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The Profit Motive in the Classroom—Friend or Foe?

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Abstract. Can competition and the existence of profit-seeking actors in the school market improve educational quality? To see cost-efficient, long-term improvements, we identify the school system's capacity for knowledge-enhancing innovation as crucial and explore this question by examining Swedish tax-financed schooling. The Swedish school system was marketized in the early 1990s to an unparalleled degree but has only seen modest (if any) educational gains. This lack of progress is puzzling considering evidence from regular markets that competition and the presence of for-profit actors should spur innovation. Our analysis suggests that these factors are necessary but not sufficient conditions for innovation, tracing the obstacles to innovation in the Swedish school quasi-market to three sub-par institutional conditions. Together, they result in a significant epistemic problem, which impedes the beneficial effects of competition and the profit-motive. 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 knowledge, making it difficult for schools to compete and for users to choose along this dimension. Third, the information provided to users is insufficient and overly complicated, meaning user choice is less informed than it should be. Institutional reforms that improve actors' epistemic positions along these margins could improve the situation, paving the way for innovation and long-term improvements.

Keywords: For-profit schools, Innovation, Marketized education, Quasi-markets, School choice, View of knowledge.

JEL Codes: H42, H44, H75, I22, I28, L88, O31.

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1. Introduction

In the last two years, six U.S. states have enacted universal school choice. That such reforms of the educational system are highly contentious (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). In this article, we shall argue that school choice is a precondition for innovation in the school system, though it is by no means a foregone conclusion that benefits will materialize. 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.

All resources have an alternative use, which makes it essential to ask whether the current use is optimal—in the short and long term. Education tends to be labor intensive; machines and robots cannot easily substitute for teachers and high-quality education involves a great deal of individual feedback and formative and summative evaluations. Teacher quality is also essential (e.g., Blazar and Kraft 2017), which requires teacher salaries to be on par with alternative professions. As a result, the relative cost of educational services will tend to increase unless quality is impaired. Innovation is the only way out of this dilemma.

To mitigate the trend towards increased relative cost and stimulate quality-enhancing innovation, many countries have established quasi-markets to govern welfare service provision. The hope is to unleash creativity, efficiency, and innovation through competition between public and private providers without jeopardizing user equality. Such privatization of tax-financed welfare services and the establishment of quasi-markets in the welfare area have been important parts of Sweden's movement in a market-oriented direction. This is especially the case for 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).

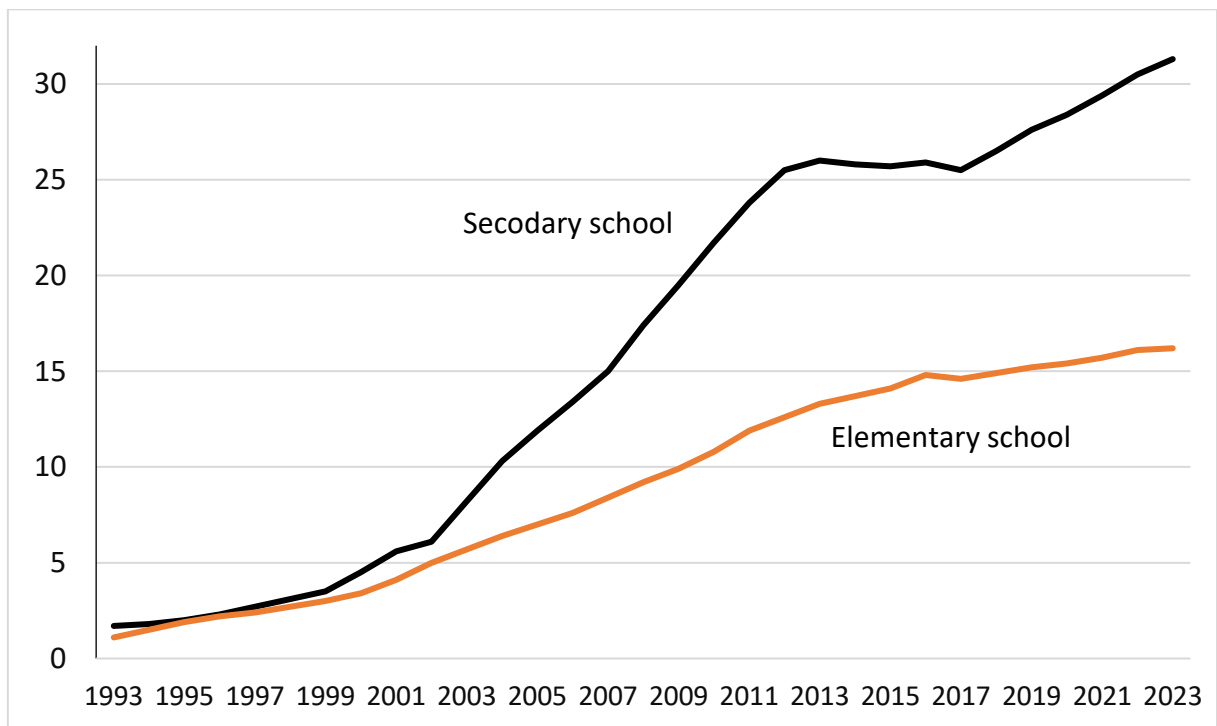
The theoretical reasons why quasi-markets could deliver better welfare services are partly about competition and partly about the organizational form. First, competition between all manner of service providers with all manner of motivations can force them to improve (Le Grand 2009). Second, while there are enticing accounts of public bureaucracies successfully encouraging innovation (Kelman 2021), there is general agreement that private ownership can provide stronger incentives for efficiency, cost savings, and innovative activities than public ownership (Shleifer 1998). That said, economists are not blind to the fact that the profit motive's high-powered incentives can be a double-edged sword in the welfare sector (Hart et al. 1997; Shleifer 1998; Bowles 2016). Welfare services such as education are credence (or trust) goods whose value consumers cannot

fully assess on their own (Dulleck and Kerschbamer 2006), making them particularly susceptible to manipulation by producers.

Since the early 1990s, a freedom-of-choice quasi-market has governed the school sector in Sweden (as well as preschool, home care, and primary healthcare). In contrast to procurement models, providers in freedom-of-choice models do not compete *for* the market by making tenders but *within* the market, to which entry is relatively free. The model can be described as bottom-up because users choose, equipped with a tax-financed voucher, and new providers who meet set requirements may attract users from existing providers.

The providers can be both public and private. In the latter case, they can be for-profit or non-profit—and a distinguishing feature of the Swedish school sector is its considerable reliance on for-profit providers relative to other countries. As *Figure 1* shows, growth remains strong in the proportion of students attending independent schools, especially independent secondary schools. 16.2 percent of elementary school students and 31.3 percent 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. As an illuminating contrast, consider the case of Milwaukee, WI, instituting a similar school voucher reform in the early 1990s. While the Swedish school market became dominated by large-scale for-profit schools, the Milwaukee school program became dominated by small-scale non-profit schools operated by religious communities. Although for-profit providers were allowed, only two were started. Both were phased out within a few years (E. Henrekson et al. 2020).

Figure 1. Share of students in independent schools, 1993–2023 (%).



Source: Swedish National Agency for Education.

Can competition and the existence of profit-seeking actors improve educational quality? To explore this question, we analyze the importance of the profit motive and competition in the Swedish school system, focusing on whether and how this highly marketized system (relative to other countries) can become more innovative. Innovation is a new combination of (new and old) knowledge, resulting in a new product or service, a new production method, the opening of a new market, or a new way of organizing a business or an industry (OECD 2010; Schumpeter 1934). Innovations are seen as “the only way for the most developed countries to ensure long-term productivity growth” (Bloom et al. 2019, p. 163). One can scarcely overemphasize the importance of competition and the profit motive for innovation to unfold and disseminate in regular markets. Briefly, it may be said that the profit motive incentivizes innovation to occur in the first place (Baumol 2010; Holcombe 2013), whereas competition ensures that its benefits mainly accrue to consumers (Nordhaus 2005).

A reasonable conjecture is that the *potential* for innovative gains in welfare services should be immense, though far from given (Torfing and Triantafillou 2016, p. 10). Compound interest means that improvements and cost-savings that seem trivial in the short term can have significant long-term effects on both service quality and the size of public expenditures (Jordahl and Sundén 2016). Competition and the profit motive likely have crucial roles in ushering in a more innovative educational system. Still, their effects will only be beneficial if the institutional setup is appropriately designed. In the Swedish case, the evidence to date indicates that the education quasi-market has offered relatively modest gains. This suggests that something is impeding this quasi-market from delivering in terms of value-enhancing innovation to the detriment of students, parents, teachers—indeed, the country as a whole.

We 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 and Storr 2019). This limits the beneficial effects one can expect from competition and the presence of profit-driven actors.

First, the view of knowledge that has been institutionalized in national curricula since the early 1990s does not entrust teachers with a real, knowledge-promoting mission. Second, the design of the grading system (which also changed in the early 1990s) makes grades unreliable measures of students’ knowledge, making it difficult for schools to compete and for users to choose along this dimension. Third, information provided to users is insufficient and overly complicated, meaning user choice is less informed than it should be, a fact that likely affects children from disadvantaged backgrounds to a disproportionate degree.

To remedy this situation, our analysis suggests that these institutions be made *more epistemically conducive*. By this term we have in mind a system that is better at creating the right kind of information actors need to make sense of the world, better at providing

them with this information, and better at giving them the incentives they need to construct the knowledge necessary for action. In practice, this entails institutional reforms along the following margins.

Most importantly, joint reforms that improve the view of knowledge and grading systems would make sure the system produces the “right” kind of information for actors to be able to make knowledge-enhancing choices. First, instituting a detailed, coherent, and carefully sequenced curriculum organized around subject disciplines would usher in a return to a classical (yet upgraded) view of knowledge entrusting teachers with a real, knowledge-promoting mission. Second, inflation proofing grades and removing undue teacher discretion would improve the reliability of grades as a measurement of the right kind of knowledge. Third, the epistemic position of all actors in the system can be further improved by providing students and parents with a better decision-making basis. This should take the form of information and reviews from users with experience of a school. The voice of previous and existing users would then help future users with their choices, creating important synergies.

Still, improved information for users is only likely to be truly useful provided that the right kind of information is constructed to begin with, which points to the relevance of starting with reforms improving the way information is constructed. And while a knowledge view reform is likely a precondition for an effective grade reform, both these efforts are well within the scope of policy; they could be undertaken relatively quickly. Were this to happen, the result would be a swift improvement in actors’ epistemic positions, essentially creating a common understanding about what knowledge teachers should impart to students while also primarily focusing competition to this dimension. This would incorporate healthy incentives for knowledge-enhancing innovation into the freedom-of-choice system.

2. Background: Sweden and the international evidence

2.1. A Swedish Crisis in Education?

The Swedish freedom-of-choice model was introduced in 1992 for elementary school and the following year for secondary school. In essence, the free school reform meant that public monopolies were transformed overnight into quasi-markets of the freedom-of-choice variety. Students and parents were equipped with a voucher, equaling (since 1996) the average student cost in their municipality (Government Bill 1995/96:200). 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 joint stock company or in a non-profit form.¹

¹ Entry into the Swedish school market was practically unregulated for a long time. There were no competency requirements for the owners, nor any restrictions on schools in the form of incorporated firms to pay dividends or to resell the shares. The only limitation was that the independent schools were not allowed to skim the market by admitting students based on academic ability or socio-economic background. Only in 2010 did independent schools become required to follow the national curriculum (Swedish Law 2010:800), and national standardized tests did not become mandatory until 2013 (Henrekson and Wennström 2022). Regulations have been further tightened since then, notably by introducing more stringent demands to be allowed to run an independent school (regarding experience, insight, financial

A couple of years later, the first comparable international tests of student knowledge (PISA and TIMSS) appeared. They implied good news. In the mid-1990s TIMSS, Swedish students ranked best in Europe in science and second in mathematics. Even relatively weak Swedish students did better than weak students elsewhere. Compared to American students, Swedish students performed better across the entire distribution. 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 most substantial fall. PISA results confirmed the dismal development, but paradoxically, the Swedish elementary school's average merit ratings rose dramatically during the period. Thus, pupils received better grades while performing worse on international tests, a clear sign the system suffered from widespread grade inflation (Henrekson and Wennström 2022, pp. 64–66; SOU 2020:43).

Since 2015, the trend seems to have turned once more. Both PISA and TIMSS show improvements for Swedish elementary school students, eliminating much of the previous decline. However, critics have questioned the new results, pointing to an excessive exclusion and a large dropout rate. Moreover, decomposition suggests the improvement is mostly driven by better results among high achievers. Merit ratings have also continued to increase in certain subjects regardless of the international measurements, an indication that grade inflation persists (SOU 2020:43).

Thus, while the recovery seems somewhat dubious, it is indisputable that the Swedish school system experienced a severe decline in knowledge shortly after the freedom-of-choice reforms of the 1990s. However, the negative trend likely started *before* the enactment of the quasi-market reforms (Holmlund et al. 2014), and the school system changed in other ways during the same period. In addition to the free school reform, 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 (2020, 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 have been implemented more or less simultaneously for it to be possible to isolate direct causal relationships.”

In a recent book on the Swedish marketization of welfare, 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

conditions, and suitability) (Government Bill 2017/18:158). Recently, the state was given increased opportunities to close independent schools (Swedish Law 2022:115).

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* without this reform, as suggested by the poor student results in those areas of the country where parents have low education and the school remains a de facto local monopoly because there has been no entry of independent schools (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 (Blomqvist 2004; Klitgaard 2008). 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, yet this has been far from the case. Still, the evidence from other countries with experience from school quasi-markets gives a window into such systems' innovative and educational promise.

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

The impetus behind greater technology use in the classroom is that technology could 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 and 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 communication technology an essential part of education in all subjects. The only demonstrable effects are deeply problematic: 1:1-programs risk increasing school inequality by *worsening* math skills and future admission prospects for students with low-educated parents. On the other hand, the use of so-called CAL (computer-assisted learning) software can be compatible with sizeable positive learning effects. As Biasi et al. (2021, p. 12) put it,

CAL essentially replicates the successes of many other interventions that use personalized tutoring and mentoring to teach students "at the right level". We know this approach works, but it is expensive.

The mixed results highlight that what we usually have in mind when discussing innovations—new technical solutions—is not a cure-all for promoting knowledge in schools. Also, a key characteristic of service production and service innovations is that they are co-produced (Aligica et al. 2019, Ch. 6; Ostrom and Ostrom 1991), by teachers and students in the case of schools. New technology can strengthen that co-production

but also risks deteriorating it. This risk appears particularly great for weak students. These facts should encourage caution but also sound evaluation strategies—one example is Chatterji and Jones' (2012,2016) EDUSTAR platform, which quickly evaluates digital learning activities in the classroom using randomized experiments. Rapid evaluations of software and hardware could result in a safer introduction of knowledge-enhancing technology.

However, new technology is only one type of innovation. An earlier review of the international evidence on school quasi-markets and innovations finds that they primarily promote management and marketing innovations (Lubienski (2009, p. 43). In his more recent overview, Chatterji (2018) also 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 (Bloom et al. 2015). The study covers eight countries, including Sweden, and the connection turns out to be strongly positive: better school management has a considerably stronger association with school results than do factors like teacher density and class size. The link was also strongest in England, where the most reliable measures of educational quality are available, but weaker in Sweden, where student grades, as we have learned, seem unreliable quality measures. Other studies confirm the connection between better school management and good educational outcomes (e.g., Dobbie and Fryer 2013; Angrist et al. 2012; Bloom et al. 2020). Fryer (2017) also shows that management training of principals has a causal, positive effect on student learning.

Moreover, Bloom et al. (2015) show that half the variation in management quality is at the country level—significantly higher than in similar studies the researchers have carried out regarding other parts of the economy, e.g., manufacturing. Publicly funded independent schools also have a significantly better management function than public schools and fully private alternatives. Bloom et al. (2015, p. 2) conclude that “differences in the institutional environment have particularly important effects on the way schools are managed.”

The evidence suggests that quasi-markets can positively affect school performance by spurring management innovations. But what is the empirical relationship between quasi-market reforms and school results? In an international meta-study, Shakeel et al. evaluate (2021) the effects of school choice and school vouchers, focusing on 21 randomized control studies selected on strict criteria to identify causal relationships. The meta-study suggests that results are better for students in private schools and that systems with school choice and vouchers are cost-effective even when municipal and private alternatives perform equally well.

Cohodes and Parham (2021) assess the impact of U.S. charter schools in a review where most studies take advantage of the fact that students are assigned to charter schools by lottery (see also Chabrier et al. 2016; Epple et al. 2016). Like Swedish free schools, charter schools are publicly funded; about six percent of all American students are

currently enrolled in these schools, 12 percent of which are for-profit entities.² While student results in charter schools are on par with comparable traditional alternatives overall, charter school test scores are consistently superior in metropolitan areas, particularly for non-white students and socioeconomically disadvantaged groups (Angrist et al. 2013; Walters 2018). Some effects are of such a magnitude that a few years in charter schools for black students would bridge the so-called black-white achievement performance gap (Chabrier et al. 2016). A crucial explanation for the large effects is that public schools in big American cities, which usually make up the comparison group, often do poorly. As Cohodes and Parham (2021, p. 22) state: “charters tend to be most successful when the alternative schools for students not offered a seat are poorly performing.”

Successful charter schools often employ a *No Excuses Curriculum*, an educational model emphasizing high expectations, good behavior, and strong math and reading skills (Thernstrom and Thernstrom 2004). A meta-analysis of No Excuses schools shows significant learning gains in mathematics and English (Cheng et al. 2017). Yet, while it affects student test scores positively, the disciplinary component does not appear directly necessary (Felix 2020). Instead, these schools’ intensive tutoring component seems to be the most critical factor behind student success (Dobbie and Fryer 2013; Chabrier et al. 2016; see also Nickow et al. 2020 for evidence regarding the robust literature on the gains from tutoring). As we remember, Biasi et al. (2021) also attributed the demonstrable success of CAL software in the classroom to that technology’s ability to replicate tutoring.

How, then, do freedom-of-choice reforms and independent schools affect the students who stay in existing public alternatives? Ideally, competition should spur public schools to improve rather than harm them by removing resources or talented students (Kelman 2006; 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.” The results, mainly deriving from studies using a difference-in-difference approach, are consistent with Cohodes and Parham’s (2021) review, showing that, overall, competition from charter schools results in small but positive effects on students’ outcomes in traditional public schools and that the long-term effects may be larger still (Figlio et al. 2020).

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. However, this does not yet seem to be the case regarding, e.g., high-intensity tutoring.

² <https://www.publiccharters.org/>.

2.3 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, pp. 135–136) aforementioned summary of the Swedish free-school reform. Although the reform appears to have increased productivity in the Swedish school system, the gains have been modest and have not counteracted the overall knowledge decline.

The crux of the matter, we contend, is that while quasi-markets of this kind may have obvious advantages over public monopolies, they fall short relative to regular markets in ways that have yet to be fully appreciated. 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. Further insights on how quasi-markets come up short relative to regular markets can be gained by adopting a more evolutionary perspective on innovation. 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, e.g., education.

3. Necessary and sufficient conditions for innovation in quasi markets

Economists' “standard” view on quasi-markets offers a strong case for why competition and the profit-motive should be considered necessary conditions for innovation in welfare services like education. Yet, to understand why they should be treated as necessary but not sufficient conditions for quasi-market innovation, we complement the standard analysis with an evolutionary perspective on innovation. This perspective also sheds light on what additional conditions need to be in place for quasi-markets to deliver on their innovative promise. 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.

3.1. Necessary conditions: Private ownership and competition

Shleifer (1998) discusses the general conditions for private and public ownership, focusing on two investment incentives: (i) those investments that reduce costs and (ii) those that improve quality or lead to innovation. Under public ownership, the (private economic) incentives to make any of these investments are small since a public servant on fixed pay has no share in the returns on the investments if successful. 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 affects the kind of quality that cannot be laid down in the contract. Thus, 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; this prediction generally seems correct (Andersson et al. 2019).

One example could be a for-profit nursing home allowing cost savings to impair care quality. If such temptations are imminent, weaker incentives may be preferable. 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. While we outline them, we note, first, that all criteria can be classified as epistemic, in the sense that they are about how actors make sense of the world and construct the knowledge necessary for purposeful action. Secondly, no criterion is written in stone; at least in theory, institutional changes can influence all three.

The 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 should be clear from section 2 that it is an open question whether sectors such as schools are breeding grounds for innovation. The answer depends both on the form of ownership and on details in the model used, not least what kind of information the parties involved—providers, clients, and regulators—have access to when acting within the system.

Shleifer's second criterion states that freedom-of-choice reduces the risk of quality being negatively affected. Here, his reasoning meets that of Julian Le Grand, the doyen of quasi-market research, who argues that (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.

In other words, what Le Grand prefers is a voucher-based freedom-of-choice quasi-market. The equalization of purchasing power that the voucher entails is what, in Le Grand's eyes, 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. The altruistic provider wants more resources to help more people, while the self-interested provider wants more resources because that would make the enterprise more profitable. For, those who are both selfish and altruistic (like most of us), these motivations will reinforce each other.

Shleifer's and Le Grand's perspectives both suggest that it may be a good idea to "temper" the profit motive with freedom-of-choice. 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 head-on, as it deals with the value of reputational mechanisms, or what Le Grand (2009) calls the voice tool. Private contractors who must safeguard their reputation will be less inclined to engage in cost-cutting that degrades non-contractible quality. To be sure, this criterion can also be

influenced, e.g., by introducing a rating system modeled on those already used for hotels, taxi services, and subletting.

In essence, then, 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, the list gives (1998, p. 140) "a fair sense of how tenuous, in general, is the normative case for government production."

Yet, while this line of reasoning suggests that a quasi-market should often be superior to a government monopoly, it says very little about how a quasi-market should fare innovation-wise relative to an unhampered/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. Instead, policymakers can influence the quasi-market's epistemic capacity, i.e., its capacity to generate information and knowledge, by introducing complementary institutions that strengthen the returns to competition and profit-driven enterprise.

3.2. 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 would cover all costs, including a normal risk-adjusted rate of return on equity). Pure profit only pertains to the part of accounting profit that exceeds the market's risk-adjusted rate of return. This can be labeled an entrepreneurial rent, which arises because the innovation gave the entrepreneur a temporary monopoly on the market that s/he created (Henrekson and Stenkula 2017). The entrepreneurial rent is compensation for bearing the uncertainty (incalculable risk) associated with generating innovations. Positive profit constitutes the selection criterion. Only profitable firms survive in the long run and owners have an incentive to continue operations as long as their business is profitable.

Spurred by the appearance of an entrepreneurial rent/profit, replicators (either new entrants or incumbents) challenge the entrepreneur through imitation and further improvement of the innovation. Over time, replication in a free market erodes the entrepreneurial rent and the value of being first on the scene. The benefit from the innovation does not disappear but shifts into a consumer surplus, the size of which can scarcely be overstated: Nordhaus (2005) estimates that inventors, entrepreneurs, and producers receive on average less than three percent of the value that their activities contribute. The rest goes primarily 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 knowledge that contributes to efficient resource use. Conversely, sustained high profits suggest competition is weak (Holcombe 2013).

The success of an innovation project is far from given. Of course, misjudgments occur all the time while actors learn. Still, regular markets with well-functioning selection mechanisms are likely to be better placed epistemically than quasi-markets, even when these markets include both competition and a sizeable proportion of for-profit actors, for reasons we discuss below.

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 necessity limits the scope of innovation opportunities since it closes 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. This 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 where this occurs in the form of a specification of the kind of knowledge that should be imparted to students. The establishment of this 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 quasi-markets with user choice. After all, 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 feature, not a bug, as a key “egalitarian” motivation behind quasi-markets is that purchasing power should be equal (Le Grand 2009), with providers often receiving a fixed remuneration “per unit,” e.g., per student. Therefore, providers cannot use higher prices to signal higher quality, so they usually only compete in terms of quality. In the case of schools, this further emphasizes the need to focus competition along the most relevant margin, i.e., students' knowledge development, and suppress the temptation to attract users by devoting parts of the fixed student voucher to amenities that are ultimately irrelevant to this goal. When you can only compete in terms of quality, it has to be the right kind of quality.

Still, a fixed price system is likely always epistemically inferior to a free price system because it does not allow economic coordination via the signals that changing prices send.

Consequently, a fixed price system lacks the ability “to secure the best use of resources known to any of the members of society, for ends whose relative importance only these individuals know” (Hayek 1945). By dampening knowledge signals, fixed prices limit quasi-markets’ ability to generate and disseminate innovations whose benefits primarily accrue to the users. As Haeffele and Storr (2019) put it, “entrepreneurs in an unhampered market enjoy a privileged epistemic position compared to actors in non-market settings.” This also puts the presence of queues, usually seen as a symptom of inefficiency by economists, in a different light. In systems with fixed purchasing power, queues convey at least a part of the knowledge that prices convey in regular markets (cf. Hayek 1945). Thus, a long queue to a school signals high quality and is also 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. Freedom-of-choice proponents like Le Grand (2009) are careful not to favor one organizational form over others. According to him, the competition for users’ resources in a quasi-market provides good incentives for both selfish and unselfish actors to improve, which seems to align with the evidence we reviewed about school competition’s effects. A contrasting observation is that (too many) soft-powered incentives risk hampering quasi-markets’ functioning. For example, one may ask whether all schools in such a model, regardless of organizational form, would adapt their operations to users’ wishes (Hoxby 2003; Vlachos 2011). 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 non-profit providers do not follow any easily defined profit logic (Chatterji 2018; Hoxby 2003). And even if the desire for such expansion existed, non-profits’ 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 perform better then. However, the interaction between actors may be what matters the most. For example, while non-profits 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, e.g., their educational ideas and methods through imitation (SOU 2019:56, p. 13). Arguably, non-profits 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, non-profit 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.” For the same reasons, 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 freedom-of-choice model thus appears more attractive precisely because its experiments are carried out on a smaller scale. Granted, one failing school out of many or one poor match between school and student may have considerable negative consequences. Nonetheless, they should be easier to handle and learn from than if a large procurement accidentally gives an incompetent actor a de facto monopoly on a municipal service for an extended period (cf. Harford 2011). 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.

Nevertheless, failures will occur, and market exit is an important aspect of selection in a quasi-market. After all, one of the underlying (innovative) points of employing a voucher system is that schools that fail to attract enough students be penalized financially. Ideally, school selection functions as a continuous feedback mechanism giving schools on a downward trajectory reason and an opportunity to correct course. In practice, not all schools will be able to reverse the trend. Equality concerns dictate the need for a well-designed system for dealing with failure to protect students finding themselves in such schools. Here, evidence on charter takeovers of chronically underperforming schools is instructive. Encouragingly, the grade and test effects from takeovers are on par with those found for students in big cities who actively chose a charter school (Angrist et al. 2013), which is likely because charters usually employ the kind of No Excuses pedagogy we have already discussed (Abdulkadiroğlu et al. 2016).

3.3 Sufficient conditions for innovation in school quasi-markets?

We have identified several ways quasi-markets come up short relative to regular markets. Each of these problems will likely worsen in quasi-markets 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. A government-mandated profit restriction would prohibit entrepreneurial rents in the school sector, dampening crucial knowledge signals, transformative pressures, and incentives to innovate and replicate successful innovations. A profit restriction would also make it more difficult to raise external equity, thus forcing companies to finance expansion largely through retained earnings. Major negative consequences for both competition and freedom-of-choice would ensue. The main lesson is that market legislation must establish

clear rules *and* keep the door open to hitherto unexplored knowledge pathways, i.e., what legislators, producers, or users had not previously envisaged.

For educational services to continuously improve, the transformation process driven by the existence of entrepreneurial rents is likely to be especially important. Because government providers with weaker innovation incentives still dominate the school sector, existing private providers must be willing to bear uncertainty and innovate in the hope of future returns. Yet, the profit motive is far from uncomplicated in quasi-markets, a fact which, as we have seen, in no small measure relates to *epistemic* issues.

While these issues are likely to differ between quasi-markets and countries, looking for and diagnosing such issues is likely a good starting point whenever a quasi-market “underdelivers” in innovation and service quality. Perhaps the best illustration of the epistemic problem phasing the Swedish school quasi-market is one we have already touched upon: the unreliability of grades as a measure of knowledge attainment. As we shall see, this constitutes part of the key obstacle to knowledge-enhancing innovation in the Swedish case, but the problem is likely relevant for other countries as well.

4. Diagnosis: The Swedish School System’s Epistemic Problem

While Swedes view for-profit welfare providers with skepticism, they strongly support freedom of choice in all welfare areas, schools included (Blix and Jordahl 2021, p. 176). A key issue is what this choice is based on, and what it *should* be based on. Grades should be an obvious measure of schools’ ability to impart knowledge. If families primarily care about their children’s knowledge development when choosing a school, one would expect schools to compete in terms of educational quality. Extensive research from various countries shows that families value school average grades or test scores. 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 countries or cities without school choice. The absence of user choice means that the choice of school becomes a choice of place of residence (Black 1999; Fack and Grenet 2010; Burgess 2016).

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, 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 not reliable measures of quality.

The discrepancy between the actual knowledge level and knowledge indicators such as grades is related to how these indicators are “created,” which exposes 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 (Holmlund 2020): 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 each of these developments in turn.

4.1. 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 practically without external oversight (Wennström 2020). In addition, the pressure on teachers to give higher grades than justified given the governing documents increased, not least because of the free school choice competition (SOU 2020:43). Together, these factors resulted, and still result, in upward pressure on merit ratings.

Grades are the most important selection criterion for further study in Sweden (SOU 2021:72, p. 23). 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 less well-designed grading system creates problems. An ever-so-genuine desire among parents to choose a school where their children learn as much as possible must necessarily 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, even if the effect appears modest (Holmlund et al. 2014; Nordin et al. 2019; Edmark and Persson 2021). 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 (Vlachos 2018; Ernestam 2018). However, the differences are small, and municipal elementary schools seem well on their way to becoming as generous as independent elementary schools (Ernestam 2018).

The most important explanation for discrepancies between grades and national test results at the school level is that it is significantly more challenging to get good grades relative to one’s national test results in schools with a high average performance level. The schools thus practice an “informal” relative grading, which explains up to 40 percent of the total differences between different schools’ grading in relation to the national tests (Swedish National Agency for Education 2019). 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. In over half of Swedish schools, at least half 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 that rewards and enables high grades for low effort is not very knowledge-enhancing: Research shows that students learn less when it is easy to get high grades (Betts and Grogger 2003; Figlio and Lucas 2004). Competition may create incentives for innovation, but since the system does not reward knowledge, it is not in the field of knowledge that schools will innovate. The creative potential is thus channeled in the wrong direction.

4.2. Diagnosis: The View of Knowledge

The grading problem plaguing Swedish schools did not arise in a vacuum. It 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 the new view had been gaining ground for decades before the 1990s, it peaked in the 1994 national curriculum, i.e., soon after the freedom-of-choice reforms (Henrekson and Wennström 2022). According to the view that was replaced—the 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; Willingham 2010; Tricot and Sweller 2014). Thus, 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 also 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. 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.

Henrekson and Wennström (2023) offer a detailed exposition of the difference between the classical view of knowledge and the postmodern social constructivist view, and why the view of knowledge is the most crucial institution of any school system. By undermining any claim to a common foundation of knowledge, the postmodern view’s role as an epistemic obstacle is immense. The implication is that any attempt to remedy the grading problem (described in section 5.2) in isolation is likely to fail, or at least have limited success, unless the view of knowledge is changed simultaneously.

4.3. 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. Presently, this system leaves a great deal to be desired. One problem has to do with the moment when the choice is made. 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 day very they are born. This puts parents who are less far-sighted or move to another city at disadvantage, substantially limiting their choice set.

As to the information underlying user choice, rather than being provided with this information, users must actively look for it. In addition, the available information is not presented in a straightforward, easy-to-navigate manner. The Swedish National Agency of Education presently has a webpage on school quality that reports, e.g., grade point average, 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 view. 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 in grade nine, the so-called SALSA value. Few would claim that the site currently functions 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).

5. Reform suggestions: Alleviating the epistemic problem

To remedy the situation outlined in section 4, our analysis suggests that reforms make the relevant institutions more epistemically conducive. That is, they should become better at constructing the information actors need to make sense of the world, providing them with this information, and giving actors the incentives they need to construct the knowledge necessary for action. In practice, this entails institutional reforms along the following margins.

5.1 Reform: Inflation-proofed grading

As Blix and Jordahl (2021, p. 152) point out, one should have been able to foresee from the beginning that the free school reform would lead to grade inflation, and it may seem that this obvious system error could be fixed with a few simple steps. Unfortunately, the Swedish government's new principles for grading are a step in the wrong direction, as they give the individual teacher's assessment of the student's level of knowledge even more weight (Swedish Law 2022:146), increasing the scope for unwarranted grades.

What should a more robust grading system look like? As we have seen, that many schools still apply *de facto* relative grading – letting national test results constrain grading – is a

main reason why grade inflation is not even more pervasive (Swedish National Agency for Education 2019, p. 5). The bottom line is that inflation proofing can be achieved by basing grades on concrete syllabuses and national tests that are binding at the class or school level. This would create an anchoring effect, preventing the highest grades from deviating upwards and making student cohorts comparable.

Most European countries tie (parts of) the final grade to the results of anonymized national tests (Blix and Jordahl 2021). Sweden should take similar steps, using the national test score to calibrate the class average. That such an external correction is necessary is underlined by evidence suggesting independent schools' test grading is too generous (Tyrefors Hinnerich and Vlachos 2016; Edmark and Persson 2021). However, the national tests must test the right content, which we will return to when discussing the school's view of knowledge.³

If Sweden carried out a grading reform along those lines, schools would lose the opportunity to influence the grading inappropriately and be forced to compete in terms of educational quality and student performance. Such a reform would also recognize that the outcome is what counts and that good results can be achieved in several ways. It would reduce the need for process inspections and detailed control. The profit motive and competition would then provide incentives to improve, rather than undermine, quality.

5.2 Reform: A more appropriate view of knowledge

The view of knowledge prescribed in the national curriculum is a significant obstacle to knowledge-enhancing innovation in the Swedish school system. It also means that an isolated reform for inflation-proof merit ratings of the kind we just outlined would likely have limited effects. The reform would only gain "teeth" if curricula and educational norms returned to rewarding a classical, fact-based view of knowledge. In practice, this would mean that course curricula clearly stipulate the course content and, above all, emphasize the teacher's responsibility to impart the knowledge students need to, in Arendt's words, continue to develop our world. That those Asian countries that do well in terms of education have such curricula is no coincidence (Zhaon et al. 2011; Chi-Kin et al. 2011).

In a sense, a return to a classical view of knowledge is about trust: changing curricula would signal how valuable teachers are and that their responsibility lies in imparting knowledge. If a view of knowledge reform accompanied a grading reform, a synergy would be created between trust and control. The educational provider's sense of duty would then reinforce, and be reinforced by, the incentives to attract more users, as it would be about offering real quality, incorporating a natural striving towards improvement and innovation into the system. The school market's competition (and profit

³ Mandatory national tests are given in English, mathematics, the sciences, and social sciences in the final year of elementary school. However, these tests have several weaknesses. Most importantly, the tests are not taken at exactly the same time in all schools, and as a result, their content is often leaked on the internet; the tests are sent by regular mail to schools several days in advance and are thus available to the teachers beforehand; the tests are neither anonymized nor graded by a teacher at another school; the tests contain complex essay questions where it is neither clear what the correct answer is nor how detailed a correct answer should be. See Henrekson and Wennström (2022, pp. 135–138) for further details.

motive) could thus stimulate increased knowledge, not just higher grades and lower costs per student. The high cost of changing schools for the individual student would also decline significantly with more concrete curricula.

A return to a classical view of knowledge is entirely possible to implement. Experience from other countries, notably Portugal and Germany in the early 2000s, also suggests positive effects would quickly materialize (Crato 2020; Knodel et al. 2013). Following large deficiencies and substandard results in their school systems exposed in the first PISA assessments, the two countries began to stress empirical evaluations. They created “common core” standards for student performance and procedures for external experts to review individual schools. Sharp improvements in international assessments ensued within less than a decade.

For once, it is also a question of what we may describe as a “free lunch”—students’ knowledge would improve across the board. The opportunities for knowledge-enhancing innovation in the school market would likely increase without any need for additional financing.

5.3. Reform: Informed Choice

An obvious way to improve information on both performance-related factors and other factors that parents value is to require municipalities to provide all parents with transparent and easy-to-understand information about the schools in the catchment area well before the school choice date. Thus, such information should be based on a few well-selected quality measures, while users who want to delve deeper can do so (Bergman and Jordahl 2014). In addition, it has been shown that families assessing measurable school results tend to focus on the school’s absolute level, which to a large degree reflects the student composition (SOU 2020:28). Added-value measures of educational quality that take student background into account would likely be beneficial.

More formalized reputation mechanisms should also be considered. As stated, reputation mechanisms can be potentially valuable to ensure quality. In line with this observation, recent American evidence indicates that charter schools exit to a greater extent than public schools and that it is precisely the schools that do the worst that close, while those that survive deliver better results over time (Chabrier et al. 2016; Cohodes and Parham 2021). In a recent report, Lundberg et al. (2022) propose that Sweden “should push for a European rating system that takes into account previous deliveries and take the lead by introducing it for Swedish procurement” and that it can be modeled on the systems used for hotels, taxi services, and subletting. There are good reasons to strengthen reputation mechanisms in the school market and other areas that rely on user choice in this manner as well.

A government bill rebutted by parliament in 2022 proposed the abolition of queue time as an admission criterion to schools. The proposal was not without merits. As noted above, many parents place their newborns in line to popular independent schools, putting parents who are less far-sighted or move to another city at a considerable disadvantage. That said, abolishing queues is likely to have a net negative effect for epistemic reasons,

as the quasi-market's queues convey some of the knowledge that prices convey in free markets, guiding user choice and expansion decisions. A reasonable compromise to strengthen equity could be to limit queue time to a couple of years, while some slots cannot be chosen until the spring preceding the start of the first school year.

Providing prospective users with reliable and comparable information from users with experience of a school, 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. The reforms of the grading system and the view of knowledge are therefore necessary for user choice to become more informed.

6. 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. Thus, 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 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 conditions that would make such a model conducive to cost-efficient and knowledge-enhancing innovation.

1. Return to a classic view of knowledge with concrete and detailed curricula.
2. Institute an inflation-proofed grading system.
3. Improve the information basis provided to users.

If these conditions are met, competition among providers including for-profit firms is likely to result in value enhancing innovation that has the potential, in the words of Caroline Hoxby (2003), to become "the tide that lifts all boats."

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