



Received: 10 February 2015
Accepted: 23 July 2015
Published: 24 August 2015

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Reviewing editor:
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EDUCATION POLICY | RESEARCH ARTICLE

Why does private school enrollment grow? Evidence from Argentina

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Abstract: During the second half of the twentieth century, a process of privatization took place in the Argentine education system. This paper seeks to explain the growth of private enrollments in Argentina over the last years. Drawing on the concept of quasi-monopoly, we run a random-effects estimation on panel data to analyze the determinants of the complex (and dynamic) equilibrium between public and private education supply. It is observed that the behavior of both sectors is explained by (1) the incorporation of new students to the education system, (2) the State action regulating and financing, and (3) the general socioeconomic conditions.

Subjects: Education Policy; Education Politics; International & Comparative Education

Keywords: private education; privatization; enrollment; funding; Argentina

1. Introduction: the growth of enrollment in private education in Argentina

Different studies produced in recent years have shown the case of the Argentine education system as a paradigm in terms of privatization of education (Morduchowicz, 2001; Narodowski & Andrada, 2000, 2001a; Vior & Rodríguez, 2012). The use of the term privatization refers in this case to the fact that the evidence reveals a significant increase in enrollment in private education in Argentina since the 1960s, both in absolute and relative terms. Furthermore, it has been found that this trend, far

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PUBLIC INTEREST STATEMENT

Over the last decades, Argentina's private school enrollment has been growing both in absolute and relative terms in every one of the 24 federal jurisdictions (provinces). This tendency has been observed even during self-declared pro-public education government administrations. Even though these administrations repealed previous regulations that allegedly drove education privatization, such measures proved to be insufficient to counteract deeper social trends.

The article seeks to provide a broader explanation to this phenomenon. Using statistical evidence and the concept of quasi-State monopoly, this study provides an analysis of the causes of the growing number of students in private schools as an opposite effect of the objectives of the educational policy.

from abating, has taken a higher rate in the last 10 years (Narodowski & Moschetti, 2015). The aim of this article is not to understand whether this process has been beneficial or not for the Argentine education system—which has been analyzed in other studies (Narodowski & Andrada, 2001a; Narodowski & Nores, 2000; Gasparini, Jaume, Serio, & Vazquez, 2011; Tiramonti, 2011; Narodowski, Moschetti, & Gottau, 2013; among others)—but to contribute to the understanding of the ongoing process of privatization in Argentina presenting and interpreting statistical evidence that allows to explain the growth of private education and accounting for the role of the State and the allocation of State funding to private schools in such process. The hypothesis behind this approach is that far from competing, the public and private sectors complement each other thus maximizing coverage in a cost-effective scheme regarding public expenditure allocation. Inspired on the concept of *quasi-monopoly* (D'Aspremont & Gabszewicz, 1985), this study tests the influence of the changes in the enrollment of the entire education system, the allocation of State funding to the private sector, and—in more general terms—the economic and human development over the privatization process over time and for the 24 Argentine educational jurisdictions.

Following the contributions of different studies, it is possible to consider that the current private education sector in Argentina emerged altogether with the national educational system itself in the late nineteenth century. Even when there are some precedents of private education—Catholic schools and universities since the sixteenth century (Newland, 1995), and independent non-religious educators outside the State action that educated children from wealthy families in the early nineteenth century (Szuchman, 1990)—its relative importance declined sharply in the first half of the twentieth century as a result of the significant growth in public education (Newland, 1994).

It is from the 1960s that the private sector began to grow significantly until reaching its current size and offering an increasingly diverse shape (Perazza, 2011). While some Argentine provinces have schools providing Catholic education in public schools, it is private education that mostly offers religious education in Catholic, Protestant, Jewish, and Muslim schools. Likewise, there are several schools that reflect the country's immigration history (Italian schools, Galician, English, Welsh, Armenian, Turkish, Japanese, etc.), as well as secular, experimental schools, Waldorf or Piagetian orientation, art education, among many others. Many are for-profit institutions and some are non-profit, usually sponsored by NGOs or civil society organizations.¹ Unlike other countries, there are no public-private partnerships experiences in Argentina—at least not in the sense that these have been studied over the last decade (Broadbent & Laughlin, 2003; Reeves, 2003; Verger, 2012): private schools respond to a “traditional” model with State financial aid in some cases. The Argentine public-private scheme dates back to the 1940s, and therefore it would be anachronistic to characterize it in current PPP terms as we shall see.²

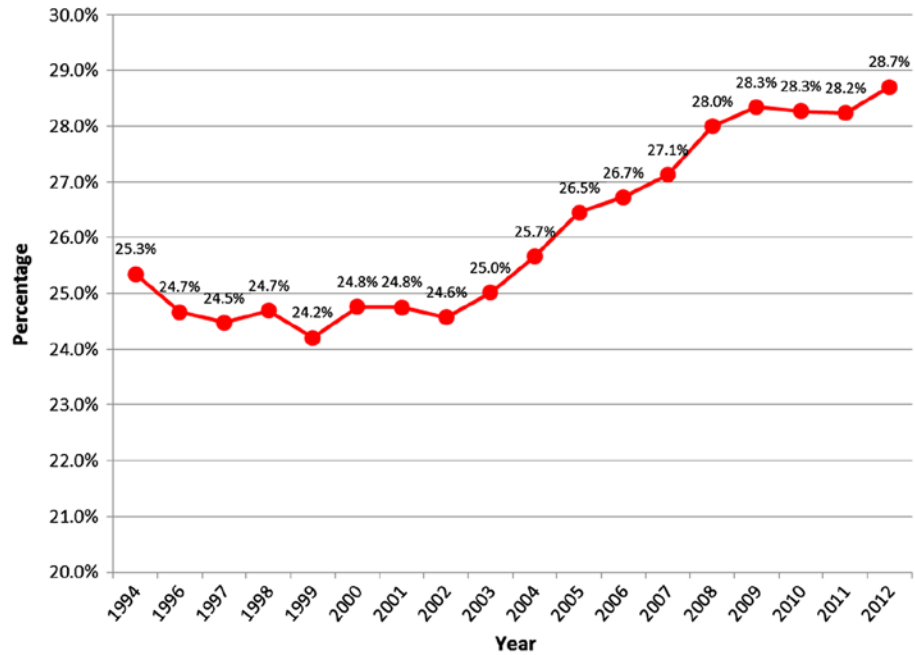
The sustained growth of the private sector share seemed to reach a stable equilibrium of about 24%³ during the 1990s. Nevertheless, and in spite of the deep economic crisis that took place in the years 2001–2002 and the official discourse in favor of public schools put forth by the post-crisis governments, as from 2002, anew period of strong private school enrollment growth started to become evident, showing in 2012—according to the latest data available—a rate of 28.7% (DiNIECE, 2012) as shown in Figure 1. As such, in the context of Latin America, Argentina ranks second after Chile, whose education system, different to Argentina as we shall see, is structured on the basis of demand-side funding and a quasi-market dynamic (Narodowski & Nores, 2003). It is also important to note that Argentina holds the second largest State-funded private sector in South America right behind Chile, albeit under quite a different logic of subsidy allocation (Bassi, Busso, & Munoz, 2013).

Figure 2 presents the evolution of private enrollment share disaggregated by educational level. It is important to note that kindergarten, primary, and secondary levels account for 90% of the total enrollment, while tertiary level represents only 10%.

In the most densely populated districts of Argentina, the percentage of students in the private sector results significantly higher than the national average. In the city of Buenos Aires, one out of

Figure 1. Evolution of private sector enrollment share. Common education (1994–2012).

Source: Own preparation based on the information provided by the DiNIECE—Ministry of Education.

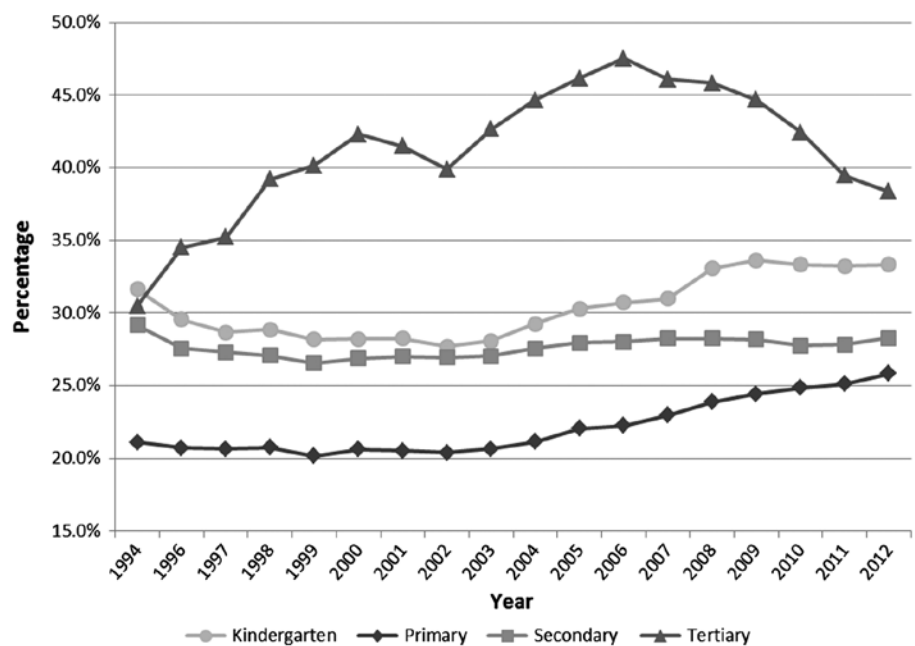


two students attends a private school and in some districts such percentage rises to 65%. The provinces of Buenos Aires, Córdoba, and Santa Fe show, in 2012, private school enrollment rates ranging between 30 and 35% for the levels comprised in “Common Education” (kindergarten, primary, secondary, and tertiary). When considering each level separately, these districts show rates of 27–40% for kindergarten, 26–36% for primary, 30–40% for secondary, and 33–50% for tertiary levels.

The main hypothesis is that private schooling has been increasingly serving the increase in demand in a context of fiscal financial constraint.⁴ This structuring follows a cost-efficient rationale

Figure 2. Evolution of private sector enrollment share. Kindergarten, Primary, Secondary, and Tertiary (1994–2012).

Source: Own preparation based on the information provided by the DiNIECE—Ministry of Education.



in which the system as a whole guarantees more coverage than what would originally offer if the available resources were applied exclusively to the public sector. Essentially, private schooling has been increasingly incorporated because the public sector cannot fully accommodate demand. The exit of middle- and upper-middle-income families to the private sector—fostered by partial State funding in some cases—leaves vacancies in the public school system solving the excess demand problem as described by James (1987, 1993) and Belfield and Levin (2002).

The road map of this paper is as follows: In Section 2, we review the usual explanations for the growth of private education, showing that the repeated idea that the increase in the number of students in private schools responds to the governments' ideological orientation may not be accurate at all. In this line, an alternative hypothesis is offered where the public and private sectors seem to form a balance that maintains a significant school coverage using public and private resources in a cost-efficient fashion. In Section 3, we present the characteristics of the analysis model and the results of the empirical tests. Finally, conclusions are presented in section four interpreting the evidence in line with the conceptualization of the quasi-monopolistic structure of the Argentine education system.

2. Theorizing the relationship between privatization and policy

2.1. Neoliberal vs. post-neoliberal policy: a false dilemma

The case of the Argentine education system is of great interest to the international academic debate since the increase in private enrollment does not result from the policies that back up what Ball and Youdell (2009) call “exogenous privatization,” where the State opens up the arena for private competition, as opposed to “endogenous privatization,” where the public sector incorporates managerial techniques. In Argentina, there are no demand-side subsidies, voucher programs, or free school choice programs. The structure—if any—within which school choice operates, certainly does not offer genuine choice alternatives for parents (Merrifield, 2008; Moe, 2008). From a public policy approach, supply-side State funding mechanisms exist for some private schools and aim to finance (totally or partially) only the salary of those teachers who fulfill functions within the framework of the official curricula. These mechanisms came together with a strategy of homologation of private schools' certificates with those issued by public schools and a growing autonomy and flexibility in administrative and pedagogical issues.

For many years, the dominant academic interpretation regarding this phenomenon in Latin America, in general, and Argentina, in particular, is derived from an explanatory model centrally based on political and ideological issues. Thus, it was argued that the neoliberal policies sponsored by governments identified with such ideology were the most important factor to account for the remarkable increase in the number of students attending private schools. The works of Puiggrós (1997), Gentili (1999), López Guerra and Flores (2006), and Torres (2008), among others, were at the core of the political and academic debate considering neoliberalism as the main explanation for this privatization process. This explanation has been recently reconsidered in the view of the current privatization process (Narodowski & Moschetti, 2015). The findings of that study confirm that, for the case of Argentina, it is problematic to explain both the increase in private schools enrollment and in State expenditure on private schools as a result of neoliberal policies. When comparing enrollment data for the last two decades under different government administrations and policy orientations, the study shows that there is no evidence that may correlate the increase in private school enrollment in Argentina with the positioning within the neoliberal ideology of some of its governments: during the presidency of Carlos Menem (1989–1999)—of pro-market orientation—State schools still attracted students to the detriment of private schools. Contrary to this, during Néstor Kirchner's and Cristina Fernández de Kirchner's administrations (2003–2015), characterized by a persistent anti-neoliberal preaching and the support of those who had condemned the privatizing neoliberalism of the previous decade, the school privatization tendency was consolidated.

Moreover, the privatization process in Argentina permeates all the political spaces of the educational system. Argentina is a country of federal educational administration and schools depend on each of the 24 jurisdictions. These jurisdictions have some political and financial independence regarding the organization of their pertaining educational systems, which reveal relevant social, economic, and political differences (see Rivas, 2004). In spite of these differences, which are in fact of great importance, the study shows that private education grows regardless of socioeconomic indicators or the political parties and ideologies of the respective governments (Narodowski & Moschetti, 2015).

As shown in previous studies (Narodowski and Andrada, 2001a; Narodowski & Moschetti, 2015), the privatization process in Argentina started before the so-called neoliberal period and its tendency not only remained unchanged during the post-neoliberal period but also strengthened considerably. Moreover, the educational policies and regulations operated during the self-proclaimed anti-neoliberal administration—which included the abolition of the regulations of the previous period and the passing of new legislation (Zuain, 2010)—did not stop the privatization process. In fact, as shown in Figure 1, private school enrollment grew almost 5% points in just seven years.

Thus, this previous research shows that the explanations based on the government's proclaimed ideologies to understand the privatization tendency in Argentine education result insufficient. However, the analysis of the evidence does not imply any assertion that the post-neoliberal governments of Néstor and Cristina Kirchner have had a “privatizing” orientation. Both the political discourse and ideological positioning adopted by governments, including changes in the regulations, do not seem to be related to the deeper, but certainly more relevant, consensus regarding the behavior of society and the State with relation to a family-level model of school choice and the private/public options (Narodowski, 2002, 2008). A rigorous analysis then needs to consider variables of increasing complexity that operate independently from the predominant ideological bias and the sociopolitical identification of the macro political cycles. For this reason, it is essential to contribute to the elaboration of theoretical models capable of explaining the logic of the interplay between a set of variables that would help clarify these processes of privatization of education in Argentina.

2.2. The quasi-State monopoly education system

Public schools dominated the Argentine education scenario until approximately the end of the 1950s. Like in many other countries, the educational supply at all levels was predominantly provided by the State, leaving a share ranging between 5 and 10% for the private sector (Morduchowicz, 2001). This hegemony of the State provision was not merely quantitative: several studies (Andrada, 2007; Feldfeber, 2003; Narodowski & Andrada, 2000; Veleda, 2009) have shown that private schools had limited leeway to take administrative and pedagogic decisions and that the certificates these institutions issued did not have any validity until they were endorsed in public schools examinations. Furthermore, although some private schools already received State funding to afford teachers' salaries, such funding was limited to a small number of schools and hardly exceeded 60% of total wage expenditure.

Since the 1960s, the Argentine education system began to experience a series of dramatic changes induced by new regulations that tended to diffuse—and even suppress in some cases—what was stipulated in the regulations in force for private schools. The new regulatory network 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 some proportion (Morduchowicz, 2001; Narodowski & Andrada, 2001a). Regarding this issue, it should be noted that this device of State support for private education originally emerged in 1947⁵ in order to guarantee schooling to students in areas where there were no public schools or to offer some financial help to private schools attended by low-income sectors (Moschetti, 2012). However, it was in the 1960s that, through successive decrees, this funding mechanism acquired greater definition and systematization regarding the proportion of the total expenditure on teachers' salaries to be financed by public monies.⁶ These changes in regulations and funding ran parallel

to the increase in enrollment. Far from resulting from public–private competition or confrontation, the growth of private education in Argentina may be explained by the process of growth of the education system as a whole. In other words, we argue that it is not possible to understand the logic of the privatization process considering the private sector as an independent structure.

The public sector is regulated and entirely financed by the State and serves a major portion of the schooled population reaching 71.1% for the whole country in 2013 but in relative decline (Narodowski & Moschetti, 2015). Evidence shows that the State sector mainly serves students coming from the poorest strata of the population (Gasparini et al., 2011; Narodowski & Nores, 2000). According to 2013 figures, students in private high schools are 35% more likely to graduate than students in public schools. From the point of view of social perception, several studies show that families see public schools as suffering an increasing deterioration due to factors such as teachers' strikes, insecurity, school indiscipline, building/facilities conditions, and low-quality education (López, 1997; Scialabba, 2006). Although this perception increases according to socioeconomic status (Tiramonti & Ziegler, 2008), research shows that the negative perception of public schools is very much widespread (Tuñón & Halperín, 2010).

On the other hand, this State supply is complemented by a private sector which is in constant quantitative growth. From the point of view of its perception, studies demonstrate a remarkable increase of its social prestige during the last decades (López, 1997; Scialabba, 2006). Evidence shows that private schools are mostly chosen by middle- and high-income sectors, and in some urban areas, these sectors seem to have definitely abandoned public schools (Gasparini et al., 2011; Narodowski & Nores, 2000).

From a structural perspective, the Argentine education system seems to be organized as a quasi-State monopoly (D'Aspremont & Gabszewicz, 1985). This concept refers to a situation in which due to the steady increase in demand, an existing monopoly structure enables the generation of a new closed supply structure on condition that it only captures the excess demand that the old monopoly cannot absorb due to several structural fiscal restraints. In other words, a possible way to accomplish the constitutional mandate of delivering education for all is having some families choose and pay for private education. The quasi-State monopoly would then be a scheme that, in cases such as the Argentine, allows to understand the growth in private education as a necessary means for the growth of school population.

As such, the private sector does not directly compete with the traditional monopoly but rather contributes to its maintenance by providing coverage where the old State monopoly is not capable of doing so. The old monopoly sector of public schools may thereby continue operating on the captive demand, opening the opportunity for the private sector. The complete structure, i.e. the articulation between the old traditional monopoly and the private sector, the interplay between both sectors, is called “quasi-monopoly” (D'Aspremont & Gabszewicz, 1985; Narodowski, 2008, 2010).

It is necessary to discard beforehand the idea that education quasi-monopolies are “duopolies” in economic terms or even “dual” systems, in general terms. Whereas in the duopoly, there are two competing monopolies (or supply structures that may show a cartelized behavior), in a quasi-monopoly, the private education sector does not strictly behave as a monopoly. In fact, it is the existence of the private sector that allows the public sector to continue operating in monopolistic terms: in order to survive as such, the public sector depends on the existence of a non-competing private sector that meets excess demand (D'Aspremont & Gabszewicz, 1985).

For the Argentine case, the characteristics of the new sector show that it is regulated by the State and in fact benefits from its financial support, even if partially. Nevertheless, its provision mechanisms are increasingly autonomous compared to the State sector, and schools have greater

scope for decision-making regarding the possibility of offering a differentiated and unique educational project attentive to the demands of families that can potentially choose their service (Andrada, 2002). Undoubtedly, the existence of these private school features certainly affects school choice at the micro sociological level among middle- and upper-middle-class families, as some studies have shown (Scialabba, 2006; Veleda, 2009). However, and in recognition of this, this article aims at offering a structural explanation in line with a more general hypothesis. We definitely observe the importance of “choice” and “population demand shifts” in the process of privatization, but argue that these are conditions of possibility for the drift to occur rather than systemic causes.

Meanwhile, the traditional sector of education in Argentina deals with a whole architecture of regulations which leaves little leeway on pedagogic and administrative matters such as teacher recruitment, for instance. This limiting condition has been studied in terms of a growing “bureaucratization of education”: what the State regulates for the traditional sector is usually deregulated for the private sector (Andrada, 2002). The quasi-State monopoly model of education supply denotes—as from the conceptualization of D’Aspremont and Gabszewicz (1985)—a dynamic balance between the old monopoly sector and the new private sector. This equilibrium enables the traditional sector to reproduce its practices, while the new sector accommodates excess demand in a cost-efficient fashion. An important indicator of these dynamics comes from the comparison between State expenditure on public and private schools: the evidence in the case of Argentina shows the structural efficiency of public expenditure applied to the private sector when combining these subsidies—which never represent more than 25% of the total expenditure on education (Moschetti, 2012)—with families’ private spending on education. Measured in terms of State expenditure per student, the investment in the private sector is always several times less than in the public sector, and as the private sector captures a greater enrollment, the efficiency of State expenditure increases. According to the *Coordinación General de Estudio de Costos del Sistema Educativo* (CGECSE—Ministry of Education, 2014), State spending per pupil in constant Argentine pesos in the private sector accounted for \$1,021 in 2010 (last available data), while State spending per pupil in the State sector reached \$ 2,660. For the same year, in the city of Buenos Aires—the second most populated of the 24 jurisdictions and where enrollment in public and private schools is divided in halves—State spending per student in public schools was \$3,954 and in private schools was \$874. Thus, with fewer resources than those stipulated by the law (in Argentina, public education is universal, compulsory, free, and secular in formal terms), low-income sectors can massively receive free education provided by the State. Under this quasi-State monopoly rationale, withdrawing funds or subsidies for private education would inevitably push families from the private sector to public schooling thus causing coverage problems, especially for low-income sectors. In Argentina, a counterfactual scenario of the quasi-State monopoly structure would result in an important deficit in free public school coverage if State expenditure remained stable.

To sum up, the Argentine education system could be explained with the description of the quasi-monopoly structure (Narodowski, 2008). On the one hand, there is a traditional public education sector monopolized by the State, and inhabited, in general terms, by low-income sectors and, on the other hand, an heterogeneous private sector composed mostly of private schools which, in terms of public expenditure efficiency, becomes functional to the State sector and has a greater scope for decision-making and capacity to structure autonomous education projects while mostly serving middle- and upper-middle-class families (Gasparini et al., 2011; Morduchowicz, 2001; Narodowski & Andrada, 2001b). Furthermore, the concept of quasi-State monopoly allows us to understand that the increase in enrollment in private education in Argentina is not the result of a “withdrawal,” “weakening,” or “disappearance” of the State but instead of a conversion that involves moving from a monopolistic behavior—as regards the administration of the system—to a greater and complex structure that contributes to guarantee the quantitative growth of the education system as a whole, not through the traditional way of increasing the enrollment in free public schools but by combining and balancing this growth with that of private schools.

This articulated vision allows conjecturing that in the quasi-monopolistic structural rationale, the growth in private enrollment is neither the result of privatization policies nor just a phenomenon simply related to the behavior of middle and high classes, even when, as we have mentioned, studying the sociological dimension of this problem is definitely useful to understand the conditions of possibility of the public-private school drift. At the macro structural level, using the concept of quasi-State monopoly, we try to test if the causes of this growth are derived from (1) the changes in the enrollment of the entire education system; (2) State expenditure on private schools; and (3) the economic and human development for the period.

3. Empirical tests

3.1. Conceptualizing the quasi-State monopoly rationale

The independent variables included in this piece comprise data at the provincial level on the total enrollment in compulsory education levels, State expenditure on private schools, and human development indices (HDI).

As regards the changes in the total enrollment, these are indicative of a growing demand which drives financial difficulties for provincial States in sustaining the quantitative growth of the system in contexts of fiscal crisis or shortage. At the same time, the variation in State expenditure on private schools is interpreted as a cost-efficient incentive to the creation of private supply in education services: this cost-efficient feature lies in its partial nature since it requires the families' private effort to complete the financing of the entire exit (private) sector. Finally, the degree of economic and human development serves as a control variable, but—globally considered—it also denotes the capacity of families to finance their children's education in private schools.

3.2. Data and descriptive statistics

The measure for the dependent variable, *Private Enrollment Share*, is the private school enrollment share for each of the 24 jurisdictions of the country for kindergarten, primary, secondary, and tertiary levels; the variable *Total Enrollment* registers the total number of students in hundreds of thousands; the variable *State Expenditure on Private Schools* has been expressed as the proportion of total provincial and national government expenditure on private education for each jurisdiction; and finally, *Economic and Human Development* has been built according the Human Development Index developed by the United Nations Development Programme for each jurisdiction.

Data were organized in a panel set and, as mentioned above, the regressions used the information available between 1994 and 2010 for the 24 provincial jurisdictions. The analysis was limited to the 1994–2010 period on the basis of statistical rigor since the National Board of Information and Evaluation of Education Quality (DiNIECE) began to survey and systematize information regarding the number of students in private schools by jurisdiction in 1994. Previous data available show inconsistencies and lack segmentation by jurisdiction. Table 1 summarizes the descriptive statistics for the chosen variables.

3.3. Model and estimation

In order to test the relationship between private enrollment and the independent variables, the models use panel data with random effects. Panel data models analyze variance in a cross-sectional

Table 1. Descriptive statistics

Variable	Mean	SD	Min	Max
Private education share	18.08	9.13	6.87	51.87
Total enrollment	4.07	6.95	.24	38.8
State expenditure on private schools	9.97	5.3	1.75	24.15
HDI	79.64	2.99	73.9	88.1

manner as well as across time—capturing heterogeneity that is not observable either in time series or cross-sectional analysis. It also offers an adequate framing to employ estimation techniques as well as for reaching theoretical results (Greene, 2003). In this case, the understanding of both dimensions—jurisdictions and their evolution in time—is particularly relevant in order to seize the functioning logic of a federal system such as the Argentine. Finally, panel data allow considering a greater number of cases, thereby increasing degrees of liberty and diminishing collinearity (Hsiao, 2003).

The model takes i for each of the 24 educational jurisdictions and t for annual data for the period 1994–2010. Then, our specification is:

$$MP_{it} = \alpha_1 TE_{it} + \alpha_2 PS_{it} + \alpha_3 HD_{it} + V_{it}$$

where MP is the growth of private enrollment measured as private enrollment share over the total, TE is the growth of State expenditure on private schools, HD is the Human Development Index, and:

$$V_{it} = C_i + U_{it}$$

V_{it} compound errors of idiosyncratic error U_{it} , and unobserved cross-sectional heterogeneity C_i .

Given the relatively small t of the sample, dynamic models with lagged dependent variables are not advisable (Gervasoni, 2010). The recommended alternative is to use subject-specific estimators and given the nature of our data-set, a random-effects estimation is better suited. Since the fixed-effects estimation relies on within-case variance exclusively, it would not be appropriate to run on a data-set that is dominated by cross-sectional variance resulting from the Argentine federal heterogeneity.

3.4. Results

The random-effects estimates are presented in Table 2. The results obtained from the regressions support the hypothesis above stated both in terms of the functioning of the education system as a quasi-State monopoly and as an explanatory model of the causes of its operation, showing highly significant effects for the three variables ($p < .001$).

Thus, the data support the hypothesis that the greater the number of students in the Argentine education system, State financing, and economic and human development, the higher the probability that the private sector incorporates more students.

Table 2. Determinants of private sector enrollment growth (random-effects model)

Independent variable	Model 1
Total enrollment	.456* (.102)
State expenditure on private schools	.243* (.047)
HDI	.597* (.031)
Constant	-33.697* (2.551)
Overall R^2	.619
Within R^2	.619
Between R^2	.613
Rho	.952
n	349

Note: Standard error in parenthesis.

*Significant at .001 level.

The regression coefficients represent the average change in the dependent variable when, *ceteris paribus*, the independent variable is increased in an additional unit. The coefficients obtained must be interpreted as the average increases in the share of the private sector when each variable is increased in one unit, assuming that the rest remain constant. The familiarity of the units in which our variables are expressed simplifies their interpretation considerably. Therefore, and keeping all other variables constant, the model herein developed predicts that:

- (1) For each 100,000 students incorporated to the Argentine education system, the private enrollment share increases by almost half a percentage point on average in absolute terms (.45%)
- (2) For each additional percentage point of State expenditure on the private sector (represented as a percentage of the total expenditure), the private enrollment rate increases on average by .24% in absolute terms.
- (3) Finally, for each additional HDI point (which ranges between values of 0 and 100), the private rate grows on average by .60% in absolute terms.

These results indicate that in addition to the fact that all variables are very significant, these predictions imply that the impacts of these variables are also very substantial.

It is worth underlining the high value obtained for the overall determination coefficient R^2 . Additionally, the proximity of the within R^2 and between R^2 coefficients prove the important predictive capacity of the model not only in relation to the differences among some series, but also between jurisdictions. This point becomes more relevant when considered in the light of the economic, social, and political heterogeneities that exist among the 24 Argentine jurisdictions.

Since it is theoretically plausible that these independent variables, as main causes of the increase in private enrollment, take some time to produce effects, the regressions were performed applying a delay of one year to the variable “State expenditure on private schools” (Model 2), and afterwards applying the same lag to all variables (Model 3) (Table 3).

The estimates for both models do not show relevant differences regarding Model 1. The probability of obtaining coefficients equal to or greater than those obtained if the null hypothesis were true

Table 3. Determinants of private sector enrollment growth (random-effects model)

Independent variable	Model 2	Model 3
Total enrollment	.471* (.098)	.478* (.102)
State expenditure on private schools	.216* (.041)	.236* (.048)
HDI	.584* (.031)	.653* (.035)
Constant	-32.405* (2.538)	-37.816* (2.837)
Overall R^2	.628	.609
Within R^2	.596	.619
Between R^2	.589	.615
Rho	.952	.953
n	350	326

Note: Standard error in parenthesis.

*Significant at .001 level.

remains less than .001. The coefficients hardly vary, except marginally, so their substantive impact reveals minimal alterations.

In relation to the overall determination coefficient R^2 , there is a slight change, although the differences between the values for the within R^2 and between R^2 tend to become shorter. As previously stated, these results prove to be highly positive because they imply that the model has a good explanatory capacity of the time series and cross-sectional differences.

3.5. Endogeneity

3.5.1. State expenditure on private schools and private enrollment growth

It is important to deeply analyze the relationship between State expenditure on private schools and the growth in demand for private education. It is a complex relationship that requires some clarifications regarding the direction of causality, especially in the view of the singularity of the Argentine case. It is indeed reasonable that an increase in State expenditure to support the private system will attract more enrollments to that sector. However, it is also clear that an increase of the number of students in the private system implies an increase in the associated expenditure. The related nature of the variables forces us to consider the operational way in which expenditure is allocated and the implications of such practices with regard to the structural balance between public and private supply.

Regarding the causal relation that the model puts forth between “state expenditure on private schools” and “enrollment,” that is where the very nature of the mechanisms of government expenditure allocation in Argentina becomes a key feature to understand the functioning of the system. While Chile’s demand-side voucher mechanism ensures actual per capita funding, thus meaning that funding shares increase because enrollment shares increase, in Argentina, funding does not strictly “follow the student” but acts as a causal incentive for private enrollment growth. State subsidies are certainly unconditional and offer an a priori guarantee but, moreover, once the State has defined that a particular school should receive, for instance, a 60% subsidy on teacher salaries, this rate is kept the same no matter how many additional classes the school decides to open or teachers decide to hire. Chilean schools, in contrast, receive regular official inspections that monitor not only enrollment but also students’ daily attendance, and these two indicators are the basis for calculating the subsidy that each school is entitled to. The architecture and operational aspects (and implications) of both systems are quite different: the Argentine case resembles more to an “unconditional donation agreement.”

The logic of the quasi-State monopoly model within the education system supports the existence of a dynamic equilibrium that enables the maximization of per-pupil expenditure within the State system while driving and accompanying exit to the private sector with minimum public funding. In this regard, we have considered the cost-effective dimension of this operation. The allocation of resources to the private sector appears as an *ex-post* mechanism only when considered from a lineal perspective. In contrast, our model reflects its role as a State incentive for the creation of private education provision, particularly in the view of Argentina’s singular expenditure allocation system. The main features of this institutionalized mechanism are its regularity and incremental a priori guaranteed nature, even if for administrative reasons the subsidy is allocated once the rise in enrollment occurs. The mere existence of such mechanism is a promise and a guarantee of private education at preferential prices, not necessarily in a particular school but throughout the sector. This a priori guarantee necessarily promotes the development of private supply in the knowledge that there will be a large unmet demand at those subsidized prices. In this sense, the lag of the corresponding variable included in our model aims to bridge the administrative mismatch in subsidy allocation that does not reflect the true direction of causality.

3.5.2. Demographic growth and urban–rural schooling

The increase in demand for schooling may be due to two complementary factors: either population growth (which in turn is determined by vegetative or migration phenomena) or the increase in schooling

rates (or a combination of both). We know from previous studies that in the Argentine case and for the period studied, both reasons are relevant to explain the increase in school enrollment and that growth in school enrollment at all levels of the education system has in fact been significant. However, as for this study, the reasons behind the increase in schooling demand do not alter the interpretation of the results of the model. Similarly, the distinction between urban and rural schooling becomes irrelevant when analyzing the educational system as a whole. Argentina's rural population index is among the lowest in the world (World Bank, 2014) and academic literature dealing with the Argentine educational system seldom incorporates this dimension.

4. Conclusions

The work of Belfield and Levin (2002) divides the causes of growth in the private sector into three groups. The first of them is constituted by "demand pressures," which may appear as excess demand—often referred to in literature as "enrollment boom"—or rather as differentiated demands in social, cultural, or religious aspects that break the uniformity and standardization of the State system. Furthermore, the authors highlight a second group of causes as "supply pressures," associated to the impossibility of States to finance the needs of an ever-growing system which may even lead to funding withdrawal in times of crisis. Finally, the third group is identified as a group of "general pressures," related to the globalization phenomena, the search for more flexible systems, and the intervention of organisms such as the World Bank.

Although the factors that affect the general features and size of the private sector vary from country to country, in industrialized countries, the most relevant ones may be associated to the increasing heterogeneity of the families' demands, whereas in developing countries, although it is undeniable that the differentiated demands have some impact—and in fact there is research on the subject for the Argentine case (Scialabba, 2006; Weinstein, 2007)—the phenomena may be better explained as a result of the combination of financial and capacity constraints in the State system (James, 1987, 1993; Somers, McEwan, & Willms, 2001).

It is this perspective of the political economy of the privatization of the Argentine education system that we have addressed in this paper by means of the concept of quasi-State monopoly of the education system: private enrollment growth is the result of a logic of social articulation in which the private and public sectors remain interdependent. Within the context of Belfield and Levin's point of view, it is a matter of the dynamic articulation of the causes that correspond to the first two groups—demand and supply pressures—but resulting in a relative balance within the education system as a whole and not only favoring private schools.

Consistently with this model, the evolution of the total enrollment of common education has been analyzed as a measure for an increasing demand which certainly drives to financial and capacity constraints of provincial States in sustaining the whole education in contexts of crisis or shortage. Moreover, the behavior of State expenditure on the private sector has also been observed by focusing on its cost-efficient nature as an incentive to the creation of private provision of education. This cost-efficient feature is certainly related to its partial nature since it requires the families' private support to be completed. Finally, we have taken into account the level of economic and human development which, in addition to operating as a control variable, is a general indicator of the economic capacity of families to pay for private schools.

As previously stated, the observed behavior for each of the variables taken independently allowed a better understanding of the situation of each variable jurisdiction without losing sight of their evolution over time. The suggestive graphic correspondence between the evolution of private enrollment, on the one hand, and the evolution of the total enrollment, transfers to the private sector, and the degree of economic and human development, on the other hand, was put to test using all the information available for each variable both for time series and structural dimensions. Consequently, the results of the statistic estimates obtained from the panel data provided evidence supporting the

hypothesis that sustains the model with high levels of significance and a great explanatory capacity regarding intertemporal differences within each jurisdiction, and the actual differences among these.

This evidence enables us to understand the quasi-State monopoly as a phenomenal rational administrator in the Argentine education system, redirecting a significant portion of the enrollment towards the private sector to the extent that socioeconomic conditions permit: in counterfactual terms, it is possible to conjecture that if the Argentine private education sector did not exist or if it had a higher opportunity cost, the Argentine education system as a whole would grow quantitatively at a slower pace. In this sense, the State funding of the private sector seems to operate as a guarantee that the balance between both sectors may be kept throughout time and this being so, the opportunity cost of private schooling does not increase, thus remaining cost-effective in comparison to public education funding. In return, it is possible to infer from the evidence obtained that the actual enrollment growth in public schools depends on this quasi-monopoly balance.

The statistical strength of the model assumes that the “excess demand”—in Belfield and Levin’s terms (2002)—is redirected to private education depending on the economic growth—and the financial capacity of some sectors of society—within the framework of the financial support based on State policies. Under these dynamics, the poorest sectors of the population have a guaranteed vacancy in State public schools. In this line, many studies have shown the high levels of socioeconomic segregation within the Argentine education system (Tiramonti, 2011; Gasparini et al., 2011; Jaume & Gasparini, 2013, among others). Future studies may intend to analyze the links between segregation and the quasi-monopolistic functioning of the education system.

The strength of the data obtained confirms what has been stated in previous papers regarding the lack of correspondence between the privatization of education in Argentina and ideological explanations or even the mechanical application of public policies. What evidence shows for the Argentine case is that the quasi-State monopoly sets both State and private sectors into a rational functioning forming a dynamic equilibrium; the privatization of education is explained as the need of the education system to capture new enrollment within the limits of its quasi-monopoly behavior: the privatization of education is still the effect of State behavior.

The quasi-monopoly structure must be tested in the education systems of other countries to, thereby, understand if this is a specific case found only in Argentina or if the quasi-monopoly supply model is applicable to other national or sub national scenarios with reference to the functioning of their education systems.

Funding

The authors received no direct funding for this research.

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Citation information

Cite this article as: Why does private school enrollment grow? Evidence from Argentina, Mariano Narodowski & Mauro Moschetti, *Cogent Education* (2015), 2: 1077604.

Notes

1. Unfortunately, the Argentine Government does not offer statistical information on the composition of the private

sector regarding religion, curriculum orientation, profit status, etc.

2. Several studies have described and analyzed the richness and heterogeneity of private education in Argentina, both throughout its history, and especially regarding the last 50 years. For a historical perspective, see Newland (1992, 1994, 1995) and Weinberg (1984). For the last half century, see Perazza (2011), Morduchowicz (2001), Narodowski and Andrada (2001a).
3. The numbers pertain to the total of “Common Education” that includes the pre-school, primary, secondary (high school), and tertiary non-university level according to the annual survey carried out by the Dirección Nacional de Información y Evaluación de la Calidad Educativa (DiNIECE) since 1994. There is no consistent data available for 1995.
4. According to the Ministry of Education, in 1994, there were 8.4 million children at school in Argentina and 2012 accounts for 10.8 million (kindergarten, primary, secondary, and tertiary).
5. This law was passed during the first presidency of Juan Perón (founder of the Justicialist Party to which President Menem, President Kirchner, and his successor, Cristina Fernández, belong).

6. A review of the legislation on private education is presented in Narodowski and Andrada (2001b).

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