

REGULATION AND FUNDING OF  
INDEPENDENT SCHOOLS

# Lessons from Sweden

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## Executive summary

As the share of students attending independent schools across Canada increases, the regulatory context of these non-government schools becomes increasingly relevant. Innovation, performance, and efficiency in this education sector can be enhanced by appropriate regulation and funding—or hindered by onerous or inappropriate regulation and funding—and thus other countries with long histories in independent schooling have lessons for Canada. Sweden’s experience is the focus of this paper.

Since Sweden embarked on its educational reforms in the early 1990s, its independent schooling sector developed and matured to the point where the share of students in Sweden enrolled in independent schools has increased significantly, rising from less than 2 percent in 1992 to 14.1 percent in primary and lower secondary grades and to 25.1 percent in the upper secondary grades in 2014.

Indeed, during this period education in Sweden was fundamentally transformed from one of the most centralized education systems in the OECD to one of the most decentralized. Funding was decentralized from the national to the municipal level, public school choice opportunities increased, and a national voucher system allowed for-profit and non-profit independent elementary and secondary schools to receive funding equivalent to 100 percent of the per-student allocation for average operating costs at local municipal schools.

Perhaps surprisingly, the most significant independent school enrolment growth occurred in the for-profit sector. In all, 64 percent of elementary and lower-secondary independent school students and 85 percent of upper-secondary independent school students attend for-profit schools. Thus, not only do independent schools in Sweden attract one in seven lower-grade students and one in four upper-secondary students in the country, but the vast majority of those students attend for-profit institutions.

For-profit independent schools tend to enrol, on average, more students from lower socioeconomic backgrounds compared with non-profit independent schools. Currently, the ten largest chains of for-profit schools enrol 36 percent of all independent school students.

The growth of independent schools has led to beneficial results. Research has indicated that the performance of independent school students, as well as the competitive presence of independent schools, has moderated, rather than exacerbated, the decline in Sweden's student performance on international standardized tests.

Both for-profit and non-profit independent schools are heavily regulated in Sweden. Independent schools are required to follow the national curriculum, use progressive pedagogical approaches, meet instructional time requirements for each subject (at the elementary and lower-secondary level), hire certified teachers, and be regularly inspected by both national and municipal inspectorates, and they may not be selective in the students they enrol. Students must participate in national proficiency tests in grade 3, 6, and 9 (and additional ones in upper secondary school).

Countries like Canada have much to learn from Sweden's experience. Lessons from Sweden include:

### **1. Parity of public funding**

Sweden's precedent of funding independent schools at 100 percent (of the allocation for per-pupil operating expenditure in local government schools) is worth consideration. Although buildings and other capital assets are not funded, and thus full funding of independent schools is not achieved, a more level playing field for the schools and the families that choose them is created.

### **2. Ownership neutrality**

For-profit independent schools should not only be permitted, but they should also be eligible for funding equivalent to non-profit independent schools, as they have stronger economic incentives and opportunities to start new schools, scale up excellent schools, and crowd out poorer performing schools. Sweden's experience with this practice is almost unique in the world and should be considered.

### **3. Output accountability**

It is important to learn from the lack of good information and output accountability of student performance in the Swedish system. Publishing output measures in terms of academic achievement, especially if constructed to generate value-added measures at the school level, as well as measures of parent satisfaction, gives parents and inspectors better information and holds all schools accountable.

### **4. Avoid onerous curricula and input regulations**

Restrictive requirements on inputs (as is the case in Sweden) for curricula, pedagogy, and teacher certification should be minimized. Independent schools need flexibility in the professionals they hire and the curriculum and

approaches to teaching they use. This mitigates the monopoly on teacher certification and protects against having to adopt harmful practices across the jurisdiction.

### **5. A depoliticized approval process**

Sweden's practice of allowing local competitors a say in the approval process for new or expanding independent school applicants should not be mimicked. Provincial level registrations, accreditations, or approvals (or the equivalent) would ensure a more arm's length approval process.

### **6. Selection practices and top-up fees**

Although independent schools in Sweden may neither use selective practices when enrolling students nor charge top up fees, more research is needed to consider the potential benefits of these practices.





# 1. Introduction

Ever since Friedman's (1962) proposal to separate education funding and provision through a school voucher system, the participation of independent organizations in publicly funded education provision has been an intensely debated topic worldwide. Proponents argue that independent schools provide more choice and competition, which stimulate improvements in education quality for all. Opponents, on the other hand, often believe independent providers will merely increase segregation, decrease equality in achievement, and even lead to deteriorating performance.

However, neither proponents nor opponents generally recognize that competition among independent providers does not exist within an institutional vacuum, but rather operates within broader regulatory structures that determine their effects. Whether or not independent providers will generate improvements cannot be decided a priori, but depends on how the overall system is designed. Unfortunately, little attention has thus far been devoted to exploring how regulation and financing of independent schools could be improved to maximize the potential for improvements.

In most contexts in the developed world, education markets function as “quasi-markets,” characterized by at least some public funding and user choice between different providers (Le Grand, 1991). Apart from equity concerns, the economic argument for retaining some public funding is well established and concerns the question of how to avoid underinvestment and maximize positive spillover effects on society at large.<sup>1</sup> And with public funding also comes the need for basic regulation (see Friedman 1962, 1975; Hoxby, 2006).

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1. Even low-cost independent schools in the developing world, which have mushroomed in the past decades (Tooley, 2009), are partly dependent on government funding. Indeed, an important reason, at least in some contexts, why these (mostly primary) schools have been able to keep fees low is because the government supplies them with cheap teachers in the form of (secondary) public school graduates. That is, some government education funding appears to crowd in, rather than crowd out, independent school provision (Andrabi, Das, and Khwaja, 2013). This indicates that the existence of supply-side constraints, at least in some contexts, is another argument why government funding in education may be necessary.

As Hoxby (2006) puts it: “Once government funds are used for financing, the government has some interest in whether its funds are employed as intended” (p. 9). The question, then, is rather *to what extent* and *how* education markets should be regulated to maximize their benefits.

This paper discusses these issues by analyzing the case of Sweden and drawing lessons for other countries. In the early 1990s, Sweden carried out large-scale reforms that aimed to increase choice and competition in its then-heavily-centralized government education system. Decentralization of funding from the national to the municipal level was followed by increased opportunities for school choice and a national voucher system, which allowed for-profit and non-profit independent schools to receive public funding. The hope was to stimulate more alternatives in schooling, empower parents, and generate system-wide improvements through competition.

While the Swedish voucher system has been much debated internationally in recent years, there are many misunderstandings regarding how it functions and to what extent it has been successful. This paper seeks to rectify this situation and draw appropriate lessons for other countries.

The paper proceeds as follows. Section 2 briefly discusses the Swedish education system prior to the 1990s; Section 3 outlines the market reforms that followed; Section 4 discusses what the independent schools market look like in detail, how it is regulated, and its strengths and weaknesses; Section 5 shows how costs have changed over time and how well the system performs, while also outlining the contribution of the independent school market (and other factors) to this performance; Section 6 outlines the lessons that should be drawn for other countries; and Section 7 concludes.

## 2. A brief history of the Swedish education system prior to the 1990s

Government involvement in education in Sweden stretches back at least to the Church Law of 1683, which made it a duty for all citizens to be able to read. This goal was achieved almost entirely without any formal schooling, as parents were responsible to ensure that their children met the obligation. While reading ability increased rapidly in the 18<sup>th</sup> century, writing ability did not. This, in turn, was one motivation behind the Compulsory Education Act of 1842, which provided free elementary schooling for six years and eventually ensured a high level of full literacy (Johansson, 1981). As the country developed further economically, education became increasingly emphasized. In the 1930s, compulsory schooling was extended to seven years, and in 1962 to nine years in conjunction with the comprehensive school reform. This reform also postponed streaming of students into vocational and academic tracks from the age of 12 to the end of lower-secondary school, thus ensuring that students of all abilities went through the same compulsory education system (Meghir and Palme, 2005).

During the 20<sup>th</sup> century, the education system became increasingly centralized, partly because of the emphasis on social and economic equality for which Sweden is famous internationally (Björklund et al., 2005; Holmlund et al., 2014). A swath of reforms that increased central government involvement followed the implementation of the first national curriculum in 1919. After the comprehensive school reform in the 1960s, local school boards were nominally in charge of schooling, but the boards had little power in reality because of prescriptive rules and regulations emanating from the national government, which also provided the lion's share of school funding and employed all teachers (Lewin, 2014). A new national curriculum, which applied to all primary and lower-secondary school students, was also implemented in conjunction with this reform (Meghir and Palme, 2005).

In 1971, upper-secondary school education was consolidated, with schools offering a range of educational programs, both academic and vocational, and the central government deciding target enrolment figures for each program. Overall, therefore, it is fair to say that Sweden's education system in

the mid-to-late 20th century was strongly centralized with the central government being highly involved in both funding and delivery.

Similarly, parental and student choice was restricted in this education system. Parents could generally only exercise Tiebout choice—that is, choosing schools by moving closer to them. This is because students were allocated to schools based on proximity to residence, although parents could opt out with special permission, while there were only a tiny number of independent schools that educated less than 1 percent of students. Some of these were entirely fee-paying, while some received state funding. The latter required special government approval (Sandström, 2002). Government funding was also generally restricted to schools that were seen as complements, rather than substitutes, to the public education system, such as special pedagogy schools, religious schools, boarding schools, international schools for foreign students, and schools for students with special needs. Furthermore, funding in government schools was independent of enrolment in the few independent schools that existed (Böhlmark and Lindahl, 2015; Holmlund et al., 2014). The opportunities for parental and student choice were therefore generally limited in Swedish education prior to the 1990s.

It is here interesting to note that, unlike the situation in many other countries, the question of religious schooling has been relatively unimportant in Swedish debate. For a long time, Sweden was a homogenous society, with few religious and ethnic differences, which decreased demand for separate religious schooling options. Perhaps more importantly, the general population grew rapidly more secularized over the 20<sup>th</sup> century—and is today one of the most secular in the world—and governments decreased religious teaching in schools throughout the century without much opposition (Tomasson, 2002). Thus, there appears to have been relatively little demand for religious schooling in modern Sweden.<sup>2</sup>

Probably for similar reasons, there has historically been little demand for homeschooling. Until the Education Law of 2010 was implemented, homeschooling was allowed as long as it was deemed a worthy alternative to the education provided in the regular school system (SFS, 1985: 1100). Still, few families were homeschooling their children; in 2010/11, before the new law came into effect, just over 116 children were educated outside the regular school system (Skolverket, 2015a). With the new law, government increased restrictions and religious reasons are no longer valid for pursuing education outside of the general school system, which is now only allowed in “exceptional

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2. Religious freedom was also not an important argument for the changing political winds in favour of decentralization in the 1980s, which is discussed in Section 3, and has not played more than a minor role in the new system established since then (despite increasing diversity).

circumstances” (SFS, 2010: 800).<sup>3</sup> Nevertheless, historically, homeschooling has not been an important issue in the Swedish education debate.

Thus, education in the mid-twentieth century in Sweden was marked by centralized curricula and strong government involvement in funding and delivery. Independent schools enrolled less than 1 percent of students in Sweden and consisted only of schools not otherwise available among the government options.

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3. Interestingly, since then, it actually appears as if the number of homeschooled children has been increasing somewhat, although still remaining at very low levels (Skolverket, 2015a).

### 3. The 1990s onwards: Decentralization, school choice, and vouchers

Following economic stagnation in the 1970s, the centralized education system was criticized for being inefficient and pedagogically stifling. The political left complained that the system did not reach the goals of equality, while the right argued that it was too rigid (Lewin, 2014; Lundahl, 2002). In the 1980s, a new political consensus in favour of decentralization and local decision making began to emerge, further bolstered by a public inquiry in 1989, which documented a widespread sense of powerlessness among Swedish citizens regarding their ability to influence their children’s schooling (Pettersson et al., 1989). The move towards decentralization was also part of a wider adoption of the New Public Management philosophy, entailing a marketization of public services that aimed to improve efficiency (Svanborg-Sjövall, 2014). The pendulum had swung against the previous tide of centralization in Swedish education, and the debate at this point rather concentrated on how far decentralization would go.

And so, in the late 1980s and early 1990s, partly following the deepest economic crisis since the Great Depression, the Swedish education system underwent significant decentralization. In 1989, full financial and operational responsibility for education was handed over to the municipalities by a Social Democratic government.<sup>4</sup> In 1991, a centre-right government was elected and continued to decentralize the education system. The central government stopped giving the municipalities funds earmarked for schooling. Instead, municipalities were given general block grants and the freedom to distribute these grants to a variety of different public services, including education. Furthermore, the centre-right government promised a “choice revolution” in public services in general. In education, this meant that a universal voucher program was implemented in 1992, which allowed independent providers to establish primary and lower-secondary schools and receive public funding

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4. The number of municipalities has varied over time. Today, there are 290 municipalities in Sweden. They are similar to local education authorities in England and school districts in the US.

in a “virtual voucher” system: independent schools were given per-student funding based on the average operating costs in the schools run by the municipality in which they were located. This was combined with a more general school choice reform in 1994, which allowed parents to choose any municipal school, and also extended the voucher system to the upper-secondary level (Holmlund et al., 2014). Simultaneously, funding was reformed so that it would follow students, thereby creating incentives among schools to compete. The goal was to “achieve the largest possible freedom for children and parents to choose schools” (Government Proposition 1991/92: 95).

All these reforms meant that Sweden within a couple years went from having one of the most centralized education systems in the OECD to having one of the most decentralized (Lundahl, 2002). Thus, the reforms of the late 1980s and early 1990s transformed Swedish education fundamentally. They stimulated the emergence of a “quasi-market”, the nature of which is discussed in more detail in the following section.

## 4. The independent schools market

The voucher reform increased the number of independent schools and their overall enrolment share considerably. In 1992/93, there were 106 independent schools and 4,442 schools operated by municipal governments at the primary and lower-secondary level. In 2011/12, the figures had changed to 761 and 3,850 respectively, an increase in independent schools by more than 600 percent and a decrease in municipal schools of 13.3 percent.

At the upper-secondary level, there were 57 independent schools and 444 public schools operated by local governments in 1992/93. In 2011/12, there were 499 independent schools and 506 schools operated by local governments (Skolverket, 2015a),<sup>5</sup> an increase in independent schools of almost 800 percent, while public school numbers increased by 12.3 percent. It is thus clear that the number of independent schools increased greatly because of the voucher reform.

The definition of a school unit changed after 2011/12, which makes comparisons of the number of schools prior to and after this year difficult. It is thus more useful to compare the share of pupils attending government and independent schools prior and after these years.

As **figure 1** shows, the share of students attending independent schools has increased quite significantly since the early 1990s: from about 1 percent in primary and lower-secondary education and 2 percent in upper-secondary education to 14 percent and 26 percent respectively in 2014/15. It is clear that the voucher reform has enabled more Swedish students to attend an independent school.<sup>6</sup>

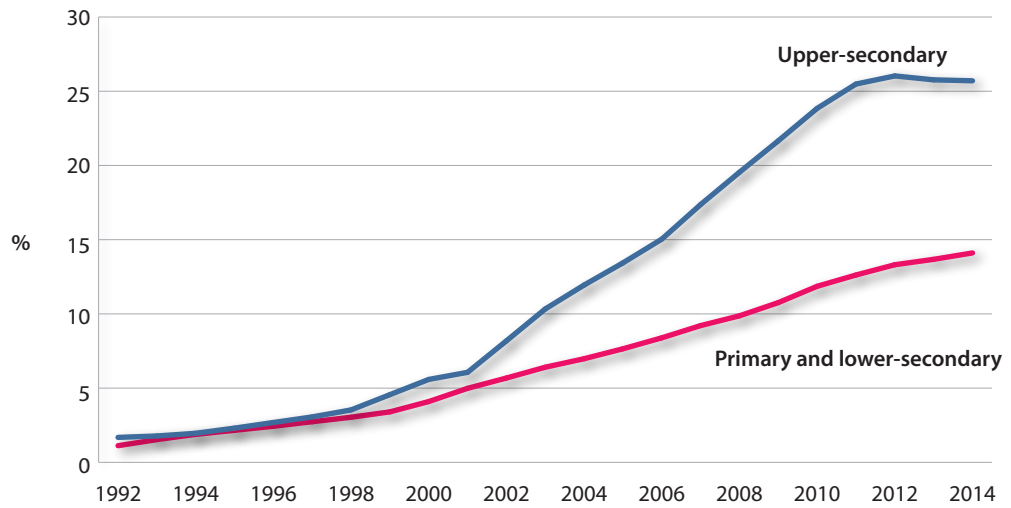
It should be noted, however, that the availability of independent schools still varies greatly between municipalities. Today, of a total 290 municipalities, 185 have at least one independent school at the primary and/or

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5. At the upper-secondary level, government schools are operated at both the county council and municipal levels.

6. The general school choice reform also led to a decrease in the share of students attending the municipal school to which they were assigned. Between 1992 and 2009, the share of students in primary and lower-secondary schools attending a non-assigned municipal school increased from about 13 percent to 22 percent (Böhlmark, Holmlund, and Lindahl, 2015).



**Figure 1: The independent school share of students**

Source: Skolverket, 2015a.

lower-secondary level, while 106 municipalities have at least one independent school at the upper-secondary level. Unsurprisingly, therefore, the share of students attending independent schools also varies greatly between municipalities. For example, the share of students attending independent schools at the primary and lower-secondary school level in the different municipalities varies between 0 percent and 44 percent (Skolverket, 2015a). Thus, opportunities to attend independent schools depend on the municipality in which students reside.

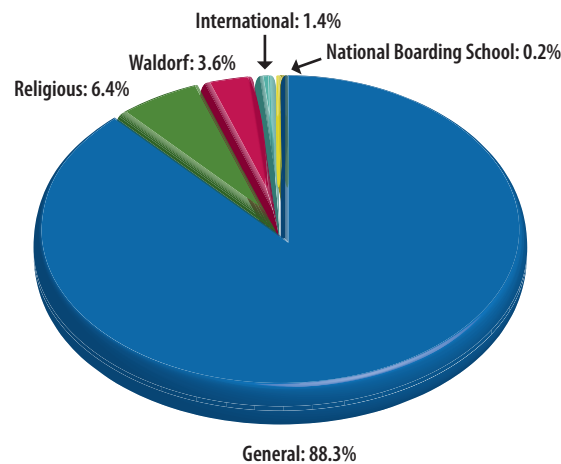
The new providers were responsible for raising up-front capital, since the government virtual voucher only covers operating costs—including rents and interest on loans—via the per-student virtual voucher. However, providers have also been able to rent existing property, thus often circumventing the need for new buildings (see Section 4.5). In other words, the voucher reform spurred an entirely new supply of schools into the education system—and competition within this system—without forcing the government to incur the usual related capital expenditures.

## 4.1 Independent school profiles

There are different types of independent schools, with different profiles, in Sweden. In contrast to the situation in many other countries, few independent schools have a religious profile; potential reasons for this are discussed in Section 2.<sup>7</sup> Instead, schools with a general profile—which do not aim to have a specific religious or pedagogical basis for their instruction—have come to dominate the landscape.

Indeed, 88 percent of students in primary and lower-secondary independent schools are educated in schools with a general profile, 6 percent are educated in schools with a religious profile, 4 percent are educated in schools using Waldorf pedagogy; 1 percent are educated in international schools, and 0.2 percent are educated in national boarding schools (**figure 2**).

**Figure 2: The share of primary- and lower-secondary independent school students by school profile**

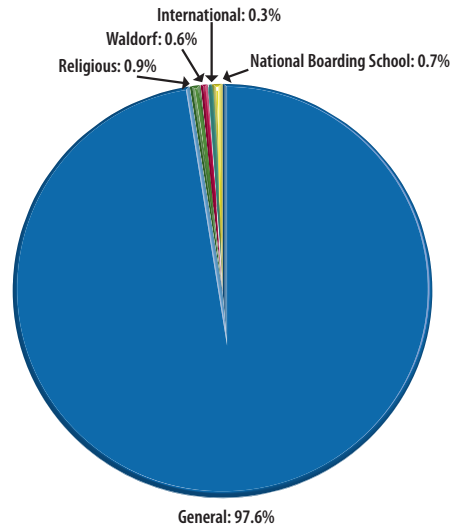


Source: Skolverket, 2015a.

At the upper-secondary level, fully 98 percent of independent-school students attend schools with a general profile, and only tiny fractions attend schools with other profiles (**figure 3**). Meanwhile, essentially all government-operated schools have a general profile.

<sup>7</sup> While the country has become increasingly diverse in religious terms since the voucher reform, the total market share of religious schools has only increased marginally. In 1995, for example, there were 3,408 students out of a total of 938,869 students (0.4 percent) enrolled in independent schools with a religious profile at the primary and lower-secondary level. In 2014, the figure was 7,925 students out of a total 930,415 students (0.9 percent). When compared with other independent schools, the religious alternatives have in fact declined (Skolverket, 2015a). This is because the for-profit companies, which tend to have a general profile, have come to dominate the education landscape.

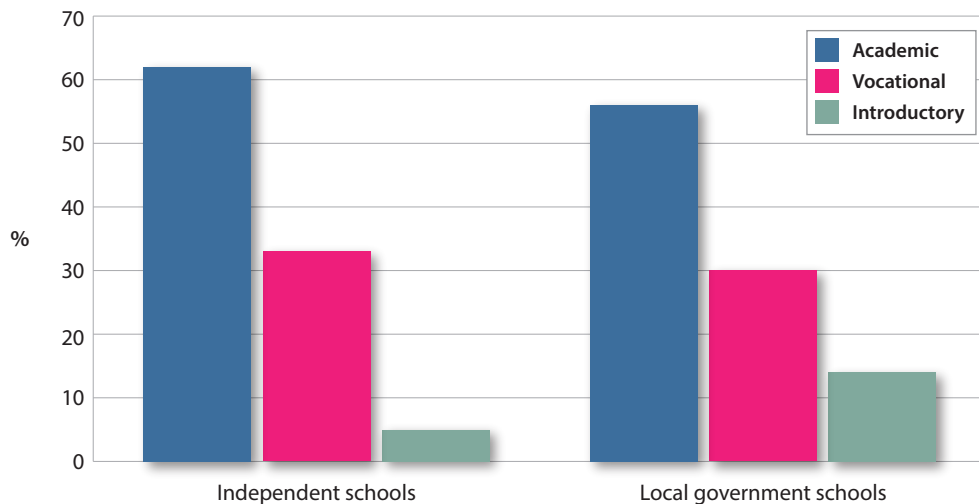
**Figure 3: The share of upper-secondary independent school students by school profile**



Source: Skolverket, 2015a.

Also, at the upper-secondary level, 62 percent of independent-school students are enrolled in academic programs, whereas 33 percent are enrolled in vocational programs, and 5 percent are enrolled in introductory programs (figure 4). In municipal and county council upper-secondary schools, 56 percent of students are enrolled in academic programs, 30 percent are enrolled in vocational programs, and 14 percent are enrolled in introductory programs. The introductory programs are designed for students who are not qualified to enrol in any of the vocational or academic upper-secondary school programs. The idea is that students eventually progress into a regular program or straight into work.

**Figure 4: The share of upper-secondary school students by program and school type**



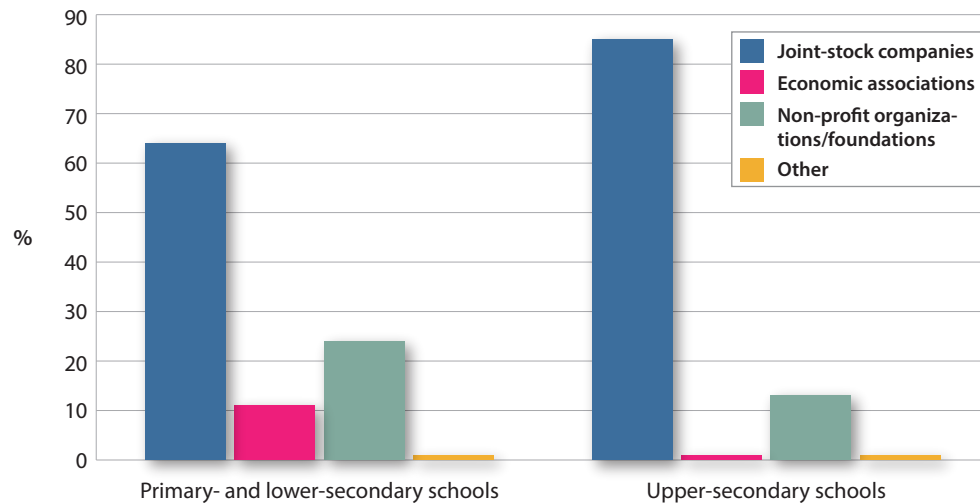
Source: Skolverket, 2015a.

In other words, the independent schools provide all different types of upper-secondary education, but they enrol more students in academic programs and fewer of their students in introductory programs than the government-operated schools.

## 4.2 Ownership structures

As discussed in Section 4.3.1, a relatively unique feature of the Swedish voucher program is the open ownership requirements among independent providers that obtain public funding. In the immediate aftermath of the reforms in the 1990s, an important share of (the few) market entrants were non-profit schools with a special pedagogical or religious profile (Sandström, 2002). However, from the mid-1990s, the most significant enrolment growth has occurred in the for-profit sector. Fully 64 percent of pupils are today enrolled in a school run by a for-profit company, at the primary and lower-secondary level (figure 5). At the upper-secondary level, the figure is 85 percent.<sup>8</sup>

Figure 5: Share of independent school students by ownership structure



Source: Friskolornas Riksförbund, 2015.

Interestingly, Swedish for-profit schools have tended to focus more on providing options among students from lower socio-economic backgrounds on average, compared with non-profit independent schools. The latter stand out for having the most advantaged student composition. For-profit schools

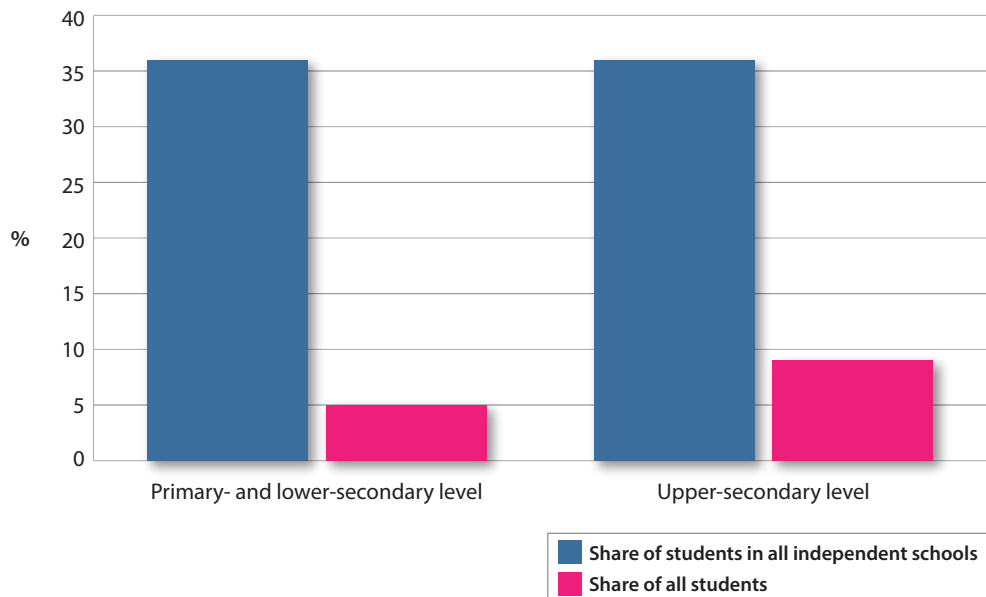
8. While technically established to advance members' economic interests, economic associations are essentially cooperatives, most of which are run on a non-profit basis. They are therefore best interpreted as non-profit organizations in the education sector.

come out in between municipal and non-profit independent schools in this respect at the primary and lower-secondary level, but are almost on par with municipal schools at the upper-secondary level (e.g., Vlachos, 2012a).<sup>9</sup>

It is also worth noting that the Swedish independent school market has become more concentrated in recent years. Indeed, the ten largest school chains enrol 36 percent of all students in independent schools in both the compulsory and upper-secondary sectors (**figure 6**). It is also conspicuous that all of these schools are joint-stock companies, apart from one chain at the upper-secondary level (Skolverket, 2014a). A considerable majority of students in Swedish independent schools, therefore, attend institutions run by for-profit firms that operate multiple schools with public funding.

In all, joint-stock for-profit education providers have attracted two-thirds of the students who attend elementary and lower-secondary independent schools as well as the vast majority (85 percent) of those in upper-secondary independent schools. Thus, not only do independent schools in Sweden attract 1 in 7 lower-grade students and 1 in 4 upper-secondary students in the country, but the vast majority of those students attend for-profit institutions. This suggests important policy implications for those jurisdictions that fund, or are considering funding, independent schools.

**Figure 6: Share of students in the ten largest school chains**



Source: Skolverket, 2014a.

9. This also follows the pattern in Chile (Elacqua, 2012).

## 4.3 Regulation

In the name of competition neutrality, independent schools are generally subjected to the same requirements as municipal schools, with slight differences in admissions rules in the case of oversubscription—a shortage of places in sought-after schools—as discussed below. The Swedish Schools Inspectorate is responsible for processing applications to start new independent schools and expand existing ones, while having no such responsibility for municipal schools.<sup>10</sup> It may be noted that municipalities have an advantage over independent providers in this sense, since the former do not need approval from central authorities to set up new schools or expand existing ones. However, there is no direct political influence or discretion in the approval process.

### 4.3.1 Ownership requirements

In Sweden, unlike in most countries, there are no ownership restrictions on publicly funded independent providers. This means that for-profit and non-profit providers are treated equally in the approval process. At the moment, there are no restrictions on dividend payouts or profits in schools run by for-profit organizations. Apart from the system in Chile, this is the only national voucher program in the world that has allowed for-profit schools to operate on more-or-less equal terms with other school types.<sup>11</sup>

As noted in Section 4.2, a considerable majority of students in independent schools attend for-profit institutions, and especially larger chains that run more than one school. It is highly unlikely that the increase in independent school enrolment would have been as high had the profit motive been banned. This is because non-profit organizations (in education and elsewhere) have fewer incentives to enter the market and to scale up. Also, non-profit education providers often have problems finding up-front capital for new schools or for scaling up existing ones—as noted in Section 4.5, the government does not cover up-front capital costs. For-profit providers, on the other hand, both have strong incentives to expand and can seek funding on the private market

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**10.** Prior to 2008, the National Board of Education was responsible for processing applications to start and expand independent schools.

**11.** Furthermore, Chile recently changed its legislation, which bans profit making from public funding in independent schools from January 2016 (Government of Chile, 2015). This means that Sweden is now the only national voucher system in which for-profit, publicly funded schools remain legal. The current Swedish government has announced its intentions to decrease profits in independent schools, but currently lacks the votes necessary to carry through this measure in the Swedish Parliament.

in exchange for potential future returns (Heller Sahlgren, 2013a).<sup>12</sup> Thus, the dominance of larger for-profit chain schools is relatively unsurprising and is likely to have enabled the independent schools market to grow faster and more extensively than if they had been banned.

### 4.3.2 The “no harm” requirement

While all ownership structures are allowed, there are still many requirements for independent providers applying to open schools. One of the more conspicuous ones is that the inspectorate should consider whether or not “the establishment [of an independent school] generates long-term negative economic consequences, or pedagogical or organizational difficulties, for the municipal organization” (Skolinspektionen, 2011: 2). At the upper-secondary school level, the inspectorate should also consider the consequences among nearby municipalities.

Historically, few schools have been rejected on this basis at the primary and lower-secondary school level, but it has been more important at the upper-secondary level in recent years. For example, in the 2009 application round, while 74 percent of rejected applications to start or expand an independent school at the upper-secondary school level were rejected because of the risk of negative effects on municipal schools, which amounts to 49 percent of all applications, the figure in the primary and lower-secondary sector was 7 percent, which amounts to 2.5 percent of all applications. In the same year, 34 percent of all applications at the primary and lower-secondary level were rejected, while 66 percent of all applications at the upper-secondary level were rejected (Skolinspektionen, 2015). While municipalities cannot veto applications, they can request that the inspectorate rejects them on this basis. However, the inspectorate is also entitled to reject these requests.<sup>13</sup>

Overall, this requirement is not beneficial for stimulating competition, which may very well have negative enrolment effects on municipal schools. Indeed, for competition to be successful, it is important that poorly performing schools are closed and that students end up in higher performing ones (Heller Sahlgren, 2013a). Furthermore, in this instance, the competitors can themselves object to increased competition, which is clearly unsatisfactory. This is also an infringement on competition neutrality, since municipalities do not have to consider potential consequences for independent schools

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12. For-profit schools could have incentives to raise quality, despite the fact that no schools are allowed to charge top-up fees for higher quality, as discussed in Section 4.5. They could also raise profits through increased market shares, which theoretically could be captured by providing better quality.

13. The Social Democratic government implemented these regulations in 1997, following a parliamentary inquiry, as an alternative to abolishing the voucher system when they returned power in 1994 (Holmlund et al., 2014).

in their decisions to set up new municipal schools. In any case, the solution to worsened conditions for nearby schools that are unable to compete is not to shield them from independent-school competition, but rather to shut them down and help students find places in schools that are performing better.

### 4.3.3 Curricula and time plan requirements

Independent schools have been forced to follow the national curriculum guidelines since 1996/97.<sup>14</sup> These guidelines stipulate broad goals of the education system in the compulsory and upper-secondary sectors. In addition, all schools must follow national subject plans. These plans do not give exact details regarding what students must learn, but stipulate what content should broadly be covered and the level of knowledge that is required for each grade (Skolverket, 2011a, 2013a).

Indicating that the requirements do impact on schools' decision-making, Swedish schools report relatively low levels of curriculum autonomy in a comparative perspective (OECD, 2014). This is problematic since autonomy is essential for schools' ability to compete by raising quality (e.g., Hoxby, 2006). And since there is evidence that curriculum autonomy is positive for international test scores in developed countries (Hanushek, Link, and Woessmann, 2013), this is likely to be negative for Sweden's performance at a more general level as well.

Furthermore, the national curricula also regulate specific pedagogical and leadership styles. Indeed, key paragraphs stipulate that students should be given responsibility and influence over their education. This is true at both the compulsory- and upper-secondary levels (Skolverket, 2011a, 2013a). In fact, the right of students to exercise influence over their education has been enshrined in the Education Act since 1991 (Government Proposition 1990/91: 115; SFS, 1985: 1100; SFS, 2010: 800). There is no doubt that this not only acts as a considerable impediment to pedagogical and school innovation, but also essentially mandates schools to adopt progressive education methods and leadership structures (e.g. Heller Sahlgren, 2013a; Sanandaji, 2014). This is also likely to have been harmful for achievement, as discussed in Section 5.4.

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14. Prior to 1996/97, independent schools were technically not forced to follow the national curriculum guidelines. But in Government Proposition 1995/96: 200, which became law in 1996/97, it was stipulated that: "Education for all children and youth aims to provide a common knowledge base and shall be grounded in the same values and have common goals. Thus, in practice, the independent schools must also follow national and course curricula." The deputy education minister also later highlighted that this proposition removed the previous leeway among independent schools: "The government proposition Independent schools etc. (Proposition 1995/96: 200) tightened the requirements so that an independent school shall follow the curriculum in its entirety and not just substantially aim towards the goals of the public education system" (Johansson, 1998).



Yet another regulation at the primary and lower-secondary level is the instructional time plan, which stipulates how many hours of instruction students should receive in each subject out of a total 6,785 hours (600 of which can be decided by school management). This regulation applies to both local government and independent schools as of 2011, although independent schools that already deviated from the instructional time plan at this stage were allowed to continue to do so. New schools and old schools that did not deviate from the instructional time plan prior to 2011 can still seek special permission to do so (Skolverket, 2014b, 2015b). In general, however, schools are bound by the instructional time plan.

At the upper-secondary level, the strict time plan was abolished in 1998, when the number of course units no longer came to reflect the number of instructional hours. Instead, students are guaranteed a total of 2,180 hours of instruction in academic programs, and a total of 2,430 hours of instruction in vocational programs (SFS, 2010: 800). This means that principals are given more autonomy in how they distribute the number of instructional hours at the upper-secondary level.

The time plan at the primary and lower-secondary level is supposed to ensure that students get sufficient instruction in all subjects, but is also likely to penalize schools that seek to specialize in some subjects or that are simply more efficient in some subjects and would like to put more time into other ones. The time plan, by limiting autonomy, is also likely to act as an impediment to innovation in the classroom.

Yet this assessment depends on the prevalence of good information in the system so that parents and the government can hold schools to account for their results. As discussed in Section 4.4, this is not the case in Sweden today. At the moment, schools can decide to give students high grades regardless of whether or not they deserve them. Schools may thus have perverse incentives to decrease the number of hours of instruction in some subjects in which it is more expensive—but still give students high grades. Nevertheless, the solution to this issue is not to stipulate strict input requirements, but rather to improve the accountability and information system, as also discussed in Section 4.4. In a functioning education market, schools must be judged on how good they are at improving student outcomes, not by their compliance with input regulation (Heller Sahlgren, 2013a).

Thus, independent schools in Sweden are limited by the regulatory requirements under which they operate. Not only are the schools required to follow the national curriculum, but they are expected to adopt progressive pedagogical practices, and elementary and lower-secondary schools must comply with mandated time plans. Evidence does not exist that compliance with strict input and process requirements of this sort is associated with improving student outcomes. In fact, schools that are more efficient with time, or could be more effective with alternative curriculum or approaches

to teaching and learning, are penalized. Provided that adequate information and accountability are available, such requirements are likely to prevent the full effects of education markets from being realized.

#### 4.3.4 Selection requirements

All schools in Sweden must accept all applicants if they have places. Thus, they cannot discriminate against students based on ability, socioeconomic characteristics, ethnicity, or faith. This holds true at the primary, lower-secondary, and upper-secondary levels. In the case of oversubscription, when supply does not meet demand, independent schools at the primary and lower-secondary level are not allowed to utilise other selection criteria than children's place in waiting lists (determined solely by application date), sibling priority, and proximity to residence. Municipal schools at these levels are only allowed to select pupils based on sibling priority and proximity to residence, and cannot use place in a waiting list as a tiebreak device. In reality, therefore, proximity remains a key admissions instrument for primary and lower-secondary municipal schools that are oversubscribed, since students residing closest to the schools *de facto* take precedence. Other students residing farther away are restricted to whatever available slots remain after those living closest to the school have made their choices (apart from when sibling priority is used). This also holds true for independent schools that utilise proximity to residence as their principal oversubscription criteria.

The current admissions regulations act as a considerable obstacle for the functioning of the education market. First, since proximity is the dominant tiebreak device in municipal schools, this means there are considerable incentives to move closer to the more popular schools. This induces residential segregation and also mutes competitive incentives among these schools (Heller Sahlgren and Le Grand, 2014). Second, using children's places in waiting lists as a tiebreak device is also likely to be regressive since it benefits more privileged students, whose parents can afford to engage in more extensive search behaviour. It is therefore also likely to induce school-level segregation, partly by enabling popular schools to cream skim students from a more advantaged background (Heller Sahlgren, 2013b).

At the upper-secondary level, the key admissions instrument in the case of oversubscription is students' lower-secondary school GPA. However, again, municipalities can choose to give priority to their own students. In this case, students from other municipalities can only attend an upper-secondary municipal school in another municipality if there are places left on the program to which the student has applied after students residing in the municipality have made their choices. This limits the level of competition in the system and is likely to decrease pressures to compete among municipal schools.

Using previous grades as a tiebreak device at the upper-secondary school level can have both positive and negative effects. First, schools,

teachers, and students may have stronger incentives to work hard in primary and lower-secondary school. Indeed, evidence suggests that selection has positive incentive effects on performance in Swedish lower-secondary school and in other settings before the actual selection takes place (Haraldsvik, 2014; Koerselman, 2013; Vlachos, 2011). Second, using grades as the tiebreak device may also produce better matching between students and schools, which could potentially generate higher results.

However, forcing upper-secondary schools to accept students' previous grades as tiebreak devices appears especially problematic given the severe lack of accountability in grading practices, which is also discussed in Sections 4.4. If academic selection should be allowed, it is highly questionable why upper-secondary schools should be forced to accept the grades given by lower-secondary schools.

In sum, schools in Sweden may not be selective unless they are oversubscribed (and then only at the upper-secondary school level). This requirement may prevent better matching between pupils and schools and could undermine a school's ability to specialize in serving different types of students. On the other hand, the lack of selection also prevents schools from competing by skimming the best pupils, which could have negative effects on education markets (Macleod and Urquiola, 2012a, 2012b). The impact of the lack of selection in the Swedish education market is therefore ambiguous. However, the tiebreak mechanisms for oversubscribed Swedish schools—proximity, waiting lists, and subjective grades—also act as considerable obstacles to the functioning of the education market, for example by undermining competitive incentives in the system.

#### 4.3.5 Teacher license requirements

Until recently, there were no license or certification requirements for teachers in the Swedish school system, and schools were not restricted to hiring individuals who held an approved teacher education qualification. However, in 2010, under a centre-right coalition government, a new Education Law was passed, which forces all schools to hire only teachers who have an official license. Since July 2015, only licensed teachers are allowed to be principally responsible for instruction and set grades. In order to obtain a license, teachers must have qualified teacher status, which they obtain through an officially approved degree in teacher education (Skolverket, 2014c). Peculiarly, there is no requirement that teachers need to be educated in the subject they teach, meaning that the license requirement is indeed essentially just a requirement to obtain general pedagogical training. The change in regulation aimed to increase teacher quality in the Swedish education system, and ultimately raise student achievement.

However, the regulation is unlikely to be helpful. This is because, while teacher quality is important for raising achievement as well as improving

outcomes in adulthood (e.g., Chetty, Friedman, and Rockoff, 2014; Hanushek and Rivkin, 2010), there is no consistent evidence that we can identify effective teachers based on their certification (e.g., Harris and Sass, 2009, 2011; Kane, Rockoff, and Staiger, 2008; Sass, 2015).<sup>15</sup> If anything, by restricting supply, the license requirement merely makes it more difficult for schools to compete by hiring suitable individuals without approved credentials. Many prospective teachers may be put off by the extra costs associated with additional pedagogical training, which research indicates makes little, if any, difference anyway.

Incidentally, the new rules appear to affect independent schools more significantly than municipal schools. In August 2015, 60 percent of teachers had obtained the official teacher license, compared with 74 percent in municipal primary and lower-secondary schools. At the upper-secondary level, the figures are 72 percent and 79 percent respectively (Skolverket, 2015a).<sup>16</sup> Overall, therefore, because they are more inclined to hire uncertified teachers, the independent school sector is mostly affected by the new rules. It restricts their flexibility, which in turn decreases their ability to compete.

#### 4.3.6 Restrictions on religious schools

There are also certain requirements that all schools must follow in regard to religious teaching. Previous to the 2010 Education Law, religious independent schools were not explicitly prohibited from including religious elements in their instruction, as long as the general values and goals of the public education system were upheld (SFS, 1985: 1100).<sup>17</sup> The 2010 Education Law, however, explicitly highlights that instruction in all schools with religious profiles must have scientific foundations and cannot include any religious elements (SFS, 2010: 800). For example, this means that schools are not allowed to teach creationism as an alternative to evolution in biology.

However, other religious elements in non-instructional school conduct are allowed, including prayers and devotions as well as other forms of religious worship. Schools are also allowed to offer more in-depth instruction in religious studies, history or civics, with focus on one specific faith. This includes studies of Holy Scriptures, such as the Bible or the Koran. Again,

<sup>15</sup> In Sweden, Andersson, Johansson, and Waldenström (2011) claim to find a negative impact of non-certified teachers among students from high socioeconomic backgrounds, but the study's methodology cannot separate the impact of certification from the effect of experience.

<sup>16</sup> Meanwhile, independent schools have tended to hire more teachers with high cognitive achievement and experience outside the teacher profession compared with municipal schools (Hensvik, 2012).

<sup>17</sup> Of course, they had still been bound by the national curriculum guidelines since 1996/97, as discussed in Section 4.3.4

however, the instruction itself must have scientific foundations and cannot include any confessional elements (Skolverket, 2015b).

While the new restrictions on schools with a religious profile circumscribe parental autonomy in terms of religious freedom, it is more questionable whether they have been harmful for academic achievement and attainment.

In any case, as noted in Section 4.1, even before the new restrictions, religious schools did not play a substantial role in the expanding independent school market.

#### 4.3.7 Grading and testing requirements

Once approved, independent schools also face grading and testing requirements. All schools, both municipal and independent, are required to give students grades at the end of each school term from 6<sup>th</sup> grade (last year in primary school), according to the national curriculum and subject guidelines. Schools are not allowed to give students grades earlier than in 6<sup>th</sup> grade. Until 2011, in fact, schools were only allowed to give grades from 8<sup>th</sup> grade (second year in lower-secondary school) onwards. At the upper-secondary school level, grades must be given after each course in accordance with the guidelines.

Schools also have to carry out mandatory National Proficiency Tests (NPTs) in 3<sup>rd</sup> grade (mathematics and Swedish), 6<sup>th</sup> grade (English, mathematics, and Swedish), and 9<sup>th</sup> grade (English, mathematics, Swedish, one of civics-oriented subjects, and one of the natural sciences). At the upper-secondary level, there are mandatory tests in English, mathematics, and Swedish, but the number of tests depends on which program students attend.

The ban on giving grades prior to 6<sup>th</sup> grade (previously 8<sup>th</sup> grade) further highlights that specific pedagogical ideas have become part and parcel of the Swedish education system, and independent schools are essentially forced to comply with these ideas. This stifles independent schools' ability to compete with traditional or other alternative pedagogy and such restrictions undermine the ways individual schools can differentiate themselves from government schools.

#### 4.3.8 Other requirements

There are other requirements that independent schools must satisfy. For example, they must employ principals who have teacher education or experience; have established routines for quality improvement; follow basic democratic principles and human rights; and ensure access to a school library. They must also be able to show that they are likely to have a sufficient number of students to be able to deliver high-quality education in the long term. Also, the inspectorate can now reject applications if the teacher-student ratio is expected to be "low."

With the exception of the requirement regarding democratic principles, and perhaps one or two others, these are input regulations that circumscribe schools in how they compete on the market. Certainly, while it is sometimes claimed that resources have no or little impact on student outcomes, this is not correct. A recent literature survey focusing only on research using credible identification strategies shows that the evidence regarding the impact of resources on student achievement is very mixed. However, there is more support for the idea that students from disadvantaged backgrounds gain from additional school resources. Still, there is no agreement regarding what resource-based interventions are more or less effective or whether reforms increasing resources generate higher achievement even among disadvantaged students (Heller Sahlgren, 2014). Thus, while there is a case for per-student funding that is differentiated along the lines of student background or ability, broader input regulation appears unjustified.

Overall, the regulatory framework thus limits the Swedish independent school sector in how it is allowed to compete with the government sector. For-profit ownership of schools is permitted but restrictions on variations in curriculum, instructional time, student selection, teacher licensing, and grading and testing, among other things, restrict the ability of independent schools to differentiate themselves. While some regulation of quasi-markets is necessary, detailed regulation of inputs should be avoided. And in order to avoid strangling input regulation, stronger output accountability is desirable (Heller Sahlgren, 2013a). Indeed, an important reason why the Swedish government has come to increase input regulation is likely due to flawed accountability measures. These measures are discussed in the next section.

#### **4.4 Accountability and information**

In terms of public accountability, the National Board of Education publishes average school GPA and NPT scores online, but historically only the final GPAs in lower-secondary school were published at the compulsory education level and in the final year at the upper-secondary school level. Grades and large-scale assessment scores in 3<sup>rd</sup> and 6<sup>th</sup> grade became publicly available only recently.

It should also be noted that there are no value-added metrics published, making it difficult to differentiate between schools with good students from schools that are effective at raising student performance. While the National Board of Education provides a website where school results in lower-secondary school can be compared, with and without controlling for some relatively coarse background variables, this is an unreliable metric of school effectiveness. The lack of value added is a problem since it is likely to decrease pressure on schools to compete by raising academic quality (Heller Sahlgren and Jordahl, 2016).

However, the biggest problem with the current accountability and information system is that there is no external moderation of grades. Instead, teachers mark their own students' NPTs—which means that the tests are not standardized—and also decide what final grades their students receive. Up until recently, marks from NPTs were not even systematically collected at the upper-secondary school level (Fredriksson and Vlachos, 2011). At the same time as the voucher reform was carried out, another reform also abolished the cohort-referenced system that anchored grading in Sweden up until the mid-1990s. This meant that teachers were suddenly allowed to set essentially any grades they wanted.

What makes this regime especially dysfunctional is that the admissions systems to upper-secondary and higher education simultaneously rely essentially entirely on the grades determined by individual teachers. Upper-secondary schools and universities are forced to accept students on the premise of these grades. This is despite the fact that researchers have found that grades are not comparable across schools. Since there are strong incentives to increase grades among all actors in the system, it is unsurprising that grade inflation has been rampant (Fredriksson and Vlachos, 2011; Vlachos, 2012b). Naturally, the dysfunctional grading and admissions systems are also a big obstacle to providing parents and students with appropriate information regarding school quality. The metrics that are published today are simply not reliable.

Overall, however, the most important point is that neither NPT results nor student GPAs are reliable metrics of student performance. Because of the lack of external moderation, there are no regular standardized tests or other indicators in the Swedish education system. Given that admissions to upper-secondary and higher education depend almost exclusively on non-standardized grades, this is an important general flaw in the Swedish system.

#### 4.4.1 Inspections

Apart from the above-noted accountability requirements, the Swedish Schools Inspectorate also inspects all education providers every three years, which includes an announced visit to all independent schools and 20 percent of each municipality's schools. The inspectorate argues that the decreased visibility of independent schools' activities justifies this difference (Skolinspektionen, 2015). However, it also shows that independent and municipal schools are not treated the same way in terms of public accountability.

Apart from the announced visits, the inspectorate also carries out unannounced visits in exceptional cases. But the fact that the vast majority of visits are announced is certainly a weakness from an accountability perspective, given the incentives among school leaders and teachers to engage in "window dressing" and prepare in advance so that their schools pass the inspections.

The inspectorate uses information on results and student, parental, and personnel surveys when determining what to focus on during the visits. The surveys focus on various areas, such as perceptions about school development, school rules, and the study environment, and are intended to increase participation of students, parents, and personnel in the inspections.

If the inspectorate believes that there are deficiencies in education provision in a school, for example if it does not conform to the regulations, it can give it an injunction and stipulate what has to be done. If the deficiencies are considered severe enough, schools can also be temporarily closed until they have been corrected. Independent schools that do not improve after that can be permanently closed down. However, the inspectorate cannot force municipal schools to close for longer than six months, even if serious deficiencies remain. If this is the case, it can instead take the measures it deems necessary to correct the deficiencies, while municipalities have to pay for the costs associated with the measures taken (Skolinspektionen, 2015).

The inspection reports are available to download at the inspectorate's website and could potentially serve as school quality information for parents and students. However, the reports are entirely qualitative and the inspectorate does not give schools overall quality grades. This makes them difficult to interpret for parents seeking school quality information.

A serious problem with the inspection regime is that the inspectorate does not focus on issues that accurately reflect school quality (Heller Sahlgren and Jordahl, 2016; Riksrevisionen, 2013). Instead, it only ensures that schools meet the regulations and requirements outlined in the Education Law and the national curriculum in what can only be described as a box-ticking exercise. Yet, as discussed in Sections 4.3.3 and 5.4, there are considerable problems with these regulations, particularly because they force schools to adopt progressive education practices.

An important example here is the case of *Internationella Engelska Skolan i Sverige AB* (International English School in Sweden, Ltd), a for-profit organization currently running 27 schools in Sweden. The company profiles itself as having high expectations of all children, regardless of background, and a safe and structured environment: "Order, structure, and safety are prerequisites for learning" (IES, 2015). To ensure this, the organization's constitution does not allow students to have a say regarding its core school rules, although they are allowed to discuss these rules and also suggest new ones in agreement with the school leadership.

But this means that the company is breaking the law. In a recent inspection report, the inspectorate writes that the organization's rules are unlawful because students "are not given a real opportunity to participate in how school rules are decided, and [they] are thus not given sufficient influence in accordance with prevailing statutes" (Skolinspektionen, 2014: 5). Poor results are not the problem: "Results at Internationella Engelska Skolan in Sweden AB



are high, with some exceptions, and are generally above the national average” (Skolinspektionen, 2014: 3). The inspectorate thus holds that a school that produces high results uses the wrong methods to achieve them.

To be sure, given the lack of external moderation noted earlier, it is questionable whether the results highlighted accurately reflect students’ cognitive achievement at *Internationella Engelska Skolan*. Yet, the point is that the progressive pedagogical principles that are enshrined in the Education Law and the national curricula are an obstacle for schools’ ability to compete.

In sum, all schools are inspected once every three years to determine compliance with input requirements. Yet inspections do not focus on issues that accurately reflect school quality and are difficult to interpret for parents seeking information about school quality. They also enforce progressive pedagogical principles outlined in the Education Law. Overall, therefore, the inspection system does not provide appropriate accountability and appears to have done little to improve the functioning of the Swedish education market.

#### 4.4.2 Other available information

The Swedish Association of Local Authorities and Regions (SKL) also publishes results, long-term outcomes, and student surveys—unadjusted and adjusted for student composition—at the municipal level. Yet this does not help parents and students to discern how specific schools perform. And, again, there is no value-added information presented.<sup>18</sup>

Finally, the municipalities have an individual responsibility to inspect the quality of schools for which they are responsible.<sup>19</sup> Yet the municipalities decide freely how to do this, and there has so far been no comprehensive mapping over what happens in practice. This means that it is difficult to say anything about the methods used by the municipalities in this respect (Hagbjer, 2014). Consequently, the information available to parents and students as a result of these exercises varies considerably between municipalities. The same applies more generally to the provision of information. For example, 73 municipalities provide no information whatsoever in terms of the tools available for parents to compare different schools with each other (Heller Sahlgren and Jordahl, 2016).

Overall, therefore, the accountability requirements and information provision in the Swedish education system have been and still are insufficient, with the accountability requirements being the core of the problem. They are

<sup>18</sup>. Together with the Confederation of Swedish Enterprise and the Swedish Free Schools Association, SKL also provides a website that is supposed to help parents compare primary and lower-secondary schools. However, it does not provide other information than what is already available through other sources.

<sup>19</sup>. This does not extend to independent schools, although they have the right to observe how they operate.

contradictory as well. On the one hand, schools essentially decide their own results, which is a significant problem given the importance of those grades in the admissions process. On the other hand, schools that are praised in inspection reports for producing good results are criticized for not following pedagogical rules stipulated in the Education Law and the national curricula. Thus, there is a clear mishmash of centralization and decentralization, which produces poor incentives for schools to raise quality and forces them to utilize a specific pedagogical approach.

#### 4.5 Funding provisions

The funding provisions of independent schools have changed over the years. And because of decentralization of funding and responsibility of schools to the municipal level, the amount of per-student funding to independent schools varies depending on how much money the home municipality spends on education. When the reform was passed in 1992, independent schools received 85 percent of the average per-student funding in their home municipality. With the Social Democrats' return to political power in 1994, this was decreased to 75 percent, but then just a couple of years later increased by the same government to 100 percent (SOU, 1999). The per-student funding covers operating costs, including property expenditures such as rent and interest on loans (but not amortization payments). However, up-front capital for new independent schools, or schools that seek to expand, is not provided by the government. This means that providers must either seek funding on the private market to buy or build new property or rent existing buildings.

Municipalities are supposed to distribute funds entirely on a per-student basis, and are not allowed to discriminate against independent schools in their funding formula. In reality, however, municipalities still have some opportunities to treat independent schools differently, which often means that independent schools get less per-student funding than municipal schools. For example, since municipalities have owned their schools for a long time, they often have very low property expenditures. Independent schools, on the other hand, must rent (or buy) their property on the market, which means that they have to spend a higher proportion of their income on property costs compared to municipal schools. There is technically a rule stipulating that the per-student voucher may be calculated based on independent schools' actual property expenditures, but this is essentially only utilized in municipalities where the independent schools' property costs are lower than in the municipality schools (Friskolornas Riksförbund, 2013).

Also, with the recent advent of differentiated per-student funding in some municipalities, which means that schools get different amounts depending on students' backgrounds, independent schools have in some cases

still been compensated according to the *average* per-student funding in municipal schools (Skolverket, 2013b). This means that independent schools in some municipalities may get more or less per-student funding than municipal schools with similar student compositions, depending on how the independent school student composition differs from the municipal school average.

While the theoretical principle to equal funding is part of the Swedish system's strengths, the ability among municipalities to deviate from this principle is a weakness.

In the first years after the reform, independent schools receiving public funding could charge tuition fees “that [were] reasonable with regard to the specific costs incurred by the school, provided that the costs could be viewed as justifiable” (Government Proposition 1992/93: 230), although far from all of them did.<sup>20</sup> For example, in 1993, right after the reform, about 50 percent of primary and lower-secondary independent schools charged fees. In 1995, this figure had dropped to 30 percent (Skolverket, 1996). Fees were also generally low. In 1995, the average annual fee at primary and lower-secondary independent schools was CA\$352 in today's value, and had declined to CA\$285 by 1998. At the upper-secondary level, the average fee in 1995 was CA\$1,824 in today's value, and had declined to CA\$1,174 by 1998 (Skolverket, 2015a).<sup>21</sup> In fact, these figures also include fees at national boarding schools and international schools, and fees in most regular schools were considerably lower.

In the years following the official equalization of public funding, independent schools receiving public funding were banned from charging top-up fees from parents. Today, publicly-funded schools are not allowed to charge parental fees at all, with the exceptions of international schools and national boarding schools. As noted in Section 4.1, these schools only educate 1 percent of primary and lower-secondary students and 1.6 percent of upper-secondary school students.<sup>22</sup> Essentially all independent schools are therefore financed entirely with public funds—in terms of their operating expenditures—which in turn means that there is currently no price mechanism operating on the Swedish education market.

This may have both negative and positive effects. Top-up fees ensure that many parents take some financial responsibility over their children's education, which may give them stronger incentives to choose schools wisely. They also provide a price mechanism that may generate stronger incentives

20. Whether or not fees were “reasonable” was left for the National Agency for Education to decide, and it could ask schools to lower the fees if they found them unreasonable (Government Proposition 1992/93: 230).

21. These figures are adjusted for inflation using CPI figures from Statistics Sweden (SCB, 2015).

22. Technically, independent schools may be able to opt out of public funding altogether to be allowed to charge tuition fees from parents, but none of them currently do.

and opportunities to compete by raising quality. In the long run, this could lead schools to become more efficient, lower fees, and/or attract more students. Prices provide signals to education providers about what type of education different families prefer, and give them incentives to provide that education as well as specialize in different market segments. Indeed, the price mechanism is generally seen as crucial for markets to function, precisely because it aggregates local information and gives easily interpretable signals of how consumers and producers should act (Hayek, 1945). Without a price mechanism to clear demand, the result is often queues and the inability among producers to find out what consumers desire. If so, the current ban on top-up fees may be seen as a considerable weakness of the Swedish system.

On the other hand, theoretical and empirical work suggests the price mechanism induced by top-up fees does not always work well in education, partly because information asymmetries that benefit schools over parents may make it easier to compete by other means than raising quality (Epple and Romano, 2012; Feigenberg, 2014; Heller Sahlgren, 2013a). Overall, therefore, more comprehensive and in-depth empirical research on this topic is needed before determining whether or not the ban on top-up fees has had positive or negative effects in the Swedish context.

In sum, the Swedish education system officially guarantees full public funding of independent-school students at the rate of the average amount per student in local government schools. Yet the ability of municipalities to deviate from this principle in practice is a weakness. Meanwhile, while publicly-funded independent schools could charge some top-up fees in the early days of the 1990s voucher reform, such fees are today banned. The effects of such a ban, however, are ultimately ambiguous.

## 5. Costs and performance

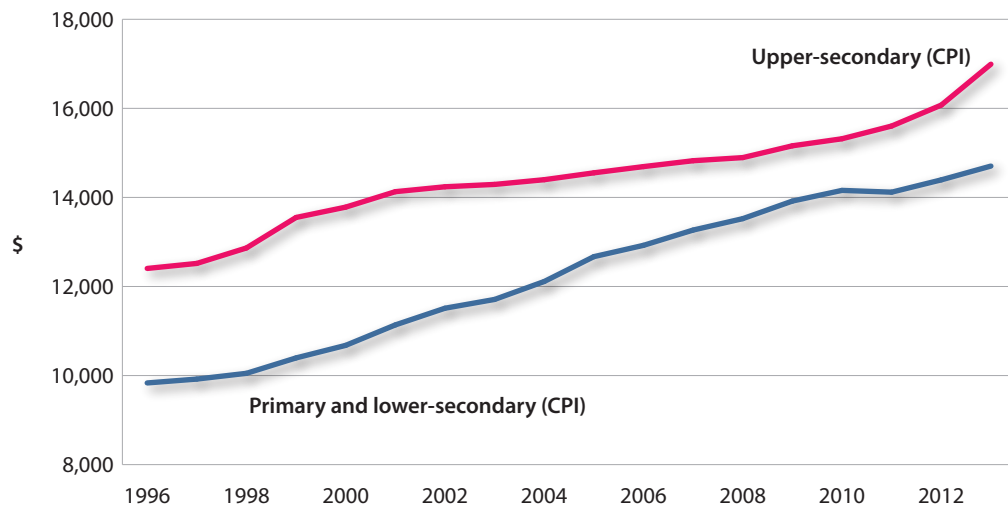
Having discussed the Swedish education market and the current regulatory framework, this section shows how costs have changed over time and how well the system performs. It also discusses in detail the effects of the independent school market. Overall, while the Swedish education system's performance has declined in the past decades, all available research indicates that independent schools have cushioned this fall, while not adding to the costs of education.

### 5.1 Costs

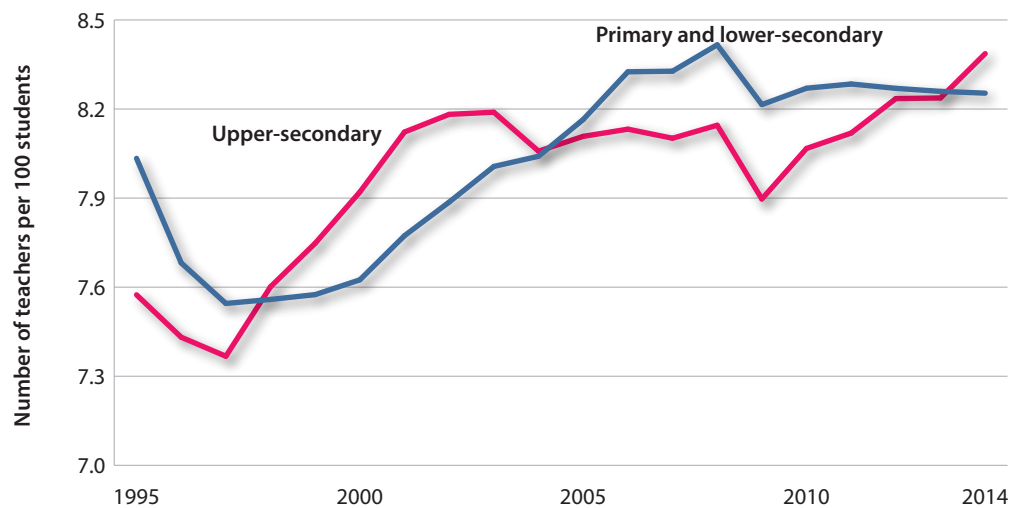
As in many other countries, Swedish education expenditures have increased when indexed for consumer price inflation (CPI). Indeed, the average expenditure per student in primary and lower-secondary education increased by 50 percent between 1996 and 2013 when taking into account CPI (**figure 7**). Similarly, the average expenditure in upper-secondary education has increased by 35 percent during the same period. Certainly, as highlighted by others, this does not necessarily mean that schools can invest more in the education process today; many schooling costs, such as real wages and property costs, have increased faster than CPI (see Vlachos, 2013). Nevertheless, Swedish education costs indexed for CPI have increased over the course of the past decades.

Teacher density—the number of teachers per 100 students—has also increased over the same period (after an initial dip), coinciding with decreasing enrolments during the 2000s (because of smaller cohorts)(**figure 8**). Between 1995 and 2014, teacher density in primary and lower-secondary school increased by 7 percent. In upper-secondary school, the figure is 11 percent. In other words, a share of the increase in costs per student may be attributed to the fact that teacher density has increased since the late 1990s.

As Section 5.3 notes, however, the evidence does not suggest that the voucher reform has driven these costs; if anything, increasing independent school competition appears to have decreased average government education expenditures slightly. It is important to remember that allowing independent schools to obtain public funds, as well as the equalization of independent

**Figure 7: Average expenditure per student over time**

Sources: Skolverket, 2015a; SCB, 2015; author's calculations.

**Figure 8: Teacher density over time**

Source: Skolverket, 2015a.

school funding to 100 percent of the municipal average per-pupil expenditures, does not necessarily mean that government costs increased. This is dependent on how much politicians choose to spend on public schools, and increasing competition may make all schools operate more efficiently on leaner resources (e.g., Hoxby, 2006). Thus, increasing access to publicly funded independent schooling does not necessarily mean higher government costs, as the evidence discussed in Section 5.3 indeed shows.

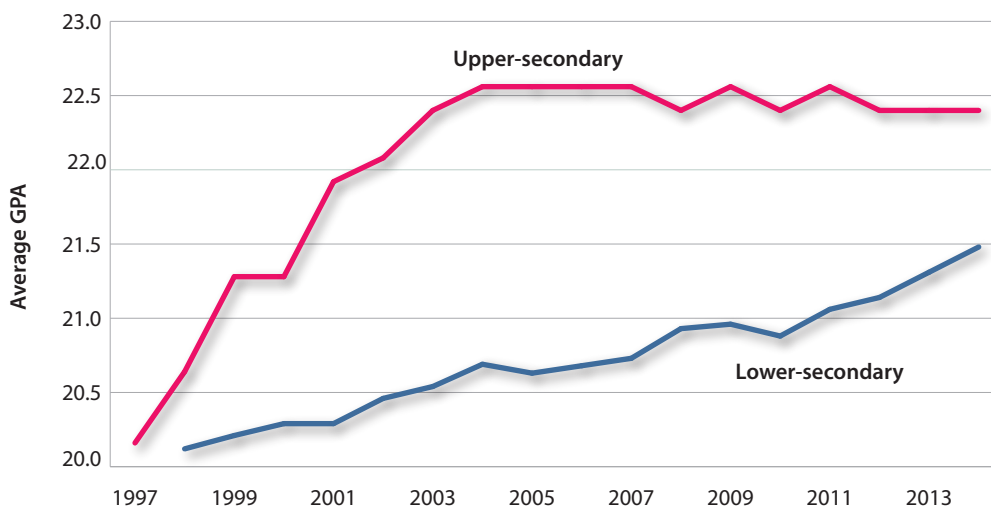
Overall, therefore, costs adjusted for CPI in the Swedish education system have increased over the past decades. Teacher density has also increased somewhat.

## 5.2 System performance

**Figure 9** shows the average GPAs in lower-secondary and upper-secondary education over time (Skolverket, 2015a).<sup>23</sup> Both have increased since the mid-to-late 1990s, although the latter has essentially plateaued since the mid-2000s. Based on the domestic performance metrics, one may conclude that performance has increased since the mid-1990s.

Yet this does not take into account grade inflation. As noted in Section 4, there is no external moderation of grades in Sweden. Teachers are free to set grades without external restrictions and those grades compose the average GPA, which is a key admissions instrument to both upper-secondary and higher education.

**Figure 9: Average GPAs over time**

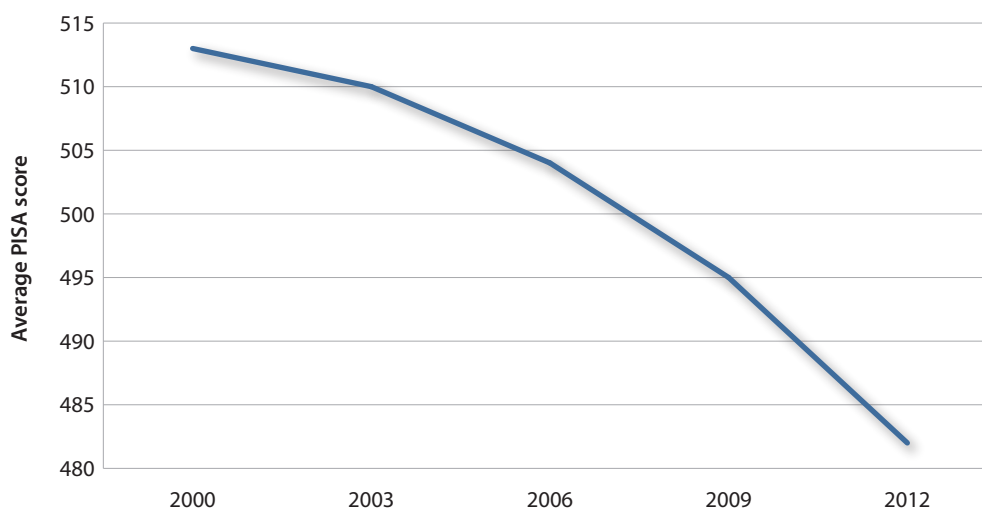


Source: Skolverket, 2015a.

**23.** For ease of comparison, the data have been standardized to a scale between 0 and 32. The lower-secondary school GPA scale is normally 0–320 and the upper-secondary school GPA scale is 0–20.

Consequently, it is more appropriate to consider Sweden's performance in international tests. And there is no doubt that this performance has declined significantly in recent decades. For example, in the OECD's PISA test in mathematical literacy, scientific literacy, and reading literacy, Sweden has deteriorated quite radically. Indeed, Sweden's average performance in PISA (**figure 10**) fell by 31 points between 2000 and 2012 (NCES, 2015). This is a significant decline. As a reference point, the US and Canada have fallen 7 and 10 points on average respectively. In fact, Sweden is today among the worst performing countries in Europe in PISA (OECD, 2013).

**Figure 10: Sweden's average PISA results over time**

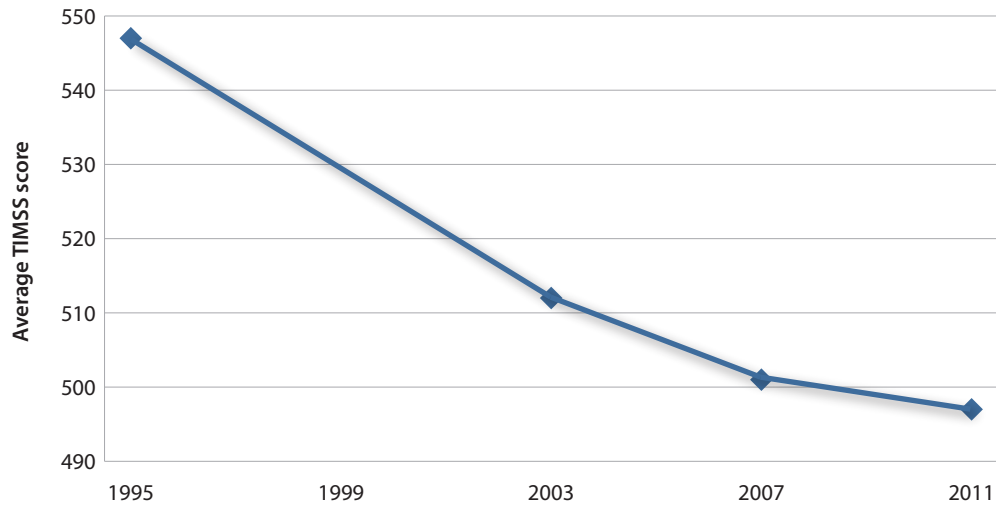


Source: NCES, 2015.

While PISA measures knowledge of importance in everyday life—reading skills are important in all three subjects—TIMSS measures more traditional curriculum-based knowledge in mathematics and science. **Figure 11** shows that Swedish 8<sup>th</sup> graders' average performance in TIMSS has fallen 50 points between 1995 and 2011 (Skolverket, 2012a). In the case of TIMSS, however, the fall was the most radical at the end of the 1990s and has since slowed down significantly. This contrasts with PISA, where the curve becomes steeper in recent years.

The evidence also shows that Sweden's average performance in TIMSS Advanced, a test in advanced mathematics and physics taken at the end of upper-secondary school by students enrolled in natural science and technical programmes, has fallen 86 points between 1995 and 2008. It has also fallen 19 points in PIRLS, a reading test taken in 4<sup>th</sup> grade, between 2001 and 2011 (Skolverket, 2009b, 2012b). Thus, it is clear that Swedish education performance has tumbled in the previous decades.



**Figure 11: Sweden's average 8<sup>th</sup> grade TIMSS results over time**

Source: Skolverket, 2012a.

### 5.3 The impact of independent schools

It may be tempting to blame this on the voucher reform: as the share of independent school students has been going up, results have been going down. This is far too simplistic. There have been many other changes, both in and outside education, at the same time. Indeed, the decline in Swedish education performance appears to have begun already in the 1980s, before any of the reforms were carried out (Holmlund et al., 2014). Certainly, it is still possible that independent schools may have increased the fall. But it is also possible that the fall would have been even greater without them. To separate causation from correlation, it is not enough to look at simple associations; one must consider research that employs appropriate econometric methods.

Since the early 2000s, a growing economic literature analyzing the effects of the Swedish voucher reform at the primary and lower-secondary level has emerged. And, in fact, this research finds no evidence that the voucher reform is responsible for the downward trend in international tests. Instead, all evidence indicates that it is instead partly responsible for ensuring that the decline has not been steeper.

Indeed, essentially all studies find some positive effects on achievement (e.g., Ahlin, 2003; Bergström and Sandström, 2005; Böhlmark and Lindahl, 2007, 2008). However, these studies focus solely on the impact on domestic grades or test scores, which may be biased because of the problems with the accountability system discussed in Section 4.4, and they do not typically assess the impact of differential grade inflation. They also ignore differences

between for-profit and non-profit schools and other important nuances of the Swedish voucher system.<sup>24</sup>

However, in the most recent and rigorous study, Böhlmark and Lindahl (2015) find positive effects on grades and test scores in English and mathematics in lower-secondary school. The results indicate that a 10 percentage point increase in the enrolment share of independent schools raises test scores at the end of lower-secondary school by the equivalent of 0.08 standard deviations. To set the effect in perspective, it is roughly equal to 8 PISA points. Going from 0 percent of students in independent schools to 44 percent—the level of Täby municipality and highest in the country—would increase test scores by the equivalent of 35 PISA points.

The authors also analyse whether higher independent school enrolment shares affect the difference between final grades in subjects where students sit national proficiency exams and subjects in which they do not. This is supposed to be a test for grade inflation: teachers are more likely to succumb to pressures to increase grades in subjects with a more subjective type of assessment than in subjects with compulsory testing, indicated by the fact that grades have increased much more in the former subjects. They find no evidence that competition affects grade inflation.

In addition, the authors find positive effects on long-term outcomes, such as grades in English and mathematics in upper-secondary school and the likelihood that students pursue university studies.

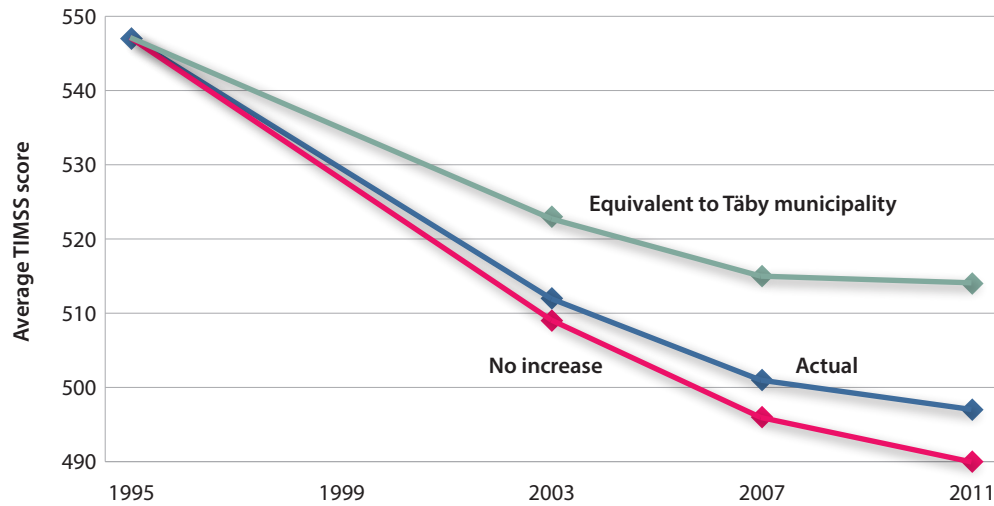
To drive home their argument, the authors also analyse TIMSS scores. TIMSS is a low-stakes test and externally marked, making it immune to the inflation problems that may plague Swedish domestic test scores. Again, the authors find positive effects: a 10 percentage point increase in the independent school share raises TIMSS scores by about 0.10 standard deviations (7 TIMSS points). This provides the first direct evidence that independent school competition appears to have slowed down the decline in international test scores. Note also that the effect size is very similar to what they find when analysing domestic test scores and grades, further indicating that competition per se appears to have had little effect on grade inflation.

The effect found by the authors, extrapolated to the country level, is shown in [figure 12](#), which compares the actual TIMSS score trajectory with counterfactuals, based on different alternative trajectories of the independent school enrolment share. With no increase in the independent school enrolment share between 1995 and 2011, TIMSS scores would have been 7 points lower in 2011. If instead the overall independent enrolment share had followed the trajectory in Täby municipality—the municipality that has had the highest increase in independent school enrolment at the primary

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24. Furthermore, two of the studies (Ahlin, 2003; Bergström and Sandström, 2005) suffer from relatively poor methodology and data, which threaten their conclusions considerably.

**Figure 12: Sweden's TIMSS results over time with actual and counterfactual independent school share trajectories**



Source: Böhlmark and Lindahl, 2015a; Skolverket, 2012a, 2015a; author's calculations.

and lower-secondary level—then TIMSS results would have been 17 points higher in 2011. While the exact calculations should be interpreted with caution, the point is to graphically depict the perhaps counterintuitive notion that independent schools have had a positive effect on achievement at the same time as Sweden has been falling in international tests.

Intriguingly, the authors also show that almost the entire positive effect is due to the fact that independent schools have positive competition effects on municipal schools, not that the former are more efficient than the latter. This may reflect the fact that independent schools, in the name of competition neutrality, essentially have the same levels of autonomy as municipal schools. Nevertheless, it also indicates that Swedish independent schools benefit students who attend municipal schools just as much as they benefit their own students.

Similarly, the effect of higher enrolment shares in for-profit independent schools is as large as the effect of higher enrolment shares in non-profit independent schools. In other words, Sweden's liberal ownership requirements, which are likely to have stimulated independent school competition, appear to have been beneficial.

Finally, the authors find no evidence that expenditures increase as a result of increasing independent school competition. If anything, the effect is negative, suggesting that per-student expenditure decreases with higher independent school enrolment shares. This indicates that independent schools do not drive the expenditure trajectory discussed in Section 5.1.

All available evidence thus indicates that the voucher reform has cushioned the fall in international tests at the primary and lower-secondary school

level. And although the effects are not very large, they are certainly meaningful. Given all the system flaws discussed in Section 4, this is quite remarkable indeed.<sup>25</sup>

### 5.3.1 Sorting and equality of achievement

Apart from the impact of independent schools on quality, it is also important to consider the effects on sorting and equality of achievement. Two studies find evidence indicating that the voucher reform has increased sorting to some extent, at least between students of Swedish and immigrant backgrounds (Böhlmark and Holmlund, 2011; Böhlmark, Holmlund, and Lindahl, 2015). However, the authors' conclusion is still that this impact is relatively small in an international perspective—and is dwarfed by the effect of residential sorting.

It is worth noting, furthermore, that the studies are unable to determine whether independent schools have had a causal impact on school-level segregation in Sweden. The problem is that parents' residential choices are also affected by the possibilities for school choice. Indeed, international studies indicate that increased public and independent choice opportunities that are decoupled from residential choice decrease residential segregation (see Heller Sahlgren, 2013b). If so, residential segregation may have had an even larger effect on school segregation in the long-term perspective, had the voucher reform never been implemented—simply because residential patterns would have been different.

Also important, in regard to equality of achievement, Böhlmark and Holmlund (2011) find no evidence that independent schools increase the variation in test scores between students.

In other words, even if the voucher reform has increased sorting, which is not entirely clear, this sorting does not appear to have affected equality in results. It is also worth reiterating that the impact on achievement in any case is positive.

## 5.4 What caused the decline?

While the positive effects of Swedish independent schools may be puzzling in the light of decreasing overall performance in international tests, it is important to note that there have been many other concurrent changes that may have caused the decline. There are many theories in this respect, but only one of them has been verified by research: immigration. Swedish immigration has

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25. One potential mechanism behind the positive effects is the increased wage differentiation between teachers of low and high cognitive ability: independent school competition appears to have increased salaries among high-ability teachers especially (Hensvik, 2012).

since the 1980s been characterized primarily by large refugee inflows. Indeed, Sweden has had the highest per-capita refugee immigration rate in Europe since 1983 (Ruist, 2015).

Heller Sahlgren (2015b, 2015c) shows that a substantial part of the fall in PISA can be directly attributed to the student population with any form of immigrant background. When restricting the sample to students with Swedish-born parents who speak Swedish at home, 29 percent of the average fall between 2000 and 2012 disappears: 19 percent in mathematical literacy, 29 percent in reading literacy, and 41 percent in scientific literacy. Thus, almost a third of the PISA decline is mechanically due to the shift in student composition that is linked to immigration and the fact that students with an immigrant background have declined faster than those with a Swedish background (**figure 13**).<sup>26</sup>

A less in-depth investigation by the author of this paper indicates that the contribution of immigration to the average fall in TIMSS between 1995 and 2011 appears to be only about 43 percent of its contribution in PISA, which is probably because PISA requires stronger language skills than TIMSS. However, these estimates are less certain.<sup>27</sup> Nevertheless, given the sizable share of the decline in PISA that is driven by students with some immigration background, it is clear that one should be careful not to attribute all of Sweden's decreasing results to poorer schooling provision.

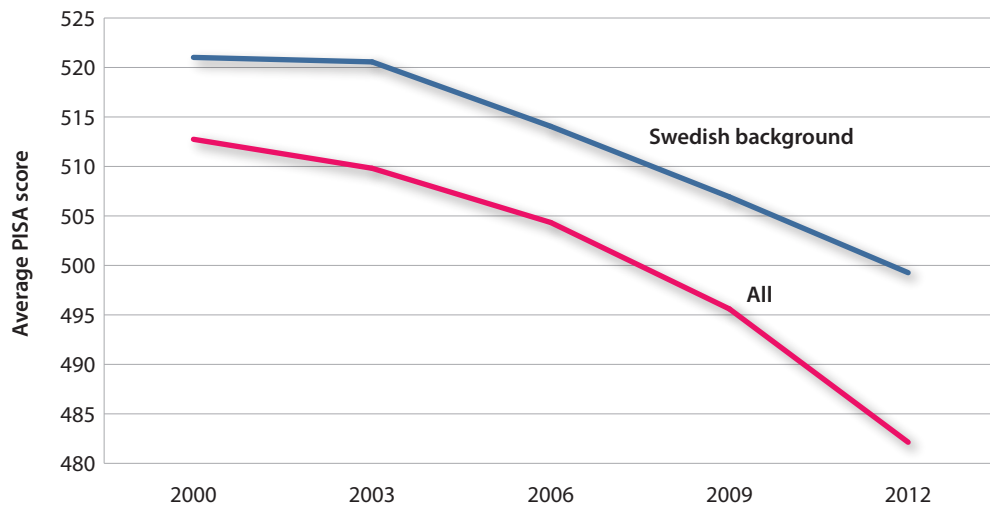
Another probable reason behind the cognitive decline, which indeed is related to poorer schooling provision, is the rise of progressive education. A progressive education culture emerged gradually in Sweden over the past decades, but child-centred methods appear to have increased most radically from the mid-1990s (Heller Sahlgren, 2015d). For example, one study found that the share of instructional time devoted to individual work in Swedish schools increased only slightly from 22 percent in the 1960s to 26 percent in the 1980s, but then jumped to 41 percent around 2000 (Granström, 2004). Another study also finds that teacher-led instruction decreased considerably, and individual work increased considerably, over the course of the 1990s (Skolverket, 2004).<sup>28</sup> Extreme changes appeared in the 1990s, which shifted pedagogical methods across the board.

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**26.** This excludes any externalities on native students, which other research finds are mildly negative (Brunello and Rocco, 2013). The total impact of the shifting student composition on PISA scores may thus be larger.

**27.** Since exactly the same background variables are not available in TIMSS, the comparison figures for both PISA and TIMSS are based on a definition of natives that includes both parents' birth countries, but ignores the language spoken at home (Heller Sahlgren, 2015a; NCES, 2015). There is also more uncertainty in the TIMSS estimates, since the questions regarding these background variables have changed slightly over time.

**28.** For a longer discussion of the rise of individual work in Sweden, see Carlgren et al. (2006).

**Figure 13: Immigration and Sweden's average PISA results**

Source: Heller Sahlgren, 2015b.

In practice, this meant a considerable transfer of responsibility from teachers to students. The “own work” method developed spontaneously in the 1980s to allow students to progress at their own pace in classes where student ability varied, and to enable teachers to focus on those in most need of help rather than to monitor all students. However, it was not implemented en masse until the 1990s. The pedagogical technique meant that:

The individual students plan, carry through and evaluate their own work. In contrast to the teachers deciding on the same assignment for all, students now plan their own individual assignments ... During ‘own work’ the pupils work according to their own individual plans, not the teachers’ decisions about what and when things have to be done ... In ‘own work’ the pupils have individual timetables where they plan for each subject one or two weeks ahead. After that, they evaluate their own work and make up new plans. They are, so to say, monitoring themselves. (Carlgren, 2006: 306)

Yet, given the regulations discussed in Section 4.3.3, this radical change is not too surprising. Indeed, the increase in student-led methods partly appears to have been a consequence of the language in the 1994 national curriculum, which increased the emphasis on student influence and responsibility (Björklund et al., 2010; Carlgren et al., 2006). And, of course, similar language had already emerged in the Education Law in 1991 (Government Proposition 1990/91: 115). According to the National Board of Education, the new language helped reduce teachers’ roles to the extent that “[s]tudents

have to rely on their own ability to search for knowledge and reach the goals” (Skolverket, 2009: 28). Overall, therefore, changes to the education law and the new national curriculum guidelines appear to have increased individualization in Swedish education as intended.

This is important since a large body of research suggests that individualized and unstructured teaching methods are bad for cognitive achievement, and, vice versa, that structured teacher methods are preferred (e.g., Bietenback, 2014; Haeck, Lefebvre, and Merrigan, 2014; Hattie, 2009; Lavy, 2015; Machin and McNally, 2008; Schwerdt and Wuppermann, 2011).

The rise of progressive pedagogical methods also appears to have led to negative non-cognitive outcomes in Sweden. Indeed, higher shares of Swedish students arrive late for school than in any other OECD country, and the disciplinary climate is also worse than in the OECD on average. Furthermore, students in Sweden appear to have comparatively low levels of perseverance (OECD, 2014). Indeed, there is some evidence to suggest that unstructured teaching methods do in fact generate worse behavioural outcomes (Haeck, Lefebvre, and Merrigan, 2014). This indicates that the methods that increased radically in Swedish schools during the 1990s may also have harmed non-cognitive skills and behaviour, which may in turn be linked to the decreasing performance.

The same is true of the progressive educational culture in general, discussed in Section 4. Randomized research indicates that American charter schools using the “No Excuses” paradigm, which in contrast to progressive methods is characterized by strict discipline and high expectations, often has large positive effects on achievement (e.g. Abdulkadiroğlu, Angrist, Dynarski, et al., 2011; Abdulkadiroğlu, Angrist, Hull, et al., 2014; Angrist, Pathak, and Walters, 2013; Dobbie and Fryer, 2011). While the external validity of these findings beyond disadvantaged students is debatable, the studies provide further evidence against the progressive ideals.

Interestingly, so does the experience of Finland, which jumped on the progressive bandwagon comparatively late. For a long time, the Finnish education system was hierarchical and traditional in both structures and pedagogy. However, this has been changing in the past decades as the country’s education policy has become more aligned with its neighbours’ progressive ideals—and this is also likely one of several reasons why its results have been decreasing recently (Heller Sahlgren, 2015e).

The fact that progressive education appears harmful for student achievement is unsurprising considering evidence in psychology and brain research. Indeed, it turns out that the theoretical reasons in favour of progressive methods ignore how children’s brains and minds function (Christodoulou, 2014; Ingvar and Eldh, 2014). A probable explanation for the mismatch between rigorous evidence and pedagogical theory is that education research has for a long time been characterized by poor methodology (Oakley et al., 2005).

This has prevented any serious evaluation of the pedagogical methods that have been advanced.

Certainly, there have been cultural changes that may explain worse behaviour and cognitive achievement as well as the moves toward progressive education. Post-industrialization appears to be connected to cultural shifts that lead to decreasing efforts among students (Heller Sahlgren, 2015e), although it is impossible to quantify their contribution to the Swedish decline. Regardless, given the evidence, the new methods are likely to have had an independent harmful effect on Sweden's results in international tests.

Overall, therefore, the positive effects of growing independent-school competition in times of decreasing overall performance in international tests can be reconciled by the fact that there have been other changes occurring at the same time. For example, immigration can explain about a third of the fall in PISA, while progressive pedagogical techniques—which research suggests decrease performance—have increased considerably in use. In effect, the evidence suggests that Sweden would have fallen even faster in international tests without increasing independent-school competition.



## 6. Lessons from Sweden

What, then, are the main lessons from the Swedish voucher program and its regulations? There are general lessons discussed throughout the paper, but this section highlights the more important ones.

### 6.1 Parity of public funding

An important lesson from the Swedish system is that parity of public funding is important for increasing access to independent schools. To ensure healthy incentives to compete by raising quality, it is important to maintain a level playing field between the government and private sectors. As Lewis and Patrinos argue, mature school choice systems “must fund equally or close to parity” (2011: 7). In Sweden, it is conspicuous that independent school enrolment only began increasing significantly once official parity of funding was achieved. Even so, parity has been and is difficult to achieve in practice. Capital expenditures further distort this parity as none is awarded to independent schools.

The main lesson for other countries is that funding parity is difficult to achieve and that 100 percent of what is allotted on average for local government school students approaches parity, but still does not achieve it. Official full operational funding is thus not an unreasonable aspiration for jurisdictions to consider.

### 6.2 A depoliticized approval process

Another important feature of Sweden’s system is that the approval process for new independent schools is, relatively speaking, depoliticized. The process is handled by a government agency that cannot deny schools funding provided that they meet the minimum requirements stipulated by the government. The complaint mechanism enabling municipalities to voice their opposition is, however, problematic.

To generate a functioning education market, it is crucial that there is a sufficient supply-side dynamic among independent schools (Hoxby, 2006). Actors must be able to enter the market with relative ease to produce

a credible competitive threat for existing schools. As Dearden and Vignoles argue, “freedom of entry and exit is required if parents are going to have genuine choice.” (2011: 179). To obtain freedom of entry, in turn, it is thus necessary to ensure a depoliticized approval process.

It is important to learn from Sweden’s mistakes in this sense: enabling municipalities that are threatened by competition to affect the approval process, albeit indirectly, has been unhelpful for maintaining competition neutrality.

### 6.3 Ownership neutrality

Another related aspect of the Swedish system that is important to learn from is its neutrality with respect to ownership structures. It is not surprising that profit-making organizations have been important for generating higher independent school presence, and thus competition, in Sweden.

For-profit schools have stronger economic incentives to start new schools and capitalize on economies of scale, as well as fewer problems finding up-front capital for new schools and expansions of existing ones. Because of the different incentive structures, for-profit schools may thus be important to succeed in the goal to scale up excellence and crowd out poorly performing schools.

Here, it is important to note the link with funding parity, the lack of which may be an important obstacle for profit-making operators, especially since, in Sweden, they tend to focus on more disadvantaged children compared with non-profit independent schools. Indeed, the share of for-profit education companies only began growing seriously in Sweden after official funding parity was introduced.

Overall, therefore, for-profit companies should be recognised as legitimate providers of independent schools and should qualify equally for per-student government funding.

### 6.4 Avoid onerous curriculum and input regulations

Restrictive curriculum requirements placed on schools appear to have perpetuated poor innovation throughout the Swedish education system, and are likely an important reason behind the country’s fall in international tests. An important lesson is thus not to overburden independent schools with such requirements.

This does not mean that schools should be able to teach whatever they want. There are positive externalities of education, which justify some learning requirements. Given the difficulties in knowing how such positive externalities are produced, however, such regulations must be kept to a minimum. Broad rules are thus preferable to detailed input restrictions.

Additional restrictive input regulation must be avoided. In Sweden, teacher certification is now mandatory despite little evidence that specific pedagogical training and teacher certification generate higher student achievement. Instead, such regulations make it difficult for schools to compete by hiring diverse professionals, and it also ensures a monopoly of pedagogical training.

Alternatively, it is preferable to state minimum requirements, for example that the overall level of education should be equivalent to the goals in the public school curriculum. Schools could then be allowed to choose or design their own curricula. It would be up to independent schools that apply for public funding to show that the level of education on offer is equivalent in terms of quality to what the public school curriculum stipulates.

## 6.5 Ensure good information and output accountability in the system

An important problem in the Swedish education market has been the lack of good information on school effectiveness. This is a problem for both the government and parents, since it means that it is difficult to separate good schools from schools that merely enrol highly performing students (or merely decide to give their students good grades). This, in turn, may generate less pressure to improve academic achievement than otherwise would be the case.

The lack of information is a problem in its own right from which other countries should learn. Ideally, some form of value-added measures should be produced and disseminated. Such measures have been shown to capture schools' and teachers' effectiveness at raising student performance (e.g., Bacher-Hicks, Kane, and Staiger, 2014; Chetty, Friedman, and Rockoff, 2014; Deming, 2014).<sup>29</sup> Rather than detailing input requirements, it is preferable to require schools to publish output measures in terms of academic achievement, which could then be constructed to generate value-added measures at the school level. Since there is evidence showing that schools are differentially effective for students with different prior ability (Dearden, Micklewright, and Vignoles, 2011), it would be preferable that information is presented in a way that takes this into account.<sup>30</sup>

29. Angrist, Hull, and Walters (2015) find that value-added models do not always measure all schools' effectiveness, but nevertheless that the average predictive power is high and that policy decisions based on such models generate substantial achievement gains.

30. There are certainly problems with some value-added measures, including measurement error, that in some settings make them somewhat unreliable for predicting future performance (e.g., Leckie and Goldstein, 2009), but the metrics still provide valuable information on school performance. The problems depend on how the measures and underlying tests are constructed.

Naturally, a good education is not only about producing high academic achievement. Parental preferences and satisfaction rates are certainly important, since parents are generally probably the best judges of their children's progress on many "soft" quality criteria, such as happiness and satisfaction (e.g., Neal, 2010). It is also difficult to know exactly how positive externalities from education are best generated, and there is little reason why governments would be better than parents at determining the trade-offs.<sup>31</sup> To be sure, an increasing amount of evidence suggests that cognitive achievement—measured by performance on international tests like PISA and TIMSS—is important for countries' future economic development (e.g., Hanushek and Woessmann, 2015, 2016), but there are likely other aspects of education that are important as well.

However, given the difficulties in identifying academic school effectiveness specifically, it is imperative that parents have access to such information so they can determine these trade-offs. Thus, equipping them with better information on academic school effectiveness would be an improvement for the education market.

## 6.6 Selection practices and/or top-up fees?

Distinct features of Sweden's system are that independent schools have not been able to charge top-up tuition fees or use academic selection. Such features may, however, generate positive benefits. Selection could generate a better match between schools and students as well as allow schools to specialize on different types of students, while top-up fees could produce a price mechanism that gives signals to education providers about what type of education different families prefer, and gives them incentives to provide that education, and to specialize their provision in different market segments. Without a price mechanism to clear demand, the result is often queues and the inability among producers to find out what consumers desire.

At the same time, theory and empirical research indicates that these mechanisms do not always work well in education. We therefore believe the effects of top-up and selection bans in Sweden are ambiguous and refrain from drawing strong lessons for other countries in these respects.

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31. Some research suggests that parents first consider academic performance and then turn their attention to student satisfaction and wellbeing (see Jacob and Lefgren, 2007), which are also likely to carry positive externalities.

## Conclusion

Since Sweden embarked on its voucher reform, its independent schooling market has developed and gradually matured to the point where one in seven elementary and lower-secondary students attends an independent school in Sweden and one in four upper-secondary students attends an independent school. This paper has discussed the system and its relative benefits and problems in order to draw lessons for other countries. Overall, the system has generated some improvements in achievement and appears to have cushioned Sweden's fall in international tests, rather than spurring it, while having no effects on costs.

Given all of the highlighted problems in the regulatory framework, the fact that independent schools have had any positive effects at all are quite remarkable. Indeed, because of the significant system design flaws that plague the Swedish education market, it would not have been surprising if independent schools had had negative effects, which critics often argue. Yet the research does not support their claims.

At the same time, it is also increasingly evident that Swedish politicians had no clear plan to produce a functioning education market when they introduced the voucher reform in the early 1990s. The resulting mishmash of decentralization and centralization that followed the swath of reforms that were carried out could never target quality deficiencies more than marginally. This has also made it more difficult to evaluate their effects in various respects, and yet there is much to learn from Sweden's experience.

There are several important lessons from Sweden's independent schools market, both in terms of the policies to implement and policies to avoid. It is important to ensure a depoliticized approval process in which the branches or levels of government that inspect and approve school applications are different from those that fund them. It is important to approach parity in funding as much as possible and to maintain neutral ownership requirements. This includes permitting for-profit education providers. It is also important to avoid heavily detailed input and curriculum regulation, but at the same time ensure the availability of good output accountability and information metrics. While top-up fees and the opportunity to select students could offer benefits,

the potential problems that that they may bring for generating healthy competitive incentives must be considered.

In all, Sweden offers lessons for other jurisdictions on the funding and regulation of independent schools that can produce a functioning education market with strong incentives among schools, independent and public, to enhance competition and raise education quality for all.

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