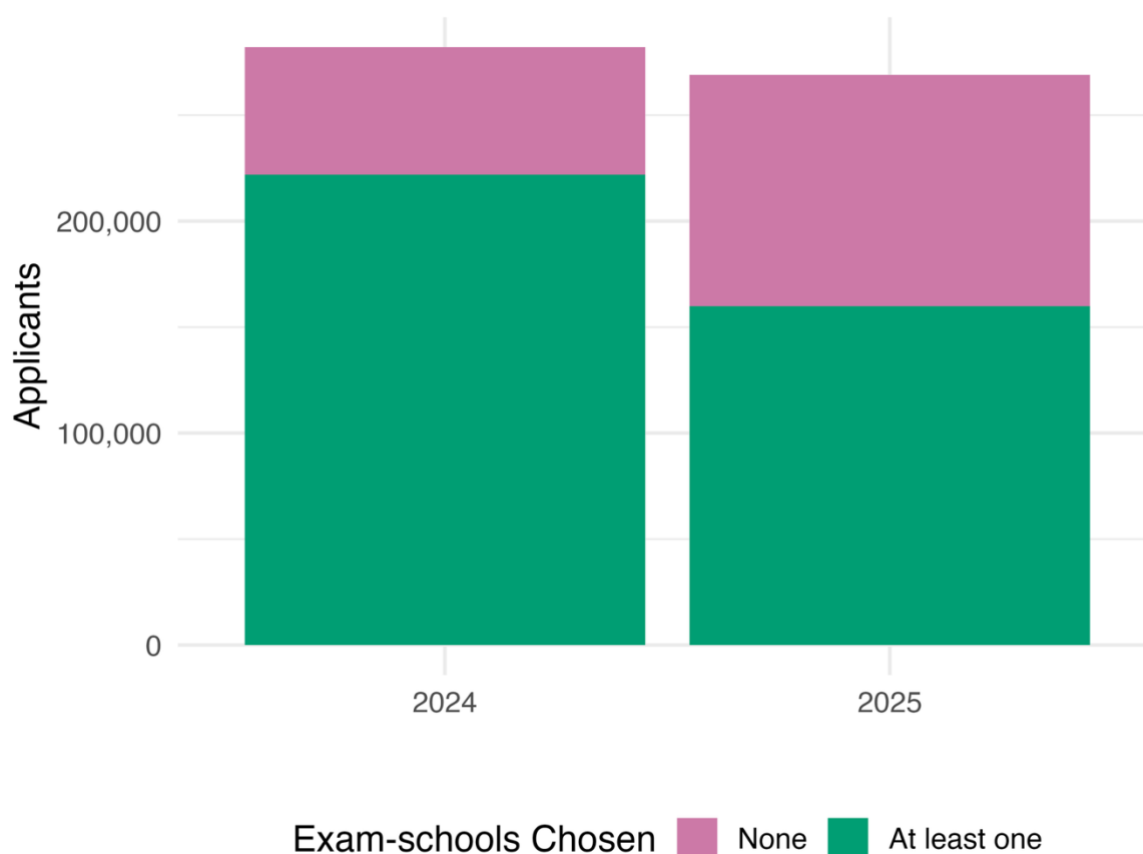
Table 1. Distributional comparison of model variables between cohorts

Variable	2024			2025			Effect size *
	N	Mean	SD	N	Mean	SD	
Socioeconomic index (SES)	282,090	-0.015	1.01	269,066	0.026	0.99	d = -0.04
Aspirations	282,090	0.005	0.997	269,066	0.006	0.994	d = 0.001
Expectations	282,090	-0.071	0.994	269,066	0.084	0.998	d = -0.16
Grade average	282,090	0.047	0.98	269,066	-0.012	1.01	d = 0.06
Educational trajectory							v = 0.045
- <i>Public general</i>	171,767	60.9%		163,301	60.7%		
- <i>Public technical</i>	74,651	26.5%		71,027	26.4%		
- <i>Public other</i>	12,282	4.4%		12,248	4.6%		
- <i>Private</i>	23,390	8.3%		22,490	8.4%		

* All tests $p < 0.001$. d stands for Cohen's d tests and v for Cramer's v tests.

In contrast, the outcome variable shows marked differences between the two cohorts, as shown in Figure 2. In 2024, 222,011 applicants selected at least one exam-requirement school, compared with 60,079 who selected none. However, in 2025, the number of applicants choosing exam schools decreased to 159,882, while 109,184 selected none. As a result, the share of applicants choosing at least one exam-requirement school fell from 78.7% to 59.4%, a decrease of 19.3 percentage points after the change in the admissions system.

Figure 2. Applicants Choosing Exam-requirement Schools by Year

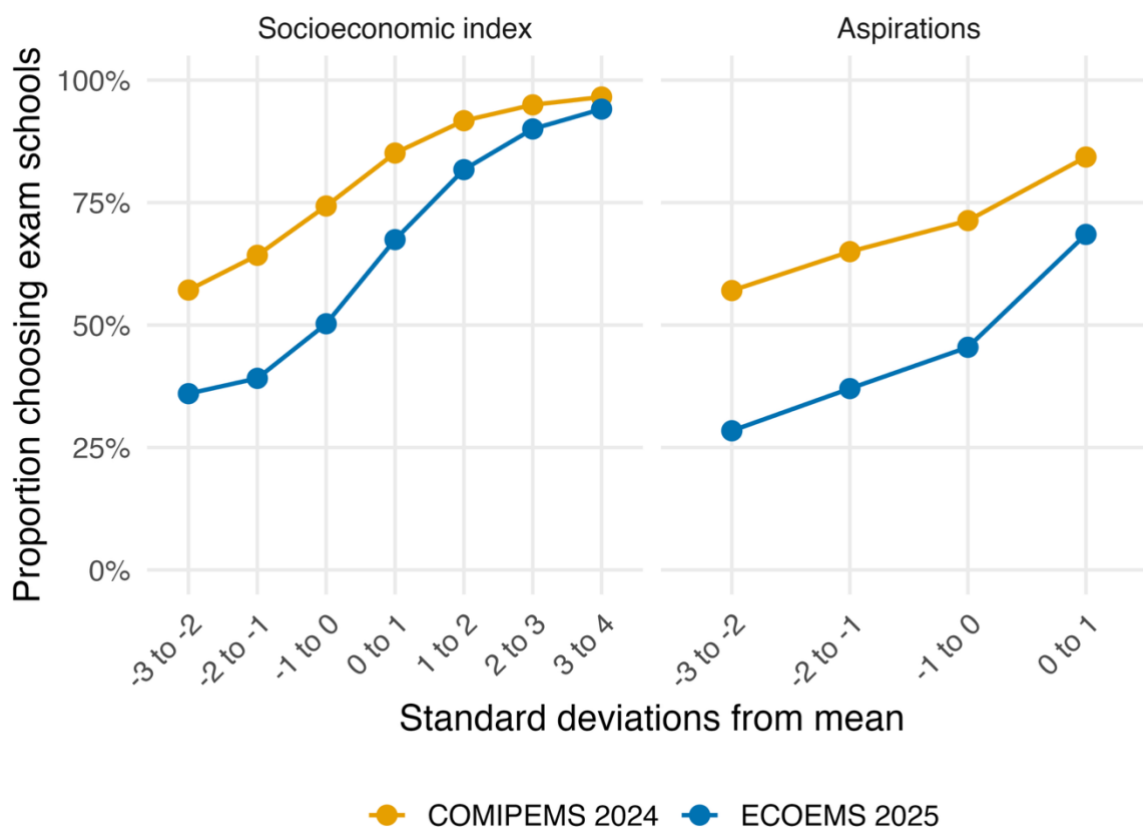


The change in the distribution of the outcome variable between the cohorts has important implications for the results of the logistic models. Because their coefficients are expressed in log-odds, any changes between cohorts reflect not only shifts in the underlying association between the outcome and the predictor variables but also changes in the baseline probability of the outcome. This is a well-known limitation of the educational transition model based on log-odds (Breen & Jonsson, 2000; Solís, 2014). To address this, average marginal effects in probability units are presented in Section 5.3, as a more substantive basis for analyzing the reform's effects.

As a first exploration of the association between outcome and predictor variables, Figure 3 shows the percentage of applicants who choose exam schools in a panel for SES and another for aspirations, each grouped into bands based on standard deviations from their mean. Both panels show a clear drop in the proportion choosing exam schools across cohorts and an increase as SES or aspirations rises, albeit with different patterns. In the SES panel, high-SES applicants largely maintained their exam-school choice behavior under ECOEMS: the gap between cohorts in the second-highest SES group is only 5 percentage points, but widens as SES decreases, reaching

a 21-percentage-point gap in the lowest group. As a result, the difference in exam-school choice between the lowest and highest SES groups widened from 39.6 percentage points under COMIPEMS to 58 percentage points under ECOEMS.

Figure 3. Percentage of applicants choosing exam schools by SES and Aspirations, grouped into bands of standard deviations from their mean



Note: Extreme bands with sparse observations omitted.

In the aspirations panel, the gap between cohorts in the lowest aspirations group is 28.6 percentage points, narrowing down to 15.9 percentage points in the highest group. The difference between the lowest and highest groups widened from 27.2 percentage points under the old system to 40 percentage points under the new one. While the difference between cohorts is greater for aspirations than for SES, the change in the difference between its lowest and highest groups is smaller, as the shift was more evenly distributed across its range. However, it is important to remember that the distribution of expectations is strongly left-skewed, whereas SES is approximately normal. This means that most applicants lie in the 0-1 range of the aspirations variable, so the shift at that point is particularly relevant compared to the rest of its scale.

5.2. Logistic Models

This section presents three logistic models: a simple model with only SES, a model with all predictors but without covariates, and a full model with all these variables. These models present a comparison of how the SES coefficient changes as the other variables are included, allowing analysis of the mediating role between SES and the other predictor variables and covariates. The full model, used in the rest of the analysis, estimates the log-odds as a function of the admissions system, SES, prior educational trajectory, grade average, aspirations, and expectations, as shown in Table 2. It includes three interaction terms that capture how the associations of SES, aspirations, and expectations with the outcome change when the system dummy is turned on, indicating the increase in their slope under the new admission system.

Given the sample size, all coefficients are statistically significant at conventional significance levels, rendering the p-values uninformative. Model fit was assessed using McFadden pseudo- R^2 , which compares the log-likelihood of the model to that of a model with only the intercept. The full model's pseudo- R^2 , 0.155, indicates sufficient explanatory power compared to the model without controls (0.132). These fit statistics are consistent with expectations, considering that the model predicts a complex behavioral outcome from structural background characteristics alone.

All predictor variables and covariates behave consistently with prior research on COMIPEMS. SES has the largest effect size among the continuous variables, followed by aspirations and grade average, which have similar effects. Meanwhile, the expectations variable has a comparatively lower coefficient. The covariates also behave as expected. School type has a strong effect, with a particularly large positive effect for private schools compared with the reference category of public general schools.

The interpretability of the log-odds coefficients for the research questions at hand is limited, especially for the interaction terms. However, the positive signs of the three interaction coefficients are noteworthy, as they indicate that all three associations strengthened under ECOEMS. System*ASPS is the largest, roughly 2.5 times as large as the other two interaction terms, which are similar. Nevertheless, these two interaction coefficients of equal size on the log-odds scale imply very different probability contrasts depending on their baseline levels, which differ significantly between SES and expectations, complicating their interpretation.

*Table 2. Logistic Regression models and log-odds coefficients, with standard errors in parentheses**

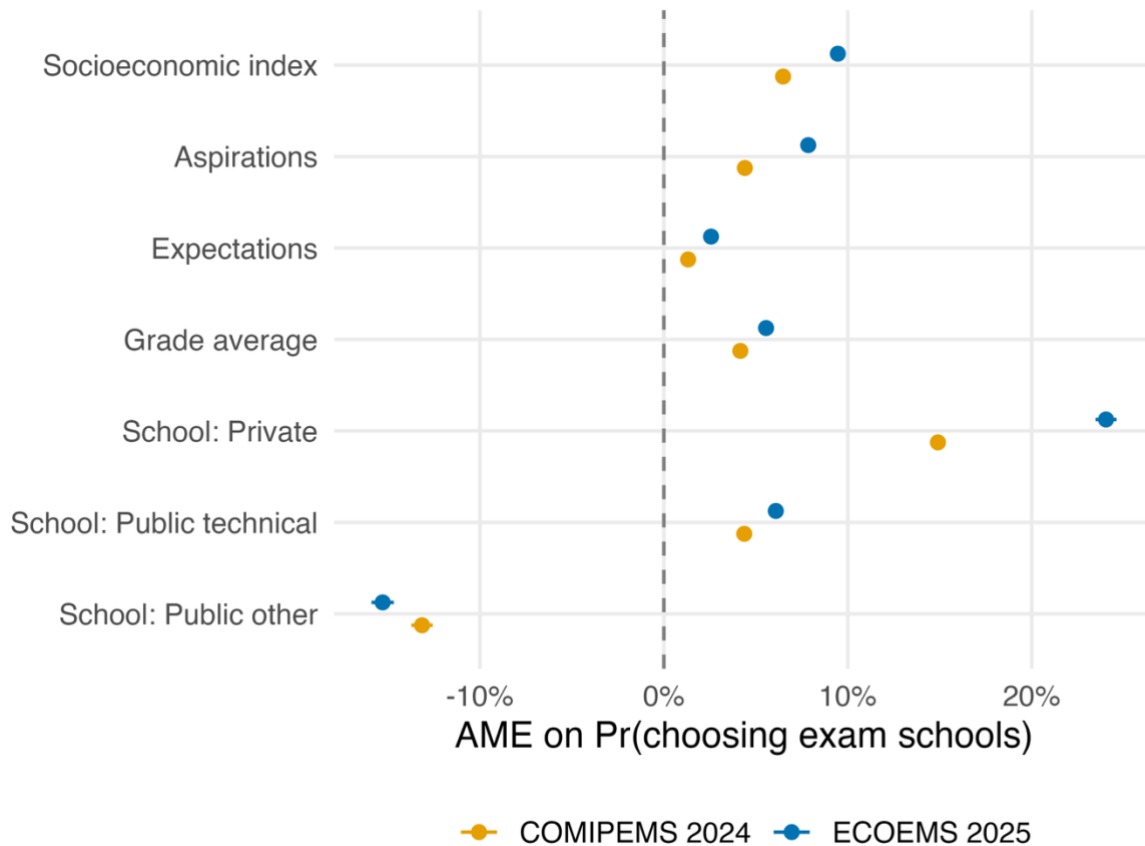
Variable		Model 1	Model 2	Model 3
Intercept		1.430 (0.005)	1.475 (0.005)	1.367 (0.006)
System (reference: COMIPEMS)		-1.016 (0.007)	-1.074 (0.007)	-1.070 (0.007)
Socioeconomic index (SES)		0.642 (0.005)	0.523 (0.006)	0.434 (0.006)
Expectations			0.151 (0.005)	0.088 (0.005)
Aspirations			0.349 (0.005)	0.295 (0.005)
System × SES		0.067 (0.007)	0.048 (0.007)	0.040 (0.008)
System × Aspirations			0.104 (0.007)	0.098 (0.007)
System × Expectations			0.052 (0.007)	0.040 (0.007)
Grade average				0.279 (0.003)
Type of middle school (reference: Public general)				
	Public technical			0.295 (0.007)
	Public other			-0.714 (0.015)
	Private			1.344 (0.020)
N		551,156	551,156	551,156
AIC		613,103.7	589,841.8	574,442.2
McFadden Pseudo-R ²		0.098	0.132	0.155

* Significance values omitted as all p-values < 0.001.

5.3. Marginal Average Effects and Probability Contrasts

To provide more meaningful interpretative material than the log-odds coefficients, this section presents marginal effects figures and probability contrasts for the predicted probabilities of choosing exam schools. First, Figure 4 presents the average marginal effect (AME) of the model variables, summarizing the average slope of the predicted probability curve across all observations in each cohort. This measure is the mean of the marginal effect of each variable, computed by holding the other variables at the observed values for each applicant and averaging the result. By showing it by cohort, this quantity separately indicates the average change in the probability of choosing exam schools for a one-unit increase in each model variable at its baseline under the old system and in the new system. As the continuous variables have been standardized, a one-unit increase in a variable corresponds to a one-standard-deviation increase, making the magnitudes of the variables easily comparable.

Figure 4. Average marginal effect (AME) on the probability of choosing exam schools



Note: Reference category for school type is public general. Confidence intervals at 99%.

Under the old system, among the predictor variables, a 1 SD increase in SES had the strongest effect on the probability of choosing exam schools (6.5 percentage points), followed by aspirations (4.4 percentage points) and expectations (1.3 percentage points). The effect of SES being strongest, followed by aspirations, is consistent with previous research findings by Rodríguez Rocha (2015), Solís (2014), and Solís *et al* (2013). The full AME estimates, standard errors, and changes between the cohorts is provided in [Table 4](#) in the Appendix.

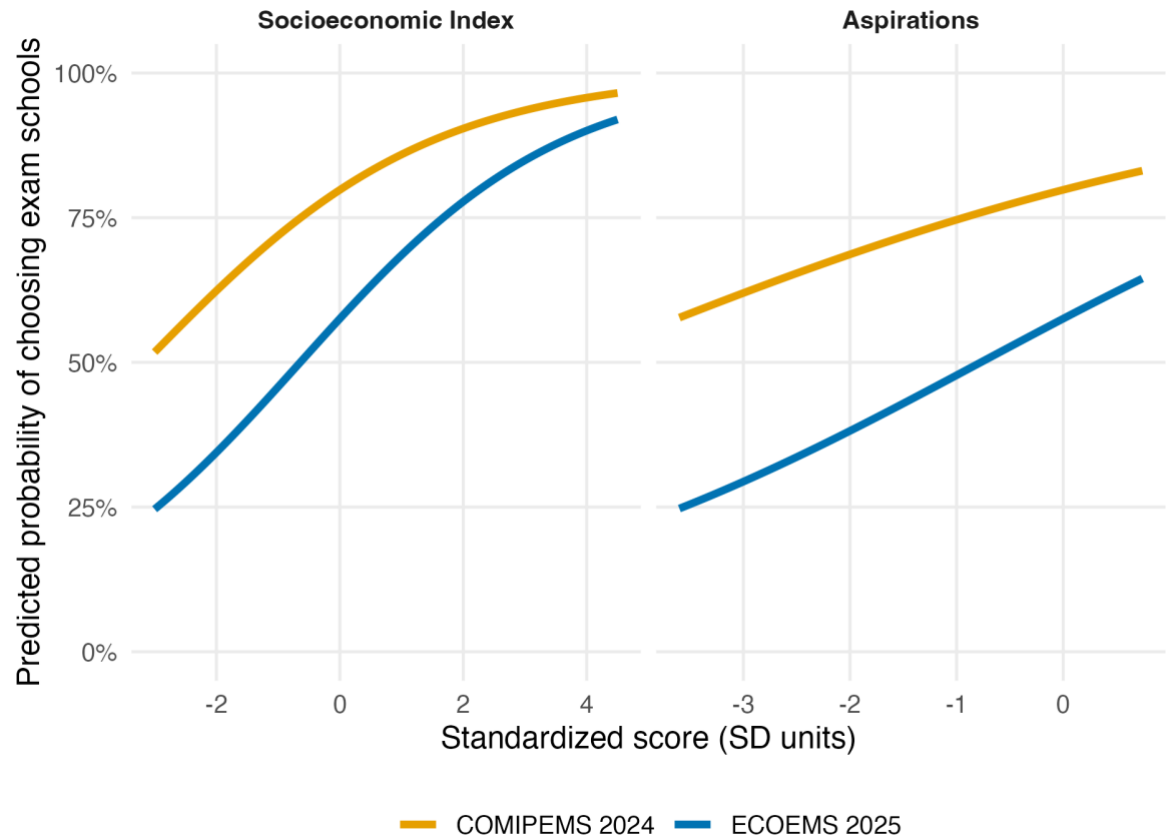
After the change to the admission system, the AME for all predictor variables increased. Under ECOEMS, an increase of 1 SD in SES became associated with a 9.4 percentage-point increase in the probability of choosing exam schools, followed by aspirations (7.8) and expectations (2.6). These correspond to increases of 2.9, 3.4, and 1.3 percentage points between cohorts, respectively. Although the magnitude of the increase in the predictors' effects varied, their order by AME remained unchanged from the old system. SES was still the strongest predictor in the new system, even though aspirations increased its effect the most in absolute terms. On the other hand, expectation doubled its effect size but remained low by comparison.

While not the focal point of the analysis, the changes in the AMEs of the covariates are noteworthy. For grade average, it increased from 4.2 percentage points to 5.6, an absolute increase of 1.4 percentage points, indicating that academic performance became more important in shaping applicants' choices. Applicants' prior trajectory shows a very meaningful pattern, as all types of middle schools strengthened their effect but in different directions: attending a public other middle school became a stronger negative predictor of exam-school choice, while attending public technical or private schools became a stronger positive predictor, compared to the reference category of public general high schools. The change in the AME of attending a private middle school was particularly marked. Increasing from 14.9 to 24.1 percentage points, it is by far the largest effect across all school categories, and more than twice the AME of SES and nearly three times that of aspirations.

Predicated probability plots and probability contrasts are now presented to visually display the interaction effects via changes in line gradients. Given their larger effects, focus is placed on the interaction of SES and aspirations, with the effects of expectations not explored in probability plots. Figure 5 contrasts SES and aspirations across their ranges, while holding school type at its reference category and grade average and expectations at their means. It confirms that the patterns shown in Figure 2 persist even after controlling for other variables. Under COMIPEMS, even low-SES applicants had a relatively high predicted probability of choosing exam schools (51.8%

at -3 SD), which under ECOEMS collapsed to nearly half (24.6%). At the high end of SES, the lines converge at 96.5% and 92%, with a difference of only 4.5 percentage points between cohorts. This confirms that high-SES applicants largely maintained their behavior, and that low-SES applicants drove the overall decline in choosing exam schools.

Figure 5. Predicted probability of choosing exam schools across the range of SES and Aspirations, by cohort



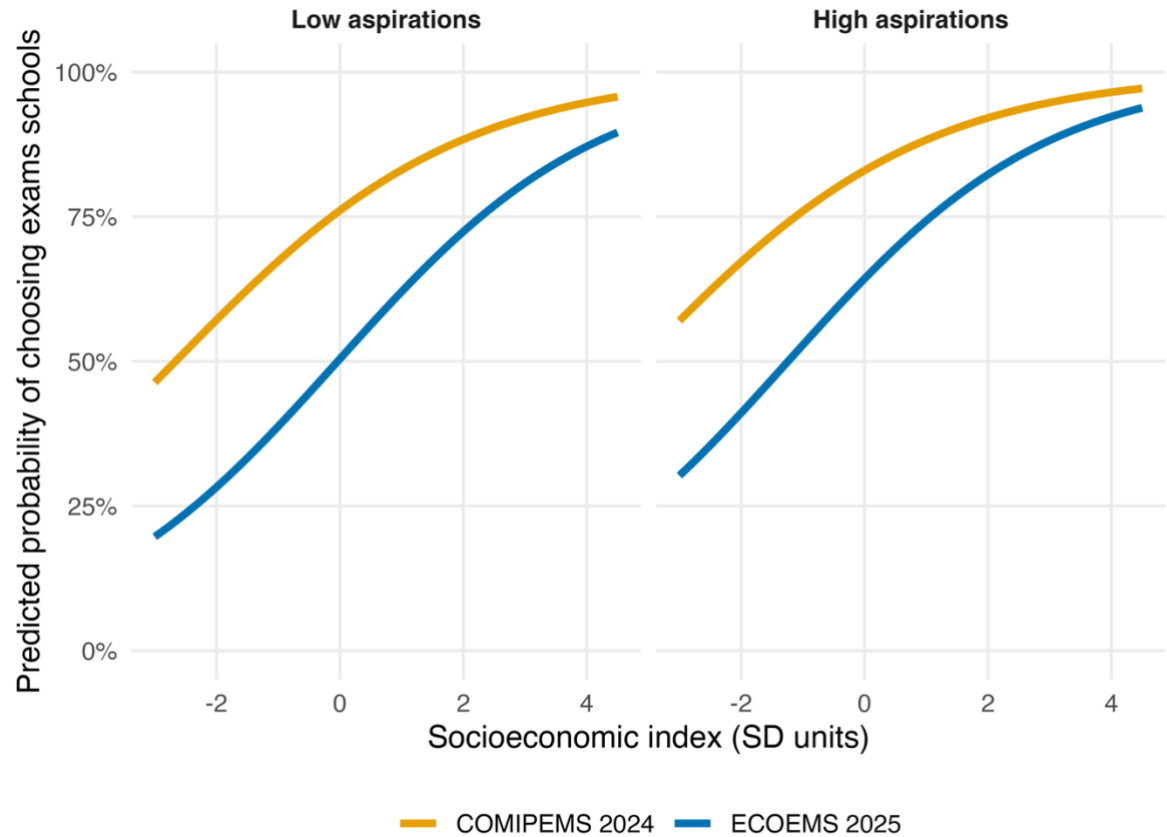
Note: Other variables held at public general school, mean grade average, mean aspirations, and mean expectations. See [table 5](#) and [table 6](#) in the appendix for selected values.

Meanwhile, in the Aspirations panel, the steeper slope under ECOEMS reflects the positive System $\times$ Aspirations coefficient, displaying how aspirations became a stronger self-selection mechanism for the exam track. Compared with SES, the gap between cohorts is larger at every point and the gradient is more uniform. The gap is especially large at low aspirations (-3.6 SD), collapsing from 57.7% to 24.7%, showing that low-aspiration applicants more than halved their probabilities, compared with a smaller drop from 83.1% to 64.5% at high aspirations (0.74 SD). This suggests that

under the old system, many low-aspiration applicants chose schools somewhat mechanically, since the exam was unavoidable and choosing the most selective schools had no marginal cost. This mirrors findings by García (2016) that indicate that low-SES applicants show less defined preferences, reflecting greater lack of access to information and guidance about schools and school choice strategies.

While these results show how SES and aspirations shaped school choice behavior separately, it is also important to display how they interact. For that, Figure 6 presents predicted probabilities of choosing exam schools across the SES distribution, conditioned at low aspirations (25th percentile, -0.71 SD) and high aspirations (median, 0.74 SD). The median was used as a reference point for high aspirations, rather than the 75th percentile, because the two values coincide due to a strong left-skewed distribution, as seen in [Figure 1](#).

Figure 6. Predicted probability of choosing exam schools by SES conditioned by low and high aspirations, by cohort



Note: Other variables held at public general school, mean grade average, and mean expectations. SD range is bounded to exclude extreme values. See [table 7](#) in the appendix for selected values.

Both panels show a gap between cohorts that narrows with increasing SES, confirming that the reform disproportionately affected lower-SES applicants regardless of their aspirations. However, the narrowing at the upper end of SES is more pronounced in the high-aspirations panel, as the gap between cohorts shrinks from 26.1 percentage points at SES -2 SD to 4.2 percentage points at SES 4 SD, compared to 28.9 to 7.6 percentage points in the low-aspirations panel. In other words, the gap between cohorts is smallest between high-SES, high-aspiration applicants. This shows that high-SES applicants with high aspirations were the most insulated from the reform's effect, even if high-SES, low-aspiration applicants were not far behind.

The shape of the SES gradient also changed substantially between systems. Under COMIPEMS, the gradient flattened in the upper SES range: among low-aspiration applicants, the predicted probability increased by 18.9 percentage points from -2 to 0 SD but by only 12.3 percentage points from 0 to +2 SD, with a similar flattening among high-aspiration applicants. Under ECOEMS, the gradient became both steeper overall and more uniform, increasing by roughly 22 percentage points in the lower and upper SES ranges for low-aspiration applicants, and by 23.2 and 18 percentage points for high-aspiration applicants. The reform not only shifted the overall level of exam-school choice downward but also altered the shape of the socioeconomic gradient by transforming a leveling-off at the upper SES range into a steeper, more uniform slope, especially for low-aspiration applicants.

On the other hand, high aspirations consistently raised the baseline probability of choosing exam schools across all SES levels, and this effect strengthened under ECOEMS. Under COMIPEMS, the gap between low- and high-aspiration applicants shrank from 10 percentage points at SES -2 to just 3.7 points at SES +2. This suggests that high SES largely compensated for low aspirations in the old system, as most high SES applicants selected exam schools regardless of their aspirations. Under ECOEMS, the aspirations gap remained substantial across the entire SES distribution, from 12.8 to 9.9 percentage points, indicating that aspirations became a more independent and persistent sorting mechanism under the new system, operating alongside rather than being absorbed by socioeconomic advantage. However, it was especially the case for high-SES applicants, explaining the steepening of the gradient at the upper end of the SES range for low-aspirations applicants in ECOEMS.

5.4. Discussion

Through a combination of descriptive, model and probability results, this thesis consistently shows that the change in the admissions system was associated with a strengthening of the link between applicants' background characteristics and their

choice of exam schools, with this pattern visible across descriptive, model-based, and interaction analysis. This claim is, however, limited by its reliance on observational data, the existence of a single post-reform cohort, and the difficulty of measuring additional attributes theoretically relevant to applicants' choices. However, the results are sufficient to state that this resulted in a drop in applicants applying to the school that now require the exam and, to the degree that this drop was driven by SES, increased social segregation between the two groups of schools.

Under the old admissions system, socioeconomic origin, aspirations, and expectations were already strong predictors of applicants' choices of the most selective schools. While the effects of all these variables strengthened, they did so to varying degrees, reflecting how each factor shapes educational choices in a different way that reacted to the change in institution design differently. Socioeconomic origin, as summarized by the SES index, reflects how resource availability and risk aversion shape educational choices depending on ascriptive position. It was the strongest predictor variable under both the old and the new system. Aspirations, as a measure of both applicants' and their families' desires to advance in education, remained as the second strongest predictor, although it saw the most marked increase in its effects.

Contrary to what was theorized, expectations, as a proxy for exam-related self-efficacy, had a much lower baseline effect, resulting in a smaller increase in its effect between the two systems than the other two predictor variables. Therefore, the analysis focused less on expectations compared to the other two predictor variables. Regarding previous educational trajectory, the baseline effect of private school is consistent with prior research, but its increase was not part of the hypothesis. This result suggests that attending a private middle school reflects characteristics beyond those measured in this model, possibly such as social networks, cultural capital, and access to exam-preparation resources, whose role in sorting applicants into the exam track was amplified under ECOEMS. While such variables are difficult to measure in this dataset, this result aligns with qualitative findings on adaptive strategies and access to information reported by Cobos (2023) and Rodríguez (2015) and points to avenues for further analysis, especially in qualitative research involving applicants.

Focusing on the isolated effect of each predictor variable, the changes in their average effect between the cohorts are straightforward. Dropout from the exam track was largely driven by low-SES applicants, with high-SES applicants mostly maintaining their choice of exam schools. Aspirations became a stronger predictor of exam school choice, showing a larger increase in effects that affected all applicants more evenly than SES. However, while its slope remained less steep than that of SES, the

admissions reform did still increase the aspirations gradient, leading to a larger gap in probabilities between cohorts at the low end of the aspiration distribution than at the high end.

Looking at the link between SES and aspirations reveals a more nuanced picture, in which the new admissions system shaped the magnitude of change in their effect depending on the levels at which they interacted. At times, these variables amplified each other: high-SES, high-aspiration applicants were the least likely to opt out of the exam track, with an 11% relative decrease compared to 50% for the group of low-SES, low-aspiration applicants. In other combinations, they counteracted one another: aspirations became a stronger predictor at both extremes of the SES distribution, but in different magnitudes. Among high-SES applicants, low aspirations had a small but noteworthy effect, explaining a large share of the opting out of the exam track observed at that SES level. Meanwhile, high aspirations had a larger effect on low-SES applicants, shielding some from the increased opting out associated with low SES. On the other hand, the effects of expectations are, by themselves, comparatively low, while they become meaningful when interacting with the effects of SES. They mirror much of the interaction between aspirations and SES, but in smaller size.

This thesis proposes two mechanisms regarding the reform's specific effects on school choice. First, under the new system, choosing exam-requirement schools became relatively more costly. Previously, all applicants paid the fee and took the exam regardless of their choices, so there was no marginal cost to including UNAM and IPN schools in their ranking. Now, choosing these schools means opting into the exam track when a less costly alternative exists. Because applicants' socioeconomic origin reflects their access to resources, social and cultural capital, and risk aversion to downward social mobility, it increases the likelihood that the exam track will be evaluated as accessible and worthwhile. This could explain why the association between choosing exam-requirement schools and socioeconomic origin increased, causing applicants from the lower end of the distribution to be more likely to opt out of the exam track.

Second, because schools that offer better pathways to higher education are concentrated in the new exam track, applicants' aspirations to attend higher education and their confidence in their abilities likely became more consequential as self-selection mechanisms. The more applicants and their families desire to reach university, the more the preferential access offered by UNAM and IPN schools would seem worth their associated marginal cost, making them more likely to opt for the exam track. Then, because obtaining access to those schools requires higher test score,

applicants' expectations of performing well on the exam are also expected to have had a similar effect, as those who did not believe they could get the test score they would need decided not to invest the extra cost involved in entering the exam track.

The resulting shifts in school choice patterns are interpreted as a component of applicants' adaptive strategies, as they react to a new institutional context and revise the action plans they use to pursue their goal of being admitted to one of their preferred schools. Looking at the three parameters that shape the evaluations of schools that lie behind these strategies, it is clear how the new admissions system created a marked difference between the two tracks, exam and lottery, to which applicants responded. First, in expected costs, not only because of the fee required to participate in the exam, but also in terms of effort, time, and, in some cases, preparatory courses. Second, in expected benefits, as all of the most prestigious schools with better pathways to higher education were in the exam track. Finally, in the likelihood of success, about which the two tracks have fundamentally different logics: the lottery depending entirely on chance and the exam promising applicants some degree of control, depending on their own subjective self-efficacy expectations.

In turn, the three mechanisms that shape student choices (resources, ability, risk aversion) help explain changes in the predictor variables, depending on applicants' ascriptive positions. Aspirations, particularly parental ones, might be related to the degree of risk aversion that characterizes each social position. Expectations is a subjective measure of applicants' perception of their own exam-related abilities. Meanwhile, socioeconomic origin operates on all three parameters simultaneously: it affects the cost of exam preparation (resources), the perceived likelihood of success (perceptions of ability and risk aversion), and, to some extent, the perceived benefits through aspirations. This would seem to explain why SES is the strongest and most persistent buffer against opting out of the exam track, as it shapes the entire evaluative framework within which applicants make their decisions, not just one parameter.

Overall, these results provide strong evidence for the thesis' hypothesis, which holds that the characteristics of an applicant's socioeconomic origin, aspirations and expectations increased their weight as predictors of applying to schools that use the exam as an admissions mechanism. This is associated to a greater divergence in school choices, which is interpreted as an increase in social segregation by school selectivity, as the differences in applicants' backgrounds in each group became larger. In terms of the theory of effectively maintained inequality, the results support the role of the predictor variables, especially SES and aspirations, as having increased their

effectiveness in moving students between the threshold of two segmented positions: exam- and non-exam-requirement schools.

The results also show what segment of applicants are most associated with this divergence in school choice patterns. First, by increased opting out of the exam track by applicants from lower SES and, secondly, by the strengthened role of aspirations to progress in education and of expectations of exam performance as self-selection mechanisms for the most selective, exam-requiring schools. As the mechanisms behind socioeconomic origins and educational background work in tandem, at times amplifying and at others counteracting one another, the resulting social segregation in school choices became more nuanced than the combined effect of either variable's independent contribution. These findings allow for a rich discussion of their implications for analyzing the interaction between institutional design and social inequality in the transition to upper secondary education, which is presented next in the final chapter.

6. Conclusions

The admissions system reform's unintended shift to a mix of admissions tracks increased the implications of applicants' school choices, introducing an additional, more consequential decision that did not exist in the previous system. Including any of the most selective schools, with the benefits in prestige, quality and access to university they represent, now meant opting into the exam track. Compared to the alternative of being assigned to one of the other schools via the lottery track, the exam is not only an additional cost in resources and effort to prepare for and take it. It also means relying on the test score obtained, rather than leaving the result to the random draw of a lottery.

The change in the admissions system led to a significant drop in the number of applicants choosing exam schools, equivalent to 19.3 percentage points, or 62,129 applicants. However, this drop was not uniform across aspirants. It was concentrated among those with lower socioeconomic origins and weaker educational aspirations. A comparison between the cohorts shows that this change is unlikely to have resulted from compositional changes in the applicant pool. Rather, the results of a logistic regression model indicate the drop was driven by a strengthening of the association between school choices and applicants' social origin and educational background, resulting in diverging patterns of school choices with more pronounced socioeconomic segregation.

These empirical results have several theoretical and policy implications. Being able to opt in or out of the exam track affected applicants who were near the threshold for choosing selective schools. The diverging pattern of school choice found indicates that the reform effectively interacted with applicants' background to modify their decision threshold, changing which side some of them occupied. Below certain levels of SES and aspirations, applicants responded to the new institutional context by opting out of the exam track. Above that threshold, behavior was more stable. These diverging patterns result from the direct influence of SES and, indirectly, through aspirations and expectations, on the choices students make, providing evidence of the secondary effects of social class.

By focusing on school choices, this thesis addresses only the most immediate aspect of the change in the admissions system. It does so in a deliberately broad way, operationalizing the outcome and predictor variables to focus on how the most salient institutional shift —the option to opt out of the exam track— affected students' adaptive strategies and, as part of them, their school choices. However, the results pave the way for research that explores more specific issues. One of these is a decomposition of the SES index to examine the weight of its different components (monetary, social, or cultural capital), or different operationalizations of aspirations, separating applicants' and parents' desires and focusing on higher education, or of expectations, as a broader form of academic self-efficacy. More importantly, this thesis lays the groundwork for analyzing the changes the new admissions systems brought to the actual assignment of applicants to schools, as well as to its link to educational outcomes, since those outcomes are what connect schooling to social mobility. From a qualitative perspective, these studies could be complemented with research on how the experiences of students and families define and shape how they carry out their adaptive strategies (Cobos, 2023).

Although those analyses would be the most informative for a policy perspective, the results found in this thesis already point in important directions. The strengthening of the effects of social origins and their persistence as the most influential predictor of school choices points to the difficulty of isolating education from the larger dimensions of socioeconomic inequality that are external to schools. That implies that the role of education is bounded by the persistence of social inequality, without saying that it is insignificant. As this analysis exemplifies, the design of education policy matters to shape the role it takes when it interacts with broader social inequality, be it to mediate, mitigate, or equalize differences originating outside of schools (Solís & Dalle, 2019). But the wider those external inequalities are, the harder pressed the education system will be when facing them.

Much of recent education policy in Mexico has been focused on increasing enrollment (Sifuentes, 2024). While guaranteeing everyone has a place in school is a necessary step, it is not sufficient. As long as schools remain highly heterogeneous, any admissions mechanism will reproduce social segmentation because the stakes of school choice are too high. This is especially true when access to the most selective schools is linked not only with better outcomes at that level, but also with much better pathways to the next one. Even as enrollment in high school in Mexico City approaches universality, such school heterogeneity allows for the effects of social inequality to persist, as its focus of activity “change[s] over time as qualitative differences supplant quantitative differences” in access in importance, as Lucas’ theory of effectively maintained inequality suggests (Lucas, 2001). While these findings do not directly test this theory, they do show how, even when access is universal as there are enough spaces in high school for all applicants, class conflict around qualitative differences in opportunities persisted and even intensified as schools become more heterogeneous, as an unintended consequence of the reform.

The heterogeneity of schools is a complicated issue to resolve not only from a policy perspective, but also from a governance one, clearly exemplified here by UNAM and IPN's decision to maintain the exam against policymakers' intentions. It also shows how policymakers' and education institutions can have conflicting interests when it comes to social segmentation among schools. Yet it is essential to continue working towards a more unified and equal offering of high schools, as the exam and the lottery are both downstream of the problems of institutional stratification and social inequality that complicate inequality of opportunity in the transition to upper secondary schooling (Sifuentes, 2025; Solís et al., 2013).

Analysis of the countries that were able to significantly increase social mobility point to the importance of combining reforms in education and in other areas (Solís & Dalle, 2019). In education, it is necessary to introduce reforms that expand and democratize the system to ensure that everyone has a place in school and that all positions are as equal as possible. In terms of social and economic policies, policies that reduce class inequalities in living conditions would limit their direct effects and their indirect ones that are mediated through schooling. As Lucas (2001) states, ‘social background cannot allocate persons to qualitatively better or worse positions if all positions are equal’. In other words, the most effective way to reduce the association between social origin and educational position, with the negative effects it has on social mobility, is to limit the distance between social and educational positions in the first place (Dubet & Duru-Bellat, 2007).

This policy reform rightly included efforts to level the system, but those will, at best, take years to achieve. In the meantime, by inadvertently creating a choice between chance and merit, in which those who opt for merit are determined by social origin and educational background, both products of prior inequality, the reform in the admissions system led to increased social segregation in applicants' school choices, as their backgrounds became more consequential. To be clear, this did not result from eliminating the exam, but from introducing two admissions tracks along the lines of school selectivity. A return to a unified, single-track system would reduce social segregation, regardless of the admissions mechanisms used. However, given the association between the admissions exam and socioeconomic origin, a unified system without an exam seems the most likely to increase equality of opportunity in the transition to upper secondary schooling in Mexico City.

While this thesis did not measure the assignment of applicants to school, it is likely to have experienced a similar shift as school choice did, due to the role that school choices have as a first filter in the admission system, which is then amplified by the exam results, as previous research has found (Blanco, 2014; Solís, 2014; Solís et al., 2013). If so, the change in the admissions system will have resulted in increased horizontal inequality in the transition to upper secondary schools, with negative downstream effects on social mobility. Thus, a reform intended to reduce social segmentation by downplaying the role of the admission exam inadvertently amplified it through a different mechanism: school choice. Motivated by a philosophical shift from meritocratic competition to undifferentiated access, the reform intended to decrease the weight of applicants' social origins on their trajectory. However, the increase in school heterogeneity represented by the exam- and lottery-based tracks led to more pronounced social segmentation in school choices than existed under the previous system.

The reform aimed to give applicants a level playing field in accessing schools by eliminating a skewed admissions mechanism that consistently favored applicants from upper socioeconomic origins. However, because the most selective schools refused to abandon the exam, taking part in it became an active, deliberate choice for applicants, depending on whether they included any of the most selective schools among their choices. The new system gave applicants an exit option from the exam track and the decision to take it was socially segmented. By shifting the parameters that shape how applicants strategize to pursue their goals, constrained by social status and expectations but acting in pursuit of their goals, the new admissions system took a split along socioeconomic and educational lines and further deepened it around the threshold between merit and chance.

Bibliography

- Blanco, E. (2014). La desigualdad social en el nivel medio superior de educación de la Ciudad de México. *Papeles de Población*, (80), 249–280.
- Blanco, E. (2024). *Políticas educativas y movilidad social en México* [Documento de política pública]. Centro de Estudios Espinoza Yglesias.
- Bolívar, A. (2005). Equidad educativa y teorías de la justicia. *Revista Iberoamericana Sobre Calidad, Eficacia y Cambio En Educación*, 3(2), 42–69.
- Bolívar, A. (2012). Justicia social y equidad escolar. Una revisión actual. *Revista Internacional de Educación Para La Justicia Social*, 1(1), 9–45.
- Breen, R., & Goldthorpe, J. H. (1997). Explaining Educational Differentials: Towards a Formal Rational Action Theory. *Rationality and Society*, 9(3), 275–305. <https://doi.org/10.1177/104346397009003002>
- Breen, R., & Jonsson, J. O. (2000). Analyzing Educational Careers: A Multinomial Transition Model. *American Sociological Review*, 65(5), 754–772. <https://doi.org/10.1177/000312240006500507>
- Breen, R., & Jonsson, J. O. (2005). Inequality of Opportunity in a Comparative Perspective: Recent Research on Educational Attainment and Social Mobility. *Annual Review of Sociology*, (31), 223–243.
- Breen, R., Müller, W., Luijkx, R., & Pollak, R. (2009). Nonpersistent Inequality in Educational Attainment: Evidence from Eight European Countries. *American Journal of Sociology*, 114(5), 1475–1521.
- Cobos, D. O. (2017). Procesos de selección para ingresar a la educación media superior en el Distrito Federal Entre la equidad y el mérito individual. In *La construcción de oportunidades educativas en contextos de desigualdad* (pp. 25–60). UNAM, Instituto de Investigaciones Sociales.
- Cobos, D. O. (2023). *La construcción de estrategias adaptativas a la desigualdad de oportunidades educativas en la Ciudad de México: El caso de estudiantes de secundaria en transición a la educación media superior*. Colecciones Digitales de El Colegio de México. <https://repositorio.colmex.mx/concern/theses/xp68kj963?locale=es>
- Dubet, F., & Duru-Bellat, M. (2007). What Makes For Fair Schooling? In *International Studies in Educational Inequality, Theory and Policy Volume 3: Inequality: Educational Theory and Public Policy* (pp. 275–291). Springer.
- ECOEMS. (2026a). *Instituciones | ECOEMS - Mi Derecho Mi Lugar*. ECOEMS. <https://ecoems.org/instituciones/>
- ECOEMS. (2026b, March 10). *¿Qué cambia con el ECOEMS respecto al COMIPEMS? Análisis comparativo del nuevo sistema de asignación | Blog ECOEMS*.

- ECOEMS. <https://ecoems.org/blog/que-cambia-con-ecoems-respecto-a-comipems/>
- ECOEMS. (2026c, March 18). *ECOEMS - Mi Derecho Mi Lugar | Sistema de Asignación a Educación Media Superior*. ECOEMS. <https://ecoems.org/>
- García, I. (2016). Patrones de elección de los participantes del concurso para el ingreso a la Educación Media Superior de la COMIPEMS. *Revista mexicana de investigación educativa*, 21(68), 95–118.
- Hernández, L. (2025, July 17). La UNAM acepta a cada vez menos alumnos en licenciatura. *La Jornada*. <https://www.jornada.com.mx/2025/07/17/politica/006n1pol>
- Hernández-Fernández, J. (2020). Admisión y selección socioeconómica en educación media superior. *Perfiles Educativos*, 42(170). <https://doi.org/10.22201/iisue.24486167e.2020.170.59322>
- Herrera, A. E. (2010). Examen único para ingresar al nivel medio superior. ¿Oportunidad o negocio? *Uaricha Revista de Psicología*, (14), 56–72.
- López-Ramírez, M., & Rodríguez, S. A. (2020). Métodos y técnicas de investigación en el análisis de trayectorias y transiciones educativas en México. *Revista Electrónica en Educación y Pedagogía*, 4(6), 86–104.
- Lucas, S. R. (2001). Effectively Maintained Inequality: Education Transitions, Track Mobility, and Social Background Effects. *American Journal of Sociology*, 106(6), 1642–1690.
- Mijs, J. J. B. (2015). The Unfulfillable Promise of Meritocracy: Three Lessons and Their Implications for Justice in Education. *Social Justice Review*, (29), 14–34.
- Osnaya, M. (2025). Implicaciones de la extinción de la evaluación de la Comisión Metropolitana de Instituciones Públicas de Educación Media Superior en el sistema educativo mexicano. In *La educación en el marco del Plan Nacional de Desarrollo 2025-2030* (pp. 151–179). Universidad Autónoma del Estado de Morelos.
- Rodríguez, E. (2015). *El proceso de toma de decisiones en la transición de la secundaria a las instituciones públicas de educación media superior en la Ciudad de México. Un factor clave para entender el problema de la persistencia en la desigualdad de oportunidades educativas* [Tesis para optar al grado de Doctor en Ciencia Social con especialidad en Sociología]. El Colegio de México.
- Rodríguez, S. A. (2018). La persistencia de la desigualdad social en el nivel medio superior de educación en México. Un estudio a nivel nacional. *Perfiles Educativos*, 40(161), 8–31. <https://doi.org/10.22201/iisue.24486167e.2018.161.58603>

- Secretaría de Educación Pública. (2015). *Comisión Metropolitana de Instituciones Públicas de Educación Media Superior Comipems*. gob.mx. <http://www.gob.mx/sep/prensa/comision-metropolitana-de-instituciones-publicas-de-educacion-media-superior-comipems>
- Sifuentes, V. I. (2024). *Desigualdad y acceso diferenciado: El debate en torno al COMIPEMS*. Centro Regional de Investigaciones Multidisciplinarias. Universidad Nacional Autónoma de México.
- Sifuentes, V. I. (2025). Transición a la educación media superior en México mecanismo de ingreso y expectativas educativas. *Andamios*, XXII(59), 319–345. <https://doi.org/https://doi.org/10.29092/uacm.v22i59.1229>
- Solís, P. (2013). Desigualdad vertical y horizontal en las transiciones educativas en México. *Estudios Sociológicos*, XXXI, 63–95.
- Solís, P. (2014). Desigualdad social y efectos institucionales en las transiciones educativas. In *Caminos desiguales. Trayectorias educativas y laborales de los jóvenes en la Ciudad de México* (pp. 71–106). INEE-El Colegio de México.
- Solís, P. (2018). La transición de la secundaria a la educación media superior en México: El difícil camino a la cobertura universal. *Perfiles Educativos*, 40(159), 66–89. <https://doi.org/10.22201/iisue.24486167e.2018.159.58412>
- Solís, P., & Dalle, P. (2019). La pesada mochila del origen de clase. Escolaridad y movilidad intergeneracional de clase en Argentina, Chile y México. *Revista Internacional de Sociología*, 77(1), e118. <https://doi.org/10.3989/ris.2019.77.1.17.102>
- Solís, P., Rodríguez Rocha, E., & Brunet, N. (2013). Orígenes sociales, instituciones, y decisiones educativas en la transición a la educación media superior: El caso del Distrito Federal. *Revista mexicana de investigación educativa*, 18(59), 1103–1136.
- Torche, F. (2010). Economic Crisis and Inequality of Educational Opportunity in Latin America. *Sociology of Education*, 83(2), 85–110.
- Villa, L. (2007). La educación media superior ¿igualdad de oportunidades? *Revista de La Educación Superior*, XXXVI(141), 93–110.

Appendix

Table 3. Principal Component Analysis

Variable	Description	Principal Component 1
ED_MOTHER	Education level of mother	0.61
ED_FATHER	Education level of father	0.60
INC_MON	Monthly household income	0.69
CUAN_LIB	Number of books at home	0.49
BIEN_PC	Number of computers	0.74
SER_TV	Number of televisions	0.63
SER_AUTO	Number of automobiles	0.67
SER_BANO	Number of full bathrooms	0.65
SER_LAV	Washing machine (yes/no)	0.65
SER_HOR	Microwave oven (yes/no)	0.62
SDC_APOT	Piped drinking water (yes/no)	0.43
SDC_GAS	Natural gas connection (yes/no)	0.44
Proportion of variance explained		0.38

Table 4. Average marginal effect (AME) on the probability of choosing exam schools, by year, from [figure 4](#)

Variable	2024		2025		Change	
	AME	Std. Error	AME	Std. Error	Absolute	%
Socioeconomic index (SES)	0.065	0.0008	0.094	0.0010	0.029	44.6
Aspirations	0.044	0.0007	0.078	0.0009	0.034	77.3
Expectations	0.013	0.0008	0.026	0.0009	0.013	100.0
Grade average	0.042	0.0005	0.056	0.0007	0.014	33.3
Educational trajectory						
- Public technical	0.043	0.0011	0.060	0.0015	0.017	39.5

- Public other	-0.129	0.0029	-0.150	0.0030	-0.021	-16.3
- Private	0.149	0.0015	0.241	0.0029	0.092	61.7

Note: all p-values < 0.001.

Table 5. Predicted probability of choosing exam schools across the range of SES by cohort (from [figure 5](#))

SES	Cohort	Predicted Probability
-2	COMIPEMS	0.6255
-1		0.7188
0		0.7991
1		0.8589
2		0.9045
3		0.9355
4		0.9575
-2	ECOEMS	0.3462
-1		0.4574
0		0.5773
1		0.6849
2		0.7788
3		0.8486
4		0.9008

Table 6. Predicted probability of choosing exam schools across the range of aspirations by cohort (from [figure 5](#))

Aspirations	Cohort	Predicted Probability
-3.00	COMIPEMS	0.6191
-2.00		0.6861

Aspirations	Cohort	Predicted Probability
-1.00		0.7462
0.00		0.7981
0.74		0.8311
-3.00	ECOEMS	0.2931
-2.00		0.3810
-1.00		0.4774
0.00		0.5755
0.74		0.6448

Table 7. Predicted probability of choosing exam schools by SES conditioned by low and high aspirations, by cohort (from [figure 6](#))

Aspirations	SES	Pr in COMIPEMS	Pr in ECOEMS
High	-2	0.6719	0.4108
	-1	0.7597	0.5284
	0	0.8300	0.6429
	1	0.8829	0.7431
	2	0.9209	0.8229
	3	0.9473	0.8819
	4	0.9652	0.9231
Low	-2	0.5717	0.2827
	-1	0.6733	0.3877
	0	0.7609	0.5043
	1	0.8309	0.6204
	2	0.8835	0.7243
	3	0.9213	0.8084

Aspirations	SES	Pr in COMIPEMS	Pr in ECOEMS
	4	0.9476	0.8715