



4

Other School Characteristics Related to Stratification

Other reasons why privately managed schools tend to attract socio-economically advantaged students, including admittance criteria and the quality of education in the schools, are examined in this chapter.



Public funding is not the only factor related to stratification. The cross-country analysis in Chapter 2 shows that about 45% of the variation in socio-economic stratification is accounted for by the level of public funding for privately managed schools, but the rest of the variation is related to other aspects. Why, for example, do privately managed schools tend to have more socio-economically advantaged students? In this final chapter, stratification is examined as a product of school policy, such as school-admittance criteria, and as a product of parents' choice, as parents seek schools that provide high-quality education.¹

SCHOOL-ADMITTANCE CRITERIA

Some schools are free to select their own students by setting their own admittance criteria, such as students' academic level, religious affiliation, academic and/or non-academic interests, or relationship with other family members who have attended, or are attending, the school. The application of these criteria may inadvertently result in socio-economic stratification. If privately managed schools have more freedom than publicly managed schools to select their students based on academic achievement, then privately managed schools will tend to have more socio-economically advantaged students enrolled than publicly managed schools, since advantaged students tend to perform better in all countries (OECD, 2010).

In PISA 2009, school principals were asked to report whether the followings are "never", "sometimes" or "always" considered when students are admitted to their schools: (a) a student's record of academic performance, including placement tests; (b) recommendation of feeder schools; (c) parents' endorsement of the instructional or religious philosophy of the school; (d) whether the student requires or is interested in a special programme; and (e) preference given to family members of current or former students. Schools whose principals responded that at least either (a) or (b) is "always" considered are grouped as "schools admitting students based on academic performance". Schools whose principals responded that (c) is "always" considered are grouped as "schools admitting students based on parents' endorsement of the instructional or religious philosophy". Schools whose principals responded that (d) is "always" considered are grouped as "schools admitting students based on students' interest in a special programme". Schools whose principals responded that (e) is "always" considered are grouped as "schools admitting students based on family network".

First, the relationship between student socio-economic background and schools' admittance criteria is examined: whether socio-economically advantaged students are more likely to attend schools with certain admittance criteria. This is followed by an examination of the relationship between schools' admittance criteria and whether those schools are publicly or privately managed. The chapter then explores how admittance criteria are related to stratification.

In 15 OECD countries and 13 partner countries and economies, the socio-economic backgrounds of students who attend schools that admit students based on academic performance is more advantaged than that of students who attend schools that do not admit students based on this criterion (Table B4.1). Among these countries and economies, in 10 OECD countries and nine partner countries and economies, namely the United States, the United Kingdom, Canada, Greece, Germany, Chile, Slovenia, the Slovak Republic, Austria, Poland, Qatar, Dubai (UAE), Panama, Colombia, Peru, Argentina, Brazil, Uruguay and Trinidad and Tobago, privately managed schools are more likely than publicly managed schools to admit students based on their academic performance (Table B4.2).

In 12 OECD countries and 11 partner countries and economies, the socio-economic background of students who attend schools that admit students based on parents' endorsement of the instructional or religious philosophy is more advantaged than that of students who attend schools that do not admit students based on this criterion (Table B4.1). Among these countries and economies, in 10 OECD countries and nine partner countries and economies, namely the United States, Australia, New Zealand, Slovenia, Portugal, Ireland, Canada, Chile, Mexico, Spain, Argentina, Uruguay, Kazakhstan, Brazil, Albania, Colombia, Peru, Panama and Dubai (UAE), privately managed schools are more likely than publicly managed schools to admit students based on parents' endorsement of the instructional or religious philosophy (Table B4.2).

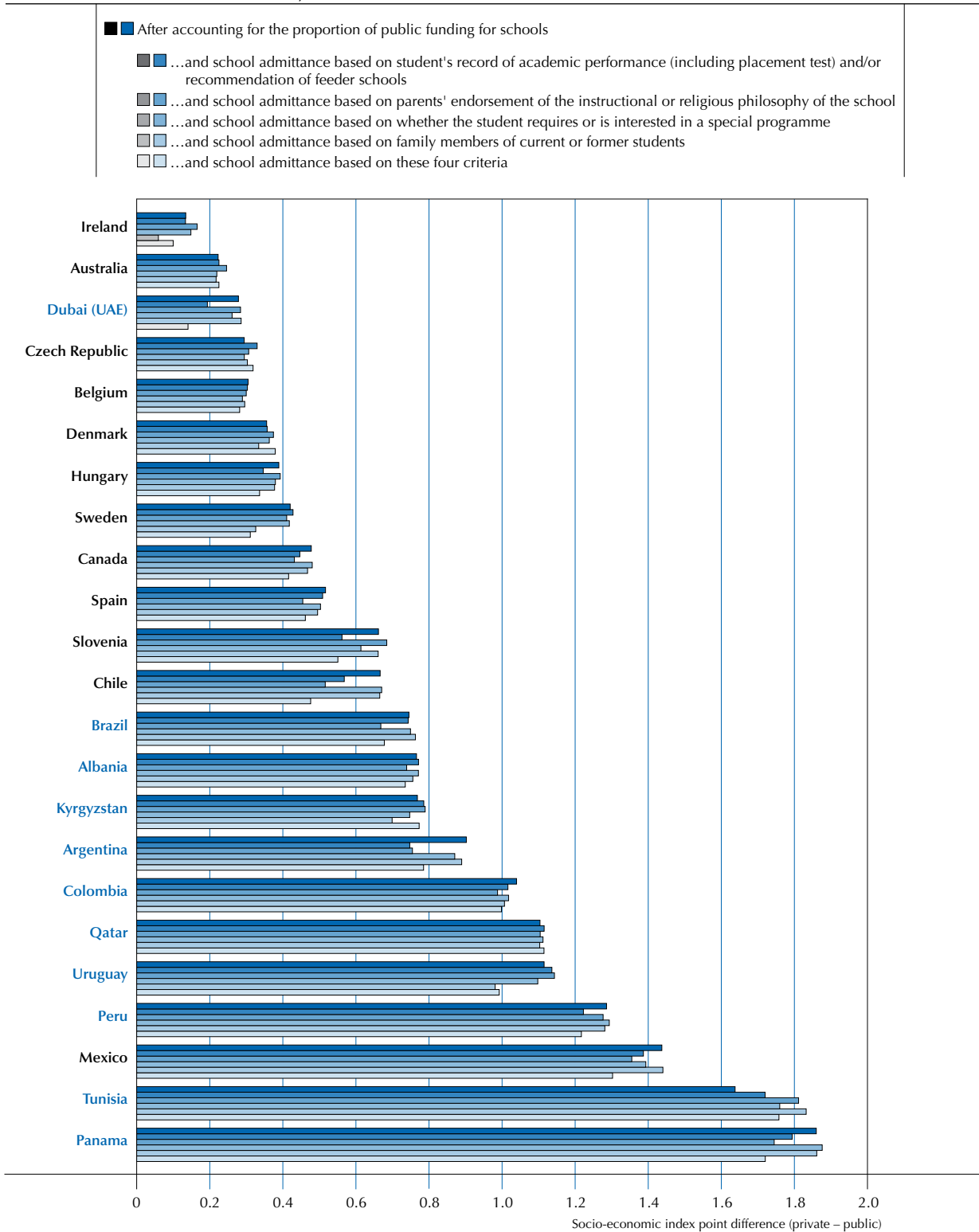
In four OECD countries and seven partner countries and economies, the socio-economic background of students who attend schools that admit students based on their interest in a special programme is more advantaged than that of students who attend schools that do not admit students based on this criterion (Table B4.1). Among these countries and economies, in the OECD countries Poland and Mexico, the partner country Colombia, and the partner economy Dubai (UAE), privately managed schools are more likely than publicly managed schools to admit students based on their interest in a special programme (Table B4.2).



Figure 4.1

How stratification varies across countries, after accounting for various school-admittance criteria

Stratification: Difference in socio-economic background between students in privately and publicly managed schools, as measured by the PISA index of economic, social and cultural status (ESCS)



Note: Index-point differences that are statistically significant are marked in a blue tone.

Countries are ranked in ascending order of the index-point difference before accounting for the proportion of public funding for schools.

Source: OECD, PISA 2009 Database; Tables B2.7 and B4.3.



In 15 OECD countries and seven partner countries and economies, the socio-economic background of students who attend schools that admit students based on a family network is more advantaged than that of students who attend schools that do not admit students based on this criterion (Table B4.1). Among these countries and economies, in eight OECD countries and five partner countries and economies, namely Sweden, Australia, Ireland, Canada, Spain, Chile, New Zealand, United States, Dubai (UAE), Qatar, Uruguay, Jordan and Argentina, privately managed schools are more likely than publicly managed schools to admit students based on a family network (Table B4.2).

How are these school-admittance criteria related to socio-economic stratification between publicly and privately managed schools? If advantaged students are more likely to attend privately managed schools because of the schools' admission processes and criteria, there would be no stratification between publicly and privately managed schools after accounting for schools' admissions criteria. Figure 4.1 shows the stratification between publicly and privately managed schools after accounting for various admittance criteria and after accounting for the proportion of public funding for schools. This is done for the 12 OECD countries and 11 partner countries and economies where socio-economic stratification between publicly and privately managed schools is observed after accounting for the proportion of public funding for schools (i.e. countries and economies in the bottom section in Figure 2.5).

As Figure 4.1 shows, after accounting for school admittance based on family network, Ireland shows no stratification. In the partner economy Dubai (UAE), after accounting for all four admittance criteria, no stratification is observed. In most countries, stratification becomes smaller after accounting for school admittance based on the four criteria. However, in all other countries and economies, even after accounting for the various admittance criteria, socio-economic stratification between publicly and privately managed schools is evident.

PARENTAL CHOICE FOR BETTER EDUCATION

Why do more advantaged parents tend to send their children to privately managed schools than disadvantaged parents do? One reason could be that parents believe that these schools offer a better education, an environment more conducive to learning, additional resources, and better policies and practices; and advantaged parents are more informed or aware of the differences in quality across schools. As discussed in Chapter 1, in many countries, privately managed schools tend to enjoy more autonomy, better resources, better school climate and better performance than publicly managed schools (Table B1.2). In many countries, socio-economically advantaged students tend to enrol in schools with more autonomy in curricula and assessments and in resource allocation, more education materials, fewer teacher shortages, better school climate and better performance levels (Table B4.4).

This section focuses on the likelihood that advantaged students will attend privately managed schools, before and after accounting for various aspects of the quality of education in those schools. For example, if privately managed schools attract advantaged students because those schools offer better school resources, the likelihood (i.e. the odds) of attending privately managed schools would decrease if publicly and privately managed schools offered a similar level of school resources. The likelihood is also examined after accounting for the level of public funding for individual schools, in other words, after taking school fees into consideration.

Before accounting for any school characteristics, socio-economically advantaged students are more likely to attend privately managed schools than students from backgrounds that are similar to the national average in 18 OECD countries and 11 partner countries and economies.² The likelihood that advantaged students will attend privately managed schools is two times greater or more in Chile and the partner countries Panama, Uruguay, Peru, Argentina and Colombia (Model 1 in Table B4.5). The likelihood is over 1.8 times greater, but less than 2.0 times greater, in Australia and Spain, the partner country Brazil, and the partner economy Dubai (UAE).

In some of these countries and economies, the likelihood decreases after accounting for the proportion of public funding for schools. In other words, when the proportion of public funding for both publicly and privately managed schools is around the national average,³ the likelihood that advantaged students will attend privately managed schools is not necessarily greater than the likelihood that students from backgrounds similar to the national average will do so. This is true in the United States, New Zealand, Japan, Portugal, Greece, Denmark, the United Kingdom, the partner country Jordan and the partner economy Dubai (UAE) (The first column in Figure 4.2 and Model 1 in Table B4.6). In Chile, Mexico, Spain, Australia, Belgium, Hungary, Sweden, Ireland, Canada, Slovenia and the partner countries Argentina, Peru, Qatar, Panama, Colombia, Uruguay, Albania and Brazil, socio-economically advantaged students are still more likely to attend privately managed schools.



■ Figure 4.2 ■

The likelihood that socio-economically advantaged students will attend privately managed schools

	How much more likely is it for socio-economically advantaged students to attend privately managed schools compared with students whose socio-economic background is similar to the national average?					
	Before accounting for school characteristics	After accounting for:				
		School's average reading performance	Quality of school's educational materials	School's autonomy in curriculum and assessment	School's disciplinary climate	Average student socio-economic background
	Odds ratio	Odds ratio	Odds ratio	Odds ratio	Odds ratio	Odds ratio
Dubai (UAE)	0.60	0.54	0.66	0.66	0.61	1.00
Indonesia	0.61	0.80	0.67	0.57	0.60	1.00
Chinese Taipei	0.61	0.91	0.59	0.61	0.68	1.00
Netherlands	0.85	0.92	0.85	0.85	0.84	1.00
Switzerland	0.88	1.01	0.87	0.88	0.90	1.00
Luxembourg	0.89	0.92	0.83	0.87	0.89	1.00
Trinidad and Tobago	0.92	1.02	0.91	0.92	0.92	1.00
Hong Kong-China	0.92	0.96	0.92	0.93	0.92	1.00
Thailand	0.94	1.09	0.85	0.94	0.94	1.00
Estonia	0.98	1.00	0.98	0.98	0.98	1.00
Kazakhstan	0.99	0.98	0.98	0.99	0.99	1.00
Italy	1.00	1.09	0.99	1.00	1.03	1.00
Germany	1.01	1.06	1.01	1.02	0.96	1.00
Finland	1.01	1.01	1.00	1.01	1.01	1.00
Poland	1.02	1.01	1.02	1.02	1.02	1.00
United States	1.02	1.00	0.99	1.02	0.97	1.00
New Zealand	1.03	1.06	1.02	1.03	1.01	1.00
Japan	1.03	1.39	1.02	1.03	1.23	1.00
Jordan	1.03	1.06	1.02	1.03	1.04	1.00
Portugal	1.04	1.01	1.02	1.04	1.05	1.00
Greece	1.05	1.04	1.04	1.02	1.04	1.00
Czech Republic	1.05	1.01	1.04	1.05	0.99	1.00
Tunisia	1.05	1.09	1.06	1.05	1.05	1.00
Slovak Republic	1.06	1.03	1.06	1.05	1.04	1.00
Kyrgyzstan	1.07	1.02	1.06	1.08	1.07	1.00
Denmark	1.07	1.02	1.07	1.08	1.06	1.00
Korea	1.07	0.92	1.07	1.06	0.96	1.00
Slovenia	1.08	1.04	1.08	1.08	1.03	1.00
Israel	1.10	1.02	1.10	1.10	1.09	1.00
Shanghai-China	1.10	1.06	1.11	1.10	1.02	1.00
Canada	1.13	1.08	1.13	1.13	1.12	1.00
Ireland	1.18	0.99	1.17	1.18	1.14	1.00
Brazil	1.18	1.26	1.16	1.18	1.16	1.00
Albania	1.19	1.13	1.11	1.21	1.23	1.00
Sweden	1.20	1.12	1.18	1.21	1.15	1.00
Hungary	1.21	1.23	1.20	1.18	1.24	1.00
Belgium	1.32	w	1.32	1.32	1.36	1.00
Uruguay	1.39	1.29	1.38	1.37	1.43	1.00
Australia	1.40	1.25	1.39	1.41	1.36	1.00
United Kingdom	1.45	1.07	1.48	1.35	1.21	1.00
Spain	1.50	1.27	1.45	1.51	1.53	1.00
Mexico	1.50	1.42	1.29	1.45	1.50	1.00
Colombia	1.68	1.43	1.49	1.63	1.68	1.00
Panama	2.01	1.72	1.77	2.13	1.94	1.00
Qatar	2.04	2.01	1.95	2.18	2.05	1.00
Peru	2.08	1.57	1.76	2.13	2.08	1.00
Chile	2.10	1.47	1.89	2.07	2.05	1.00
Argentina	2.24	1.54	2.10	2.16	2.19	1.00

Notes: These are the results after accounting for the proportion of public funding for schools. Socio-economically advantaged students are those whose nationally standardised ESCS is equal to 1. Students whose socio-economic background is similar to the national average are those whose nationally standardised ESCS is equal to 0. Values that are statistically significant are indicated in bold.

Countries are ranked in ascending order of the likelihood before accounting for school characteristics.

Source: OECD, PISA 2009 Database; Table B4.6.



In all of these countries where stratification is observed, even after accounting for the proportion of public funding for schools, the likelihood that advantaged students will attend privately managed schools decreases after accounting for the schools' average performance in reading. In other words, when the performance levels of both public and private are around the national average,⁴ this likelihood decreases from 1.2 times to equally as likely in Ireland, 1.1 times to equally as likely in Slovenia, and 1.2 times to 1.1 times as likely in Albania (Model 2 is compared with Model 1 in Table B4.6). Even after accounting for schools' average performance, advantaged students are still more likely to attend privately managed schools; but that likelihood decreases considerably in Chile (from 2.10 times to 1.47 times as likely), Argentina (from 2.24 times to 1.54 times as likely) and Peru (from 2.08 times to 1.57 times as likely).

The quality of schools' educational resources seems to be less related to whether advantaged students attend privately managed schools. Model 3 accounts for the quality of schools' educational resources, which is measured by the *PISA index of school's educational resources*,⁵ which, in turn, is derived from the perceptions of school principals about the aspects that may hinder instruction at their schools. Even after accounting for the quality of schools' educational resources, advantaged students are more likely to attend privately managed schools in 10 OECD countries and seven partner countries (Model 3 is compared with Model 1 in Table B4.6). In Albania, the likelihood that advantaged students will attend privately managed schools is about the same as that for students whose socio-economic backgrounds are around the national average, after accounting for the quality of schools' educational resources and the proportion of public funding invested in schools.

A more flexible and innovative curriculum may also attract students to privately managed schools. But PISA results show that schools' autonomy in deciding curricula and assessments, measured by the *index of school responsibility for curriculum and assessment*,⁶ seems to have a limited relationship to whether advantaged students choose privately managed schools (Model 4 in Table B4.6). Even after accounting for schools' autonomy in these areas, and after considering the proportion of public funding invested in schools, advantaged students are more likely to attend privately managed schools in nine OECD countries and eight partner countries. Only in Hungary does the likelihood that advantaged students will attend privately managed schools decrease to around the same level as that for students from socio-economic backgrounds that are similar to the national average.

In many countries, schools' disciplinary climate, measured by the *index of disciplinary climate*,⁷ which is derived from students' reports, seems to be unrelated to whether advantaged students choose to attend a privately managed school (Model 5 in Table B4.6). After accounting for schools' disciplinary climate and the proportion of public funding for schools, advantaged students are more likely to attend privately managed schools in eight OECD countries and eight partner countries. The exceptions are Slovenia and Ireland, where the likelihood that advantaged students will attend privately managed schools decreases to around the same level as that for students from socio-economic backgrounds that are similar to the national average.

Model 6 shows the likelihood of attending privately managed schools after accounting for the average socio-economic background of a school's student body.⁸ After this factor is taken into consideration, there is no greater likelihood that advantaged students will choose privately managed schools; and this is observed in all countries. This suggests that privately managed schools are chosen partly because of the differences in their academic performance levels, policies, practices and learning environments, but mostly because of the composition of their student bodies. This finding suggests that stratification may increase over time unless some structural changes occur,⁹ since an advantaged student body in a privately managed school attracts more advantaged students, which increases the socio-economic advantages of the privately managed school even further, so that greater numbers of advantaged students will want to attend.

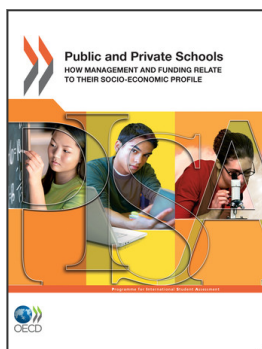


Reference

OECD (2010), *PISA 2009 Results, Overcoming Social Background: Equity in Learning Opportunities and Outcomes* (Volume II), OECD Publishing.

Notes

1. If privately managed schools exist only in certain areas, and residential areas are related to families' socio-economic background, this also contributes to stratification. But given the limited data available, this issue is beyond the scope of this paper.
2. In Tables 5.5 and 5.6, the *PISA index of economic, social and cultural status* (ESCS) is standardised within each country to have national mean of zero and a standard deviation of one. The likelihood is for socio-economically advantaged students (i.e. students whose nationally standardised ESCS is 1, while the reference group is the group of students whose nationally standardised ESCS is 0) to attend privately managed schools.
3. The level of public funding for a school is centred on the national mean within each country; so the national mean of this variable is zero.
4. A school's average performance is centred on the national mean within each country; so the national mean of this variable is zero.
5. This index is centred on the national mean within each country; so the national average is zero on this index.
6. This index is centred on the national mean within each country; so the national average is zero on this index.
7. This index is centred on the national mean within each country; so the national average is zero on this index.
8. This is measured by the school average of the *PISA index of economic, social and cultural status* (ESCS), which is standardised within each country.
9. Structural changes could be local (e.g. emergence of new housing estates) and regional or national (e.g. shifts in the distribution of the immigrant population; changes to curricula or policy on educational equity).



From:

Public and Private Schools

How Management and Funding Relate to their Socio-economic Profile

Access the complete publication at:

<https://doi.org/10.1787/9789264175006-en>

Please cite this chapter as:

OECD (2012), "Other School Characteristics Related to Stratification", in *Public and Private Schools: How Management and Funding Relate to their Socio-economic Profile*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264175006-8-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.