Private schooling in Latin America

Trends and Public Policies

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Private schooling in Latin America: Trends and Public Policies

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Abstract

Over the last 25 years, more than two-thirds of OECD countries have increased school choice opportunities for parents. For example, in recent years, new forms of delivery like government-dependent private schools have flourished in nearly all of the OECD countries by using policies such as open enrollment in public schools and several forms of public-private partnerships (e.g. school vouchers, charter schools, and magnet schools).

Although Latin America is one of the regions with the greatest private sector participation and expansion in the world, there is scant information on the policies countries have adopted to strengthen parental choice and incorporate private schools into the public system. To fill this knowledge gap, in this report we first explore private school trends in Latin America, using available census data and administrative records in each country, and then we review the policies adopted by Latin American countries to strengthen their mixed schooling systems. The review of these policies is to focus mainly on the specific design and implementation features and on the evidence of their impact on efficiency and equity. We characterize policies into three dimensions: i) the design and regulations of public funding of private schools; ii) school admission systems; and iii) information and accountability.

After reviewing the evidence and country cases studied in this report, we conclude with a set of recommendations that could provide Latin-American countries and other middle- and low-income countries with a high proportion of students enrolled in private schools, with a policy road map to introduce finance and regulations that promote quality and equity.

First, we show that financing policies that are part of a governmental system, tied to effective regulations on the quality of education provided by schools and that take into account family and school background characteristics have a positive impact on student performance and equity. Second, we examine centralized admission systems in the region and conclude that the implementation of these systems is consistent with the trend in countries that have introduced school choice to families, since they are a fair, efficient, and transparent way to allocate vacancies in schools. Third, we review information and accountability policies in LAC. We find that many countries in the region apply standardized tests at different levels. However, in most countries, the results are only used to provide feedback directly to schools and to target support programs. Very few school systems in the region use the results to provide incentives for parents, schools, and teachers. The evidence also sheds light on the importance of designing the rules so that schools

respond to these pressures by introducing policies and practices that aim to improve learning and narrow the achievement gap taking into account quality and equity.

The results of this work will contribute to our understanding of how educational markets work in different contexts. We also hope to set forth an agenda for the future study and practice of school choice and private schooling in the region. Rather than ask whether school choice is an effective reform, the goal of this report is to study the policies that school systems with a high proportion of private schools in the region are implementing in practice.

1. Introduction

Over the last 25 years, more than two-thirds of OECD countries have increased school choice opportunities for parents. According to Musset (2012), in this group of countries, most school systems are based on the geographical assignment of students to their neighborhood public school (e.g. based on the location of the family's residence and its proximity to the school), combined with a certain flexibility to choose among other public schools, particularly in secondary education. However, parental choice is often restricted in different ways, including academic and other admission criteria. But also in recent years, new forms of delivery like government-dependent private schools have flourished in nearly all of the OECD countries. For example, in 25 out of the 33 OECD countries, public authorities finance private schools, with the exception of Estonia, Greece, Ireland, Italy, Japan, Mexico, and the United States (Musset, 2012). These policies include open enrollment policies in public schools and several forms of public-private partnerships (e.g. school vouchers, charter schools, and magnet schools).

Despite being a recent trend, school choice has been a hot topic of policy debate since the 1950's when Milton Friedman published his seminal article on "The Role of Government in Education." From that moment onwards, a persistent debate began about the effects of choice on different educational outcomes.

The promoters of school choice have argued that it would increase the efficiency of schooling systems, operating as a market incentive for schools to improve. The threat of losing enrollments and resources leverages pressure on schools to improve in order to retain their students and recruit new ones (Friedman, 1962; Chubb and Moe, 1990). The key assumption behind this argument is that parents have information about the quality of schools and that they will make informed decisions. Choice advocates have also maintained that public schools are organized to serve bureaucratic needs rather than the goals derived from public interest, while private schools (especially for-profit) are goal oriented and driven to respond to parents' preferences (Chubb and Moe, 1990). Voucher advocates predict that private schools will be laboratories for change and experimentation in pedagogical innovation.

However, the empirical evidence on the impact of school competition on efficiency is mixed. While several studies show that competition between public and private schools increases aggregate educational outcomes (generally measured through the results in national standardized tests), others find no evidence of impact. For example, Christophe et al. (2015) reviewed more than 40 studies, which use different measures of competition (e.g. market concentration indices like the Herfindahl-Hirschman Index, percentage or number of private schools in the market, etc.). Of all of the studies reviewed, 21 showed positive effects larger than 0.15 standard deviations, 12 find no significant effects, 2 show negative effects, and 5 have mixed results, depending on the specification and databases used.

In addition, several studies have analyzed the relative efficiency of private and public schools. While some studies show no significant differences between both types of schools (e.g. McEwan, 2001) others find an advantage in favor of private schools, but the magnitudes are low after controlling for students' socio-economic status (SES) and selection bias (e.g. Angrist, Bettinger, and Kremer, 2006; Lara, Mizala and Repetto, 2011). Researchers have also found heterogeneous effects. All else equal, the evidence suggests that Catholic schools (e.g. Neal, 1997; Carnoy and McEwan, 2000; McEwan, 2001) and schools that operate as networks (Elacqua et al., 2011) outperform other public and private school types.

Advocates have also argued that the introduction of market mechanisms in education will expand the educational opportunities of the most disadvantaged students (Neal, 2002; Jencks, 1966). Since economically advantaged families have always had the opportunity to enroll their children in high performing schools through residential mobility or by choosing private schools (Viteritti, 2003), proponents have argued that enabling disadvantaged families to leave their low performing neighborhood schools for higher performing ones would enhance educational equity and reduce school segregation (Moe, 2001; Finn, 1990).

School choice opponents contend that choice increases the risk of increasing inequities (Fiske & Ladd, 2000; Levin, 1998). Skeptics argue that low-SES families will not have the information or the time to make informed decisions and choose high quality schools for their children (Schneider, Teske, & Marschall, 2000; Ascher, Fruchter, & Berne, 1996). They argue that disadvantaged parents will tend to base their educational decisions on non-academic factors, such as the proximity of schools to their residence or the availability of extracurricular activities, and that they will be less likely than more advantaged families to use choice programs to find a higher performing school (Bifulco & Ladd, 2007; Saporito, 2003; Henig, 1994). Critics are also concerned that schools will have incentives to skim-off high achieving students at the expense of disadvantaged and low performing ones, who will remain at their low performing and segregated neighborhood public schools (Epple and Romano, 1998).

The concerns of the opponents to school choice are supported by empirical research that has analyzed the impact of these policies on equity. For example, several studies have found that more advantaged families and high performing students are more likely to opt out of their assigned public school (e.g. Alves et al., 2015; Bifulco, Ladd, and Ross, 2009; Cullen et al., 2005; Hastings et al., 2005) and that school choice increases segregation, relative to underlying residential segregation (Elacqua and Santos, 2016; Bifulco, Ladd, and Ross, 2009; Sohoni and Saporito, 2009; Riedel et al., 2010; Allen, 2007; Östh, Andersson, and Malmberg, 2013).

In recent years, following the theoretical debates and empirical evidence, several school systems have adopted policies to improve the functioning of their school choice systems. For instance, some countries have introduced funding formulas that account for student background characteristics – the Netherlands and Chile provide schools with a higher per pupil voucher for disadvantaged children. To increase equity and transparency in school admissions, several school systems have introduced centralized admission systems where a government agency processes school preferences declared by families and assigns schools based on priorities defined by law (e.g. Amsterdam, Belgium, New York City, New Orleans, Boston, and Barcelona). Finally, most school choice systems have also introduced minimum quality standards for subsidized schools and many hold them accountable for their outcomes. For example, Chile, most states in the United States, the United Kingdom, and the Netherlands set learning standards and use student assessments to rank schools and hold them accountable for their performance.

Although Latin America is one of the regions with the greatest private sector participation and expansion in the world (see Figure 1), there is scant information on the policies countries have adopted to strengthen parental choice and incorporate private schools into the public system. To fill this gap, in this report we first explore private school trends in Latin America, using available census data and administrative records in each country, and the policies adopted by Latin American countries to strengthen their mixed schooling systems. The review of these policies will focus mainly on the specific design and implementation features and on the evidence of their impact on the efficiency and equity of educational systems.

The results of this work will contribute to our understanding of how educational markets work in different contexts. We also hope to set forth an agenda for the future study and practice of school choice and private schooling in the region. Rather than ask whether school choice is an effective reform, our goal is to study the policies that school systems with a high proportion of private schools in the region are implementing in practice.

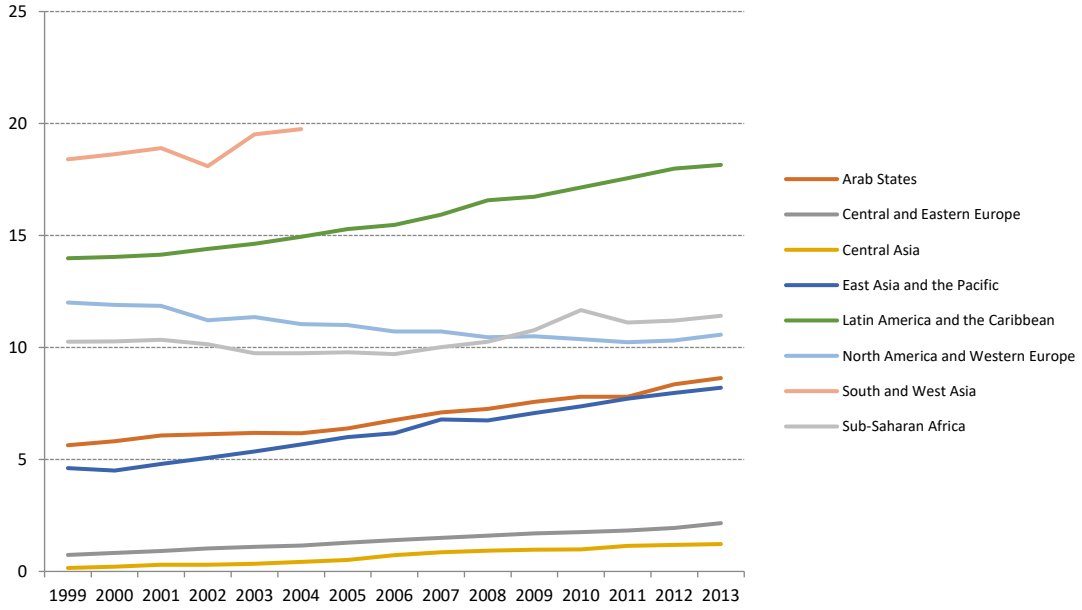
The report is structured as follows. In section 2 we describe the trends in private school enrollment for several Latin American school systems. Section 3 examines three policies that mixed schooling systems in the region have implemented to improve the design of their school choice systems.[1] Section 4 concludes and presents policy implications as well as an agenda for future research on choice and private schooling.

2. Trends in private enrollment around the world

Over the last decades, the private sector in education, which includes for-profit, non-profit, and religious schools, has grown significantly around the world. As a consequence, there is a persistent debate over which type of private schools should be allowed to receive public subsidies and what should the role of the state be in regulating this expanding sector. For example, while some countries with mixed schooling systems, such as the Netherlands and Belgium, require private subsidized schools to be non-profit organizations, others allow for-profit providers (e.g. Chile and Sweden). If we compare the different regions around the world, Latin America and the Caribbean (LAC) has a higher percentage of enrollments in private primary institutions compared to all other regions, with exception of the South and West Asia region (Figure 1). In 2013, 18% of LAC students attended private primary schools compared to 11% in North America and Western Europe, and 8% in East Asia and the Pacific. The growth in private primary education is a trend around the world (Figure 2). For example, countries such as Bahrain (19 to 35%), Gambia (14 to 28%), Georgia (0 to 10%), Guinea (15 to 29%), Malaysia (2 to 15%), Qatar (37 to 60%), and United Arab Emirates (45 to 75%) experienced significant increases in their private sector enrollment from 1999 to 2014.

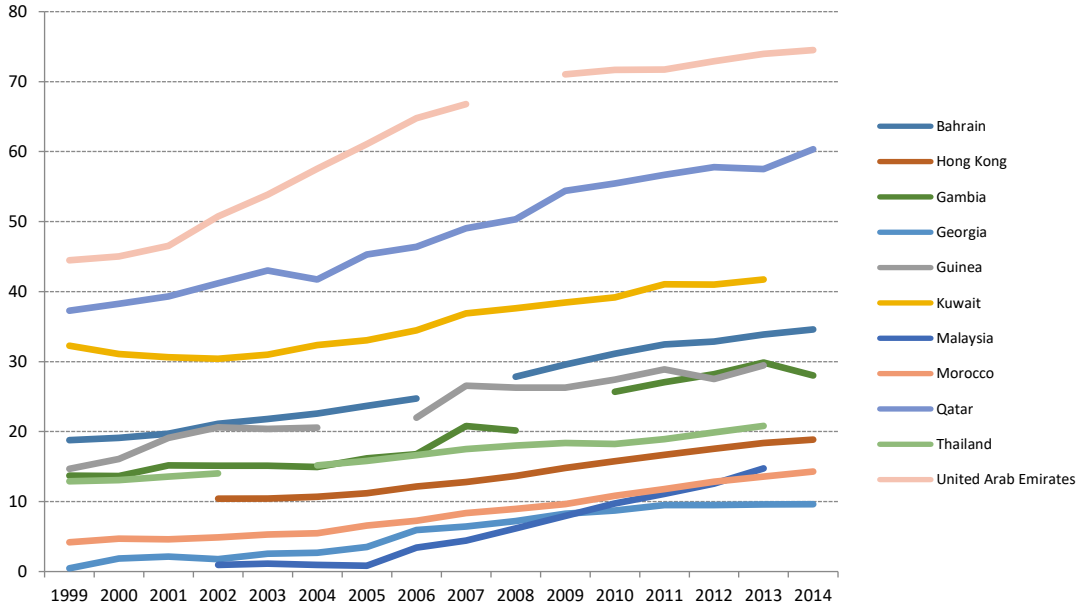
[1] The Appendix presents several case studies with the details of policies implemented by systems in the region.

Figure 1. Percentage of private enrollments in primary schools by region (2015).



Source: UNESCO (2015) and authors' calculations.

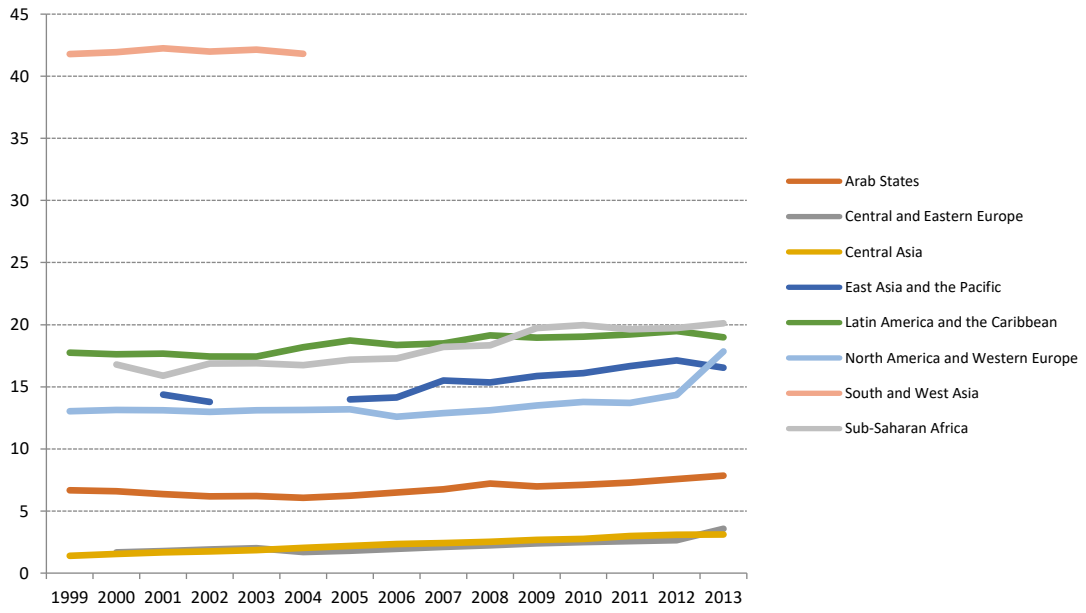
Figure 2. Percentage of private enrollments in primary schools by country (2015).



Source: UNESCO (2015) and authors' calculations.

There has also been a moderate expansion of private enrollment in secondary school over the last two decades (Figure 3). LAC had an enrollment rate in private secondary institutions higher than most other regions with the exceptions of South and West Asia and Sub-Saharan Africa (but only from 2009 to 2013). In 2013, 18% of LAC students were enrolled in private secondary compared to 17% in North America and Western Europe, and 16% in East Asia and the Pacific.

Figure 3. Percentage of private enrollments in secondary schools by region (2015).

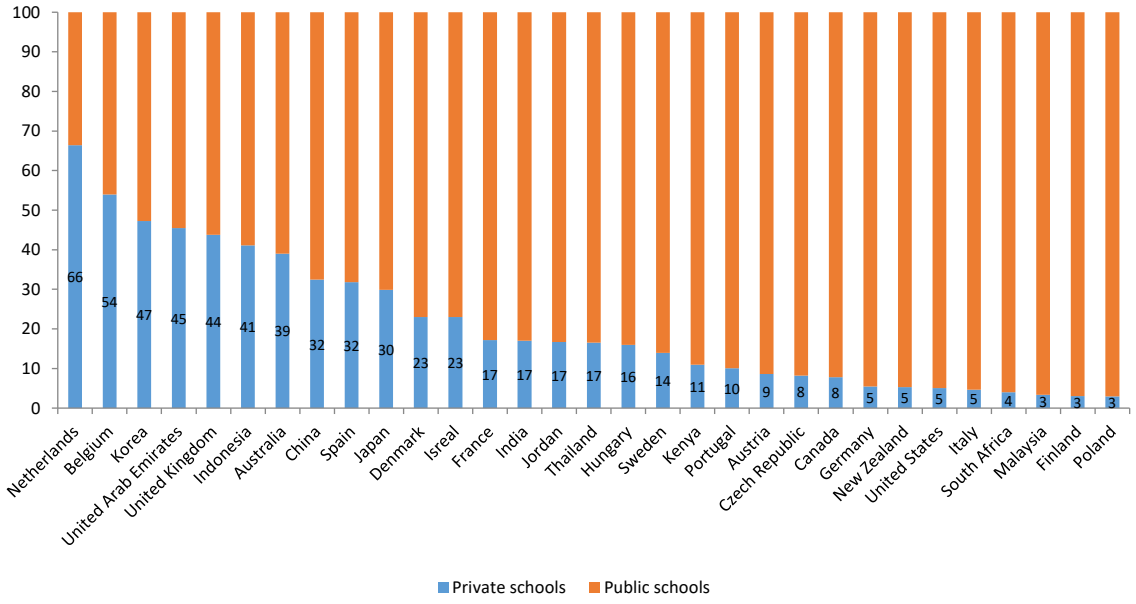


Source: UNESCO (2015) and authors' calculations.

As the previous figures show, private schooling in primary and secondary education in LAC has been increasing consistently over the last 14 years. In contrast, in the OECD countries, the proportion of private primary education remained unchanged for the most part over the past decades at around 10% of national enrollments (Bellei and Orellana, 2014). The private sector is playing an increasingly important role in expanding school enrollment for students in the region.

Private schooling trends vary by country (Figure 4). For example, in the Netherlands two-thirds of students are enrolled in private schools, but this is regulated in such a way that quality assurance systems and school finance policies do not distinguish between public and private education with the exception that private schools can have a religious mission or specific pedagogical approach (e.g. Montessori). Most high-income countries (Germany, Italy, Poland, United States, Canada, etc.) have a small percentage of students in the private sector. On the other hand, the percentage of students in low-income countries attending private primary schools has doubled over the last two decades, from 11 to 22% (Baum et al., 2014).

Figure 4. Percentage of private enrollments in secondary schools around the world (2015).

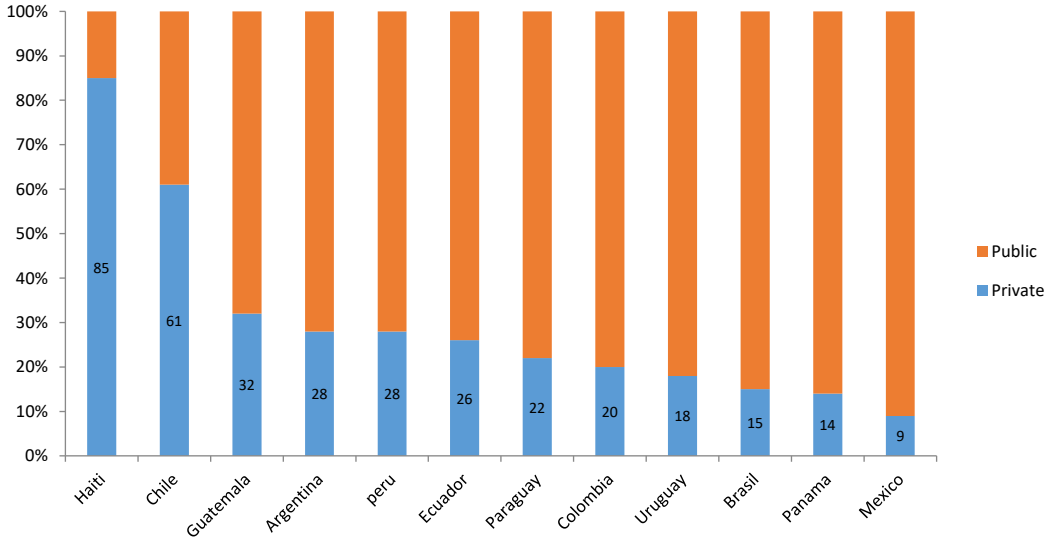


Source: OECD, UNESCO (2015) and authors' calculations.
Note: The countries were selected to represent different levels of income (high, medium and low that didn't include LAC countries since we wanted to compare them later) and a full range of countries with high to low levels of private school enrollment.

Private schooling in Latin America

Private school enrollment has increased rapidly over the last decades in the LAC region (see Figure 1). However, enrollment trends and policies to incorporate private schools vary significantly across countries in the region. Figure 5 illustrates that, while most students are enrolled in private schools in Haiti and Chile, less than 10 percent of students are enrolled in private schools in Mexico. In the other LAC countries, between one-fourth and one-third of students are enrolled in the private sector.

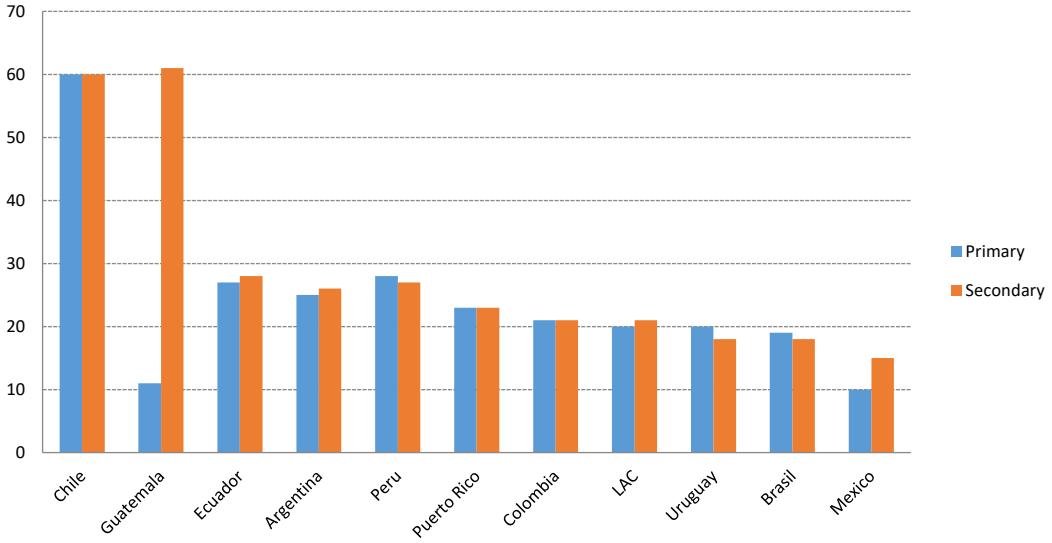
Figure 5. Percentage of private enrollments in primary and secondary schools in LAC.



Source: IDB (2015) and authors' calculations.

There are also significant differences between primary and secondary enrollments in private institutions across countries in the region. In 2013, the LAC average was 20% for private primary enrollment (Figure 1) and 21% for secondary (Figure 3) and most countries in the region have similar enrollment rates for both levels of schooling. However, there are two exceptions: Mexico with 10% primary and 15% secondary private enrollments, and Guatemala, which is an extreme case with 11% private primary and 61% private secondary enrollments.

Figure 6. Percentage of private enrollments in LAC, by education level.



Source: World Bank and authors' calculations.

Table 1 describes the different categories of private schools across countries. For example, in Chile, the government provides vouchers to private for-profit and non-profit (religious or secular) schools. In Colombia, the government subsidizes some secular and religious private schools and charter schools (*concesionados*). Argentina, the Dominican Republic, and Ecuador subsidize mostly religious private schools. Haiti subsidizes private for-profit, non-profit (religious and secular) schools. Brazil, Mexico, Panama, and Peru do not subsidize private schools. However, Peru does provide subsidies to a chain of Catholic schools (Fe y Alegría), which represent less than 2% of total enrollments. Ecuador is the only country that prohibits for-profit non-subsidy schools. Below we will disaggregate some of these private schools categories in countries where we have micro-level data.

Table 1. Private school categories by country.

Country	Category	Description
Chile	Voucher	Private for-profit or non-profit (religious or secular) schools that receive a per-pupil voucher.
	Non-voucher	Private for-profit and non-profit (religious and secular) schools that do not receive government funds
Colombia	Subsidized	Private non-profit (religious and secular) schools that receive government funds.
	Concessional	Charter non-profit secular schools that receive government funds.
	Non-subsidized	Private for-profit or non-profit (religious or secular) schools that do not receive government funds
Ecuador	Fiscomisional	Religious schools that have an agreement with the government and receive subsidies to pay teacher salaries
	Non-subsidized	Private non-profit (religious or secular) schools that do not receive public subsidies. For-profit schools are banned in Ecuador.
Argentina	Subsidized	Private for-profit and non-profit (mostly religious) schools that receive government subsidies to pay teacher salaries.

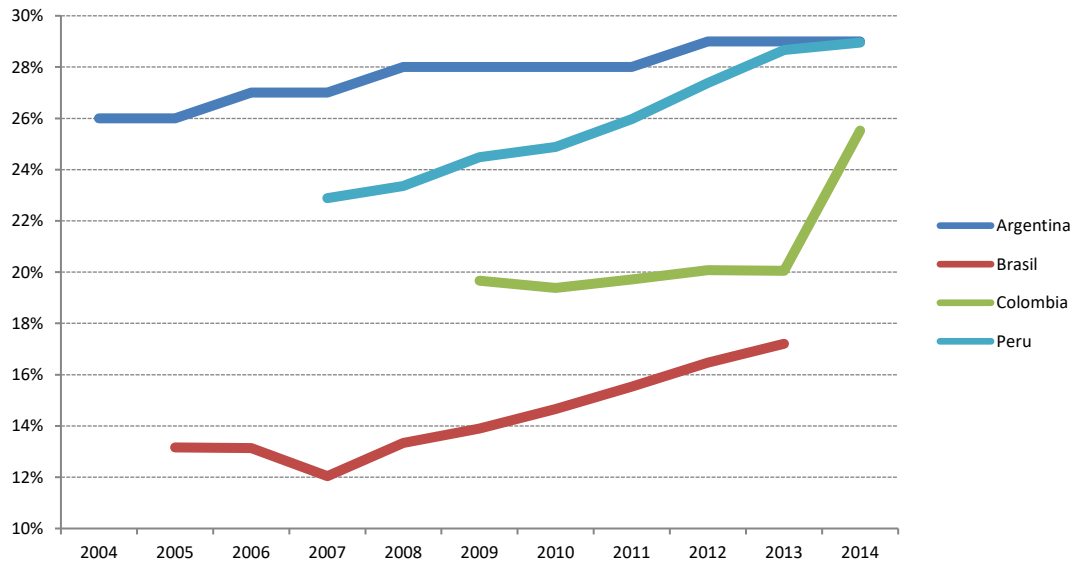
	Non-subsidized	Private for-profit or non-profit (religious or secular) schools that do not receive government subsidies.
Peru	Subsidized	Fe y Alegría religious schools that receive government funds
	Non-subsidized	Private for-profit or non-profit (religious or secular) schools that do not receive government subsidies.
Dominican Republic	Subsidized	Private for-profit and non-profit (religious and secular) schools that receive government subsidies to
	Non-subsidized	Private for-profit and non-profit (religious and secular) schools that do not receive government subsidies.
Brazil	Non-subsidized	Private for-profit and non-profit (religious and secular) schools that do not receive government subsidies.
Mexico	Non-subsidized	Private for-profit and non-profit (religious and secular) schools that do not receive government subsidies.
Haiti	Subsidized schools	Private for-profit and non-profit (religious and secular) schools that receive subsidies
	Non-subsidized schools	Private for-profit and non-profit (religious and secular) schools that do not receive government subsidies.
Panama	Non-subsidized schools	Private for-profit and non-profit (religious and secular) schools that do not receive subsidies

Private schooling trends within Latin American countries

Several countries in the region have experienced an upward trend in their private enrollment rates. For example, private enrollments increased in Chile between 1981 and 2014 (from 20 to 60%). Private enrollment also increased in Argentina, Brazil, Colombia, and Peru (see Figure 7). Private

enrollment rates have been stagnant over the last decade in the Dominican Republic (26%), Ecuador (27%), El Salvador (17%), Mexico (9%), and Panama (17%).

Figure 7. Percentage of private enrollments in primary and secondary education in LAC countries: 2004-2014.

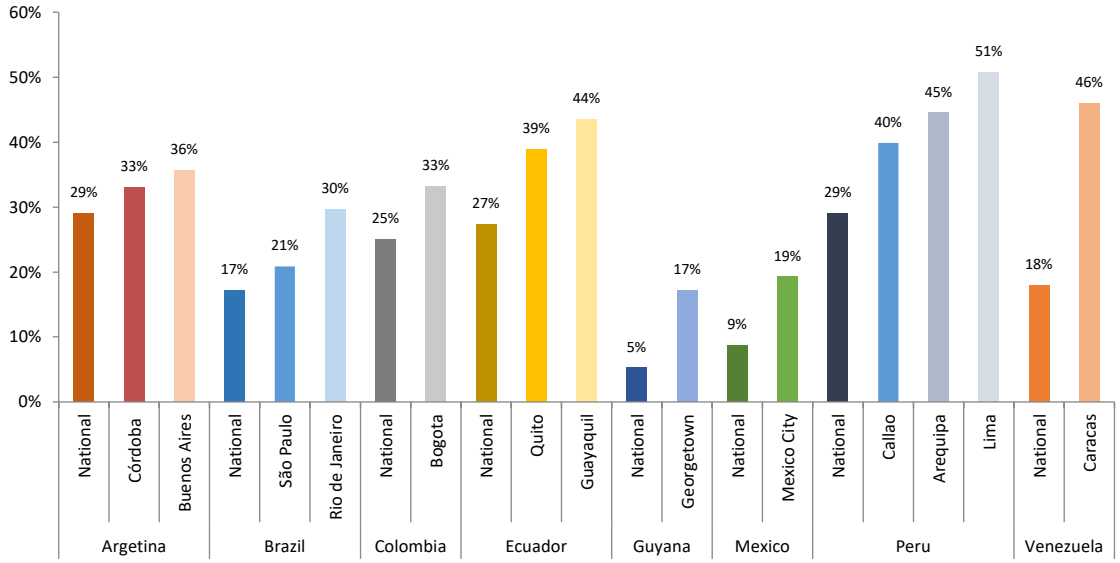


Source: Authors' calculations.

There are three potential explanations for the upward trend in private schooling in Latin American: i) growth of the middle class; ii) lack of state capacity; and iii) government policies that fostered the growth of the private sector.

First, the middle class expanded in the LAC region as a result of the economic boom over the last few decades. The perception of low quality public schooling combined with families´ expanded purchasing power lead many emerging middle class households to choose private schools. One way to explore this trend is by observing the difference between national and city private enrollment enrollment rates (see Figure 8). Emerging middle-income families are often concentrated in the nations´ capitals and these families have the option (and choose) to send their children to private schools. For example, private enrollment in Bogota, Colombia was 33% compared to the national average of 25%. The cities of Guayaquil and Quito also had higher private enrollment rates than the national average with 44% and 39% in 2012, respectively. Finally, Rio de Janeiro and São Paulo both had a higher percentage of students enrolled in private schools (30 and 21%, respectively) compared to the national average of 17%.

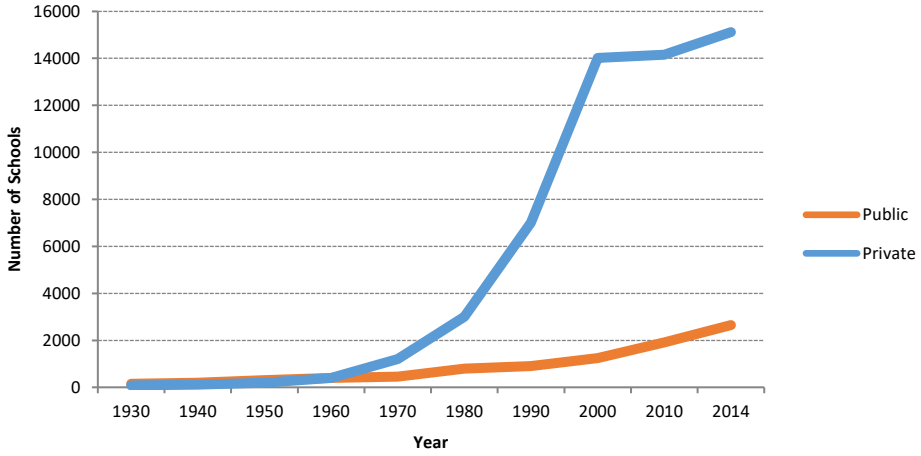
Figure 8. Percentage of private enrollments in primary and secondary schools in LAC countries and major cities



Source: Authors' calculations.

The second potential explanation for the increase in private enrollment is the lack of state capacity to provide public schooling. Even though the region experienced an economic boom and there have been many efforts by governments to expand public schooling, the reality is that many countries have lacked the resources and capacity to fulfill the increasing demand for primary and secondary schooling. In these cases, the private sector often fills the void. The main example in this category is Haiti, where about 80% of the total enrollment in primary education is private. Private education is mostly associated with religious organizations and for-profit schools and is often financed by the government, international organizations, and private tuition. Figure 9 shows how the number of private schools has increased exponentially over the past four decades (from around 1,000 to 15,000 schools). Guatemala has a similar situation but for secondary education where 61% of enrollment is private compared to only 11% in primary schools (see Figure 6).

Figure 9. Number of public and private primary schools in Haiti by year.



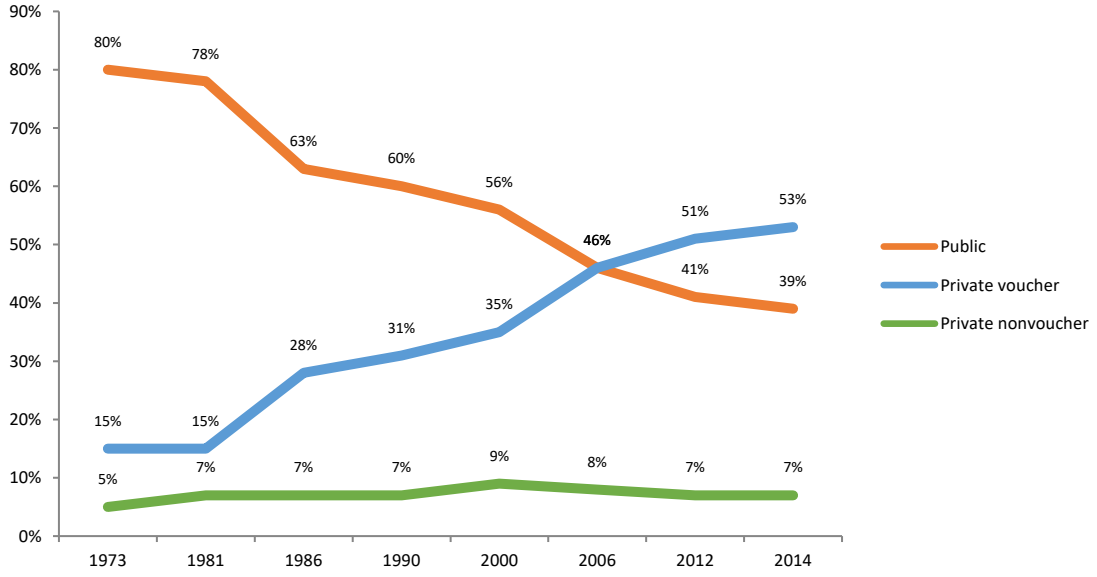
Source: IDB and World Bank estimates using 2002-2003, 2010-2011 and 2013-2014 School Censuses.

Finally, the third potential explanation for increased private enrollments in the region is government policies that fostered the growth of the private sector. This could mean policies that provide incentives (financial, regulatory, etc.) to private schools or, on the contrary, a total lack of policies to incorporate private schools into the public schooling system. In the first situation, there have been several policies in the region that have promoted the growth of private schools, such as the voucher system in Chile, subsidies to pay private school teachers in Argentina, and charter schools in Colombia, among others. On the other hand, some governments (e.g. Peru) have chosen to leave the private sector unregulated.

The case of Chile is very interesting since it was the first Latin American country to introduce a universal per-pupil voucher. The increase in private schooling is due to the rapid expansion of the private voucher school sector – between 1981 and 2014 voucher enrollment increased from 15 to 55% (see Figure 10). Colombia also fostered the growth of private schooling through its charter school program and private school subsidies. In 2014, private enrollment accounted for 25% of total national enrollment. In the case of Peru, the expansion of the middle class and increased demand for private schooling combined with unfettered private market has driven private enrollment rates to increase.

In sum, LAC has a high percentage of private enrollment compared with other regions of the world and has followed an upward trend in recent decades. In the next section we review schools systems that have implemented policies to regulate the sector's share and to strengthen private school choice for families.

Figure 10. Percentage of enrollment in primary and secondary schools in Chile.



Source: Authors´ calculations.

3. Policies to strengthen parental choice and to incorporate private schools in Latin America

While there is a vibrant debate and a large body of empirical literature on the costs and benefits of school choice and private schooling (see section 1), there is less research on the public policies that can improve the functioning of schooling markets. In this section we characterize these policies into three dimensions: i) The design and regulations of public funding of private schools; ii) School admission systems; and iii) Information and accountability. The definition of these dimensions comes from the work of Baum et al. (2014), which analyzes and benchmarks four policy goals that, according to the authors, strengthen provider accountability and promote learning. These policy goals are: (1) encouraging innovation by providers; (2) holding schools accountable; (3) empowering all parents, students, and communities; and (4) promoting the school diversity.

The systems included in this review generally satisfy the following conditions: i) a high proportion of students enrolled in private schools (>20%), and ii) information is available to characterize policy design and implementation. We used a semi-structured questionnaire to gather the information on the 3 dimensions.

<u>i) Design and regulations of public funding of private schools</u>

The school choice and private schooling literature has identified different models of public financing of private schools (Patrinos et al, 2009; Lewis and Patrinos, 2011; Musset, 2012). The different models differ in two main dimensions: i) if there is a contract between the government and the school; and ii) the ownership of school. According to these dimensions, Lewis and Patrinos (2011) defined four types of subsidized schools:

- Privately funded schools: privately owned and managed schools (entrepreneurs, church, religious groups, NGOs, foundations, charities, etc.), which receive funding from the government, but funding is not outlined in a contract on a per-student basis.
- Private-contracted schools: private schools contracted by the government, where the transfer of public funds depends on the school satisfying specific conditions.
- Privately managed public schools: a private organization that operates and manages schools owned by the government (e.g. charter schools, concession schools, etc.).
- Market-contracted schools: the student implicitly contracts public schools, private-contracted schools or privately managed schools; the funding follows the student to the school of their choice (e.g., per-pupil vouchers).

While there is a substantial literature that examines the effect of these different types of publicly funded private schools on academic achievement and equity, there are, to the best of our knowledge, no studies that analyze how the specific design of these funding mechanisms can have an impact on quality and equity. This is relevant because there are significant differences between funding mechanisms.

First, regulations may differ for subsidized and non-subsidized private schools. Some of the most common regulations which are discussed in more detail below are: i) rules to establish schools (e.g. location, existence of demand, school size, etc.); ii) infrastructure requirements; iii) curriculum; iv) legal structure (e.g. for-profit vs. nonprofit organizations); iv) pricing (e.g. regulations on tuition and other fees); iv) admission systems (decentralized versus centralized) and selection rules (tests, interviews, etc.); v) financial accountability; vi) school quality accountability; vii) working conditions of teachers (e.g. minimum wages, salary scale, pay-for-performance, etc.); and viii) teacher evaluations. The example of Chile is relevant in this dimension, because the country recently enacted the Inclusion Law (*Ley de Inclusión)*, which changed the rules that govern the private subsidized school sector. Specifically, the law bans school fees in public and private subsidized schools, introduces a new centralized admission system and requires for-profit schools – which make up one-third of total enrollments – to change their legal status to nonprofit in order to be eligible to receive the per-pupil voucher. The government´s objective with these changes was to improve equity and social inclusion.

Second, a number of countries have developed choice programs that aim to respond to both choice and equity concerns. For example, the Netherlands and Chile have introduced weighted vouchers whose amount depends on student and family characteristics. In both cases, schools receive more funding (usually double) if they enroll disadvantaged students. Ladd and Fiske (2009) show that these mechanisms have succeeded in distributing differentiated resources to schools according to their different needs: primary schools with a high proportion of "weighted" students have on average about 58% more teachers per student, and also more support staff.

Finally, in some systems, the subsidies are targeted to disadvantaged families. For example, in the case of Milwaukee's (Wisconsin) voucher program, private schools receive public funds equivalent to the Milwaukee public school per-member state aid tuition fees for the student (maximum tuition level: $6,607). Only children from low-income families that attend public schools can apply for a voucher (Musset, 2012). Another example is the Opportunity Scholarship Program created in Florida in 1999. As originally implemented, the program offered students who attended failing public schools the option to choose a higher performing public school or a participating private school (Figlio and Rouse, 2006). The PACES program in Colombia partially covered the cost of private

secondary school tuition for disadvantaged students residing in low-income neighborhoods who maintained satisfactory academic progress (Angrist et al., 2002).

In Latin America there are several experiences with public financing of private schools, which differ in design, scale and impact. Table 2 presents a synthesis of the cases reviewed in this section. In Argentina and Ecuador subsidies to private schools (Private Funded) are provided mainly to Catholic schools, which fund all or a fraction of teachers' salaries. However, in Argentina the subsidy policy covers a higher percentage of schools (18%) than in the case of Ecuador (6%). Argentina´s long-standing private school subsidy system was first introduced in 1947, but was structured more formally in the 1960s when the proportion of salary expenditure funded at each school was defined (Nadorowski and Moschetti, 2015). The "private contracted" mode is only found in Colombia. *Colegios en Convenio* are private schools that receive a publicly funded subsidy on one-year renewable contracts, in locations where there is an insufficient supply of public schools. Of the total students in the public schools of Bogotá, only 9.4 percent were enrolled in *Colegios en Convenio* (Termes et al., 2015). The third mode (Private Management of Public Schools) is present in Colombia and Peru. In both cases the government contracts the administration of public schools to non-profit organizations. In the case of Colombia, these schools (*Colegios en Concesión*) sign a contract for 15 years, during which the continuation of the grant is continually evaluated throughout those years and it depends on the results achieved by the school. In the case of Peru, the government finances teacher salaries and a fraction of the operating costs of schools run by the 'Fe y Alegría' network. However, these schools represent only 1.2% of total enrollments in primary and secondary schooling (Alcázar and Cieza, 2002). Finally, in the case of Chile, since 1981, in Haiti since 2007, and in Colombia with the PACES program (completed in 1997), the government provides a subsidy to the school for each student enrolled (market contracted schools). Currently in Chile, 56% of primary and secondary school students attend private voucher schools, while in Haiti this percentage corresponds to 52%.

Regarding the subsidy design, there are differences in the level of targeting of resources. In some cases, such as Argentina, Haiti and charter schools in Colombia, there is an indirect targeting, since the size of the subsidy depends on the tuition that the school charges. In Argentina, subsidized schools may require families to pay mandatory tuition. However, the size of the subsidy is a decreasing function of the tuition charged up to a threshold above which schools cannot receive public funds (Nadorowski and Moschetti, 2015). In Haiti, both the EPT and PSUGO programs prohibit school fees in subsidized schools (Adelman and Holland, 2015; Morduchowicz and Volman, 2015). In the case of charter schools in Colombia, they are free for families and may not apply selective admission processes (Bellei and Trivelli, 2014).

Even though in Chile there were some components of the per-pupil subsidy that depended on the geography of the school (e.g. higher subsidies for rural schools and schools located in more isolated cities), the size of the per-student subsidy was flat. The SEP law, introduced in 2008, recognizes that it is more costly to educate disadvantaged students, by introducing an extra per-pupil subsidy (60-70 percent over the base voucher) for students classified as vulnerable in the Ministry of Education's SES classification system[2] who attend public or private voucher schools that voluntarily participate in the program.[3]

[2] Details on the methodology used to classify students as priority can be found in Elacqua and Santos (2013).

[3] Elacqua and Santos (2013) find that 84% of municipal and private voucher schools decided to participate in SEP. However, there are important differences in the participation rate among school types. While almost all municipal schools (99%) participated, only 61% of private voucher schools decided to enter the system.

Finally, there are differences in the regulations between the various models reviewed. For example, in most cases, the subsidy is restricted to non-profit schools. The exceptions are Argentina and Haiti, where the law does not explicitly prohibit a subsidized institution from pursuing profit. In Chile, recently enacted legislation requires for-profit schools that receive subsidies, which currently represent two-thirds of private voucher schools, to change their status to nonprofit. Most systems also regulate the tuition fees that subsidized schools can charge. However, there are some differences across systems. For instance, while in Colombia, Peru, and Haiti subsidized schools are free, in Chile, Argentina, and Ecuador private subsidized schools can charge limited fees. With regard to admission procedures, in the case of Chile (since 2009), Colombia (*Colegios en Concesión*), and Ecuador, subsidized schools cannot apply cognitive tests or conduct parent and student interviews to screen students. In most countries, private subsidized schools are held accountable for the resources used (financial accountability). However, only Chile and Colombia have instituted accountability systems based on student performance. In the case of Chile, with the SEP Law (2008) and later with the Quality Assurance Law (2011), underperforming schools that fail to improve in 4 years can be closed. In the case of charter schools (*Escuelas Concesionadas*) in Colombia, there are a number of requirements to be able to apply for the program and to maintain charter status. For example, schools are required to ensure certain standards regarding materials (facilities, equipment, teaching materials, etc.), services (full school day, quality of food, etc.) and learning outcomes (measured by standardized test scores) compared to nearby public schools. In most of the educational systems in the LAC region that we reviewed, with the exception of Chile and Colombia, there is little empirical evidence of the impact of subsidies to private schools on student achievement.

Studies in Chile have focused on the impact of the voucher reform on: i) enrollment rates; ii) efficiency; iii) equity; and iv) segregation.

There is consensus among researchers that the introduction of vouchers lead to a rapid expansion of the private sector, especially for-profit private schools (Elacqua, Martinez and Santos, 2015) and increased graduation rates. For example, Bravo, Mukhopadhyay and Todd (2010) showed that the voucher reform increased high school (grades 9–12) graduation rates by 3.6 percentage points and the percentage completing at least two years of college by 2.6 percentage points.

The evidence is less conclusive on the effect of vouchers on productivity. While some studies show that competition between public and private schools increases aggregate educational achievement (Gallego, 2002, 2013; Auguste and Valenzuela, 2006), others find no evidence that choice improved educational outcomes (Hsieh and Urquiola, 2006). On the other hand, several studies have analyzed the relative efficiency of private and public schools. While some studies do not find significant differences between both types of schools (e.g. Mizala and Romaguera, 2000; Bravo, Contreras and Sanhueza, 1999; McEwan, 2001; Contreras, Sepulveda and Bustos, 2007) other find that, all else equal, private schools outperform public schools. However, the magnitudes are low after controlling for students' SES and correcting for selection bias (Gallego, 2002; Tokman, 2002; Sapelli, 2003; Sapelli and Vial, 2002; Mizala, Romaguera and Ostoic, 2004; Mizala, Anand and Repetto, 2006; Lara, Mizala, and Repetto, 2009). However, there is heterogeneity according to the type of school owner. The positive effects are seen mainly in Catholic schools (Carnoy and McEwan, 2000; McEwan, 2001) and those that operate as networks (Elacqua et al., 2011).

However, there is evidence that the reform has had a negative impact on equity. For example, some studies in Chile find that the voucher program led to increased sorting, as the best public school students left for the private sector (Hsieh and Urquiola, 2006; Auguste and Valenzuela, 2006) and the most advantaged families benefit more from the existence of school choice (e.g. Alves et al.,

2015). Recent evidence shows that the design of the SEP law has increased equity in the system, as more resources focused on vulnerable students have had positive effects on test scores, especially for low-SES schools (e.g. Murnane et al., 2016; Valenzuela, Villarroel and Villalobos, 2013; Mizala and Torche, 2015).

Finally, recent studies show that school choice in Chile has increased socioeconomic segregation (Elacqua, 2012; Valenzuela, Bellei and De los Rios, 2013). For example, Santos and Elacqua (2016) show that school segregation is higher in the actual scenario (school choice) than in a counterfactual scenario (students attend the school closest to their residence), which implies that the interaction between families' preferences and schools' entry barriers (tuition and selective admission process) tend to increase school segregation, relative to underlying residential segregation. One of the main causes of the high segregation in the Chilean education system is the "shared financing" policy. Empirical evidence shows that this policy has not generated significant effects on school quality (Bravo and Quintanilla, 2002; Anand, Mizala and Repetto, 2009; Mizala and Torche, 2012) but has increased school segregation (Elacqua, 2012; Valenzuela Bellei and De los Rios, 2013).

Motivated by this research, the current government of Michelle Bachelet recently enacted the Inclusion Law (*Ley de Inclusion)*, which alters the rules governing the school choice system. First, the law introduces a centralized admission system for subsidized schools (public and private), in which all families applying to schools will use a common platform. This platform will be available in schools, via internet and at the Ministry of Education´s provincial offices. In cases where demand exceeds the available seats, a transparent and nondiscriminatory algorithm will be used to allocate vacancies. Second, to ensure that resources given to schools are invested exclusively for educational purposes, the government will require every school to be constituted as a nonprofit in order to receive public funding. For profit school owners will have two years to adjust their legal status. Finally, the government will progressively replace private voucher school tuition with additional public resources. The system will take about 10 years to ban fees in all subsidized schools. During this period, the fee charged to families will be progressively reduced until it reaches zero.

In Colombia, in general, the evaluations of the school voucher program (PACES) find positive results. Angrist et al. (2002) found that three years after the program was introduced, treated students had a 10% higher probability of graduating from ninth grade and also had better results on standardized tests (+0.2 s.d) compared with control students. Also Angrist et al. (2006) found that program effects persist in the long term. Bettinger et al. (2014) used administrative data to track students for seventeen years after the scholarship lottery was introduced. They found that lottery winners were more likely to graduate from secondary school, less likely to repeat grades, and more likely to start and complete tertiary education. They also found that total formal sector earnings and payroll taxes at age 30 are at least 8 percent greater for lottery winners.

The empirical evidence is mixed regarding the impact of the *Colegios en Concesión* (CEC) program. For example, Barrera-Osorio (2006, 2009) found that CEC schools have a positive impact on test scores when compared with students in other public schools (in mathematics and biology, but not in reading or physics) and a negative impact on dropout rates. The author also shows that other public schools nearby the concession schools have lower dropout rates in comparison with other similar public schools outside the area of influence. Results of Bonilla (2012) indicate that CEC students score 0.6 and 0.2 standard deviations higher in math and verbal tests, respectively, relative to public school students. He also provides evidence that the estimated results are not driven by unintended strategic responses by CEC schools, such as excluding low-performing students from the pool of test-takers, differential dropout rates, or via test specialization in the curriculum.

However, Termes et al. (2015) do not find statistically significant differences between CEC and public schools after controlling for the length of the school day and the socioeconomic status of students. The authors also found that many CEC schools have strategically selected their students during the enrollment process, despite the fact that schools are not allowed to screen students.

Table 2. Design and regulations of public funding in different school systems in Latin America.

Characteristics	Categories	Argentina	Chile	Colombia			Peru	Haiti		Ecuador
				PACES	Colegios en Concesión	Colegios en Convenio		EPT	PSUGO	
Types of funding to private schools	Private funded	x								x
	Private contracted					x				
	Private management (Charters)				x		x			
	Market contracted (Vouchers)		x	x				x	x	
Value of the subsidy / voucher (USD)			95(m)	n.i	520(a)	n.i	n.i	90(a)	90(a)	n.i
per pupil private subsidy as % of public subsidy			100%	n.i	121%	n.i	n.i	n.i	n.i	n.i
Universal vs Focalized		U	U	F	U	n.i	F	U	U	F
Flat vs Weighted subsidy		F	W	F	F	F	F	F	F	F
Regulations for subsidized schools	rules to establish schools (e.g. location, demand, etc.)				x	n.i				x
	infrastructure		x		x	n.i				x
	curriculum	x	x		x	n.i				x
	legal structure (e.g. for-profit vs nonprofit)		x	x	x	n.i	x			x
	pricing (e.g. maximum tuition fees)	x	x		x	n.i	x	x	x	x
	admission systems (e.g. admission test)		x		x	n.i				x
	financial accountability	x	x		x	n.i				x
	school quality accountability		x		x	n.i				x
	working conditions of teachers (e.g. minimum wages, etc.)		x		x	n.i	x			x
	teacher evaluations					n.i		x	x	x

Notes:
(m): monthly
(a): annual
n.i: no information

ii) School admission systems

In simple terms, a school admission system is the set of rules and procedures governing how seats in schools are allocated among students. Considering the characteristics of this process, school choice systems are usually located somewhere along a continuum between fully decentralized admission systems (i.e. where each school allocates its seats according to its own rules and priorities) to centralized admission systems, where a government agency assigns seats according to specific priorities defined by the law and families' preferences. We identify four categories of school admission systems:

1. Decentralized unregulated: each school implements its own mechanism for allocating seats.
2. Decentralized regulated: each school implements its own admission procedure, but there are rules on the type of selection criteria permitted (e.g. whether or not a school can apply admission tests and interview parents), allocation mechanisms (e.g. lotteries, first come first served, etc.) and/or quotas (minimum percentage of low-SES students in a school).
3. Semi-coordinated: each school implements its own admission procedure, but there is some degree of coordination in the system (e.g. common application dates, common application form, etc.).
4. Centralized: there is a centralized system coordinated by a government agency, which processes the school preferences declared by families and assigns vacancies based on priorities defined by the law (e.g. priority for students with siblings at school, low-SES quotas, etc.).

Admission systems are relevant because the way seats in schools are allocated has an impact on efficiency and equity. We are especially interested in centralized admission systems because there is a growing trend in school choice systems to introduce these mechanisms (e.g. Amsterdam, Belgium, Chile, Buenos Aires, several school districts in the United States, among others). There are several reasons that explain this trend.

First, without prices (publicly funding education is free in most countries), there are demand-supply imbalances. In the absence of an assignment mechanism, the system may result in long lines, inefficiencies from uncoordinated admissions timelines and discriminatory practices. For instance, some students may be admitted into several schools while others are not admitted to any school. Decentralized admissions make it harder to supervise and regulate this, which could result in less privileged families being at a disadvantage due to lack of resources and networks at the highest performing schools.

Second, a centralized mechanism allows for a transparent and fair way to assign students to schools, because every student is treated equally from the perspective of the assignment mechanism. A student's listed choices and the school district's priority system (which may be based on exams, religious affiliation or neighborhood locations, for example) are the only considerations when making assignments. Also, any ties are broken using a lottery.

Third, the admission system can be tailored to the needs of the school system, because the mechanism can incorporate considerations by schools of prioritizing admission to students based on neighborhoods, achievement or religion. Affirmative action criteria can also be implemented (e.g. Abdulkadiroglu and Sonmez, 2003).

Fourth, a centralized admissions system has the potential to improve the quality and equity of the system. For example:

- Reduce segregation: neighborhood assignments can lead to highly segregated schools, especially in cities with high levels of residential segregation.
- Lower costs to apply to schools: this system makes it virtually free to apply to the parent´s first option. A decentralized system requires separate applications that are costly in time and often resources.
- Provide detailed information to parents on schooling options: centralized admissions can help students compare schools (with information on achievement, schooling inputs, school mission and location) and facilitate more effective choices based on parental preferences.
- Provide incentives to schools: schools will no longer have incentives to improve quality by selecting higher performing students. The system can also hold schools accountable for declines in the number of applicants.

Four educational systems in Latin America have implemented centralized admission systems in recent years. i) the City of Buenos Aires, ii) Colombia, iii) Rio de Janeiro, and iv) Chile. The implementation of centralized admission mechanisms in these systems has sought to meet a variety of objectives, which are: i) reduce socioeconomic and/or racial segregation; ii) eliminate discriminatory practices by religious, moral, social and/or racial criteria; iii) increase equity in access to schools; iv) increase the transparency of the admission processes; v) strengthen the freedom of choice for families, especially disadvantaged parents; and vi) make the admission process more efficient (e.g. reduce congestion, improve the application process, avoid paperwork, reduce waiting times, etc.).

These objectives are justified by the evidence that shows that in decentralized systems of admission, schools use arbitrary criteria for selecting students. For example, in Peru, Chile and Haiti, where families are currently required to apply to school in person, there is evidence that schools do not respect the laws prohibiting the use of entrance examinations (e.g. Elacqua, Montt, and Santos, 2013). This lack of compliance can be explained both by ambiguities in the law with respect to the definition of some of the concepts (e.g. school's mission), and the lack of oversight.

For example, in Chile, there are regulations on the characteristics of the admissions process. The General Education Law (LGE) bans school selection by academic and/or socioeconomic criteria through sixth grade in subsidized schools (public and private). However, there is evidence that many schools still conduct parent interviews and require students to take entrance exams, present report cards and conduct reports from their previous school, provide parent salary information, and show documents demonstrating their affinity with certain religious beliefs (e.g. baptism and/or religious marriage certificates), especially in the private voucher sector (Contreras, Bustos and Sepúlveda, 2010; Carrasco et al., 2014). Recent research suggests that this is due to lack of enforcement (Carrasco et al., 2014). In response to this problem, the current Chilean government recently enacted a law that changes the rules that govern the admission system for subsidized (public and private) schools. Under the new system, which will gradually be phased in starting in 2017, families will apply to schools using an online platform administered by the Ministry of Education and rank the schools based on their preferences.

Regarding the rules used in the four admission systems that, all of the systems give priority to students who have siblings in the school and three of them give priority to students who are children of teachers or other school officials (Buenos Aires, Rio de Janeiro, and Chile). With respect to geographical criteria, Buenos Aires gives priority to students who live near the school. By contrast, the other three systems seek to expand choice to families, allowing them to choose schools outside of their neighborhoods (Colombia, Rio de Janeiro, and Chile). In order to reduce school

segregation and increase equity in access, the four systems give priority to disadvantaged students (e.g. low-income, physical disabilities, students from orphanages or victims of violence, etc.).

Since most of these systems have been implemented in recent years, there is scant empirical evidence of their impact on school performance, segregation, and the satisfaction of families. However, anecdotal evidence in Buenos Aires and Rio de Janeiro suggests that governments should pay more attention to implementation issues related to providing families with information on how to apply to schools in the new admission system. For example, the four centralized systems are online platforms, which can be especially difficult to use for parents of lower socioeconomic status who have less access to the Internet.

iii) Information and accountability

Over the past 20 years, one of the major trends in education reform in countries around the world has been the implementation of high-stakes testing and school accountability. Even though several countries have been using standardized tests for measuring student achievement for several decades, the innovation of accountability reform is the use of student outcomes to evaluate teacher and school performance. Under a school accountability system, the government sets performance standards and provides rewards or sanctions to schools that meet (or fail to meet) these standards. Schools are often ranked according to their performance and have a specific period of time to improve their outcomes. If they do not meet the standards on time, schools often face sanctions that range from mandatory improvement plans to school closure (Elacqua et al, 2015).

Although most countries in LAC apply some form of standardized test (See Table 3), only a few countries disseminate the results to families and hold schools accountable for their outcomes through rewards or punishments (Alves and Elacqua, 2016). In the vast majority of the education systems reviewed, the disaggregated test results are not made public. For example, in Argentina the law explicitly prohibits publishing school level results to families. School level test score results are only given to the principal and teachers in order to improve planning. In the case of Uruguay, the General Education Act of 2008 banned dissemination of school level test scores. Peru also does not publish school level test scores.

In this section we review three schooling systems that have implemented school information and accountability policies: Colombia, Chile, and Brazil. All three systems differ in how schools are ranked and the consequences associated with the results.

In Chile, the SEP Law was the first initiative that introduced explicit school accountability mechanisms. Similar to other state accountability systems, SEP establishes minimum performance standards and ranks schools according to their performance on a national standardized test (SIMCE) and other quality indicators. It also establishes sanctions for low-performing schools. If the school does not manage to move to a higher category in three years, the Ministry of Education reports this to the school community and encourages families to consider other schooling options for their children. The government also facilitates transportation to a higher performing school. However, if the school remains in the lowest category for four years, the Ministry will revoke its license to operate and receive public funding. The information on the school rankings is also widely disseminated to families and the public.

In Colombia, the General Education Law of 1994 (*Ley General de Educación*) established a ranking of private schools, which determined the maximum annual increase in tuition that they could charge to families. The government uses a self-evaluation manual and/or a quality certification to rank schools into three categories (regimes): Regulated Freedom (*libertad regulada*), Supervised Freedom (*libertad vigilada*) and Controlled (*controlado*) (Ministerio de Educación, 2009). Schools in the Regulated Freedom regime are free to set the increase in tuition fees for new students, if they are in the upper categories of the *Índice Sintético de la Calidad Educativa* (ISCE) [4].

Finally, in 2007 the Brazilian federal government announced the Education Development Plan (PDE), which lays out a set of proposals to improve the quality of education. One of the main innovations was the creation of an education quality index, the Basic Education Development Index (*Índice de Desenvolvimento da Educação Básica* or IDEB), based on the results on the national assessment (Prova Brasil) and the student pass rate (Cortes-Neri and Buchmann, 2008). This index (or similar versions of it) is available for families and is used to create teacher incentives in several states and municipalities in Brazil. It is also used for a program called PDE-Escola (*Plano de Desenvolvimento da Escola*), which mandates schools with low values on the index to develop an improvement plan funded with government resources.

Empirical evidence on the impact of accountability policies in Latin America is scarce. Only recently some studies have attempted to assess the effect of accountability pressures on schools. In the case of Chile, Elacqua et al. (2016) found that low-performing schools respond to accountability pressures by implementing policies that seek to improve students' academic performance in the short-run (e.g. they introduce after-school tutoring programs for low-performing students). These findings are consistent with the incentives and deadlines of the SEP design. In the case of Brazil, Ferraz and Bruns (2011) evaluated the impact of a collective bonus in Pernambuco, assigned to all managers, teachers and staff from state schools that reach at least 50% of a defined target in an index based on IDEB (IDEPE or Pernambuco Index of Educational Development). The authors found that the program has had a positive impact: compared to Northeastern Brazilian states and non-program municipal schools in Pernambuco, the schools which implemented this program have seen a large improvement in their learning outcomes over two years (0.08-0.1 s.d. in Math). The effects on test scores were larger for children with lower socio-economic background. Alves et al. (2015) also found a positive impact of teacher pay-for-performance in municipal schools in Rio de Janeiro. The magnitude of the impact is consistent with the literature on teacher incentives (0.1 s.d.). Alves et al. (2016) also found that PDE-Escola had a positive impact on academic results only when the school improvement plan received additional resources. However, the results were heterogeneous among Brazilian states, which suggests that the design and implementation context of the program matters.

4. Discussion

[4] The ISCE, constructed by the ICFES, is an index composed by four dimensions: iii) performance: average test scores in SABER test of Mathematics and Reading; ii) progress: school improvement relative to the previous year in the SABER test; iii) efficiency: retention rate; and iv) School Climate. SABER is a national standardized test applied annually to all students in third, fifth, seventh and ninth grades in public and private schools. The evaluation focuses on the basic skills that students have developed in reading and mathematics for the four grades and Civic Skills and Natural Sciences for 5th, 7th and 9th grades. The test results are public and are available on the ICFES website: http://www.icfes.gov.co/index.php

A high percentage of students in Latin American and Caribbean (LAC) countries are enrolled in private schools and the proportion has increased rapidly over the last decade. However, few countries in the region have implemented policies to strengthen parental choice and incorporate private schools into the public schooling system. This report explores some exceptions. The evidence and recommendations that follow could provide LAC and other middle and low income countries with a high proportion of students enrolled in private schools, with a policy road map to introduce finance and regulations that promote quality and equity.

First, we explore different models in the region of public financing of private schools. These policies differ in the mode of financing, the design of the subsidy, and the regulations imposed on beneficiary schools. While there are few rigorous studies that evaluate the impact of these public-private partnerships, evidence to date suggests that financing policies tied to effective regulations on the quality of education provided by schools (e.g. concession schools in Colombia) and that take into account family and school background characteristics (e.g. SEP Law in Chile) have a positive impact on student performance and equity. The evidence also suggests that financing policies should be part of a system, coordinated by a government agency/ministry, and designed as a structured policy that has long-term objectives in improving the educational system of the country (e.g. Chile and Colombia). In this report we have analyzed several financing schemes (e.g. ÉPT in Haiti and private funding of Fé y Alegría in Peru) that are programs rather than structured and institutionalized finance policies.

Second, we also examine centralized admission systems in the region. For instance, Buenos Aires, Rio de Janeiro, Colombia, and more recently Chile, have instituted centralized admissions. Far from being an exception, the implementation of these systems is the rule in countries that have introduced school choice to families (e.g. Belgium, the Netherlands, several cities in the United States, Barcelona). Centralized admissions are a fair, efficient, and transparent way to allocate vacancies in schools. While there is a burgeoning body of research on the effects of centralized admissions in more established systems (e.g. Pathak and Sonmez, 2015), there is no evidence of the impact of these policies in Latin America. This is a topic for future research in the region. The comparative evidence shows that an important part of the success of centralized systems is determined by its implementation in practice. Given that many families are accustomed to apply for admission directly at the school, the agency in charge of the applications should have a support system to facilitate participation in the different stages of the process.

Third, we review information and accountability policies in LAC. We find that many countries in the region have standardized tests at different levels. However, in most countries, the results are only used to provide feedback directly to schools and to target support programs, but are not disseminated to families. Only in three cases, among the systems reviewed, school level test scores are used to generate incentives for schools and teachers. In the case of Brazil and Chile, the available empirical evidence suggests that educational institutions have responded to accountability pressures, changing their policies and practices in meaningful ways, which may explain in part the observed improvements in student learning. The evidence also sheds light on the importance of designing the rules, so that schools respond to these pressures by introducing policies and practices that aim to improve learning and narrow the achievement gap. For example, in the case of Colombia, the design of the policy seems to go in the opposite direction of the objectives of the educational system. High-performing schools are rewarded with greater autonomy to set tuition rates, which may undermine equity in access to high-quality schools. School systems may reward high performing schools with pay-for-performance (e.g. several states and municipalities in Brazil) or

more autonomy (e.g. Chile) and develop support and sanctions for low performing schools (Brazil and Chile). However, the incentives should be aligned with the objective of improving quality and equity. Countries should also make information on school quality widely accessible to families and schools. Recent evidence shows that providing information on test scores and prices can affect parent and school behavior (Andrabi et al., 2015).

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Annex

Case studies

In this section we present case studies of specific policies, implemented by education systems in Latin America, on the dimensions reviewed in Section 3. The focus of this review is to understand the details of policies to incorporate private schools into the public system.

i) Design and regulations of public funding of private schools

Argentina

Since the 1960s, the Argentine education system began to experience a series of changes induced by new regulations that tended to diffuse—and even suppress in some cases—what was stipulated in the laws regulating private schools. The new regulatory framework would guarantee the functioning of private institutions ensuring the stability and recognition of their teachers, the validity of the issued certificates, and the regular allocation of public funds to meet teacher wages expenditure. In 1947, the government started funding private schools to ensure teaching in areas where there was shortage of public supply and to support private schools serving low-SES families. But, it was during the 60's where the funding mechanism was structured more formally and where the proportion of salary expenditure funded at each school was defined (Nadorowski and Moschetti, 2015).

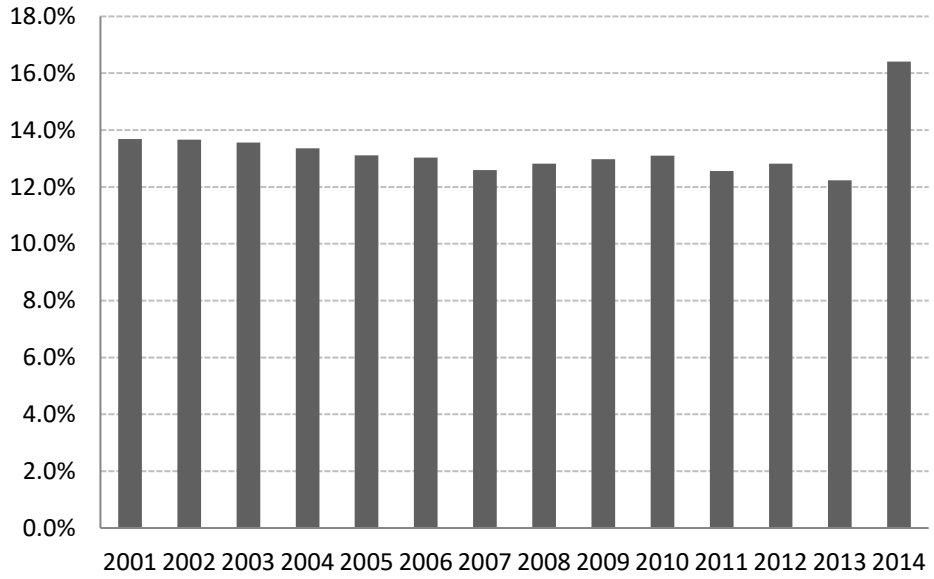
The subsidy has always been defined as a percentage of the total teacher salary expense, considering only teachers of areas included in the official curriculum. The norm also establishes certain criteria to assign funds and their proportion (e.g. student families' SES, proximity and availability of public schools, etc.), but these are not comprehensive, so there is room for arbitrary decisions by the authority (Mezzadra and Rivas, 2010; Moschetti, 2015). To ensure equitable distribution of resources, in most provinces, the size of the subsidy depends on the monthly fee charged by the school to families, reaching 100% in cases of schools below a defined threshold (Mezzadra and Rivas, 2010). In addition to the fees charged to families by the activities of the official curriculum, schools can establish fees for extracurricular activities, which are not included in the formula.

Regarding the characteristics of schools that can access the benefit, in most Argentine provinces, the legislation does not prohibit the participation of for-profit organizations. The only exceptions are Mendoza and San Juan, where for-profit schools face more restrictions to receive public funding. Specifically, in Mendoza only nonprofit organizations can apply for subsidies (Mezzadra and Rivas, 2010).

According to Mezzadra and Rivas (2010), 65% of private schools in Argentina benefit from public funding. However, public transfers per student in the private sector are much lower than those in the public sector. Monthly government spending per pupil in constant Argentine pesos in the private sector was $1,021 in 2010, while in the public sector reached $2,660. For the same year, in the city of Buenos Aires—the second most populated of the 24 jurisdictions and where half of the students are enrolled in private schools —state spending per student in public schools was $3,954 and in

private schools was $874 (Nadorowski and Moschetti, 2015). Figure 11 shows the evolution of the percentage of total spending in private schools as a percentage of total education spending.

Figure 11. Percentage of state transfers to private institutions on total education spending (education spending by the provinces).



Source: Authors' elaboration with data from Coordinación General de Estudios de Costos del Sistema Educativo, Ministry of Education http://portales.educacion.gov.ar/dpe/costos-educativos-cgecse/gasto-en-educacion/

Since the Argentine educational system is decentralized at the provincial level, each provincial authority has a specific legislation governing the funding of private schools. As an example we review the current legislation in the City of Buenos Aires. In the city of Buenos Aires, the General Directorate of Private Education (Dirección General de Educación de Gestión Privada, DGEGP) has the responsibility to manage, monitor, and support private schools in accordance with the policies of the Ministry of Education. The universe of privately run schools is composed of more than 1,656 schools and 360,000 students.

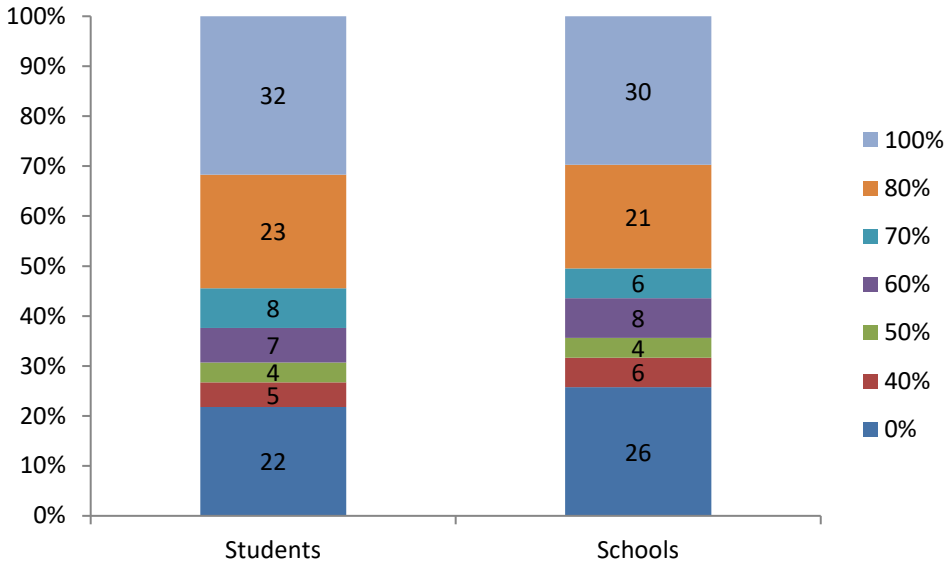
The subsidy allocated to each private school is directly proportional to the fees charged to families. Specifically, Article 5 of the Decreto Nacional N° 2542/91, states that the allocation of the subsidies should take into account "the economic characteristics of the area and the school population, the type of education provided, the financial situation of the institution, and the fee charged by the school and the maximum levels defined". In addition, the law requires schools to notify parents about the prices that will be charged each year. Table 3 shows the school subsidy as a function of the fees charged to families (Disposición DI-2013-74-DGEGP) and Figure 12 presents the distribution of private schools and students according to the subsidy received. Additionally, Article 21 of the same Decreto regulates the maximum teaching staff financed for institutions receiving the contribution (Planta Funcional). This restriction exists in most provinces and it means that in practice schools cannot receive full funding, despite being in the 100% category.

Table 3. School fees and maximum contributions for period March 1, 2013 to June 30, 2013 (USD).

Percentage of subsidy (%)	Initial-Primary	Secondary	Technical secondary	Higher	
	Double shift (1)	Up to 40 hours	Up to 40 hours	Teacher	Technic
100	35	39	44	50	61
80	62	67	77	85	106
70	79	93	107	109	121
60	119	137	158	138	139
50	138	150	173	154	156
40	151	187	216	192	195

Notes:
(1) For Initial and Primary with full school day 50% more. For Initial and Primary with extended school day up to 25% more.
(2) The exchange rate used is 5.39 pesos per dollar (June 28, 2013).
Source: Central Bank of Argentina, Disposición DI-2013-74-DGEGP.

Figure 12. Distribution of private schools and students according to the subsidy received (2012).



Source: Montoya (2014).

However, there is no clear criterion that defines the way in which the beneficiary schools are selected. According to Article 2 of Resolución No. 163/2003, the only data required from schools requesting public funding consists of a letter explaining the reasons for requesting the subsidy directed to DGEGP, an accounting balance, an affidavit of courses and number of students, an

affidavit of school fees and other charges (e.g. meals, transportation, etc.), and an affidavit of wages paid (Asociación Civil por la Igualdad y la Justicia, 2011). Additionally, schools may also collect other amounts not included in the table, for example, extracurricular activities, transportation, matriculation fees, lunch, life insurance, medical emergency insurance, parent association fees, etc. This implies that several schools receive resources despite charging total amounts much higher than those established by law (Asociación Civil por la Igualdad y la Justicia, 2011).

Article 4 of the Decreto Nacional N° 2542/91 defines who can own subsidized schools: a) Natural person proving sufficient education experience; b) civil associations with legal status and civil or commercial companies, registered in accordance with the legislation in the respective jurisdiction, whose aims are promoting cultural, educational or scientific activities and whose members are teachers or persons who work in education; c) the Catholic Church, through its parishes; d) religious orders, congregations or religious corporations recognized by the competent authority. Only non-profit institutions that do not charge monthly fees can apply for a subsidy that covers 100% of salary expenses (Article 5 Decreto Nº 2542/91).

Each subsidized school must present detailed accounting of how resources are used, including the following items: a) Contributions received from the Ministry of Culture and Education each month (transfers); b) Resource investments; c) Returns surplus; and d) the value of school fees levied during the school year (Article 11 Decreto Nº 2542/91).

Despite being a longstanding policy, there are few studies that have analyzed impact of financing of private schools in Argentina. One of the only studies is McEwan (2002). In this paper the author, using data from a standardized test applied to students in seventh grade, found that Catholic subsidized schools do better than public schools in Spanish (+0.17 s.d.) but not in Math. Also his results showed that Catholic school attendance lowers the probability of grade repetition by 0.04. In the case of nonreligious subsidized schools, he found that these schools have positive and statistically significant effects of almost 0.3 standard deviations on test scores, but no effects on grade repetition. Finally, results suggest that nonsubsidized schools have similar results as public schools, after controlling for student background variables.

Chile

The military regime introduced a sweeping education reform package in 1981. First, they decentralized the administration of public schools from the central level (the Ministry of Education) to the local level (municipalities). Second, they altered the funding scheme by tying public school funding to the number of students enrolled. Municipalities and private school owners – for-profit, nonprofit, religious, and secular – that did not charge tuition started to receive vouchers on a per-student basis. As a result, enrollment gains or losses began to have an impact on their budgets. The voucher formula included adjustments for rural schools and high schools, but did not take into account student SES. Fee-charging private non-voucher schools continued to operate without public funding.

After these changes were introduced, the Chilean educational system was composed of three types of schools, depending on their type of administration and source of funding: municipal (public) schools, which are financed with government subsidies and administered by the local municipal government, whose maximum authority is the mayor; private voucher schools, also financed with government subsidies, but administered by a private (for-profit or nonprofit, religious or secular) organization, and finally private schools, which are financed and administered privately.

The essential features of this system remained in place for over a decade. The center-left coalition that won the democratic election in 1990 chose to focus on improving the quality of poor schools through direct resource investments and continued increases in the value of the voucher, while maintaining the organizational and funding components introduced in the eighties (OECD, 2004; Cox, 2003). The only significant modification of the voucher program was in 1993, when the Ministry instituted a financing scheme that allowed all private voucher schools to charge limited tuition[5] (Elacqua et al., 2013). The "shared financing" law in Chile allowed private voucher schools and public high schools to charge monthly fees, in addition to the per pupil subsidy, that can be up to 1.2 times the basic voucher payment[6]. Additionally, in 1999 it was introduced an amendment requiring that each school must have a system of scholarships for students with less ability to pay. The scholarships are funded with public resources and with a proportion of tuition fees collected by the owner.

In 2008, the Chilean legislature enacted two laws – the School Preferential Voucher Law (Ley de Subvención Escolar Preferencial, SEP) and the General Law of Education (Ley General de Educación LGE) – which were both designed to change the rules under which the voucher system operated. The SEP law recognizes that it is more costly to educate disadvantaged students, by introducing an extra per-pupil subsidy (60-70 percent over the base voucher) for students classified as vulnerable in the Ministry of Education's SES classification system[7] who attend public or private voucher schools that voluntarily participate in the program[8]. Table 4 shows the per-pupil voucher with and without SEP Law. The additional per-pupil voucher is tied to an increased role of the Ministry of Education in monitoring and ranking schools based on student performance in standardized tests and holding them accountable for their outcomes. In addition, participating schools cannot charge tuition to low-income students and they are required to make public how the additional resources provided by the Ley SEP are spent.

Table 4. Per-pupil voucher with and without SEP Law.

Student classification		base voucher (*)	vulnerable voucher	concentration voucher	extra per-pupil voucher (%)	total per-pupil voucher
non-vulnerable student		$95	-	-	-	$95
vulnerable student in a school with:	<15% vulnerable students	$95	$56	$0	59%	$151

[5] The law determines a progressive discount on the subsidy, which varies between 10% and 35% for schools that charge fees, depending of the fees charged.

[6] The current value of the base school voucher for a full-day program school are: Preschool and Primary (67222 CLP=95.2 USD); Secondary (79,987 CLP=113.3 USD); Technical Secondary (85000 CLP=120.4 USD). Schools with full-day program represent 76% of primary schools (Contreras and Sepulveda, 2016). Rate of exchange 1 USD=706.09 CLP Central Bank of Chile (average rate 2016). Source: Ministry of Education

[7] Details on the methodology used to classify students as priority can be found in Elacqua and Santos (2013).

[8] Elacqua and Santos (2013) find that 84% of municipal and private voucher schools have decided to participate in SEP. However, there are important differences in the participation rate of these schools. While almost all municipal schools (99%) participate, only 61% of private voucher schools have decided to enter the system.

	15%-30% vulnerable students	$95	$56	$4	63%	$155
	30%-45% vulnerable students	$95	$56	$7	66%	$157
	45%-60% vulnerable students	$95	$56	$9	68%	$159
	>60% vulnerable students	$95	$56	$10	69%	$161

(*) base school voucher for students in 1-6 grade in a full-day program school (since December 2015).
(1) Rate of exchange 1 USD=706.09 CLP, Central Bank of Chile (average rate 2016).
Source: Banco Central de Chile.

The LGE repealed the constitutional education law (LOCE-Ley Organica Constitucional de Enseñanza) enacted three days prior to the end of the military regime in 1989. The LOCE granted administrators and teachers freedom on how to provide education and limited the government's role to assuring access to schools, but it did not give the State the authority to regulate the quality of education services. The LGE increased the requirements to open a school and also granted the government the ability to regulate school quality. The LGE also bans all public and private voucher schools from using parental interviews and admissions tests to select and expel primary students up to sixth grade. Schools are allowed to use academic assessments in high school, but are not permitted to conduct student or parent interviews.

According to LGE, to obtain a license to operate (*reconocimiento oficial*) schools must: a) have an owner *(sostenedor)*, which will be responsible for the functioning of the school; b) have an educational project; c) follow the national curriculum; d) have rules on the evaluation and promotion of students, consistent with national minimum standards; e) commit to meet national learning standards; f) have rules governing relations with the school community; g) have the appropriate teaching staff and support personnel; h) have initial capital, proportional to the projected enrollment; i) certify that the building in which it operates complies with the general rules; j) provide furniture, equipment, and teaching materials appropriate to the type of education that seeks to impart.

The school owner may be public or private for-profit or non-profit (religious or secular). Subsidized private schools cannot be part of a company with a different mission (e.g. a school cannot be part of a restaurant chain). The school owner must meet the following requirements: a) have a college degree that requires a minimum of 8 semesters of coursework; b) not be disqualified from being a school owner for committing certain infringements defined in the Ley de Subvenciones (DFL N° 2/ 1998); and c) not have been convicted of a crime or offense against family order, public morality and sexual integrity, such as sexual assault and drug trafficking.

In 2011 the Education Quality Assurance Law (Ley de Aseguramiento de la Calidad de la Educación), established a new institutional framework for quality assurance in Chile. The law created two new institutions: the Superintendency of Education (Superintendencia de Educación) responsible for supervising school administration and uses of subsidies, and the Education Quality Agency (Agencia de Calidad de la Educación) responsible for evaluating schools, mainly through the application of

standardized tests, ranking schools according to educational results, and issuing guidelines on how to improve the quality of all public and private schools. Both functions were previously performed by the Ministry of Education.

The current government of Michelle Bachelet recently enacted the Inclusion Law (*Ley de Inclusion)*, which alters the rules governing the school choice system. First, the law introduces a new centralized admission system for subsidized schools (public and private), in which all families applying to schools will use a common platform. This platform will be available in schools, via internet and in special offices authorized by the Ministry of Education. In cases where demand exceeds the available seats, a transparent and nondiscriminatory algorithm will be used for allocating vacancies. Second, to ensure that resources given to schools are invested exclusively for educational purposes, the government will require every school to be constituted as a nonprofit in order to receive public funding. For profit school owners will have two years to adjust their legal situation. Finally, the government will progressively replace families' spending with public resources, beginning with a new subsidy for subsidized schools that charge tuition fees and turn into free schools. The system will take about 10 years to fully ban school fees. During this period, the fee charged to the families will be progressively reduced until it reaches to zero.

Also, during 2016, was introduced a new teacher policy[9]. This law has several objectives: i) improve initial training of teachers; ii) design a new teacher career (increases in salary based on teacher evaluation); iii) improve working conditions of teachers; and iv) develop a system of teacher training. The most important change from the point of view of private schools, is that the new teacher career will be applied to all new teachers, including those in subsidized private schools. Currently, in Chile there are three types of teacher contracts. The first type consists of those corresponding to the municipal sector, governed by the Teachers' Statute (*Estatuto Docente*) established in 1991. The second type includes those in the subsidized private sector, governed by the Labor Code, which covers all private sector workers, but for which certain rules in the Teachers' Statute are binding. Among the rules are minimum salaries, length of the working day, legal holiday periods, and termination. Finally, the third type of contracts is those in the fee-paying private sector, also governed by the Labor Code, but for which the rules in the Teacher Statute are not binding (Mizala and Romaguera, 2004). Regarding teacher evaluation, this is mandatory only for teachers in the municipal sector. For private teachers there are two volunteer accreditation programs, which consist of a bonus depending on the results in a test of knowledge and teaching skills.

The school voucher system in Chile has been extensively studied because it is one of the few programs on a large scale around the world. Studies have focused on the impact of the reform on: i) enrollment rate; ii) efficiency; iii) equity; and iv) segregation.

There is agreement that the introduction of vouchers allowed a rapid expansion of the private sector (especially for-profit privates schools), enabling a quick increase in enrollment rates, especially in secondary education (Elacqua, Martinez and Santos, 2015). For example, Bravo, Mukhopadhyay and Todd (2010) showed that the voucher reform increased high school (grades 9–12) graduation rates by 3.6 percentage points and the percentage completing at least two years of college by 2.6 percentage points.

In terms of the impact on efficiency, the evidence is less conclusive. While several studies show that competition between public and private schools increases aggregate educational achievement (Gallego, 2002, 2013; Auguste and Valenzuela, 2006), others find no evidence that choice improved

[9] See http://www.politicanacionaldocente.cl/

educational outcomes (Hsieh and Urquiola, 2006). On the other hand, several studies have analyzed the relative efficiency of private and public schools. While some studies show no significant differences between both types of schools (e.g. Mizala and Romaguera, 2000; Bravo, Contreras and Sanhueza, 1999; McEwan, 2001; Contreras, Sepulveda and Bustos, 2007) other find an advantage in favor of private schools, but the magnitudes are low after controlling for students' SES and correct for selection bias (Gallego, 2002; Tokman, 2002; Sapelli, 2003; Sapelli and Vial, 2002; Mizala, Romaguera and Ostoic, 2004; Mizala, Anand and Repetto, 2006; Lara, Mizala and Repetto, 2011). However, there is heterogeneity according to the type of school owner. The positive effects are seen mainly in Catholic schools (Carnoy and McEwan, 2000; McEwan, 2001) and those that operate as networks (Elacqua et al., 2011).

However, there is evidence that the reform has had a negative impact on equity. For example, some studies find that the voucher program led to increased sorting, as the best public school students left for the private sector (Hsieh and Urquiola, 2006; Auguste and Valenzuela, 2006) and that more advantaged families benefit more from the existence of school choice (e.g. Elacqua et al., 2015). Recent evidence show that the design of the SEP law has increased the equity in the system, as more resources focused on vulnerable students have had positive effects on SIMCE test scores, especially for low-SES schools (e.g. Valenzuela, Villarroel and Villalobos, 2013; Mizala and Torche, 2015).

Finally, recent studies show that school choice in Chile has increased socioeconomic segregation (Elacqua, 2012; Valenzuela, Bellei and De los Rios, 2013). For example, Elacqua et al. (forthcoming) show that school segregation is higher in the actual scenario than in a counterfactual scenario (students attend the school closest to their residence), which implies that the interaction between families' preferences and schools' entry barriers (tuition and selective admission process) tend to increase school segregation, relative to underlying residential segregation. One of the main causes of the high segregation in the Chilean education system is the "shared financing" policy. Empirical evidence shows that this policy has not generated significant effects on school quality (Bravo and Quintanilla, 2002; Anand, Mizala and Repetto, 2009; Mizala and Torche, 2012) but has increased school segregation (Elacqua, 2012; Valenzuela Bellei and De los Rios, 2013).

Colombia

In the Colombian educational system there are three experiences of public financing of private schools: a) Programa de Ampliación de Cobertura de la Educación Secundaria (PACES); b) Colegios en Concesión and c) Colegios en Convenio.

a) Programa de Ampliación de Cobertura de la Educación Secundaria (PACES)

The PACES was a voucher system that benefited 125,000 secondary low-income students in the country's biggest cities between 1991 and 1997. The vouchers were awarded by a lottery to students in public primary schools previously accepted in a private school participating in the program, covered half of the cost of attending a private school, and were renewable as long as students maintained satisfactory academic performance (Termes et al., 2015; Barrera-Osorio, 2012). The voucher allocation rule, allowed evaluating the causal impact of the policy. In general, these evaluations showed positive results. For example, Angrist et al. (2002) found that three years after the program, treated students had 10% more probability of graduate from ninth grade and also better results in standardized tests (+0.2 s.d) compared with control students. Also Angrist et al. (2006) found that program effects persist in the long term. Saavedra et al. (2014) using administrative data to track students for the seventeen years after the scholarship lottery,

document that lottery winners are more likely to graduate from secondary school, less likely to repeat grades and hence graduate earlier, and are more likely to start and complete tertiary education. Also, total formal sector earnings and payroll taxes at age 30 are at least 8 percent greater for lottery winners.

b) Colegios en Concesión

Colegios en Concesión (CEC, or Concession Schools) is a public-private partnership in which the State provides a public educational institution to a private organization. It was first implemented in Bogota in 1999. Currently there are 67 institutions in the country, serving nearly 100,000 students (Delgado, 2014).

In order to be able to place a bid, applicants had to be private non-profit organizations and demonstrate their "academic excellence." For example, in the case of Bogota, the contract included a series of obligations such as: the school should ensure certain standards regarding materials (physical infrastructure, equipment, teaching materials, etc.) and services (full school day, quality of food, etc.); the ICFES results (SABER Test) should be superior to those of nearby public schools; school admission process should agree with the *Secretaria de Educación* (SED) policy (Termes et al., 2015). To monitor compliance with these requirements, SED implements administrative evaluations carried out by inspectors (e.g., to assess the state of infrastructure or students' attendance) and more in-depth evaluations that analyze the academic performance and pedagogical strategies of the schools. These evaluations are high stakes: the contract contemplates the expulsion of the worst rated schools from the CEC program (Termes et al., 2015)[10].

In the contract, that lasts 15 years, the state provides the infrastructure, and pays a pre-agreed sum per full-time student per year (approximately $1,200,000 Colombian pesos; US $520), which is higher than what most regular public schools receive (approximately Col $1,000,000, or US $430). They are allowed relative flexibility to contract administrative and teaching staff and can freely implement their pedagogic model (Barrera-Osorio, 2006). For example, participating schools are able to hire teachers at regulated salaries on ten-month renewable contracts from a nonunionized pool of applicants and have the flexibility to adjust the teachers' body. In addition to this, the contracts establish that teachers should have at least a college degree in Education and have some years of relevant experience. Moreover, teacher wages are regulated by law so that teachers earn at least what public schools teachers earn according to education level and experience (Bonilla, 2012).

Beneficiary schools must be accessible to all families, so they cannot apply admission requirements or charge fees to families in primary schools (in secondary they can charge fees, similar as they do public schools). The subsidy is per-student, with values and quantities pre-established in the contract. If the school fails to fill all vacancies available, the State completes it with state-assigned students. The operator also can provide other services to the community and charge for them, with prior approval of the authority (e.g. extension courses, workshops). Teacher's contracts are regulated by private labor code, but must respect the professional requirements and the salary scale of public teachers' statute (Bellei and Trivelli, 2014). The schools also must follow a standardized academic curriculum and have the same academic year length as public schools (Bonilla, 2012).

[10] Termes et al. (2015) presents detail information about institutions participating in the program in Bogota.

The empirical evidence is mixed regarding the impact of the program. For example, Barrera-Osorio (2006, 2009) found that CEC schools have a positive impact on test scores when compared with students in other public schools (in mathematics and biology, but not in reading or physics) and a negative impact in dropout rates. Interestingly the author also suggests that other public schools nearby the concession schools have lower dropout rates in comparison with other public schools outside the area of influence. Results of Bonilla (2012) indicate that CEC students score 0.6 and 0.2 standard deviations higher in math and verbal tests, respectively, relative to public school students. He also provide evidence that the estimated results are not driven by unintended strategic responses by CEC schools, such as excluding low-performing students from the pool of test-takers, differential dropout rates, or via test specialization in the curriculum.

However, the study of Termes et al. (2015) shows that the CEC program has not achieved the expected results, because there are not statistically significant differences between CEC and public schools after controlling for school day and the economic status of students. The authors also found that many CEC schools have strategically selected their students during enrollment processes, though this practice is not allowed.

c) Colegios en Convenio

Colegios en Convenio (Subsidized Private Schools), which emerged in Colombia during the eighties, are private schools that receive a publicly funded voucher on one-year renewable contracts, in locations where there is an insufficient public education offer. In general, these schools serve low-SES families, have precarious and inadequate infrastructure (e.g. no sports facilities, libraries, etc.), under-qualified teachers, and sometimes are even located in private houses. Of the total students in the public schools of Bogotá, 9.4 percent were enrolled in these schools (Termes et al., 2015).

According to Delgado (2014) this type of contract has been paid in some cases to favor political interests, so the Ministry of Education is implementing more accountability and conditions to assign the funds (e.g. certify the lack of places in public schools and require minimum levels of quality). To date, according to our knowledge, there is no impact evaluation of this policy.

Ecuador

During the time of the border disputes between Ecuador and Peru, many religious communities supported the state in the provision of education. Some of these institutions now receive public funding and are called *fiscomisionales.*[11] According to the Organic Law of Intercultural Education (*Ley Orgánica de Educación Intercultural* or LOEI) these schools are congregations, religious orders or any other religious or secular organization. They are non-profit (religious or secular). For-profit schools are also banned in the unsubsidized private school sector.

These educational institutions can receive full or partial public funding, provided they meet the principle of free education, equal opportunities for access and permanence, accountability for educational outcomes and resource management, and respect for freedom of religion. In this sense, LOEI states that the admission process in public and fiscomisionales schools may not include

[11] See http://lahora.com.ec/index.php/noticias

entrance exams. In addition, like all schools in Ecuador, they must follow the national curriculum. According to Ministry of Education data, they serve 6% of students in Ecuador.

In practice, the State finances only a fraction of total expenditure of teachers' salaries. To complement these resources, schools can charge fees, but the government sets a cap. Specifically, LOEI states that the Central Level of the National Education Authority must define ranges for unsubsidized and fiscomisionales private schools, based on compliance with educational quality standards and other indicators (Art. 118 Reglamento LOEI). On the other hand, schools are also required to provide scholarships to poor students, funded with a fraction of the resources they receive annually for tuition fees (minimum 5%) (Art. 134 Reglamento LOEI).

School fees depend mainly on the cost structure of the school, which must be reported to the Ministry of Education.[12] The maximum amount that the school can increase tuition fees from one year to another is a function of the percentage of total spending used in management (e.g. payments to principals, teachers and support staff, teacher training, etc.) and whether a school has a surplus at the end of the year (difference between revenues and expenditures). Additionally, those schools that invest in fixed assets (e.g. infrastructure or technological equipment) or increase the salaries of teachers by more than 10% are allowed to charge a higher fee to new students (Acuerdo No MINEDUC-ME-2015-00094-

To authorize the operation of a fiscomisional school, the Central Authority requests the following information (Art. 92 Reglamento LOEI):

- Justification of the profile of managers and teachers of the school
- Justification of the need for the service, such as the student population that cannot be served by existing public schools, the impact on the community, and the geographical distribution of the nearest educational institutions.
- Certification on budgetary availability and sufficient funds to ensure their full or partial funding.
- Document of the promoters of the institution, certifying the availability of resources to ensure the functioning of the school.
- Report on management, teaching and administrative personnel required by the institution
- Public deed of the building.

Regarding labor regulations, teachers in public and fiscomisionales schools are regulated by the public education career path. Unlike public and fiscomisional teachers, teachers who work in private unsubsidized institutions are regulated only by the Labor Code.

Haiti

In Haiti there are two programs that provide subsidies to private schools, provided that these do not charge tuition fees to families (Tuition Waiver Program): a) Éducation Pour Tous (ÉPT) and b) Programme de Scolarisation Universelle, Gratuite et Obligatoire (PSUGO). Both programs benefit

[12] Por ejemplo, el pago a docentes (que es la sumatoria del costo de actividad docente, costo de la planta de apoyo docente y el costo de formación, capacitación y perfeccionamiento docente) debe corresponder al menos al 35% del valor del costo total de la educación. For example, teachers' salaries (sum of the cost of teaching, cost of teaching support plant and the cost of education, training and teacher training) must correspond to at least 35% of the total cost of education.

1,650,000 students (52% of primary and secondary total enrollment) and represent 16.6% of total expenditure on education.

a) Éducation Pour Tous (ÉPT)

Éducation Pour Tous (ÉPT) is financed by the World Bank, the Inter-American Development Bank (IADB), and the Caribbean Development Bank (CDB). Schools are with 90 US dollars per student to pay teacher salaries and distribute textbooks. EPT was launched in 2007 (Adelman and Holland, 2015). The subsidy must be allocated as follows: i) 65 USD to pay teachers, and ii) 25 USD to pay for textbooks approved by the Ministère De L'Éducation Nationale et de La Formation Professionnelle (MENFP) (Creole, French and Mathematics). If the textbooks are subsidized by the MENFP and the total amount is less than 25 USD, the rest of the money must be allocated to purchase other textbooks (Morduchowicz and Volman, 2015).

Schools must apply for the EPT. The focus on private schools was due to the public sector's limited size, and in order to exploit the excess capacity in private schools. In addition, it was expected that the program would create incentives for a private school response, encouraging them to build or expand schools. In order to direct the funds to low-SES students, the program relies on self-selection, because the subsidy is well below the level of tuition charged by schools serving high-SES families (Adelman and Holland, 2015). The program began in two Departments[13] (Nippes and Artibonite) and is currently found in all departments with the exception of the South (Sud) and Southeast (Sud-Est).

The first step to qualify for the EPT is to register with the Direction Départementale d'Éducation (DDE). The school principal must sign an annual contract with the Director of the DDE, authorized by MENFP. Participating schools are not allowed to charge tuition or other fees to families and receive money from other sources (e.g. donations). In addition, schools are required to be accredited by the MENFP and also recruit at least two qualified teachers with Accelerated Initial Training (Formation Initiale Accélérée FIA), the Normal School of Teachers (École Normale d'Instituteurs ENI) or Training Center for Primary Education (Centre de Formation pour l'Enseignement Fondamental CFEF), which must be assigned to classes with students benefiting from the program (MENFP, 2014; Morduchowicz and Volman, 2015).

Then, the school must open a bank account at the National Bank of Credit (Banque National de Crédit BNC) to receive the payment. Another condition for participation is to form a school council composed made up of school principals, parents, students, teachers, and other members of the community. The school council participates in the management of program funds and in campaigns to encourage enrollment in the school (MENFP, 2014; Adelman and Holland, 2015). The money can be used for any of ten purposes outlined in the operational manual, including paying teacher salaries, rehabilitation projects, and school nutrition programs (Adelman and Holland, 2015).

Payment is made in two payments: 60% and 40% (MENFP, 2014). The first payment is calculated based on the previous year enrollment. This amount is paid at the beginning of the first quarter of the school year. The maximum class size allowed is 45 and only two classes per grade can benefit from the program per school. Only children entering grade 1 for the first time, between the ages of

[13] Departments (10) are the first-level administrative division in Haiti.

6 and 8, are eligible for the subsidy[14] (Adelman and Holland, 2015; Morduchowicz and Volman, 2015). Before paying the second payment, an external firm checks the total enrollment. If there are fewer students than the quantity declared by the school, the second payment only covers the difference[15].

The program reached its maximum of beneficiaries in 2012-2013 with almost 270,000 students in all grades. The total budget for the year 2013-2014 was 13,714,500 USD (MENFP, 2014).

Table 5. Students and schools participating in EPT.

School year	Number of:	
	Schools	Students
2009-2010	1,221	175,000
2010-2011	1,221	227,581
2011-2012	1,176	213,123
2012-2013	1,158	265,548
2013-2014	1,136	149,933
2014-2015	1,136	149,933

Source: Morduchowicz and Volman (2015).

The only impact evaluation of the program is in Adelman and Holland (2015). The authors conclude that a school's participation in EPT results in having more students enrolled, more staff, and slightly higher student-teacher ratios. The program also reduces grade repetition and the share of students who are over-age.

b) Programme de Scolarisation Universelle, Gratuite et Obligatoire (PSUGO).

Programme de Scolarisation Universelle, Gratuite et Obligatoire (PSUGO) is a program created by the Prime Minister of the Republic of Haiti in 2011, that has been managed since 2014 by a unit inside the MENFP. It follows a similar mechanics to that of EPT, but the coverage is wider. As EPT, PSUGO transfers 90 USD per student to private schools with a maximum class size of 45. These schools cannot receive other private resources. For public schools, the program transfers 5 US dollars per student per year to eliminate tuition (Morduchowicz and Volman, 2015).

[14] This condition is quite restrictive in the case of Haiti, because there are a high percentage of overage students. The proportion of overage students is 21% at the preschool level, 61% at the fundamental level, and 74% at the 3rd cycle & secondary level.

[15] While most schools have complied, there are evidence that most fail to fully comply with at least one of the conditions required. However, the Ministry has taken little to no action to enforce compliance (Adelman and Holland, 2015).

The process begins with a request from the director of each institution to the DDE. One of the requirements to approve the contract is a minimum level of teacher training. Payment is made in three payments (30%, 30% and 40%). For the third payment, the MENFP audits the total enrollment informed by schools. In 2013-2014, the PSUGO had 1,465,974 beneficiaries (Morduchowicz and Volman, 2015). A difference with EPT is that PSUGO covers the whole country (Table 6).

Table 6. Students and schools participating in PSUGO by school sector (2013-2014).

Department	Students		Schools	
	Public	Non public	Public	Non public
Artibonite	109,503	205,592	312	1,546
Centre	56,553	26,627	181	248
Grand Anse	21,461	7,697	113	136
Nippes	50,916	1,114	191	38
Nord	108,020	53,025	462	407
Nord Est	41,062	9,906	122	119
Nord Ouest	52,939	10,430	136	105
Ouest	124,767	461,732	244	3,532
Sud	55,787	5,613	185	76
Sud Est	59,292	3,938	192	55
Total	680,300	785,674	2,138	6,262

Source: Morduchowicz and Volman, 2015.

The funding for PSUGO comes from two sources. One is the National Treasury[16] and the other is the National Education Fund (Fonds National pour l'Éducation, FNE) which gets its resources from taxes on phone calls (0.05 USD for each international telephone call to or from Haiti) and transfers of funds from abroad (1.5 USD for each fund transfer) (Morduchowicz and Volman, 2015). For the period from 15 June 2011 to 21 January 2015, a sum of over USD 100 million from the tariff surplus on incoming calls in the country was collected or remains to be collected from telephone companies (Conseil National des Télécommunications, 2015). However, the legal status of the FNE is unclear. In August 2012 the Chamber of deputies passed the law, but the organization and functioning of the FNE had not yet been ratified by the Senate (World Bank 2014; Haiti Education: A lot of money in the FNE, 2015).

[16] In 2013-2014 resources from National Treasury represented the 26% on the total (Morduchowicz and Volman, 2015).

Peru

Most private schools in Peru do not receive public subsidies, however, there is a program of subsidies for private schools of *Fe y Alegría*. *Fe y Alegría* is an international movement of Jesuit education, operating in over 17 countries, mainly in Latin America. Fe y Alegría started to operate in Peru in 1966, with the creation of five schools located in the poorest areas of the department of Lima. It currently has more than 88,000 students (1.2% of the total enrollment), studying in 80 educational institutions, distributed in 20 departments of Peru: Lima (30 institutions), other provinces (43 institutions) and 7 Higher Technological Institutes.

The *Fe y Alegría* model is a public-private partnership, through which the foundation (nonprofit) assumes the management of human and physical resources of some public schools. Like other public schools in Peru these schools cannot charge fees to families, but they are allowed to choose school leaders and teachers (Alcázar and Cieza, 2002). Under this scheme, the government is responsible to cover teacher's salaries and part of the school supplies and infrastructure. However, maintenance costs and other expenses are covered by the same school through activities, events and donations. On the other hand, *Fe y Alegría* schools follow the rules, standards and norms of the Ministry of Education (e.g. national curriculum) (Lavado et al., 2014). For example, teachers of *Fe y Alegría* schools receive the same wages as the rest of the public education sector and are governed by the same teacher law Alcázar and Ciezar (2002).

As an international organization, *Fe y Alegría* Peru is composed of a Central Office and the network of schools. The headquarters monitors and trains systematically and continuously to teachers. It also raises funds by organizing national campaigns (raffles) and negotiations with international organizations and private companies. These resources are transferred to schools and are used for the construction and maintenance of school infrastructure (Lavado et al., 2014).

There are some descriptive studies comparing the results of *Fe y Alegría* with other private and public schools, which find higher academic results in the schools of the network. However, the only paper that attempts to assess the causal impact of attend a *Fe y Alegría* school is Lavado et al. (2014), who use the random allocation of seats in one of the schools in the network as a quasi-experiment. Their results indicate positive effects on student outcomes second base in the Census Evaluation of Students in both mathematics and reading comprehension (0.4 standard deviations). On the other hand, the authors find that the effect is greater in students with lower initial performance (0.6 standard deviations). However the weakness of the study is that the minimum detectable effect on the size of the sample used is very large (0.71 standard deviations). Another difficulty in assessing impact is evidence showing that a significant percentage of schools network admissions process applies. According to data Alcázar and Ciezar (2002), 68% of managers stated that in the process of selection of student's school applies a performance review and that 65% reported an interview with parents.

Despite not being eligible to receive public funding, all private schools are subject to certain regulations. The Decreto Legislativo No 882 of 1996 "Law for the Promotion of Investment in Education" introduced during the government of Alberto Fujimori, establishes conditions to promote investment in private education services at all educational levels. Article 2 states that: "Every natural or legal person has the right to free private initiative for activities in education. This right includes the right to establish, promote, conduct and manage Private Educational Institutions, with or without profit motive". Article 6 states that teachers and administrative workers in private

schools are governed exclusively by the rules of the labor of private activity. Additionally, the law defines that only the Ministry of Education is authorized to approve the opening or closing of a private school. Finally, Articles 12 and 13 establishes that private schools are regulated by the general rules of income tax. However, private schools that fully or partially reinvest their surpluses are entitled to a tax credit equivalent to 30% of the amount reinvested. Such reinvestment may only be made in infrastructure and equipment intended for educational and research purposes.

The Decreto Supremo No 009-2006 regulates the conditions to open a private school. The information requested is as follows (Article 6):

1. Name and identification of the school owner
2. Proposed name for the institution
3. Name of the school principal
4. Members of the school management committee and number of teachers and administrative staff
5. Information on levels offered
6. Scheduled date for the start of the academic activities
7. Projected number of students and sections
8. Institutional education project, curricular project and school rules
9. Inventory of school furniture, educational materials and equipment
10. Location plan
11. Plan of the school, signed by an Architect or Civil Engineer.
12. Certificate of ownership or lease of the land where the school will be located

Article 10 establish that the only requirement to be a school owner is a proof of good conduct and not have a criminal record for intentional criminal offense. In addition, Article 11 authorizes the school owner to receive a salary, in the case of performing a regular and permanent role in the institution. Finally, Article 30 authorizes, subject to approval of the Regional Education Authority, providing subsidies or teachers to nonprofit institutions providing free education to low-SES students (e.g. *Fe y Alegría*). To be a school principal, the law states that the basic requirements are: i) Have university or teaching professional title, and be collegiate ii) Teaching experience of at least five years; and iii) recognized moral, and emotional and mental balance.

ii) **School admission systems**

<u>City of Buenos Aires, Argentina</u>

In Argentina, public school choice is guaranteed in the provisions of the Federal Law of Education, concerning the right of parents to choose the educational institution whose ideology responds to their philosophical, ethical or religious convictions. However, the confusing application process often impedes parents from exercising their right to send their children to the school of their choice. On the other hand, in practice, registration rules are "redefined" and used by teachers and staff of schools heterogeneously (Nadorowski, 2000).

In order to make the school admission process transparent, in 2013, the Ministry of Education of the City of Buenos Aires created an online system to apply to public schools at all levels. Private schools are not part of the system. To apply, the family has several options. First, it can apply directly

at the Online Registration web site,[17] in-person at schools or by either visiting or calling Offices of Social Development.[18]

Based on the information entered by the applicant, the system suggests five schools, according to the school level chosen and families can add up to three more options and then sort the schools based on their preferences. After the pre-registration, the applicant must submit the documentation to validate the information entered in the system at the school selected as first preference.

The priorities are defined by law, and they depend on the education level.

Preschool:

1. Applicant's guardian works for an institution with an agreement.
2. Applicants who have siblings in the school.
3. Applicants whose guardian serves as staff in the school
4. Applicants whose guardian belongs to the program *Alumnos/as Madres/Padres*
5. Applicants whose guardian is a teacher in a different public school in the City of Buenos Aires.
6. Applicants who live within 10 blocks of the school. Within this group vulnerable students have priority.
7. Applicants residing in the City of Buenos Aires, whose guardian works in a 10-block radius of the school.
8. Applicants living in the City of Buenos Aires.
9. Applicants living in the Province of Buenos Aires, whose guardian works in a 10-block radius of the school.
10. Applicants residing in the Province of Buenos Aires

Primary:

1. Applicants who are included in the scope of an agreement with primary school to which they want to attend.
2. If the applicant attends a preschool that is located in the same building as the primary school and lives within a 10-block radius of the school.
3. If the applicant attends a preschool that is located in the same building and lives outside a 10-block radius of the school.
4. Applicants who have siblings who are regular students of a school that functions in the same school building.
5. Applicants whose guardian serves as staff in the primary school or in the preschool that shares the building with the school.
6. Applicants whose guardian is a teacher in another public school in the City of Buenos Aires.
7. Applicants who live within 10 blocks of the school. Within this group vulnerable students have priority.
8. If the applicant attended a preschool in the same school district as the primary school.
9. If the applicant attended a preschool in the City of Buenos Aires

[17] http://www.buenosaires.gob.ar/educacion/estudiantes

[18] Offices of Social Development are government offices, located in disadvantaged neighborhoods, where families can consult on policies and programs offered by the city.

10. Applicants residing in the City of Buenos Aires, whose guardian works within a 10-block radius of the school.
11. Applicants living in the City of Buenos Aires.
12. Applicants living in the Province of Buenos Aires, whose guardian works within a 10-block radius of the school.
13. Applicants residing in the Province of Buenos Aires.

Secondary

1. Applicant has siblings in the secondary school chosen
2. Applicant whose guardian serves as staff at the school.
3. Applicant attended a primary school with a joint project with the secondary school
4. Applicants residing in the City of Buenos Aires.
5. Applicants residing outside the city of Buenos Aires.

Finally, there are some artistic secondary schools that have different requirements, which may include special tests. If two applicants have a similar priority and there are not enough seats, a public lottery is performed. The lottery is broadcast live through the website of the application system. The applicant, who does not receive a vacancy for any of the selected schools, is automatically placed on a waiting list in the school chosen as first preference.

The system has been criticized, mainly due to the use of an online platform, as this could limit access to low-SES families, which have a less internet access. Others have argued that this system erodes the contact between families and the school.[19]

In the case of private schools, there are no clear rules governing the admission process. There are only rules and laws that regulate discriminatory practices on grounds such as race, religion, nationality, ideology, sex and economic status (e.g. Ley Actos Discriminatorios No 23.592). For example, the National Institute Against Discrimination, Xenophobia and Racism (Instituto Nacional contra la Discriminación, la Xenofobia y el Racismo, INADI) receives complaints of discrimination when educational institutions deny enrollment to a family.

The problem is that, legally, the right to refuse admission is enshrined in a ministerial resolution, introduced during the last military dictatorship. The Resolution No. 641/81 of the Ministry of National Education, Article 137, states: "Private institutes have the right to refuse admission." The only exception is the City of Buenos Aires, because in this case private schools cannot deny enrollment without a cause and the reasons should not be contrary to the rights recognized in other laws (Articles 1 and 2, Ley No 2.681 2008).

Chile

The current school admission system in Chile is decentralized; each family must apply directly at the school. However, there are regulations on the characteristics of the admissions process. The General Education Law bans school selection by academic and/or socioeconomic criteria through sixth grade in subsidized schools (public and private). However, there is evidence that many schools still

[19] See http://www.infobae.com/2013/10/25/1518850-la-ciudad-dispuso-que-la-inscripcion-escuelas-sea-solo-online-y-desperto-rechazo

conduct parent interviews and require students to take entrance exams, present report cards and conduct reports from their previous school, provide parent salary information, and show documents demonstrating their affinity with certain religious beliefs (e.g. baptism and/or religious marriage certificates), especially in the private voucher sector (Contreras, Bustos and Sepúlveda, 2010; Carrasco et al., 2014). Recent research suggests that this is due to lack of enforcement (Carrasco et al., 2014).

In response to this problem, the current Chilean government recently enacted a law that changes the rules that govern the admission system for subsidized (public and private) schools. Under the new system, which will gradually be phased in starting in 2017, families must apply on an online platform administered by the Ministry of Education and rank the schools based on their preferences. When schools chosen by families have a sufficient number of seats, students will be automatically be admitted. The centralized system will use a lottery to assign seats in oversubscribed schools. The algorithm maximizes the probability that parents will be assigned to one of their preferred schools. Low-income families, siblings of students already enrolled in the school, and children of school staff will be given priority in the admission process (Oficio No 11.712, 2015).

Colombia

The Resolution 7797 from May 29, 2015, sets the rules for the organization of the admission process for preschool, basic and secondary public schools at the national level. As a general criterion, the resolution prohibits the use of tests as an admission requirement. However, it allows the use of diagnostic tests to evaluate the academic level of the student. The application process also must be free for families. Also, it establishes that the allocation of seats cannot be conditional on any payment by the parent or guardian, including school fees or additional services such as membership in parent associations.

Article 10 defines the minimum criteria to be taken into account when defining priorities for allocation of seats. The criteria are as follows, in order of priority:

Current students:

1. Students who are already enrolled in a school, to ensure their continuity.
2. Students assigned through agreements of continuity.
3. Students in public schools who have applied for a transfer and have siblings at school
4. Students in public schools who have requested transfer.

New students:

1. Students with disabilities or exceptional talents.
2. Students who were victims of armed conflict.
3. Vulnerable students.
4. Students who have siblings in the school.
5. Students who left the education system and express their intention to re-enter.
6. Students in the adolescent penal system (aged 14 to 18 years)
7. Other students who have registered during the process.
8. Students not enrolled during the process and that need to be enrolled in a public school.

Private schools are only required to report enrollment to the Ministry of Education through SIMAT, which is a tool of the Ministry of National Education to organize and control the registration process at all stages[20].

Given the existing decentralized educational system in Colombia, each territorial entity[21] is responsible for organizing his own admission process by following these general criteria. For example, the Resolution 1203 from June 30 2005 describes the admission process in Bogota (Distrito Capital). To participate in the process, parents or guardians may use an online platform[22] or apply in person, approaching the Local Boards of Education (*Direcciones Locales de Educación*) and other offices designed to guide parents in the application process. In this same website, families can access the information on seats available at each school. The allocation of seats is made taking into account the options requested by parents or guardians (families can choose up to 4 schools in order of preference). If there is no availability of vacancies in these schools, the applicant is assigned to the nearest public school. If parents or guardians do not accept the option assigned, they may approach the Local Board of Education (Dirección Local de Educación, DLE) and request to be reassigned to another public school with vacancies.

Rio de Janeiro, Brazil

The regulation of school enrollment in the municipal school network of Rio de Janeiro does not establish an explicit policy of school choice for families, but it also does not restrict the choice to the place of residence of the student, ensuring flexibility for the allocation of vacancies. Furthermore, the public system guarantees every student enrolled in a public school access to free transportation, facilitating the choice of schools located far away from their residence. According to Bartholo (2013), previous research has shown strong parental pressure to enroll in the most prestigious schools and also calls for different pupil selection strategies and criteria on the part of the educational bureaucracy. This scenario, which combines a high degree of freedom of choice for families with hidden selection mechanisms and admission criteria, has been referred to in the literature as the "Hidden Quasi-Market" (Bartholo, 2014, 2013; Bruel y Bartholo, 2012; Costa y Koslinski, 2011).

The norms that regulate the first enrolment and transfers across public municipal schools in Rio de Janeiro have changed since 2009. The changes have the potential to affect the school segregation patterns (Bartholo, 2014). These adjustments try to encourage parental choice and the random distribution of slots, through centralized computer procedures. In contrast, the previous law in 2001 was vague and unclear about many aspects of the school admission process. It allowed parents to exercise unlimited choice the first time they enrolled their child in a public school, but the school principal often decided whose preference would be prioritized (Bartholo, 2014).

The revamped centralized admission system was first implemented in 2010. According to the administrator of the system, the first year there were a lot of students not assigned to any school and requests not confirmed by families, which led to Municipal Secretary of Education (Secretaria

[20] See http://www.mineducacion.gov.co/1759/w3-article-168883.html

[21] In Colombia, Departments (Departamentos), Districts (Distritos) and Municipalities (Municipalidades) are certified territorial entities, which are responsible for exercising the administration of the provision of educational services. In each territorial entity, the Department of Education (*Secretaría de Educación*) exercises this function.

[22] See http://www.educacionbogota.edu.co/

Municipal de Educação, SME) to implement the application in two periods (one at the end of the year prior to enrollment and one at the beginning of the next year) (De Oliveira, 2014).

The system has several stages:

1. Online pre-registration.[23]
2. Allocation of candidates according to the priorities established by the municipal authority and a random draw for the remaining vacancies.
3. Confirmation of the vacancy requested.
4. Confirmation of enrollment at school (with documents).

Families must choose a minimum of 3 schools and a maximum of 5, sorted according to their preference. The allocation algorithm first assigns seats according to the established priorities in the law and next assigns based on family preferences. A lottery mechanism is used for oversubscribed schools.

Priority rules are subject to change from year to year by ordinances and resolutions. The current rules governing the system are in Ordinance (*Portaria)* E/SUBG/CP No. 21/2009, which created the rules for the online application and Ordinance E/SUBG/CP No. 24/2010.

The allocation of preschool vacancies meets the criteria of "descending age", i.e., the only criterion is the age of the child, with priority given to older applicants. If two candidates are born on the same date they will have the same priority. In the case of primary education, the priorities are:

1. Students with disabilities.
2. Candidates who have siblings in the school.
3. Children of school staff.
4. Adopted children.
5. Candidates who come from orphanages.

In addition to the above criteria, ordinances also define that the candidates who are already enrolled in a full time municipal preschool, have priority in the allocation of full time primary schools. According to an interview with the head of the computer procedure, cited in De Oliveira (2014), in the case of internal transfers for students already attending the a school in the municipal network, the system will also consider the distance between the place of residence of the student, the current school and the school the family is requesting to transfer to.

Once the vacancies are assigned, SME sends the result of the assignment to the parents by letter, email and text message, as well as posts them on the SME website. The SME expects parents to confirm the registration in person at the school to which the child was assigned. For that, parents must bring the necessary documentation. If the family does not confirm enrollment within a given time period, the vacancy may be assigned to another student.

For families who did not participate in the first stage, which did not confirm the enrollment in the school to which the child had been assigned, or could not get a place in any of the options they applied to in the first stage, they can apply again at the beginning of the school year. The vacancies

[23] In 2010, SME used the web site http://www.matriculafacil.rj.gov.br, which also were used to postulate to State schools (escolas estaduais). Since 2011 has been used the site https://matriculadigital.rioeduca.rio.gov.br.

available after the first stage are reported to the SME to feed the allocation mechanism. Therefore, in this second stage only schools with available slots will participate. In the second stage, school seats are assigned on a first come first served basis. Once a school fills its vacancies, it will no longer appear in the application system.

There is a third enrollment period, which allows parents to apply directly at the schools and Regional Coordinators of Education (*Coordenadorias Regionais de Educação,* CRE).[24] Families can use the SME call center or go directly to the CRE or school to apply. According to some parents interviewed, it is difficult to adapt to the new system, as they were used to going directly to schools. They also reported some difficulties with the phone application process (De Oliveira, 2014).

De Oliveira (2014) notes that there is little information on application dates, the characteristics of the schools of the network and the supply of vacancies available in the platform. The SME developed a brochure with an explanation of the registration process online, but in 2013, only 14,500 copies were distributed. In total, each year more than 90,000 entries are made, i.e., the brochure barely covered 17% of applicants and 3% of the total number of students enrolled in municipal schools. Parents, guardians and students can also access the material online.

There is no information about the performance of schools in external evaluations, operating conditions and maintenance of the buildings, the educational project and the organization of the curriculum, teacher training, learning spaces available, and other information that can inform the choice of families. This information can be found online, for example on the website of the National Institute of Studies and Research Educacionais Anísio Teixeira (INEP), but are not easily accessible to the general population.

To solve the problem of internet access in more disadvantaged communities, the SME provides families with computers with internet access in all CRE offices. The largest CRE has 15 computers and the smallest has just 2. Families do not have information on the number of vacancies at each school.

iii) Information and accountability

Brazil

In March 2007, the Brazilian federal government announced an Education Development Plan (PDE), a set of proposals to improve the quality of education. One of the main innovations was the creation of an index of education quality, the Basic Education Development Index (Índice de Desenvolvimento da Educação Básica or IDEB), bassed on the academic passing rate and the results of Prova Brasil and Saeb (Cortes Neri and Buchmann, 2008).

Desde la publicación de los resultados de IDEB, este índice (o variantes de él) ha sido utilizado para evaluar a las escuelas e introducir incentivos para mejorar su desempeño. En primer lugar, a lo largo de Brasil, varios estados y municipios han implementado bonos docentes, los cuales dependen del cumplimiento de metas específicas de mejora en el valor del índice. Por ejemplo, Ferraz and Bruns (2011) evaluated the impact of a collective bonus in Pernambuco, assigned to all managers, teachers and staff from state schools that reach at least 50% of a defined target. The authors find that the

[24] CREs are administrative bodies that act as intermediaries between the SEM and schools.

program has had a positive impact: compared to Northeastern Brazilian states and non-program municipal schools in Pernambuco, the schools which implemented this program have seen a large raise in their learning outcomes over two years (0.08-0.1 s.d. in Math). The effects on test scores were larger for children with lower socio-economic background.

En segundo lugar, el gobierno federal creo, el año 2007, el programa PDE-Escola (Plano de Desenvolvimento da Escola). Este programa está dirigido a las escuelas que han tenido bajos resultados en el IDEB. El programa tiene dos componentes principales. Las escuelas beneficiarias reciben capacitación técnica para elaborar un plan de mejoramiento, el cual define metas de aprendizaje que la escuela debe cumplir. Para implementar el plan las escuelas reciben recursos financieros durante dos años. El monto transferido depende principalmente de la matricula total que atiende la escuela. Una investigación reciente evaluó el impacto de PDE en los resultados de las escuelas en la Prova Brasil (Alves et al., forthcoming). Los resultados indican que PDE tiene efectos positivos en las escuelas, pero solo cuando las escuelas tienen recursos para implementar el plan de mejoramiento. Por otro lado, existe alta heterogeneidad en los resultados según el estado, lo que sugiere que el contexto de implementación es importante para explicar los resultados.

Chile

The SEP Law was the first initiative that introduced explicit school accountability mechanisms in Chile. As it was noted above, the law introduced an additional voucher (about 60% over the base voucher) for students classified as vulnerable, who attend municipal or private voucher schools, and who voluntarily agree to participate in the program, under the condition of meeting minimum standards for academic performance.

In order for schools to receive the additional voucher, they must also meet a series of requirements and must sign an agreement with the Ministry of Education, which includes a series of commitments: documenting the use of resources, establishing effectiveness goals for students' academic performance, and providing parents with information on school performance. One of the most important requirements is that all schools participating in the SEP program must develop and carry out an improvement plan (Plan de Mejoramiento Educativo—PME), led by the school principal with the participation of the rest of the school community. The PME requires actions in four areas: i) curriculum management; ii) school leadership; iii) school climate; and iv) managing school resources. Schools have the option of hiring technical educational assistance to develop their PME, provided directly by the Ministry of Education or by registered external agencies. These agencies provide consulting, training, evaluation, and institutional diagnostic services.

Chile´s accountability program ranks schools into three categories: i) autonomous (schools that systematically perform above national standards); emerging (schools that do not systematically perform above national standards); and recovering (schools that systematically perform below national standards). The most important variable used for the classification is the school's performance on the Chilean standardized test (Sistema de Medición de la Calidad de la Educación—SIMCE),[25] applied to fourth-grade students during the last three years for which information is available. Besides SIMCE results, the SEP classification incorporates a set of complementary

[25] SIMCE is the oldest evaluation system in Latin America. It has functioned annually since 1988 (although its origin goes back to the early 1980s). The SIMCE tests are applied to all students in the second, fourth, sixth, eighth, and tenth grades at the national-level. SIMCE also gathers detailed information about teachers, students, and parents.

indicators that measure other dimensions of educational quality. These indicators include the percentage of students who achieve the national standard, the percentage of students who remain in school until the end of the year, quality of working conditions, participation of teachers and families in the development of the school's educational project, the school's capacity to incorporate educational innovation, and the results on the national teacher evaluation (only for public schools).[26] The ranking has consequences for low-performing schools. Schools were not ranked in the recovery category during the first four years of the SEP Law. 2012 was the first year that schools were classified in this category.

There are two components in the SEP Law that introduce specific threats to low-performing schools. First, and unlike autonomous and emerging schools, recovering schools have a tighter deadline to improve their results. If the school does not manage to move to a higher category in three years, the Ministry of Education will report this to the school community and will encourage families to consider another schooling option for their children, as well as facilitating transportation to a better school. However, if the school remains in the recovering category for four years, the Ministry will revoke its license to operate and receive public funding.[5] Second, information on the school ranking will be widely disseminated among families, which is intended to influence parental preferences in school choice. Thus, being classified as low-performing could have a negative effect on future enrollments and on the characteristics of families (e.g. motivation) who are willing to choose such a school.

While recent studies have found positive effects of the SEP Law on SIMCE test scores, especially for low-SES schools (e.g. Valenzuela, Villarroel and Villalobos, 2013; Mizala and Torche, 2015), none of these studies have specifically analyzed the impact of accountability pressures facing schools, because they evaluate the effect of the three components of SEP Law simultaneously (i.e. increase in resources, elaboration of the PME and school classification). The only research that has examined the impact of the accountability component of SEP Law is Elacqua et al. (2013). The results indicate that low-performing schools respond to the accountability pressures. First, low-performing schools respond by implementing policies that seek to improve students' academic performance in the short-run (e.g. they introduce after-school tutoring programs for low-performing students). Second, the main changes made in recovering schools were on the level of teaching policies and not in practices; moreover, these changes were likely implemented top down by the school principals without involving teachers in the process. These findings are consistent with the incentives and deadlines of the SEP design.

According to the Education Quality Assurance Law (*Ley de Aseguramiento de la Calidad de la Educación, LAG*) the school ranking is now a function of the Education Quality Agency. Currently, this agency is working on a new methodology to rank schools. The LAG states that underperforming schools that do not improve within four years will face the threat of being closed. The most important difference with SEP Law is that this classification will be mandatory for all schools in the country. The law will be phased in in 2017. Additionally, the agency conducts school visits by experts (2-3 days) to the schools classified in the low categories, to help them to make a diagnosis of its strengths and weaknesses, and provide them with feedback on how to improve and meet the standards.[27]

[26] To see details about SEP classification, see Elacqua et al. (forthcoming).

[27] To see more details about this pilot phase see http://www.agenciaeducacion.cl/coordinacion-sac/que-es-el-sac/

Colombia

The General Education Law of 1994 (*Ley General de Educación*) established a ranking of private educational establishments, which determined the maximum annual increase in tuition that preschool, primary and secondary schools could charge to families. This regulation applies to all private subsidized and nonsubsidized schools. The government uses a self-evaluation manual and/or a quality certification to rank schools into three categories (regimes): Regulated Freedom (*libertad regulada*), Supervised Freedom (*libertad vigilada*) and Controlled (*controlado*) (Ministerio de Educación, 2009).

To implement the evaluation, principals must send every year, to the corresponding Department of Education (*Secretaría de Educación*), the self-evaluation results and financial information of the school. The Department of Education complements this information with external visits. According to the results obtained by schools, the authority issued every year a resolution with the school ranking and the maximum variation in tuition approved for every school. The definition of the three regimes is the following[28]:

- If the school obtains high scores or has a quality certification[29] it is classified in the Regulated Freedom regime
- If the school obtains intermediate results it is classified in the Supervised Freedom regime
- If the school obtains low scores, if it does not offer the minimum number of hours per year, if it does not comply with sanitary, security or financial regulations, if it does not deliver the self-evaluation or the information about enrolled students, if it is classified in the category Low or Very-Low in the SABER 11test[30], if it has a low score in the *Índice Sintético de la Calidad Educativa* (ISCE)[31], if it does not offer internet access to their students, or if it is sanctioned, the school is classified in the Controlled regime.

Schools in the Regulated Freedom regime are free to set the increase in tuition fees for new students, if they are in the upper categories of the ISCE. If the school fails to meet this condition, the Ministry of Education defines the increases in tuition. For the rest of the students, the increase must be based on the variation in the Consumer Price Index (IPC), plus a few percentage points, fixed annually by the Ministry of Education. Schools in the Supervised Freedom category are also free to set the increase in tuition fees for new students if they are in the upper categories of the

[28] See http://www.mineducacion.gov.co/1621/article-236977.html for more details about school evaluation process.

[29] Certified institutions are preschools that follow specific management models approved by the Ministry of Education. For details of these models see http://www.mineducacion.gov.co/1621/article-179263.html

[30] The SABER 11 test, applied by the Colombian Institute for the Evaluation of Education (Instituto Colombiano para la Evaluación de la Educación ICFES), started in 1968 with the purpose of supporting the admission process to higher education institutions. Currently, the test consists of five parts: Mathematics, Critical Reading, Social and Citizenship, Science, and English.

[31] The ISCE, constructed by the ICFES, is an index composed by four dimensions: iii) performance: average test scores in SABER test of Mathematics and Reading; ii) progress: school improvement relative to the previous year in the SABER test; iii) efficiency: retention rate; and iv) School Climate. SABER is a national standardized test applied annually to all students in third, fifth, seventh and ninth grades of public and private schools. The evaluation focuses on the basic skills that students have developed in reading and mathematics for the four grades and Civic Skills and Natural Sciences for 5th, 7th and 9th grades. More information in http://www.icfes.gov.co/index.php. The test results are public and are available on the website of ICFES.

ISCE, but the requirements are more stringent than for Regulated Freedom schools and the variations permitted are slightly lower. For the rest of the students, the increase must be based on the variation in the Consumer Price Index (IPC), plus a few percentage points, fixed annually by the Ministry of Education. Finally, for schools in the Controlled regime, tuition increases are defined by the Secretaria de Educación[32] (Resolución 15883, September 28, 2015).

Box 1. Diversity of school providers in Chile.

The provision of education in Chile has become increasingly privatized after the voucher reforms. In 1981, 15% of Chilean students attended private schools that received some public subsidies, and another 7% attended more elite, non-subsidized private schools. By 2014, the distribution of total enrollment (primary and secondary) is as follows: 36.8% in the municipal sector, 55.5% in the subsidized private sector and 7.6% in the private non-subsidized sector (MINEDUC, 2014).

Private voucher schools are diverse in membership (Table 7). Prior to the educational reforms in the eighties, most private schools were Catholic (Aedo, 2000; Elacqua, Martinez and Santos, 2015). When private voucher schools began to receive the same per-pupil payment as the public schools, a group of new, mostly for-profit voucher schools entered the market.

For-profit franchises, which are often controlled by a group of off-site owners, in many cases with private shareholders (Elacqua, 2007), currently represent almost 6% of schools in Chile. These for-profit schools stand in varying degrees of contrast to independent for-profit voucher schools, most of which are owned and run by former public school teachers (Corvalán, Elacqua, and Salazar, 2008), which account for about 24% of all schools. Nonprofit voucher schools, including Catholic, Protestant and secular organizations, are more likely to be characterized by networks (franchises) that are affiliated through religious congregations or nondenominational foundations. Finally, private non-voucher schools charge high tuition fees, do not receive per-pupil subsidies, and are mainly focused on very high income students.

Table 7. Distribution of primary students across school types (2012).

School owner type	Schools (%)	Students (%)
Public	55.7	41.3
For-profit independent	24.0	26.2
For-profit chain	5.9	8.2
Non-profit Catholic	6.8	13.1
Non-profit Protestant	1.1	1.5
Non-profit non-sectarian	1.6	2.4
Private non-voucher	4.9	7.2
Total	100	100
Number of schools or students	8,682	1,962,575

Source: Elacqua et al. (2015).

[32] See http://www.mineducacion.gov.co/1621/article-219212.html

Box 2. Diversity of school providers in Haiti.

The number of private schools has grown exponentially since 1970s in Haiti. As explained above, this is due to a lack of state capacity in providing public schools and the nature of the private schooling market, which is unregulated for the most part. In 1957, Haiti had 2,000 private schools, now this number is over 15,000 schools. Given the nature of the Haitian market, there are many types of private schools that serve the needs of families, depending on what they are looking for: religious schools, community based schools, etc. In those terms, private schools are divided in three school categories: (1) Non-religious: Secular and Communautaire; (2) Protestant: Protestant (M, I); (3) Catholic: Congregationist, Presbyterian, and Episcopal; where each of those types means:

- Secular: School created and managed by no religious structure.
- Communautaire: School created and managed by local association.
- Protestant (M): School created and managed by local Christian Mission.
- Protestant (I): School created and managed by local Christian churches non attached to a Mission.
- Congregationist: School created and managed by the Catholic Church.
- Presbyterian: School created and managed by local catholic regions congregation.
- Episcopal: School created and managed by local catholic regions congregation non attach to Vatican.

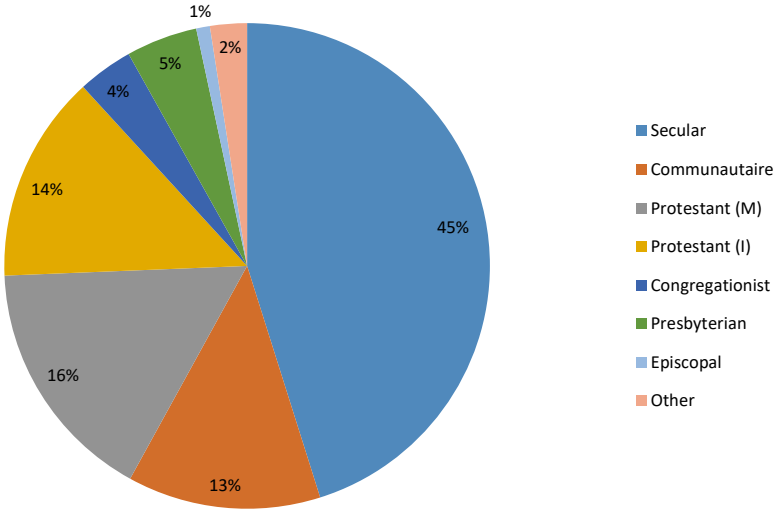
Table 8. Distribution of all levels of public and private schools in Haiti.

	Public	Private			
			Non-religious	Protestant	Catholic
Schools	12%	88%	55%	35%	10%
Students	20%	80%	53%	34%	13%
Teachers	13%	87%	56%	33%	11%

Source: Authors' calculations using 2010-2011 School Census.

There is an even distribution of private religious vs. non-religious schools in Haiti. In 2010, 55% of schools were non-religious compared to 45% of religious schools (Protestant and Catholic). Figure X, shows the distribution of each type of primary school, in which non-religious schools have a higher share of the market with 48% of schools.

Figure 13. Distribution of types of private primary schools in Haiti.



Source: Authors' calculations using 2010-2011 School Census.