





The Profit Motive in the Classroom—Friend or Foe?

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ABSTRACT

This study critically evaluates the Swedish school system's shift toward marketization since the early 1990s, noting that the anticipated educational gains from increased competition and innovation have not materialized significantly. We attribute major barriers to innovation in the school quasi-market to systemic institutional flaws. These include a national curriculum that lacks a clear mission for knowledge promotion, a grading system that undermines reliable measures of student knowledge, and insufficient, complicated information obstructing user choice. If these problems were remedied, the Swedish school system could harness the potential benefits of competition and the profit motive, ushering in substantial educational

KEYWORDS

For-profit schools; innovation; marketized education; quasi-markets; school choice

Introduction

In recent years, several U.S. states have enacted universal school choice. That such reforms to educational systems are contentious (Doncel et al., 2012; Kelman, 2007; Wolf et al., 2013) is hardly surprising. After all, a society's way of educating its children says a lot about its priorities, i.e., "whether we love our children enough not to expel them from our world and leave them to their own devices, nor to strike from their hands their chance of undertaking something new, something unforeseen by us, but to prepare them in advance for the task of renewing a common world" (Arendt, 1954, p. 193). In this article, we argue that school choice is a potentially potent mechanism for innovation in the school system. However, school choice per se is not sufficient. The Swedish school choice experience is illuminating in this regard, and our suggestions for how to improve it should be relevant for policymakers and practitioners striving to create equitable and well-performing school systems elsewhere.

To mitigate the trend toward increased relative costs and stimulate qualityenhancing innovation, many countries have established quasi-markets to govern welfare service provision. In such markets, the state is "primarily

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a funder, purchasing services from a variety of private, public and voluntary providers, in competition with each other" (Ferlie, 1992, p. 81; see also Jordahl & Öhrvall, 2013). The hope is to unleash creativity, efficiency, and innovation through competition between public and private providers without jeopardizing user equality.

Such privatization has been an important part of Sweden's movement in a market-oriented direction especially in education: No other country has marketized children's education (preschool, elementary, and secondary school) so systematically and to the same extent as Sweden did three decades ago (Blomqvist, 2004; Klitgaard, 2008). It is clear from the proposal (Government Bill 1991/92:95) that was passed by the parliament that the government that instituted the reform strongly believed in its beneficial effects: "The right and the option to choose among schools is an important instrument to vitalize schools. . . . [It] will benefit the entire school system. . . . Greater freedom to choose and greater opportunities for schools to develop distinct profiles result in stronger incentives for cost efficiency."

The theoretical reasons why quasi-markets could deliver better welfare services are partly about competition and partly about the organizational form. First, competition between providers can force them to improve (Le Grand, 2009). Second, while there are enticing accounts of public bureaucracies successfully encouraging innovation (Kelman, 2021), there is general agreement that private ownership provide stronger incentives for efficiency, cost savings, and innovative activities (Shleifer, 1998). Yet, the profit motive's high-powered incentives can be a double-edged sword in the welfare sector, a fact that scholars operating from different perspectives in the field of New Institutional Economics (NIE) recognize (Bowles, 2016; Hart et al., 1997; Shleifer, 1998). Welfare services such as education are credence (or trust) goods whose value consumers cannot fully assess on their own (Dulleck & Kerschbamer, 2006), making them particularly susceptible to producer manipulation.

Since the early 1990s, a freedom-of-choice quasi-market has governed the school sector in Sweden. Providers can be public or private for-profit or nonprofit (Badelt & Weiss, 1990). The Swedish school sector relies more on for-profit providers than other countries. Figure 1 shows that growth remains strong in the proportion of students attending independent schools, especially independent secondary schools. 16.2% of elementary school students and 31.3% of secondary school students attended a private independent school in the 2022/23 school year. Moreover, three-quarters of independent school students attended a for-profit school.¹

The purpose of this paper is to explore whether competition and the existence of profit-seeking actors can improve educational quality. We analyze the importance of the profit motive and competition in the Swedish school system, focusing on whether and how this highly marketized system can become more innovative.

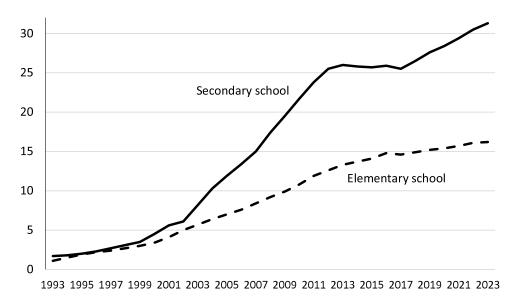


Figure 1. Share of students in independent schools, 1993-2023%). Source: Swedish National Agency for Education.

Our study uses a framework distilled from NIE (see Alston, 2008; Eggertsson, 2013; cf.; Coase, 1984), which we believe to be particularly useful when analyzing such a complex issue. NIE extends traditional economic analysis by incorporating rules, norms, and conventions that shape human interaction into the analysis of economic processes and outcomes. Importantly, we adhere to NIE's focus on individual agency, assuming that individuals are rational actors seeking to maximize their utility within the constraints imposed by institutions. That said, it is always a judgment call to choose which institutions to focus on; this choice requires deep preexisting knowledge about the phenomenon under study, and a school system is no exception.

One can scarcely overemphasize the importance of competition and the profit motive for innovation to unfold and disseminate in regular markets (Baumol, 2010; Holcombe, 2013), where innovations are commonly defined as a new good or service, a new method of production, or a new organizing method (OECD, 2010; Schumpeter, 1934). These kinds of innovations are deemed to be "the only way for the most developed countries to ensure long-term productivity growth" (N. Bloom et al., 2019, p. 163). A reasonable conjecture is that the potential for innovative gains in welfare services should be immense, though far from given (Torfing & Triantafillou, 2016, p. 10). This will only transpire if the institutional setup is appropriately designed.

According to Merrifield (2001), increased reliance on markets was the common denominator of successful 20th century economic reforms. Yet in the case of Swedish school quasi-markets, the evidence to date (see, e.g., Blix & Jordahl, 2021, pp. 135–136) indicates that the education quasi-market has offered relatively modest gains in terms of generating managerial or even classroom level innovations that promote students' knowledge acquisition in a cost-efficient manner. Here, when we discuss desirable student knowledge, we intentionally subscribe to a classical view of knowledge which considers traditional subject delineations and fact-based learning as the best way to build the knowledge needed to solve problems, think critically, and develop one's creativity (Kirschner et al., 2006; Tricot & Sweller, 2014; Willingham, 2010).

Drawing on a wealth of secondary sources including journal articles, governmental reports, books, and literary reviews, we assess this empirical evidence through the aforementioned NIE lens. This process allows us to trace the obstacles to knowledge-enhancing innovation in the Swedish school system to interconnected institutional flaws that give rise to a significant epistemic problem. Many of these flaws in the system appeared around the time of the freedom-of-choice reform, and their effect is to put users and providers in the school quasi-market in a disadvantaged epistemic position compared to actors in a regular market setting (Haeffele & Storr, 2019). This limits the beneficial effects one can expect from competition and the presence of profit-driven actors.

First, the view of knowledge, institutionalized in national curricula, does not entrust teachers with a real, knowledge-promoting mission. Second, the design of the grading system makes grades unreliable measures of students' knowledge, making it difficult for schools to compete and for users to choose along this dimension. Third, information is insufficient and overly complicated, meaning user choice is less informed than it should be, a fact that likely disproportionately affects children from disadvantaged backgrounds.

Our analysis suggests that these institutions should be made *more episte-mically conducive*. By this term we have in mind a system that is a) better at creating the right kind of information actors need to make sense of the world, b) better at providing them with this information, and c) better at giving them the incentives they need to construct the type of local knowledge they need to act and make choices (cf. Hayek, 1945).

Background: Sweden and the international evidence

Before addressing the Swedish school case, it is useful to lay out the two basic quasi-market types: the contracting model and the freedom-of-choice model (Blix & Jordahl, 2021).² The contracting model is more "top-down" in nature since the provider is appointed through a procurement procedure in which actors can submit bids, with the winner receiving a time-limited monopoly.

In contrast, the type of freedom-of-choice model that governs the Swedish school market is relatively more "bottom-up" in that users are the ones who choose, equipped as they are with a tax-financed voucher. Here, providers

compete within (rather than for) the market, to which access is relatively free. Providers can generally be either public or private, and private providers may be either for-profit or nonprofit, though some countries and sectors only allow private nonprofits. If a user chooses a private alternative, this implies a more gradual privatization - one user at a time - than in the contracting model. Competition is considered to give providers in the freedom-of-choice model the incentive to constantly improve their operations, as they would otherwise lose the voucher that users bring to a competitor. Crucially, the loss is considered to be unattractive for the profit-driven provider and the selfless provider who wants to use the money to help each user as much as possible (Le Grand, 2009).

A Swedish crisis in education?

The Swedish free-school reform was introduced in 1992-93, transforming public school monopolies into quasi-markets of the freedom-of-choice variety. Students and parents were equipped with a voucher, first equaling 85% and since 1997 100% of the average student cost in their municipality (Government Bill 1995/96:200).3 The chosen school received the voucher, with the market being open to virtually anyone who wanted to run a school either as a for-profit company or in a nonprofit form. Once the voucher was set to 100% of the average student cost, supplementary parental fees were disallowed (though schools could apply for extra resources for students with certain disabilities).4

A couple of years later, the first comparable international tests of student knowledge (PISA and TIMSS) appeared. They implied good news. In the 1995 TIMSS, Swedish eighth grade students ranked best in Europe in science and second in mathematics. Even relatively weak Swedish students did better than weak students elsewhere. Thus, a few years after the quasi-market's introduction, the Swedish school system seemed to deliver good outcomes in terms of both overall quality and equality.

The positive trend did not last. The average Swedish score in TIMSS experienced the largest decline of all participating countries 1995-2011, with the weakest students seeing the greatest fall. PISA results in mathematics and science confirmed the decline while the decline in reading was less pronounced. Paradoxically, average merit ratings rose dramatically during the period. This indicated that the system suffered from widespread grade inflation, i.e., that teachers' average demands that students needed to meet to achieve a certain grade sank over time (M. Henrekson & Wennström, 2022, pp. 64-66; SOU 2020:43).

Since 2015 the decline seems to have halted, yet the recovery has been subject of much debate and seems dubious in light of the most recent PISA results (SOU 2020:43; Swedish National Agency for Education, 2023). Yet, whether the Swedish school system's decline in knowledge happened because of the freedom-of-choice reforms of the 1990s is another matter. The school system changed in other ways during the same period. Holmlund (2020) lists decentralization, new curricula, new grading systems, changed teacher training, stricter entrance requirements to upper secondary school, digitization, and a plethora of state aid to principals. For this reason, Holmlund (p. 6) notes that it is, in principle, "impossible to sort out the reasons behind the fall and rise of Swedish students in the PISA study. Too many changes were implemented more or less simultaneously for it to be possible to isolate direct causal relationships."

In their book on the Swedish welfare marketization, Blix and Jordahl (2021, pp. 135-136) nevertheless venture a cautious interpretation, summarizing the effects of the Swedish school quasi-market as follows:

[T]he introduction of independent schools has increased the productivity of the Swedish school system. This is evident for the compulsory level (with students aged 6 to 15) where competition from independent schools has raised student performance without raising costs. . . . At the upper-secondary level, the evidence is more mixed. Students at independent schools have higher grades and test results and are more likely to graduate on time and to continue to tertiary education. However, when comparing internally and externally graded tests, students of independent upper-secondary schools actually perform worse but benefit more from lenient grading. . . . Finally, it should be stressed that the gains from competition have been relatively modest in size and have not prevented the decline in the PISA ranking.

In these authors' assessment, the free-school reforms probably did not contribute to the Swedish knowledge decline. There is also little to indicate that the result would have been noticeably better if all the changes that Holmlund (2020) enumerates had taken place except for the free-school reform. Indeed, things could have been worse, as suggested by the poor student results in those areas of the country where parents have a low level of education and no independent schools have entered the market (Heller Sahlgren, 2021).

Still, it seems clear that any gains from the Swedish school marketization have, at best, been modest. This lack of progress is noteworthy given that no other country has marketized children's education so systematically and to the same extent. If competition and the presence of actors with high-powered incentives were unambiguously beneficial to the provision of education, one would expect Sweden to have seen more consistent and continuous benefits than any other country. Still, the evidence from other countries with experience from school quasi-markets gives a window into such systems' innovative and educational promise.

International evidence on school quasi-markets, innovation, and results

Theoretically, technology in the classroom can advance student learning by enabling more hours of high-quality, individualized learning (Chatterji, 2018). Unfortunately, the scant evidence on technological classroom innovations that

lead to knowledge-enhancing outcomes is not encouraging (Bulman & Fairlie, 2016). In a Swedish study, Hall et al. (2019) examine the effects of a so-called 1:1-program aiming to make information and communications technology an essential part of education in all subjects. Surveying 26 Swedish municipalities, the authors investigate how pupils who are given a personal laptop or tablet, rather than having more limited computer access, are affected in terms of educational performance. The only demonstrable effects are deeply problematic, as they show that 1:1-programs risk increasing school inequality by worsening math skills and future admission prospects for students with less educated parents.

On the other hand, the use of so-called CAL (computer-assisted learning) software can be compatible with sizable positive learning effects (Biasi et al., 2021). The mixed results highlight that new technical solutions is not a cure-all for promoting knowledge in schools. Also, a key characteristic of educational services is co-production (Aligica et al., 2019; Ostrom & Ostrom, 1991) by teachers and students. New technology risks deteriorating co-production, especially for weak students. This should encourage caution but also sound evaluation strategies. One example is Chatterji and Jones (2016) EDUSTAR platform, which quickly evaluates digital learning activities in the classroom using randomized experiments to ensure safer introduction of knowledgeenhancing technology.

However, new technology is only one type of innovation. An earlier review of the international evidence on school quasi-markets finds that they primarily promote management and marketing innovations (Lubienski, 2009, p. 43). In his more recent overview, Chatterji (2018) discusses the great potential of organizational innovations and the extensive literature on new forms of organization and management in schools. That these kinds of innovations are significant is confirmed by international evidence on the connection between management/school governance and educational results (N. Bloom et al., 2015; for similar results, see, e.g.; Dobbie & Fryer, 2013; Angrist et al., 2013; H. S. Bloom et al., 2020). N. Bloom et al. (2015) show that half the variation in management quality is at the country level - significantly higher than in similar studies regarding other parts of the economy. They conclude that differences in the institutional environment have particularly important effects on the way schools are managed.

In a meta study, Shakeel et al. (2021) evaluate the effects of school choice and school vouchers, focusing on 21 randomized control studies. The meta study suggests that results are better for students in private schools and that voucher systems are cost-efficient even when municipal and private alternatives perform equally well. Cohodes and Parham (2021) review the evidence on U.S. charter schools, which, like Swedish free schools, are publicly funded; about six percent of all American students are currently enrolled in these schools, 12% of which are for-profit entities.⁵ Notably, charter school test



scores are consistently superior in metropolitan areas, particularly for nonwhite students and socioeconomically disadvantaged groups (Angrist et al., 2012; Walters, 2018). Some effects are of such a magnitude that a few years in charter schools for black students would bridge the black-white achievement performance gap (Chabrier et al., 2016).

Successful charter schools often employ a No Excuses Curriculum, an educational model emphasizing high expectations, good behavior, and strong math and reading skills (Thernstrom & Thernstrom, 2004). A meta-analysis of No Excuses schools shows significant learning gains in mathematics and English (Cheng et al., 2017). These schools' intensive tutoring component seems to be the most critical factor behind student success (Chabrier et al., 2016; Dobbie & Fryer, 2013).

Ideally, competition should spur public schools to improve rather than harm them by removing resources or talented students (Epple et al., 2016). In a meta-study of American school choice programs, Jabbar et al. (2022) find a small, positive effect of competition on student test scores, noting that the absence of an adverse effect may mitigate critics' concerns that competition will harm students who are "left behind."

Cohodes and Parham (2021) conclude that the competitive effect depends on the quality of the independent alternatives. When high-performing charter schools appear, public alternatives see improvements in math and reading outcomes, whereas poor-performing charter schools have negligible effects. They emphasize that the gains would likely be greater if other schools adopted charter schools' successful educational strategies.

The Swedish school quasi-market: an innovative promise?

Overall, the evidence suggests that competition may very well result in knowledge-enhancing innovation at both public and independent schools, but that this does not happen automatically. Such a conclusion is in line with Blix and Jordahl's (2021) aforementioned summary of the Swedish free-school reform.

Entry into the Swedish school market was practically unregulated for a long time. There were no competence requirements for owners or restrictions on schools in the form of incorporated firms to pay dividends or to resell shares. The only limitation was a ban on market-skimming by admitting students based on academic ability or socio-economic background. Only in 2010 were independent schools forced to follow the national curriculum, and national standardized tests did not become mandatory until 2013 (M. Henrekson & Wennström, 2022). Regulations have tightened since then, e.g., through more stringent demands to be allowed to run an independent school (regarding experience, insight, financial conditions, and suitability) (Government Bill 2017/18:158). Recently, the state was given increased opportunities to close independent schools (Swedish Law, 2010). Will these regulatory changes be enough?

The crux of the matter is that while freedom-of-choice quasi-markets may have obvious advantages over public monopolies, they fall short relative to regular markets. The "standard" literature on the benefits of competition (Le Grand, 2009) and profit-driven private actors (Shleifer, 1998) to welfare provision makes clear that these benefits only materialize when other conditions are met. A more evolutionary perspective on innovation highlights further insights on how quasi-markets come up short relative to regular markets. Thus, we posit that while competition and the profit-motive may be necessary and largely sufficient conditions to enable innovation in regular markets, they are necessary but far from sufficient to enable innovation in quasi-markets.

Necessary and sufficient conditions for innovation in quasi markets

The aforementioned standard economics account of quasi-markets is a highly valuable starting point for thinking about the matter and elucidate some of the key ways in which such markets differ from regular markets. However, this account falls somewhat short when it comes to understanding why competition and the profit-motive should be treated as necessary but not sufficient conditions for quasi-market innovation. This is why we complement the standard analysis with an evolutionary perspective on innovation. This perspective can also broadly be said to belong to the NIE tradition but is particularly helpful in shedding light on what additional conditions need to be in place for quasimarkets to be innovative. These additional conditions make the system better at creating the information actors need to make sense of the world, better at providing them with this information, and better at giving actors the incentives they need to construct the knowledge necessary for action.

Necessary conditions: private ownership and competition

Shleifer (1998) discusses the general conditions for private and public ownership, focusing on two investment incentives: those that reduce costs and those that improve quality or lead to innovation. Under public ownership, incentives to make any of these investments are weak since a public servant on fixed pay has no share in the returns on the investments. As the residual claimant, a private contractor has a much stronger incentive to implement change. Yet, these high-powered incentives are unlikely to be a good idea when cost reductions negatively affect the kind of quality that contracts cannot cover; the lower the degree of contractibility of the procured service, the greater the risk of negative effects on quality if a private contractor is engaged (Andersson et al., 2019). Advocates of government ownership often invoke variants of this argument, but Shleifer emphasizes that private ownership can still have a role to play, provided one of three criteria is at hand. All criteria can be classified as



epistemic; they are about how actors make sense of the world and construct the local knowledge necessary for purposeful action. Moreover, at least in theory, institutional changes can influence all three criteria.

Shleifer's first criterion states that private ownership is likely preferable in sectors where innovations play an important role. For-profit providers' stronger innovation incentives can then compensate for adverse quality effects from cost reductions. Yet, it is an open question whether sectors such as schools are breeding grounds for innovation. This depends both on the form of ownership and on details in the model used, not least what kind of information the parties involved have access to when acting within the system.

The second criterion states that freedom-of-choice reduces the risk of quality being negatively affected. Here, his reasoning meets that of Le Grand, who argues that (Le Grand, 2009, p. 14)

in most situations, services whose delivery systems incorporate substantial elements of choice and competition have the best prospect of delivering a good local service. Properly designed, such systems will deliver services that are of a higher quality, more responsive and more efficient than ones that rely primarily upon trust, command-and-control or voice. Moreover—contrary to much popular and academic belief—they will also be more equitable, or socially just.

Thus, Le Grand prefers a voucher-based freedom-of-choice quasi-market. The voucher's equalization of purchasing is what makes it possible to avoid the injustices that would occur if welfare service provision were left to regular markets. Moreover, he argues that competition for users (and for their resources) will make providers strive for innovation and better quality, and that this holds irrespective of whether providers are self-interested, altruistic, or somewhere in between.

That said, freedom-of-choice is only likely to produce genuine benefits if real, practicable, and substantive choices are available to users. Moreover, even if alternatives are available, ranking them can be challenging. Shleifer's third criterion addresses this information issue, as it deals with the value of reputational mechanisms. Private contractors who must safeguard their reputation will be less inclined to engage in cost-cutting that degrades non-contractible quality. This criterion can be influenced, e.g., by introducing a rating system modeled on those hotels and taxi services use.

In essence, Shleifer argues that public ownership is preferable *only* when the following four conditions hold simultaneously: (i) there is significant potential for cost savings resulting in reductions in (non-contractible) quality; (ii) innovation plays a relatively small role; (iii) competition is weak and consumer choice inefficient; and (iv) reputation mechanisms are weak. In Shleifer's words (Shleifer, 1998, p. 140), the list gives "a fair sense of how tenuous, in general, is the normative case for government production."



While this line of reasoning suggests that a quasi-market should often be superior to a government monopoly, it says little about how a quasi-market should fare innovation-wise relative to a regular market. The comparison thus seems incomplete. We will shed light on this issue by adopting an evolutionary perspective in comparing regular markets and quasi-markets. Such a perspective also makes it easier to appreciate that the criteria Shleifer (1998) lists as favoring or disfavoring private production are far from written in stone.

Evolutionary perspective: why the two conditions are not sufficient

The importance of competition and profit-seeking is evident in the *generation*, selection, and replication of innovations in regular markets. When an entrepreneur introduces an innovation, it will generate a profit if customers demand it (at a price exceeding the price that cover all costs, including a normal risk-adjusted rate of return). Pure profit only pertains to the entrepreneurial rent, the part of accounting profit that exceeds the market's riskadjusted rate of return (M. Henrekson & Stenkula, 2017). Spurred by the appearance of an entrepreneurial rent/profit, replicators challenge the entrepreneur through imitation and further improvement. Over time, this erodes the entrepreneurial rent and the value of being first on the scene. The innovation's benefits do not disappear but shift into a consumer surplus, the size of which can scarcely be overstated (Nordhaus, 2005). Most of the surplus goes to consumers in the form of lower prices and higher quality. Thus, competition and the possibility of making profits serve a crucial epistemic role, conveying useful information and the local knowledge that contributes to efficient resource use.

While misjudgments occur all the time as actors learn, regular markets are likely to be better placed epistemically than quasi-markets, even when these markets include both competition and a sizable proportion of for-profit actors.

Regarding the generation of innovations, quasi-markets are necessarily conservative relative to free markets. For example, to safeguard quality and equitability, public officials must declare what the providers are obliged to provide as a service and the content of that service. This limits innovative opportunities by closing off (hitherto unknown) paths to discovering and developing valuable knowledge. This is not a minor problem, as attested by the fact that most product and distribution markets are virtually unrecognizable compared to a few decades ago. Thus, the specification of the obligation must be sufficiently broad to offer users and providers meaningful choice, yet sufficiently concrete and meaningful so that competition and choice - and therefore efforts at improvements – become focused on the most important dimensions.

In the case of schools, national curricula and similar documents are the most obvious place to specify the kind of knowledge to be imparted to students. The establishment of the view of knowledge should put the onus of competition along this margin, while allowing for competition and choice along other margins too, e.g., flexibility and safety. Whether these additional margins positively or negatively affect students' knowledge development depends on whether they shift focus and resources away from effective knowledge transfer. Some are obviously complementary to that objective: While it is possible to imagine that parents will prefer schools with lower academic ambitions that offer a safe and pleasant environment, the success of the No Excuses model suggest that a minimum of safety and well-being is a prerequisite for knowledge-based learning.

Replication can (and should) play a significant role for innovation in freedom-of-choice quasi-markets. The main reason why competition should have fortuitous and disciplining effects is that service providers will strive to imitate and surpass whoever discovers a new clever way to attract users and their vouchers. Yet, an element of competition that quasi-markets mostly lack is variable prices. This absence is a key "egalitarian" motivation behind quasimarkets as purchasing power should be equal (Le Grand, 2009), with providers often receiving a fixed remuneration "per unit." Therefore, providers cannot use higher prices to signal higher quality, so they usually only compete in terms of quality. This further emphasizes the need to focus competition along the most relevant margin, i.e., students' knowledge development, suppressing the temptation to attract users by devoting parts of the fixed student voucher to amenities that are irrelevant to this goal.

Still, a fixed price system is likely always epistemically inferior to a free price system because it inhibits economic coordination via the signals that changing prices send (Hayek, 1945), and likely seriously limits the gains one can hope to make from a school choice reform (Merrifield & Gray, 2023). By dampening knowledge signals, fixed prices limit quasi-markets' ability to generate and disseminate innovations whose benefits primarily accrue to the users (Haeffele & Storr, 2019). While queues are usually seen as a symptom of inefficiency, they in fact convey some of the localized knowledge that prices convey in regular markets in systems with fixed purchasing power. A long queue to a school signals high quality and is a key decision basis for schools and their investors considering expansion, overcoming some of the epistemic disadvantage.

Moreover, replication rests on entry and expansion (and exits and contraction), which underscores the importance of profits. According to Le Grand (2009) the competition for users' resources in a quasi-market provides good incentives for both selfish and unselfish actors to improve. A contrasting observation is that (too many) soft-powered incentives risk hampering quasimarkets' functioning. For example, while profit-seeking companies should reasonably expand their operations when demand increases, other actors may not react that way. Long-suffering municipal schools may even appreciate a reduced demand, and foundations and nonprofit providers do not follow any easily defined profit logic (Chatterji, 2018; Hoxby, 2003). And even if the desire to expand existed, nonprofits' difficulties in raising capital could make further expansion impossible.

One interpretation of the argument is that quasi-markets would function better the greater the presence of for-profit actors because the mechanisms enabling new establishments and closures, expansion, and contraction would be more effective. However, the interaction between actors may be what matters the most. While nonprofits may lack strong driving forces to grow, they can act as role models and convey valuable knowledge about what works, inspiring for-profit actors to spread their ideas and methods through imitation. Arguably, nonprofits also wish to defend their "market position," i.e., at least maintain their current level of operations. Moreover, as Haeffele and Storr (2019) point out, nonprofit private actors may still have "the ability to coordinate plans and bring about social progress in ways that governments cannot" and "mechanisms available to nonprofits - such as reputation and competition for donors, volunteers, and customers - can and do enable knowledge discovery and social learning, and therefore, can direct nonprofits toward better coordination over time." Likewise, government entities forced to compete with private actors in a quasi-market should be better placed epistemically than monopoly providers.

The need for appropriate *selection* mechanisms remains when we leave free markets, but selection usually differs depending on the choice of quasi-market model. Selection in a procurement model is carried out by a civil servant who awards a contract to a provider. In the freedom-of-choice model, users choose in a way that is more reminiscent of selection in regular markets. The freedomof-choice model thus appears more attractive precisely because its experiments are carried out on a smaller scale. Returning to the epistemic point above, we note that when a single (public or private) actor "owns" the local market, there are few points of comparison and users are unable to vote with their feet. Thus, even knowing whether outcomes are good or bad may be difficult.

An additional wrinkle to the selection-related problem when it comes to user choice in schools is that it is someone other than the one who benefits from the service (the child) who chooses (parents). The (mostly psychological) costs of changing schools after the fact are also high, highlighting the need for a system that generates the kind of information users need to anticipate and lower the risk of making a bad choice.

In summary, we have identified several ways quasi-markets come up short relative to regular markets. Each problem will likely worsen in quasimarkets where profits are banned or restricted, or entry is severely limited, underscoring the importance of competition and the profit-motive as



necessary conditions if innovation is to come about. Yet, the profit motive is far from uncomplicated in quasi-markets, a fact which in no small measure relates to epistemic issues. This, as we shall see, is also the case in the school market.

Diagnosis: sufficient conditions for innovation in Swedish schools?

While Swedes view for-profit welfare providers with skepticism, they strongly support freedom of choice in all welfare areas, schools included (Blix & Jordahl, 2021, p. 176). A key issue is what factors this choice is based on, and what it should be based on. Grades should be an obvious measure of schools' ability to impart knowledge, and extensive research from various countries shows that families value school average grades or test scores (e.g., Morris, 2011; Parker et al., 2015). An illustration is the considerable differences in housing prices in comparable areas, except that one area provides access to a "better" school than the other in polities without school choice. The absence of school choice turns the issue into a choice of place of residence (Black, 1999; Fack & Grenet, 2010).

Yet, the development described in section 2 casts considerable doubt on the Swedish school market's ability to produce reliable grades under the current framework. In fact, N. Bloom et al. (2015) found that the relationship between school management quality and student performance was the strongest in England, where the most reliable measures of educational quality are available but much weaker in Sweden, where student grades are unreliable. The discrepancy between the actual knowledge level and knowledge indicators is related to how these indicators are "created," exposing a major systemic flaw. This is the epistemic problem in the Swedish school quasi-market in a nutshell, and it is no hyperbole to describe it as the foremost obstacle to realizing knowledge-enhancing innovation. We can trace it back to two changes that coincided with the introduction of the freedom-of-choice model in the early 1990s: an alteration of the view of knowledge, which profoundly affected the national curriculum and pedagogical practice, and the introduction of a new grading system. Below, we describe these developments in turn.

Diagnosis: grading

In 1994, Sweden transitioned from a relative grading system to a goal- and criterion-based one. The new system meant (at least on paper) that students were not compared with their peers, only assessed based on whether they achieved the teaching goals (Nordin et al., 2019). At the same time, grading



was decentralized to the teachers so that they were allowed to set grades without external oversight (Wennström, 2020) and the grading criteria were made highly subjective and open to interpretation (Enkvist, 2023). In addition, the pressure on teachers to give higher grades than justified increased, not least because of the school choice competition (SOU 2020:43). Together, these factors result in upward pressure on merit ratings (Vlachos, 2019).

Grades are the most important selection criterion for further study in Sweden. While a well-designed grading system has proven to be a better instrument for admission to higher education than standardized admissions tests (Silva et al., 2020), a flawed system creates problems. A desire among parents to choose a school where their children learn as much as possible must coexist with the desire to choose a school that gives the impression of providing the best education possible by handing out high grades. Conversely, while most teachers likely wish to give students a good education, the pressure on teachers - from students, parents, principals, and bureaucrats - to give high grades will be strong and greater than under a relative grading system.

There are also signs that school competition combined with decentralized grading drives grade inflation (Edmark & Persson, 2021; Holmlund et al., 2014; Nordin et al., 2019). The school's organizational form also seems to be a (minor) culprit in the drama, as independent schools appear more generous with grades than municipal schools (Ernestam, 2018; Tyrefors & Vlachos, 2017; Vlachos, 2019). However, the differences are small, and municipal elementary schools seem well on their way to becoming as generous as independent elementary schools. Even more remarkable are the considerable discrepancies between grades and national test results at certain schools, regardless of the organizational form (Swedish National Agency for Education, 2019). At one school, students received a mathematics grade that was, on average, a full two grade levels higher than their grade on the national test – in a system with a total of six grade levels (A – F). In over half of Swedish schools, at least 50% of the students were moved up one level.

The discrepancies demonstrate that schools use (lenient) grading as a means of competition, which helps explain why the gains from the Swedish school choice system have been quite moderate and have not counteracted the knowledge decline. It is hardly surprising that a system enabling high grades for low effort is not knowledge-enhancing (Betts & Grogger, 2003; Figlio & Lucas, 2004). Competition may create incentives for innovation, but since the system does not reward knowledge, schools will not innovate in the field of knowledge. The creative potential is channeled in the wrong direction. This situation would likely improve if Sweden followed most European countries in tying (parts of) the final grade to the results of anonymized national tests (Blix & Jordahl, 2021). However, the grading problem did not arise in a vacuum.



Diagnosis: the view of knowledge

The grading problem is likely a symptom of a worse problem still: the postmodern social constructivist view of knowledge that was prescribed in the national curriculum at the same time. While this view had been gaining ground for decades before the 1990s, it peaked in the 1994 national curriculum (Enkvist, 2023; M. Henrekson & Wennström, 2022; Wållgren, 2017). In practice, this approach led to a shift away from viewing the teacher as the central figure in education toward a model where students lead their own learning. It favored blending or disrupting traditional subject boundaries within curriculums and placed a strong focus on cultivating skills, especially critical thinking, which are seen as generic and largely decoupled from domain-specific knowledge.

According to the supplanted classical view, traditional subject delineations and fact-based learning are the best way to build the knowledge needed to solve problems, think critically, and develop one's creativity (Kirschner et al., 2006; Tricot & Sweller, 2014; Willingham, 2010). Creativity, problem-solving, and critical thinking are considered (important) side effects when studying subjects at a successively more advanced level. In contrast, the new view asserts that knowledge is created in a social context. By extension, this means that there is no objective knowledge. Therefore, to fully understand something, each student must construct their own knowledge based on their own experiences, rather than assimilating previously accumulated and transferred knowledge imparted by the teacher through direct instruction and subsequent repetition and practice to consolidate the knowledge in question. The emphasis is on discussing and questioning the studied subject while learning the basics of that subject. A subject is not thought to consist of a core that students must acquire, nor is imparting knowledge a prioritized task for teachers (Enkvist, 2023; Swedish National Agency for Education, 1994). The view's adherents claim that desired skills such as creativity, problem-solving, and critical thinking can be acquired through direct training decoupled from a systematic, knowledge-based curriculum.6

M. Henrekson and Wennström (2023) offer a detailed exposition of the difference between the classical view of knowledge and the postmodern social constructivist view, and explain why the view of knowledge is the most crucial institution of any school system.⁷ By undermining any claim to a common foundation of knowledge, the postmodern view serves as an immense epistemic obstacle. The implication is that any attempt to remedy the grading problem (e.g., by introducing standardized tests that set a ceiling for average grades at the group level) is likely to fail, or at least have limited success, unless the view of knowledge is changed simultaneously. That said, experience from other countries returning to a classical view, notably Portugal and Germany in the early 2000s, suggests that positive effects would quickly materialize (Crato, 2020; Knodel et al., 2013).



Diagnosis: poor provision of information

Whereas we have exposed flaws in the way in which the system presently *creates* the kind of information actors need, another part of the epistemic dilemma is whether and how relevant information reaches actors. The current system leaves a great deal to be desired. Currently, queue time is the most important admission criterion and there is virtually no restriction regarding when you can place your child in line to a school. Though valuable for epistemic reasons as a guide to user choice and expansion decisions, this admission criterion has the unintended effect that many parents place their children in line to popular schools on the very day they are born. This substantially limits the choice set of parents who are less far-sighted or move to another city.

Rather than being provided with this information, users must actively look for it and the available information is not presented in a straightforward, easyto-navigate manner. The Swedish National Agency for Education has a webpage on school quality that reports grade point averages, results on national tests, and student survey results. However, the site is virtually unknown and suffers from several shortcomings. For example, it is not possible to compare the results of national tests and grades in a specific subject in the same browser window. There is also no account of how well a school performs conditional on students' socio-economic background, even though an established tool for taking this into account exists for grades. The site does not function as a practical guide for users looking for guidance, which is troubling given that plenty of research suggests that consumers, especially users of welfare services, make worse decisions when the information they receive is complex (Besanko et al., 2013).

Providing prospective users with reliable and comparable information from users with experience of a school, e.g., by leveraging the kind of rating systems taxi and hotels use, would strengthen the voice of existing users precisely because their voice can assist prospective users in their choices. Even if a user perceives the cost of changing schools as too great, the user's dissatisfaction would still have a disciplinary effect on the school by potentially discouraging future users. That said, providing users with meaningful information becomes very difficult if grades are not a reliable indicator of the acquisition of (pertinent) knowledge and skills. In all likelihood, reforming the grading system and the view of knowledge are necessary for user choice to become more informed.

Sketching a solution

Obviously, the problems with grading, the view of knowledge, and information provision are interconnected. Any serious attempt to improve the situation by strengthening the epistemic institutions governing the school market also needs to deal with this interconnectedness. Actors in this quasi-market have incentives driven by the objectives set by curricula and government directives. With vague and ill-conceived objectives, the willingness of companies to compete and pursue profit are unlikely to lead to desirable outcomes.

While it is outside the scope of this paper to offer a detailed solution, the key here is to ensure that grading is inflation proof and that schools compete in terms of their ability to impart knowledge rather than overly generous grading. This requires curricula and syllabuses with well-defined knowledge content and a grading system that guarantees that a certain level of achievement is graded equally across schools. In addition, the school market would benefit from making information from user surveys easily accessible and understandable. Consideration should also be given to introducing rating systems of the kind that have emerged for many private services. The establishment of such reputation mechanisms would provide future users with a better basis for decision-making while requiring the provider to be even more responsive to the dissatisfaction of current users.

Conclusion

Can competition and the existence of profit-seeking actors in the school market improve educational quality, and if so, under what conditions? We suggest that the conditions for successful welfare production in quasi-markets hinge on these markets' epistemic capacity. When quasi-markets' fall short, policymakers can raise their innovative capacity by tailoring complementary institutions that are epistemically conducive, in the broad sense that they create and provide information that help actors make sense of the world and construct the local knowledge necessary for action.

We substantiate this conclusion by an in-depth analysis of the Swedish freedom-of-choice model in primary and secondary schooling. This highly marketized model has now been in operation for more than three decades yet delivered only modest improvements (at best). Based on Swedish experience we identify three major explanatory factors for the model's subpar performance:

- (1) The pertaining view of knowledge is not compatible with concrete and detailed curricula that allow reliable comparisons of knowledge attainment across students and schools.
- (2) The grading system is neither inflation proof nor impervious to manipulation and overly generous grading.
- (3) The information basis provided to users does not facilitate informed choices.

Like any study, ours has its limitations. One concern is the extent to which our suggestions can be applied in different countries and sectors. Relatedly, we

cannot make causal claims in the statistical sense. To dispel such concerns, future studies should try to apply econometric but also qualitative approaches, e.g., a process-tracing approach, formally examining the strength of evidence linking potential causes to consequences. That said, "the devil is in the details" when it comes to welfare service markets. Therefore, a case-focused, holistic analysis of different quasi-markets in other polities and countries akin to the one we undertake is likely to be highly beneficial. Such analyses must be grounded in an intimate knowledge of the sector in question, and how its outcomes in terms of costs, quality, and innovation compare to the empirical evidence in other sectors and countries, thereby creating an important contextual bridge between the individual case and the overall picture.

Here, our key motivation was to shed light on whether competition and the existence of profit-seeking actors can improve educational quality. Analyzing the importance of the profit motive and competition in the Swedish school system, we focused on whether and how this highly marketized system could become more efficient. Hopefully, future studies will approach this topic using all the tools in the qualitative and quantitative analytical toolkit. If the problems we identify were resolved by epistemically conducive reforms, competition among providers including for-profit firms would, we believe, likely result in value enhancing innovation with the potential, in the words of Caroline Hoxby (2003), to become "the tide that lifts all boats."

Notes

- 1. Evidence from Milwaukee, WI, instituting a similar voucher reform in the early 1990s, suggest this development was not inevitable. While large-scale for-profit schools came to dominate the Swedish school market, small-scale nonprofit schools operated by religious communities became ubiquitous in Milwaukee. Although for-profit providers were allowed, only two were started. Both were phased out within a few years (Henrekson et al., 2020).
- 2. In reality, even finer distinctions can be made (Jordahl & Öhrvall, 2013, p. 46).
- 3. This cost is certainly subject of debate, and it may be argued that public schools should have incentives to make the cost per pupil appear as small as possible to limit the voucher amount going to private schools. Yet, the municipality's responsibility of ensuring all students go to school may cause one to ponder whether it is reasonable that public and private schools receive equal renumerations. Additionally, most municipalities do differentiate school renumeration on socio-economic grounds, with a greater renumeration going to socially vulnerable areas, where public schools dominate. The system has been criticized for not being transparent, and in late 2023 the Swedish government launched an investigation into the renumeration system to free schools (Dir, 2023:153).
- 4. However, the rules do not preclude in kind contributions or donations to nonprofit schools.
- 5. https://www.publiccharters.org/.
- 6. Kirschner (2008) ascribes this view to the erroneous assumption that the novice learner should use the same methods to master a field or a subject as the trained expert does in pursuit of new knowledge.
- 7. See Wikforss (2019) for a further discussion.



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References

- Aligica, P. D., Boettke, P. J., & Tarko, V. (2019). Public governance and the classical-liberal perspective. Oxford University Press.
- Alston, L. J. (2008). New institutional economics. In S. N. Durlauf & L. E. Blume (Eds.), *The new Palgrave dictionary of economics* (pp. 4544–4551). Palgrave Macmillan.
- Andersson, F., Jordahl, H., & Josephson, J. (2019). Outsourcing public services: Contractibility, cost, and quality. *CESifo Economic Studies*, 65(4), 349–372. https://doi.org/10.1093/cesifo/ifz009
- Angrist, J. D., Dynarski, S. M., Kane, T. J., Pathak, P. A., & Walters, C. R. (2012). Who benefits from KIPP? *Journal of Policy Analysis and Management*, 31(4), 837–860. https://doi.org/10.1002/pam.21647
- Angrist, J. D., Pathak, P. A., & Walters, C. R. (2013). Explaining Charter school effectiveness. American Economic Journal: Applied Economics, 5(4), 1–27. https://doi.org/10.1257/app.5.4.1
- Arendt, H. (1954 2006). "The crisis in education, and Arendt, H. Between past and future: Eight exercises in political thought (Reprint, pp. 170–193). Penguin Books. 2006.
- Badelt, C., & Weiss, P. (1990). Specialization, product differentiation and ownership structure in personal social services: The case of nursery schools. *Kyklos*, 43(1), 69–89. https://doi.org/10.1111/j.1467-6435.1990.tb02049.x
- Baumol, W. J. (2010). The microtheory of innovative entrepreneurship. Princeton University Press.
- Besanko, D., Dranove, D., Shanley, M., & Schaefer, S. (2013). The economics of strategy (6th ed.). John Wilev.
- Betts, J., & Grogger, J. (2003). The impact of grading standards on student achievement, educational attainment, and entry-level earnings. *Economics of Education Review*, 22(4), 343–352. https://doi.org/10.1016/S0272-7757(02)00059-6



- Biasi, B., Deming, D. J., & Moser, P. (2021). Education and Innovation. NBER working paper no. 28544. National Bureau of Economic Research.
- Black, S. (1999). Do better schools matter? Parental valuation of elementary education. Quarterly Journal of Economics, 114(2), 578-599. https://doi.org/10.1162/003355399556070
- Blix, M., & Jordahl, H. (2021). Privatizing welfare services: Lessons from the Swedish experiment. Oxford University Press.
- Blomqvist, P. (2004). The choice revolution: Privatization of Swedish welfare services in the 1990s. Social Policy & Administration, 38(2), 139-155. https://doi.org/10.1111/j.1467-9515. 2004.00382.x
- Bloom, N., Lemos, R., Sadun, R., & Van Reenen, J. (2015). Does management matter in schools? The Economic Journal, 125(584), 647-674. https://doi.org/10.1111/ecoj.12267
- Bloom, H. S., Unterman, R., Zhu, P., & Reardon, S. F. (2020). Lessons from New York City's small schools of choice about high school features that promote graduation for disadvantaged students. Journal of Policy Analysis and Management, 39(3), 740-771. https://doi.org/ 10.1002/pam.22192
- Bloom, N., Van Reenen, J., & Williams, H. (2019). A toolkit of policies to promote innovation. Journal of Economic Perspectives, 33(3), 163-184. https://doi.org/10.1257/jep.33.3.163
- Bowles, S. (2016). The moral economy. Yale University Press.
- Bulman, G., & Fairlie, R. W. (2016). Technology and education: Computers, software, and the internet. NBER working paper no. 22237. National Bureau of Economic Research.
- Chabrier, J., Cohodes, S., & Oreopoulos, P. (2016). What can we learn from charter school lotteries? Journal of Economic Perspectives, 30(3), 57–84. https://doi.org/10.1257/jep.30.3.57
- Chatterji, A. K. (2018). Innovation and American K-12 education. Innovation Policy and the Economy, 18(1), 27-51. https://doi.org/10.1086/694406
- Chatterji, A. K., & Jones, B. F. (2016). Learning what works in educational technology with a case study of EDUSTAR. Brookings Institution policy memo 2016-1. Brookings Institution.
- Cheng, A., Hitt, C., Kisida, B., & Mills, J. N. (2017). 'No excuses' charter schools: A meta analysis of the experimental evidence on student achievement. Journal of School Choice, 11 (2), 209–238. https://doi.org/10.1080/15582159.2017.1286210
- Coase, R. H. (1984). The new institutional economics. Journal of Institutional and Theoretical Economics, 140(1), 229-231.
- Cohodes, S. R., & Parham, K. S. (2021). Charter schools' effectiveness, mechanisms, and competitive influence. NBER working paper no. 28477. National Bureau of Economic
- Crato, N. (2020). Curriculum and educational reforms in portugal: An analysis on why and how students' knowledge and skills improved. In F. M. Reimers (Ed.), Audacious education purposes (pp. 209-231). Springer. https://doi.org/10.1007/978-3-030-41882-3_8
- Dir. 2023:153. En nationell skolpengsnorm för ökad likvärdighet (A National Norm for the Size of the School Voucher). Directives for the public investigation. Government of Sweden.
- Dobbie, W., & Fryer, R. G. (2013). Getting beneath the veil of effective schools: Evidence from New York City. American Economic Journal: Applied Economics, 5(4), 28-60. https://doi. org/10.1257/app.5.4.28
- Doncel, L. M., Sainz, J., & Sanz, I. (2012). An estimation of the advantage of charter over public schools. Kyklos, 65(4), 442–463. https://doi.org/10.1111/kykl.12001
- Dulleck, U., & Kerschbamer, R. (2006). On doctors, mechanics, and computer specialists: The economics of credence goods. Journal of Economic Literature, 44(1), 5-42. https://doi.org/ 10.1257/002205106776162717
- Edmark, K., & Persson, L. (2021). The impact of attending an Independent upper secondary school: Evidence from Sweden using school ranking data. *Economics of Education Review*, 84 (October), 102148. https://doi.org/10.1016/j.econedurev.2021.102148



Eggertsson, T. (2013). Quick guide to new institutional economics. Journal of Comparative Economics, 41(1), 1–5. https://doi.org/10.1016/j.jce.2013.01.002

Enkvist, I. (2023). Kunskap i kris. Gidlunds förlag.

Epple, D., Romano, R., & Zimmer, R. (2016). Charter schools: A survey of research on their characteristics and effectiveness. In E. A. Hanushek, S. Machin, & L. Woessmann (Eds.), Handbook of the economics of Education (pp. 139-208). North-Holland.

Ernestam, J. (2018, June 4). Systematiken i betygssättningen är det som väcker frågor. https://www.lararforbundet.se/bloggar/lararforbundets-Lärarförbundets utredarblogg. utredarblogg/systematiken-i-betygssattningen-ar-det-som-vacker-fraagor

Fack, G., & Grenet, J. (2010). When do better schools raise housing prices? Evidence from Paris public and private schools. *Journal of Public Economics*, 94(1–2), 59–77. https://doi.org/10. 1016/j.jpubeco.2009.10.009

Ferlie, E. (1992). The creation and evolution of quasi markets in the public sector: A problem for strategic management. Strategic Management Journal, 13(S2), 79-97. https://doi.org/10. 1002/smj.4250130907

Figlio, D. N., & Lucas, M. (2004). Do high grading standards affect student performance? Journal of Public Economics, 88(9), 1815-1834. https://doi.org/10.1016/S0047-2727(03) 00039-2

Government Bill. (1991/92:95). Om valfrihet och fristående skolor. Ministry of Education.

Government Bill. (1995/96:200). Fristående skolor m.m. Ministry of Education.

Government Bill. (2017/18:158). Ökade tillståndskrav och särskilda regler för upphandling inom välfärden. Ministry of Finance.

Haeffele, S., & Storr, V. H. (2019). Understanding nonprofit social enterprises: Lessons from Austrian economics. The Review of Austrian Economics, 32(3), 229–249. https://doi.org/10. 1007/s11138-019-00449-w

Hall, C., Lundin, M., & Sibbmark, K. (2019). A laptop for every child? The impact of ICT on educational outcomes. IFAU Working Paper 26. Institute for Evaluation of Labour Market and Education Policy (IFAU.

Hart, O., Shleifer, A., & Vishny, R. W. (1997). The proper scope of government: Theory and an application to prisons. The Quarterly Journal of Economics, 112(4), 1127-1161. https://doi. org/10.1162/003355300555448

Hayek, F. A. (1945). The use of knowledge in society. American Economic Review, 35(4), 519-530.

Heller Sahlgren, G. (2021). "Bra skolor i hela landet - skillnader i resultat mellan stad och land i TIMSS 2019". Confederation of Swedish Enterprise.

Henrekson, E., Andersson, F. O., Wijkström, F., & Ford, M. R. (2020). Civil society regimes and school choice reforms: Evidence from Sweden and Milwaukee. Nonprofit Policy Forum, 11 (1), 1–37. https://doi.org/10.1515/npf-2019-0042

Henrekson, M., & Stenkula, M. (2017). The entrepreneurial rent: The value of and compensation for entrepreneurship. *Journal of Entrepreneurship and Public Policy*, 6(1), 11–25. https:// doi.org/10.1108/JEPP-07-2016-0027

Henrekson, M., & Wennström, J. (2022). Dumbing down: The crisis of quality and equity in a once-great school system—and how to reverse the trend. Palgrave Macmillan.

Henrekson, M., & Wennström, J. (2023). The view of knowledge: An institutional theory of differences in educational quality. *Independent Review*, 27(4), 511–532.

Holcombe, R. (2013). *Producing prosperity: An inquiry into the operation of the market process.* Routledge.

Holmlund, H. (2020). Vad kan den nationalekonomiska forskningen lära oss om framgångsfaktorer i skolan? Ekonomisk Debatt, 48(3), 6–23.



- Holmlund, H., Häggblom, J., Lindahl, E., Martinson, S., Sjögren, A., Vikman, U., & Öckert, B. (2014). Decentralisering, skolval och fristående skolor: resultat och likvärdighet i svensk skola. Institute for Evaluation of Labour Market and Education Policy (IFAU).
- Hoxby, C. M. (2003). School choice and school productivity. Could school choice be a tide that lifts all boats? In C. M. Hoxby (Ed.), The economics of school choice (pp. 287–342). University of Chicago Press.
- Jabbar, H., Fong, C. J., Germain, E., Li, D., Sanchez, J., Sun, W., & Devall, M. (2022). The competitive effects of school choice on student achievement: A systematic review. Educational Policy, 36(2), 247-281. https://doi.org/10.1177/0895904819874756
- Jordahl, H., & Öhrvall, R. (2013). Nationella reformer och lokala initiativ. In H. Jordahl (Ed.), Välfärdstjänster i privat regi: framväxt och drivkrafter (pp. 33–87). SNS Förlag.
- Kelman, S. (2007). The transformation of government in the decade ahead. In D. F. Kettl & S. Kelman, (Ed.), Reflections on 21st century government management (pp. 33-61). IBM Center for the Business of Government.
- Kelman, S. (2021). Bureaucracies as innovative organizations. Harvard Kennedy school faculty research working paper RWP21-017. Harvard University.
- Kirschner, P. A. (2008). Epistemology or pedagogy, that is the question. In S. Tobias & T. M. Duffy (Eds.), Constructivist instruction: Success or failure? (pp. 144-157). Routledge.
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. Educational Psychologist, 41(2), 75-86. https:// doi.org/10.1207/s15326985ep4102_1
- Klitgaard, M. B. (2008). School vouchers and the new politics of the welfare state. Governance-An International Journal of Policy Administration and Institutions, 21(4), 479-498. https:// doi.org/10.1111/j.1468-0491.2008.00410.x
- Knodel, P., Martens, K., & Niemann, D. (2013). PISA as an ideational roadmap for policy change: Exploring Germany and England in a comparative perspective. Globalisation, Societies & Education, 11(3), 421-441. https://doi.org/10.1080/14767724.2012.761811
- Le Grand, J. (2009). The other invisible hand. Princeton University Press.
- Lubienski, C. (2009). Do quasi-markets foster innovation in education? A comparative perspective. OECD education working papers nr 25. OECD Publishing.
- Merrifield, J. (2001), The school choice wars. R & L Education.
- Merrifield, J., & Gray, N. (2023), Unproductive school choice debates: All sides assert much that is wrong, misleading, or irrelevant. Rowman & Littlefield.
- Morris, A. (2011). "Student standardised testing: Current practices in OECD countries and a literature review". OECD education working papers, no. 65. OECD Publishing.
- Nordhaus, W. D. (2005). "Schumpeterian profits and the alchemist fallacy". Yale working papers on economic applications and policy no 6. Department of Economics, Yale University.
- Nordin, M., Heckley, G., & Gerdtham, U. (2019). The impact of grade inflation on higher education enrolment and earnings. Economics of Education Review, 73, 101936. https://doi. org/10.1016/j.econedurev.2019.101936
- OECD. (2010). The OECD innovation strategy: Getting a head start on tomorrow. OECD Publishing.
- Ostrom, V., & Ostrom, E. (1991). Public goods and public choices: The emergence of public economies and industry structures. In V. Ostrom (Ed.), The meaning of American federalism (pp. 163-197). ICS Press.
- Parker, K., Menasce Horowitz, J., & Rohal, M. (2015). Parenting in America: Outlook, worries, aspirations are strongly linked to financial situation. Pew Research Center.
- Schumpeter, J. A. (1934). The theory of economic development. Harvard University Press.



Shakeel, M. D., Anderson, K. P., & Wolf, P. J. (2021). The participant effects of private school vouchers around the globe: A meta-analytic and systematic review. School Effectiveness and School Improvement, 32(4), 509-542. https://doi.org/10.1080/09243453.2021.1906283

Shleifer, A. (1998). State versus private ownership. Journal of Economic Perspectives, 12(4), 133–150. https://doi.org/10.1257/jep.12.4.133

Silva, P., Nunes, L., Seabra, C., Balcão Reis, A., & Alves, M. (2020). Student selection and performance in higher education: Admission exams vs. High school scores. Education Economics, 28(1), 1–18. https://doi.org/10.1080/09645292.2020.1782846

SOU. (2020:43). Bygga, bedöma, betygssätta – betyg som bättre motsvarar elevernas kunskaper. Betänkande av Betygsutredningen 2018. Ministry of Education.

Swedish Law 2022:115. Lag om ändring i skollagen. (2010:). Ministry of Education.

Swedish National Agency for Education. (1994). Läroplan för det obligatoriska skolväsendet, förekoleklassen och fritidshemmet Lpo 94, Skolverket.

Swedish National Agency for Education. (2019). Analyser av likvärdig betygssättning mellan elevgrupper och skolor. Skolverket.

Swedish National Agency for Education. (2023). Pisa 2022. Skolverket.

Thernstrom, A., & Thernstrom, S. (2004). No excuses: Closing the racial gap in learning. Simon & Schuster.

Torfing, J., & Triantafillou, P. (2016). Enhancing public innovation by transforming public governance. Cambridge University Press.

Tricot, A., & Sweller, J. (2014). Domain-specific knowledge and why teaching generic skills does not work. Educational Psychology Review, 26(2), 265-283. https://doi.org/10.1007/ s10648-013-9243-1

Tyrefors, B., & Vlachos, J. (2017). The impact of upper-secondary voucher school attendance on student achievement. Swedish evidence using external and internal evaluations. Labour Economics, 47(August), 1–14. https://doi.org/10.1016/j.labeco.2017.03.009

Vlachos, J. (2019). Trust-based evaluation in a market-oriented school system. In M. Dahlstedt & A. Fejes (Eds.), Neoliberalism and market forces in education: Lessons from Sweden (pp. 212-230). Routledge.

Wållgren, I. (2017). Den postmodernistiska kunskapssynen och den svenska skolan. In M. Henrekson (Ed.), Kunskapssynen och pedagogiken (pp. 65–93). Dialogos.

Walters, C. R. (2018). The demand for effective charter schools. *Journal of Political Economy*, 126(6), 2179–2223. https://doi.org/10.1086/699980

Wennström, J. (2020). Marketized education: How regulatory failure undermined the Swedish school system. Journal of Education Policy, 35(5), 665-691. https://doi.org/10.1080/ 02680939.2019.1608472

Wikforss, Å. (2019). Critical thinking in the post-truth Era. In P. Kendeou, D. H. Robinson, & M. T. McCrudden (Eds.), Misinformation, "Quackery," and "Fake News" in Education (pp. 279–304). Information Age Publishing.

Willingham, D. T. (2010). Critical thinking: Why is it so hard to teach?. Arts Education Policy Review 109(4), 21–32. https://doi.org/10.3200/AEPR.109.4.21-32

Wolf, P. J., Kisida, B., Gutmann, B., Puma, M., Eissa, N., & Rizzo, L. (2013). School vouchers and student outcomes: Experimental evidence from Washington, DC. Journal of Policy Analysis and Management, 32(2), 246-270. https://doi.org/10.1002/pam.21691