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Publicly Funded Education Markets - Background Note by the Secretariat

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More documentation related to this discussion can be found at
<http://www.oecd.org/daf/competition/publicly-funded-education-markets.htm>

Please contact Mr Chris PIKE if you have questions about this document
[Chris.PIKE@oecd.org].

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Publicly Funded Education Markets

Note by the Secretariat*

Most OECD countries use choice and competition within their education system. They give students and their families a choice of school and university, and ensure that funding follows these choices. The same is often true of pre-school and adult learning and skills services. They increasingly give state owned schools and universities operational autonomy to compete to be chosen, sometimes against rival not-for-profit providers. This creates incentives for schools and universities to become more efficient so that they can invest those savings in improving the quality of the education they provide.

In this context, and given the huge importance of the sector, both in terms of productivity and inclusive growth, competition agencies may increasingly see education markets as a priority area in which to advocate for more effective competition. They may, for instance conduct market studies, provide opinions or advise education departments (in addition to taking enforcement action). However, this paper identifies that excessive deregulation risks incentivising competition on wasteful aspects of the service, and can generate outcomes that directly contradict important policy goals. This can make policymakers reluctant to use competition to improve efficiency. Competition agencies will therefore need to instead advocate for markets that complement, and not contradict those policy goals, if they are to be successful. Drawing on the literature and different examples of competitive reforms that have been undertaken in different countries, this paper therefore identifies 10 important policy decisions and regulations that competition agencies might focus upon in their advocacy.

* This paper was prepared by Chris Pike with the assistance of Elad Cohen, both of the OECD Competition Division.

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1. Introduction

1. Education services are fundamental for economic and social well-being. They include not only compulsory school-age education but university education, and further or adult education, and early pre-school education. They are often provided by state-owned enterprises, charities and foundations, and sometimes profit-making firms (all of whom may receive public funding).¹ Improving these services directly boosts public sector productivity, but also the productivity of workers across the economy by improving their skills, increasing their capacity to add value, and giving them the ability to adapt to new ways of working.

2. At the same time market studies and advocacy on education appear to be relatively rare (ICN, 2015). This is perhaps surprising given the key role that the sector plays in developing human capital and driving growth, as well as performance in the OECD's Better Life Index. Moreover, the lack of attention is not because market mechanisms are not being used to deliver publicly funded education services. In fact most OECD countries give students a choice of school (of 38 countries only in Brazil, France, Greece, Israel, Norway and Switzerland are these decisions not taken by parents in at least some parts of the country, see OECD, 2018a).² They also give these institutions increasing operational autonomy, and funding often depends upon the number of students that choose to enrol at the school or university (OECD, 2017). The basic structure of a market is therefore in place.

3. However competition agencies face serious challenges when advocating and enforcing in education markets. Firstly, while governments have in many cases adopted market mechanisms in their education systems, there are numerous features of these markets that can prevent, restrict or distort competition, and thereby limit its ability to help policymakers achieving their goals. For instance, competitive incentives can be smothered if there are uninformed or passive users, binding capacity constraints, weak growth incentives or lack of exit risk, distortions arising from asymmetric regulations, or restrictions on rules that allow providers to raise rivals' costs or otherwise restrict their ability to expand.

4. Secondly, there are often other policy goals that are important to policymakers responsible for these services, for example providing equal opportunity for all, providing the skills required to fulfil an industrial strategy, or prioritising the needs of the highest achievers, or those that are left behind. If competition cannot find a way to complement, and not contradict those policy goals, then policymakers will be reluctant to use it to improve efficiency. It is therefore important for competition to be carefully designed to help achieve those policy goals. This, alongside the risk of traditional market failures, means that using competition in these markets does not mean the state absenting itself after paying the bill for the service. Instead it needs to play a number of important roles in an education market. For example, in addition to compelling consumption of school-age education, it needs to inspect and regulate the services provided by state owned schools and any privately owned schools that are permitted to provide publicly funded education services, to regulate the employees (both for safety and qualifications), it needs to give schools the operational autonomy, but to prevent them from setting top-up fees, or selecting students, it needs to set a minimum curriculum, ensure an independent exam boards, mandate the collection of the necessary information to inform students' choice, and determine how much it will pay for the education of each pupil. Many of the same roles are then also required in respect of university markets, childcare markets and adult learning and skills markets.

5. In the next section we briefly look at the value of education services, and the other policy objectives that lead these markets to be publicly funded. We then discuss the nature of the concerns over the use of competition, and why competition might nevertheless still be useful. We then point towards three stylised models of competition, elements of which can be seen in existing services. Drawing on these stylised models, a number of examples, and the literature, we then identify 10 key features of education markets that will shape the outcomes that those markets can be expected to deliver, and which competition agencies may therefore wish to advocate upon.

2. Education services

2.1. Value (and market failures) in education

6. Education holds value for a number of different reasons. Some of these reasons drive an individual's demand for it, while others account for governments' decision to fund it.

7. It has significant intrinsic value. It empowers students, makes them curious and helps them understand and appreciate the world around them, thereby helping them to live happy fulfilling lives.

8. It also has instrumental value. It builds skills and hence increases an individual's productivity (or the marginal revenue product of labour) and hence earning power, thereby helping to alleviate the stresses caused by poverty and unemployment, to consume products and services, and to increase leisure time. It can also be used to signal a student's ability to potential employers.

9. An education service can be characterised as a credence good, the quality of which it is difficult for students to judge, even after they have consumed it (Weingarten et al, 2018). For example while students receive a set of results at the end of the experience, and can compare this against their hopes or expectations at the start, it is difficult for them to compare these results against a relevant counterfactual, that is, the results that they would have obtained if they had received a different type or quality education. However, for some students it may also be a veblen good, the value of which is increased when it becomes more expensive (Davidson, 2017). This can make price competition dangerous since it may result in firm's competing to raise, rather than reduce, prices.

10. Education may also involve considerable network effects (or peer effects as they are sometimes known in the education literature). Firstly being educated alongside high performers, or non-disruptive students might be expected to improve outcomes.³ Secondly being educated alongside those that may – for reasons other than performance – be expected to eventually reach powerful positions, might be expected to offer a student value later in life. This means that even students with the same objectives, for example gaining an education that gets them a well-paid job that they enjoy, may choose on different criteria. For instance some might look at which schools increase their grades with the view that this will translate into opportunities, other may focus on the social network that is gained, with the view that this will translate into future job opportunities.

11. Whatever we think about these two philosophies, the point is that where markets are subject to these strong network effects, they risk tipping into market dominance (see Farrell & Klemperer, 2005). This dominance might be visible in particular schools having a near monopoly of high performing students within a local market, or in certain universities deciding to voluntarily constrain their capacity (in search of a monopolist's

easy life rather than higher prices). Policymakers should therefore be aware that there is considerable risk that when left to their own devices, education markets that allow selection may become less competitive, even in the absence of exclusionary conduct.

12. Education also delivers a broad range of valuable externalities,⁴ which if not reflected in demand for the service are likely to lead to under-provision. For instance, it builds understanding and respect for others, the ability to constructively participate in civil society, to contribute to a society's (or a workplace's) accumulated knowledge (enabling others to 'stand on the shoulders of giants'). Indeed in this paper we focus on education markets, but it should be recognised that there are also important synergies between the provision of publicly funded university education services to students, and publicly funded research in those same universities (Mazzarotto, 2007). Both have an impact on productivity which increases the competitiveness of an economy and lifts the growth rate, thereby increasing the tax revenues that can be spent on public services (Biggar & Fels, 2017). It also builds the flexibility or versatility of an individual's skillset, and hence reduces an economy's vulnerability to shocks that might otherwise create persistent unemployment.⁵

13. This flexibility is particularly important from the perspective of competition policy. This is because the impact of globalised competition has had important distributional consequences within OECD countries, and this naturally has an impact on policymakers' views of the merits of protecting and promoting competitive markets. For example globalised competition has created huge benefits for many in developing countries and those in thriving sectors of OECD economies (Lakner & Milanovic, 2013). However, OECD economies have also seen some sectors and some regions suffer acutely as a consequence of the low prices that greater competition has generated for consumers (Autor et al, 2017).⁶ Such areas have in some cases experienced persistently high unemployment levels, which can to some extent be attributed to the local workforce lacking the skills and education to enable them to switch into alternative roles (or to move to different regions where the skills employed in their previous jobs are still in demand). Indeed in some cases, job losses may follow directly as a result of decisions made by competition authorities, for example from a decision to permit efficiency-enhancing mergers that did not reduce competition (Semuels, 2017), or a merger that increased monopsony power (Hovenkamp & Marinescu, 2018).

14. Effective education and skills services that allow workers to quickly respond to these shocks and shift into good quality new jobs are therefore pre-conditions for an effectively implemented competition policy to generate benefits for all, rather than benefits that are only net positive. These services therefore merit particular attention from those competition authorities that may no longer be satisfied with assuming or hoping that such pre-conditions have been met. Advocacy and enforcement to ensure that education markets are delivering a versatile workforce may therefore help secure popular legitimacy for competition rules. Firstly by reducing instances where competition may inadvertently lead to unemployment that turns out to be persistent, and secondly by underlining that this unemployment is not the result of *highly* competitive product markets, but instead reflects the *ineffectiveness* and lack of competition in education and skills markets. Therefore while policymakers' responses might need to include a number of different approaches, they should be sure to include measures to increase the effectiveness of competition in those education and skills markets.

2.2. Policy objectives

15. In light of the value that education brings, there are a number of different potential objectives that policymakers (and the voters that elect them) might have in mind when they decide to devote tax revenue to funding education services.

16. A common objective is that of providing equality of educational opportunity to citizens regardless of their income or wealth.⁷ For many this is a vital component of a meritocratic society that organises itself in order to ensure that those with the greatest ability are able to rise to the top of their chosen profession and hence enable the society to achieve more than would otherwise be possible (if less able individuals occupied those positions). In many respects this reflects the logic of a market which works best when there's a level playing field (competitive neutrality) that ensures that those with a comparative advantage can thrive, thereby delivering allocative efficiency of jobs. The risk of policy incoherence in this case is that choice (and competition) may allow the less able to gain an advantage, for example those that are more able but on low incomes might be less effective in exercising their choice (they might be less aware of comparative information, or have less support and guidance when making their choice). This was the fear of many of the 70% of a panel of leading economists who were not convinced that all students would be better off if they all had access to vouchers to use at any school of their choice (Chicago Booth IGM Forum, 2011).

17. However, such incoherence can be avoided, indeed with the right rules in place (see section 4.2 and 4.5), policymakers can use choice and competition to increase equality of educational opportunity. For example, giving low-income students a choice between different publicly funded education services can give them the ability to take their funding elsewhere when faced with poor-quality services. This then creates the same incentive to provide a better service that exists in those wealthier areas where students can afford to pay to opt-out and go private if the alternative is poor quality services. Choice can therefore reduce inequalities in access to high quality services.

18. Another common policy objective is social cohesion, for instance values and attitudes, civic skills, and respect for diversity, fundamental rights, principles of democracy, and an understanding of the need to protect the environment. Segregation poses a risk to social cohesion (Sturgis et al, 2014), and reducing segregation at school is therefore a way to build a more cohesive society. There are broadly three possible explanations for school segregation: residential segregation, students' choice of school, and schools' selection of students (Böhlmark, 2015):

- Residential segregation will create school segregation whether or not students are able to choose their school. Indeed residential segregation is likely to increase where school places are allocated on the basis of proximity, since this adds a premium to house (and rental) prices within the catchment area. Where students can choose schools, and schools can expand to accept more students this effect would be softened. However if travel costs are not reimbursed then low-income students are less likely to choose a school outside their local neighbourhood.
- Student choice may however increase segregation in other ways. For example, if students have preferences based on the cultural, religious or income background of the existing student base, this might increase school segregation. Similarly, if students and their parents differ in their access to, or awareness of information about the quality of schools then that would also increase school segregation.

- Selection by schools may also increase segregation since those that are able to demonstrate high ability within the admissions process tend to be those from wealthier backgrounds (see Burgess et al, 2017). Similarly charging top-up fees prevents low-income students from applying. Even where selection by ability is prohibited there is a risk that schools will seek to game the system by interviewing students and parents as part of the application process, or by expelling underperforming students (Boeskens, 2016, Musset, 2012, Holmlund, 2016).

19. Naturally perhaps the most important objective for policymakers is to improve the quality of the education, or the value that it adds. The risk of policy incoherence here is if choice and competition are allowed to focus on the dimensions of the service that students care about (e.g. easier to achieve grades, impressive buildings, networks), and not on those that actually increase the quality of their education. Again, the right rules can prevent such incoherence (see section 4.2 and 4.3) if the issue is anticipated. The same is true if the objective is to improve the quality of the education of specific groups, whether these are those that underperform, or a particular interest group that have influence over policymakers.

20. Another possible objective is to help deliver a policymaker's industrial strategy, for instance one that increases the countries competitiveness in key sectors. These might be those skills that are in demand amongst firms (and the public sector), or they may reflect a vision of policymakers that is to be invested in the belief that firms will then make location choices based on the strength of the human capital in local labour markets. In that case the risk of policy incoherence is again that choice and competition are allowed to focus on the dimensions of the service that students care about (e.g. easier to achieve grades, impressive buildings, networks), and not on those that deliver the skillsets that policymakers want to achieve. Once again the right rules can prevent such incoherence (see section 4.2 and 4.3) if the issue is anticipated.

3. Competition in publicly funded education

3.1. Concerns

21. In the debate on the value of competition as a policy tool in education services a number of concerns often arise. Many of these relate to the role of profit-making providers (Ball & Youdell, 2007), or the ability of the wealthiest to game the system (Gordon & Steverman, 2019, Bau, 2014), which as we discuss in section 4 depend on the specific rules that are adopted. However others relate to the use of any market mechanism (Blakely, 2017). For instance, these include concerns that it can have a commoditising effect on services and that students become consumers with a transactional approach to the service.

22. On the latter point, making choice a more transactional one can increase student engagement, satisfaction, retention and success whilst at university and employability after university (OFT, 2014).

23. On the first point, the concern appears to be that a market mechanism ignores the scope for experts on the frontline to know best how to educate students. However this could not be further from the truth. In fact empowering schools with the autonomy (and in the case of public-service mutuals, empowering teachers within those schools, see Le Grand & Roberts, 2017) to manage and organise themselves in the way that they find works best for students, makes the most of their front-line expertise. They therefore have freedom to

decide what works, and to experiment, provided they can demonstrate that their methods are successful in increasing demand for places. Empowering educators in this way has the attractive feature of making the job more attractive than it would be if it were subject to micro regulation of methods and processes (Chatfield, 2018).

24. What is true is that the definition of ‘what is best for students’ becomes crucial, and the expertise of schools/universities and teachers/lecturers in informing and shaping that definition is a key one. In particular there is a risk of adopting a definition based on short-term considerations that are more easily measured. Once again this is then a matter of the specific rules that are adopted, rather than the use of competition per se. As we discuss in section 4.2 and 4.3, rules on payments and choice can be structured to give strong incentives for competition on longer-term and more complex aspects of quality. Moreover the input of front-line staff and institutions in defining those dimensions of quality are likely to be key.

25. Commoditisation is also argued to crowd-out the effect of intrinsic motivations like altruism. Benabou & Tirole (2003) show how adding financial incentives may generate counterproductive effects, and the empirical evidence is mixed (see Kahn et al, 2001, Baiker and Jacobson 2007, Lavy, 2009, Mullen et al, 2010, and Burgess et al, 2017). Where this applies it would indeed suggest that performance-related pay for teachers or lecturers will not be a useful tool for schools or universities to use to incentivise performance, and that instead demonstrating trust in the staff they hire will deliver better outcomes. Notably in such cases competition would of course incentivise schools and universities to adopt a trust-based approach to their staff and to avoid performance related pay. However, it is important to note that large complex hierarchical organisations such as schools or universities are not individuals, and hence will not as a collective have the same strong altruistic motives that many of their employees do. Indeed evidence tends to suggest that not-for-profit firms respond as expected to financial incentives (Capps et al, 2017).

26. A final concern is that introducing competition creates the risk that providers will find ways to behave anti-competitively in order to obtain a payoff (whether it be higher profits or an easier life) without having to compete to provide a better service. This risk is non-negligible, particularly where for-profit providers are permitted (see Box 1). However enforcement of competition law has proved effective in catching price fixing cartels such as those operated by fifty English private schools, and similarly amongst private colleges and universities in the United States. This concern may therefore be addressed, provided that enforcement is vigilant in education markets in which competition is on non-price factors, and so collusion would need to be on factors such as geographic territory or capacity.

27. If the concerns are potentially addressable through the specific rules that are adopted, then the potential merits of competition should mean that the case for carefully designed competitive mechanisms should be a straightforward one. We briefly consider these merits below.

Box 1. Cartel cases in school and university markets

US Colleges and Universities

Between 1989 and 1991 the US Department of Justice investigated 57 private colleges and universities for price fixing. The case involved annual spring meetings between the universities where they co-ordinated the calculation of the financial aid they would provide to low-income students. The universities signed a consent decree agreeing to stop the meetings, though MIT refused and went to trial where it was found to have violated the Sherman Act.¹ However, Congress then passed a higher education act that allowed to engage in certain co-operative conduct aimed at concentrating aid only on low-income students. The Government subsequently dropped investigations into other colleges and universities and reached a settlement with MIT. This allowed them to engage in much of the conduct that the Government had challenged (Bamberger & Carlton, 1993).²

UK schools

In the United Kingdom the Office of Fair Trade (OFT) (predecessor to the Competition and Markets Authority (CMA)) found in 2005 that 50 private schools had conspired to fix prices (OFT/CMA, 2006).³ The case involved the schools routinely swapping information about their costs and intended fee changes, as often as four to six times a year. The investigation was prompted by the September 2003 leak of emails to The Times Newspaper by two Winchester College pupils. Originally from Winchester College's bursar to the Warden of the College, the emails contained details of 20 schools' fees and the phrase: "Confidential please, so we aren't accused of being a cartel." The OFT reported that the information exchange was organised by the bursar of Sevenoaks School, to whom the Participant schools submitted details of their current fee levels, proposed fee increases (expressed as a percentage) and the resulting intended fee levels. The Sevenoaks bursar subsequently circulated this information amongst the Participant schools in tabular form. This process of information exchange and the resulting tables of information are referred to as the Sevenoaks Survey or Survey. The schools were fined, though Eton and Winchester each reduced their fine by co-operating in the investigation of other schools. The Royal Hospital School was not fined because it was part of a trust whose sole trustee is the Secretary of State for Defence and which, as a result of Crown immunity, the OFT could not require to pay a penalty.

Notes:

¹ U.S. v. Brown University, et al., 805 F. Supp. 288 (E.D. Pa. 1992).

² See also Morrison (1992) and Hoxby (2000) for further discussion of the case

³ CA98/05/2006

3.2. Merits

28. Incentivising and empowering schools and universities to deliver outcomes that meet policy goals, rather than simply monitoring and controlling inputs into the service and ordering them to do so, or alternatively, leaving them to decide whether to do so, can help address the key challenge of how to deliver change in a publicly funded education system. Specifically, it can help deliver change in a publicly funded education system composed of institutions and public servants with both altruistic motives and personal interests (Le Grand, 1997).

29. Firstly, empowering schools and universities with the autonomy to manage and organise themselves, makes the most of their front-line expertise and facilitates innovation (OECD, 2011).⁸ Autonomy might include factors such as the independence of their leadership, their ability to borrow, their choice of curricula and textbooks, student assessment policies, pedagogic approach, class size, and which courses they offer, or specialise in, as well as decisions on hiring staff, and paying them. At the same time, limiting the ability of schools to collectively decide how to organise themselves limits the risk that they use their freedom from centralised control to make changes that make life easier and predominantly serve the interests of institutions rather than students.

30. Secondly, incentivising schools and universities with the prospect of growth, and the threat of contraction (and ultimately exit), can help drive them towards improving the efficiency and effectiveness of the service that they provide. By creating financial incentives for better quality, competition can address the perverse incentives that can mean that the existing altruistic impulse of many within the sector to improve quality is frustrated by the lack of a financial rationale to make that change.

31. This is not to say that competition is the only, or even the main way to drive quality improvement in schools and universities. Many factors other than competition determine the quality of an education, and these may exist with or without market mechanisms. For example, Finland topped the OECD's PISA ranking for 12 years. Since the mid-1990s there have been, in many parts of the country, markets where students choose between publicly funded schools (Kosunen, 2016, Poikolainen, 2012, Seppänen, 2003). However, the key to its success appears instead to be in large part due to its highly educated teachers, which are required to have a master's degree, and often carry out academic research.⁹ Requiring such highly qualified teachers has directly increased teaching standards, and indirectly has attracted high quality applicants (due to the respect accorded to the profession).

32. Requiring highly qualified teachers is of course perfectly consistent with regulated competition, indeed in the absence of wage caps, competition on outcomes would incentivise schools to compete for good teachers, and hence to pay a premium for those that have taken additional qualifications. However, it is unfortunately true that in some systems the introduction of competition has been combined with a reduction in the minimum requirements on teacher qualifications (see BBC, 2012). This can both damage the standing of the profession and hence the quality of applicants, and create a risk that schools will take advantage and cost-cut where competitive incentives are not strong enough to deter them from doing so. It therefore illustrates a case where competition and regulation are complements and not substitutes.

3.3. Typology

33. Since the specific rules that are used can make a big difference in the validity of the concerns over competition, it is useful to distinguish between the different competitive systems. At a high level, we can distinguish between three stylised models or approaches that might be taken: suppressed competition, open unrestricted competition, and regulated competition.

- **Suppressed competition.** Here the essential market mechanisms are in place, and the costs associated with that are incurred (e.g. cost of arranging for students to choose). However, any competitive incentives are largely suffocated or heavily distorted. For example, payments for attracting additional demand are uncertain, there is little information or support available to students, underperforming schools

are bailed out and so face no risk of exiting the market, meanwhile successful schools or universities are unable to expand by adding capacity or opening new schools, and have to subsidise the bailout of unpopular rivals. This means the choice that students face can be an empty one in that it changes little.¹⁰

- Open unrestricted competition. At the opposite extreme is a de-regulated laissez-faire model where entry is open to all, schools and universities are free to decide which information to provide to advertise their services, to select the students they enrol, to set top-up fees, to set their own curriculum, and to mark their own exams, to employ unqualified teachers or lecturers, and to pay them as they see fit.
- Regulated competition. The incentives in the suppressed competition model are unlikely to change anything. The incentives in the open unrestricted competition model might be strong,¹¹ but would risk fuelling competition on service dimensions that have little (or no) value, while reducing equality of educational opportunity. The most effective way to use competition will therefore be to find a third way that harnesses the strength of competitive incentives and uses regulation to steer them towards the delivery of outcomes that meet policymakers' objectives.

Precisely what this involves will depend on the specific objectives, however, as an example, this might mean giving schools and universities: certainty on the payment they can expect from educating an additional student, the ability to expand capacity, a risk of exit, and operational autonomy. While at the same time inspecting and setting minimum regulated standards for the services, setting a minimum curriculum, ensuring there is independently assessed standardised testing, mandating the collection of comparable information on value-enhancing metrics to inform students' choice, prohibiting selection, setting a funding formula that includes large premium payments for enrolling high cost students and for creating diverse classrooms, prohibiting the charging of top-up fees, and compelling consumption for school age students.

34. These three models can therefore be useful in framing the debate with policymakers, however, in practice we find that each market can differ in many different ways. In the next section we therefore address in more detail ten of the most important decisions for policymakers face when setting the rules of a market. These may offer a useful framework for competition agencies thinking about the features of these markets that might prevent, restrict or distort competition, as well as the types of remedies that might help make competition work more effectively to deliver policymakers' objectives in these markets.

4. Ten key decisions

4.1. Should students choose their provider?

35. Giving students the right to choose the service that they use can have intrinsic value for students and may help increase their commitment to an option that they have themselves selected (OFT, 2014). It may also improve the matching of students to school or university places, meaning that those that select those spots get more value from them than others would.¹² However, without a competitive system it is difficult to ensure that the choices students would like to make will be accommodated. This is because the providers of school

places have no incentive to satisfy the choice preferences of students. Regulation might seek to ensure that choices are accommodated by requiring that schools accept as many students that select the school as is possible, it might even require that popular schools expand in order to increase the percentage of students that obtain their first choice. However in each case these regulations, and the enforcement of them through targets and bureaucratic pressure, simply seek to mirror the incentives that effective competition would provide (which requires no enforcement).

36. Beyond the static challenge of optimally allocating a scarce number of places, effective competition can also build incentives both to improve the quality and efficiency of the services that are currently provided, and to innovate to improve the quality and efficiency of future services. By advocating for this competition to be based on student choice, rather than on choice by a procurer, a competition agency can ensure there is an incentive to compete on the aspects of the service that students value (provided they can observe these), rather than on those aspects that the funder or procurement officer values. Since the student can be expected to put more weight on the importance of quality this then helps to ensure that the market delivers better quality more innovative services, and not services that cut-corners on quality in order to reduce prices. Such corner-cutting is a particular risk because writing contracts that hold providers to promises made in bidding documents is difficult when quality is multidimensional and difficult to verify. Meanwhile the need for price competition is limited because the funder can in any case set prices that ensure that the service is affordable for the budget that the government has allocated (see section 4.3).

37. Giving informed students, rather than funders, the right to choose, also increases the level of competitive pressure on providers. It incentivises the provider to compete for each new student, every year, and hence to perform every year against their diverse priorities. It also removes the provider's risk that it will lose revenue during the course of the contract, and hence focuses the competitive incentive on a point in time at which the contract is due to be renewed (or, on tenders for other contracts). Such contracts typically last for many years, making the threat to a provider's funding stream a less immediate one.

38. Furthermore the threat of switching a contract may be less credible. Where a procurer chooses, providers do not compete for the marginal students amongst a heterogeneous user group, and therefore non-marginal students are no longer protected by the provider's incentive to compete for marginal students that are more sensitive to changes in quality. Instead the incentive is to compete for the preference of a bid evaluator who does not use the service themselves, and may trade-off cost-savings and continuity (and the cost of opening a competitive procurement) against student welfare. There is also a risk that incumbency advantages develop during a contract, and that future governments may decide against a competitive renewal process, thereby undercutting the incentive to build a good reputation by performing well against promises made in a bidding document.

39. In isolated areas where even marginal students lack any realistic alternative provider, competitive tender might be the only option if a market based model is to be used. However, given the difficulty in contracting and holding providers to promises made in bidding documents, and the cost of such procurement processes, direct provision should not be ruled out. If competitive tenders are to be used then incentives can be strengthened by making payments dependent on a variety of quality metrics and introducing penalty break clauses to allow commissioners to quickly exit the contract and impose a penalty where quality falls below pre-agreed levels. If this reduces the appetite of bidders to participate then again direct provision may be the best answer.

40. In contrast simplified competitive tendering may be helpful in cases where, for example an autonomous state-owned school that was competing for students exits the market and leaves assets that new entrants and existing providers may wish to compete to operate. In such cases the operation of the assets can be tendered in an open transparent process, and students then given the right to choose whether they use that new service or an alternative. The revenues will then depend on the contract winner's success within the market, meaning that post-entry competitive constraints might help to reduce the risks of bidders producing unacceptable quality. This allows the initial open and transparent procurement process to be much simpler than in a case in which there is little or no post-entry competition (and no prospect of a bail-out).

Box 2. Schools in the United States

Education is primarily a state and not a federal responsibility in the United States. Schools in United States operate under state laws and regulations but must meet the accountability requirements of federal law. The K-12 education systems are different between states, however, in general, education is compulsory between ages 5 (or 6) years old to 16 (or 18) years old and divided between elementary (or primary) schools, middle or junior high schools and high schools. In general, there are three types of school providers: Traditional state schools, private schools, and charter schools. Charter schools are semi-autonomous public schools that receive public funds (these are sometimes referred to as vouchers but often there is no voucher, and funding is simply paid directly to the student's chosen school.¹³ They can open both in underserved In 2015-2016, about 69% of schools were state schools, which are publicly funded and run by the state (district or town). About 26% of schools were private, which funded and run by private entities, and about 5% were charter schools.¹ However, the number of charter schools has grown exponentially since Minnesota passed the first charter school law in 1991. Currently, 44 states and the District of Columbia have charter school laws, and charter schools now operate in nearly every large US city and educate a growing share of public school students (Baude et al, 2014). In some big cities, such as San Antonio, Detroit, and Philadelphia, charters now enrol at least 30% of children in publicly funded schools (Education Week, 2016).

Charter schools were established in order to improve education performance, and are supported and encouraged by the federal government,² which also promotes parental choice and competition between schools. Although states charter laws vary, they share two common set of assumptions: i) accountability requirements for outcome will improve school performance; and ii) high level of autonomy will allow schools to better meet students need, and as a results, improve performance.³ Charter schools, are run by private individuals and associations (both non-profit and for-profit) under a written contract (or "charter") with a state (district or other authoriser or sponsor) that lays out a school's mission, academic goals, fiscal guidelines, and accountability requirements.

Charters are free from many regulations that apply to traditional public schools and they have a high level of autonomy over their curricula, teaching methods, staffing decisions. However they are subject to the same accountability requirements as traditional public schools and they could be closed if they do not meet the terms of their contracts (Ferreya & Kosenok, 2015). Charter schools are tuition-free and receive per-pupil public grant. They are non-selective schools and if oversubscribed they determine admission by lottery.⁴ In addition, in order to facilitate choice, transport subsidies are available for students that choose schools outside their neighbourhood.⁵ The regulations from which charter schools

are exempt depend on each state's law (Prothero, 2018). Despite the growth of charter schools, they face significant obstacles to expansion in states. Some states do not allow entry by charter schools, and others put a cap on the number of charter schools.⁶

Empirical research suggests that competition from charter schools leads state schools to improve (Epple et al, 2017). However, the impact on overall quality is ambiguous (Davis, 2013 and Epple et al 2017)), leading researchers suggest that “the evidence to date is not sufficient to warrant recommending that vouchers be adopted on a widespread basis; however, multiple positive findings support continued exploration.” For instance, changes may take time to become apparent, an analysis of schools in Texas for example, suggests that charter schools were initially of highly variable quality and were, on average, less effective than state schools. However, the exit of ineffective schools, the improvement of existing charter schools, and the fact that the opening of additional schools was predominantly undertaken by successful charter school providers, led to an increase in the average effectiveness of charter schools over time relative to state schools (Baude et al, 2014). Researchers however remain cautious since there is also evidence that choice and competition has increased segregation both on race, and between students that are more and less expensive for schools to educate, suggesting that in many cases the incentives for schools to enrol a diverse intake of students remain inadequate (Whitehurst, 2017, Bergman & Macfarlin, 2018).

Notes:

¹ In school year 2015-2016, there were 132,853 K-12 schools in the United States. https://nces.ed.gov/programs/digest/d17/tables/dt17_105.50.asp?current=yes

² For instance, the Public Charter Schools Program (PCSP) from 1995 and the Race to the Top Program from 2009. <https://www2.ed.gov/programs/racetothetop/executive-summary.pdf>, <https://www2.ed.gov/news/pressreleases/2009/06/06082009a.html>

³ Evaluation of the Public Charter Schools Program: Final Report, <https://www2.ed.gov/rschstat/eval/choice/pcsp-final/index.html>

⁴ National Alliance for Public Charter Schools: <https://www.publiccharters.org/latest-news/2019/02/07/what-charter-school-lottery>

⁵ Urban Institute Student Transportation Working Group (February 2017): “Student Transportation and Educational Access”.

⁶ <https://www2.ed.gov/news/pressreleases/2009/06/06082009a.html>

4.2. What tools should be given to empower students to drive effective competition?

4.2.1. Information, advice and support is required

41. Choice of educational provider is for many students a one-off experience. The switching costs of changing provider include both the considerable upheaval and uncertainty of settling into a new school or university when mid-way through a course, as well as any difficulties encountered in transferring credits or moving between curricula which may not run in parallel (even if they ultimately cover the same topics). Nevertheless, switching between schools does occur when families move house, or when a student is unsettled in a school. In university it may also be feasible to switch, though this will not always be the case (UCAS, 2019).

42. In addition, as previously noted, education is an experience or credence good, the quality of the service is often unclear until after the service is complete and the results have been obtained (and may not even be clear then, given uncertainty over the impact that a different education might have had). This means that even attending a given school or

university may not provide enough information for a student to know if they have made a good or bad choice and hence to switch.

43. In light of these features, extensive support to make the right choice at the first time of choosing is therefore required. In relation to support when choosing a university, many schools already provide careers advice, however such advice may be more difficult to provide for those schools that send fewer students to university. There may therefore be advantages in providing a high quality pro-active advice service to each and every prospective student. In relation to support when choosing a school, students and their families will again need support and advice, and again there are likely to be advantages to this advice being proactively provided by government to each and every student (and their family), rather than simply being an online resource that is largely used by those that are already engaging with the importance of the decision.

4.2.2. What type of information is required?

44. Students will have different priorities on what is most important to them for a school or university to offer.¹⁴ For many students that are choosing a school the convenience and the impact on their grades might be expected to be the most important factors. For some, the quality of the sports, musical, science, or technological facilities, the subject specialisation, the philosophy or the religion of the school may matter. Others may consider a school's record of success in addressing bullying, the happiness of its students, its success in sending students onto university, or into successful careers, or the type of students that it attracts. Finally some may prefer to base their choice on the impact the school has on the average student, others on the impact it has on the highest performers, or on those that fall behind, or on those students with characteristics similar to their own.

45. When choosing a university there is more flexibility on the location of study (since students typically move to live near the selected university, though this can add to the effective price that students pay to enroll). This may become increasingly true if the digital content of courses continues to grow and remote learning becomes common practice. There is also likely to be greater weight placed upon the characteristics of a specific course, the future prospects associated with that course, the experience of the professors, contact time, and the availability of financial support, both for tuition and for living expenses.¹⁵

46. There is therefore a key role for the state in understanding which aspects of the service students care about, and then mandating the collection of that information, and ensuring that it is presented in a comparable and accessible way (see Box 3 on England). Wherever possible the presentation of this information might be personalised to allow students to understand which schools/universities work best for someone with their interests, preferences, personality and characteristics.

47. However, policymakers may not want services to improve in certain dimensions. For instance, if students are easily impressed by expensive buildings, a high proportion of students from wealthy backgrounds, or a willingness to exclude underperforming students, then they may want information on those factors, and choose accordingly. However, policymakers, may instead want to deliver education services that help reduce the unemployment rate, or improve social cohesion, or give the country a comparative advantage in an emerging technology. For example, if policymakers want to use education to help reduce future unemployment they might ensure that users understand which skills employers expect to need in future (see Sleeman, 2017 on the NESTA initiative to provide a skills map to help students navigate the labour market in the same way that Google Maps

helps us navigate our roads). They might also want to identify which schools and universities are currently adding most value for students on those skills.

48. As well as improving information on those dimensions that contribute to meeting the objective, they might also want to discourage competition on dimensions that do not further those goals. For instance, simplistic league tables of test scores that take no account of the students' performance or ability prior to enrolment, will inevitably favour schools that are selected by the high ability students, rather than schools that are most effective at adding value. Policymakers that want to use competition to incentivise schools to add value, rather than to simply collect and segregate high ability students, should therefore consider not only measuring value added across a range of different courses, but also prohibiting the publishing of unadjusted test results in light of the perverse incentives it may create.

49. Where standardised information is required and collected by a regulator this 'nudge' approach to framing the choices that are made by students might be straightforward to adopt. However, there might also be advantages to facilitating the development of a market for information provision. To do so a competition agency might advocate for providers to be required to submit standardised information, and that this data then be provided to firms to commercialise. It might for example be expected that those firms that are able to innovate and package the information to make it easier to understand and use, perhaps for niche groups, would then thrive. This might help increase user take-up of the information. It would naturally become harder for policymakers to use the presentation of the information to nudge students into focusing on the aspects of the service that matter most to policymakers. However, they might still decide to only require standardised information provision on certain aspects of the service, and might impose rules against the provision of information on aspects of the service on which they would want to discourage competition.

50. In considering the advice to provide to policymakers on these matters a competition agency should therefore recognise that these are highly complex and very important choices. Perhaps more so than buying a house and taking out a mortgage. We know that in the face of complexity a user may prefer to fall-back on defaults, or rules of thumb to help them choose (CCP, 2013). However such behavioural biases can as we know lead to users making poor decisions and as a result provide perverse incentives for providers that do not deliver the goals that the policymaker and ultimately voters want to see. This reinforces the need for proactive advice to students to help them navigate the complexity and engage with the decisions rather than avoiding them.

Box 3. Universities and Schools in England

Universities in England enjoy high levels of autonomy.¹ Students pay up to GBP 27 000 (pounds sterling) for a three-year course (in fact almost all pay exactly this amount since almost every single university in the country charges the maximum allowable fee, prompting allegations of collusion).² Universities also receive government subsidies for courses, that are considered particularly helpful for economic growth (e.g. science, technology, engineering and mathematics). Unlike in the Netherlands, where universities must admit all students with the secondary school certificate (OECD, 2008 and Amsellem, 2017) universities in England are able to select the students they enrol by requiring certain grades and calling students in for interviews. The price and selection process mean the system is highly segregated, both in terms of ethnicity and income.³ This seems set to continue, for

instance, despite the government removing caps on student numbers to enable popular universities to grow, Oxford University and Cambridge University have nevertheless rejected proposals that they remove restrictions on capacity in order to reduce segregation.⁴

The CMA who have been active in the sector, undertaking various studies (OFT, 2014), and reviews (CMA, 2015) noted that providers compete directly for students through open days, taster sessions, outreach, prospectuses and marketing materials. Providers also indirectly compete for students by seeking to build their reputation and to achieve high rankings in league tables which, in turn, students use as proxies when choosing between providers and courses. Many providers are also used to competing for research funding and seek to attract good research ratings in the Research Excellence Framework. A measure of the quality of Teaching (the Teaching Excellence Framework) has been added in recent years, and there are numerous league tables run by newspapers and privately owned firms that look at student satisfaction rates, staff ratios, completion rates, academic spend, facilities spend, graduate job prospects, school head teachers assessment.

Caps on student numbers at each university are also being removed to enable successful universities to grow and meet demand, and an independent regulator – the Office for Students – has been set up to promote choice and competition, and to protect students if a university exits the market. It has sought to do so by requiring that all universities make agreements or ‘living wills’ (a ‘student protection plan’ in this case) to ensure that students they enrol can complete their studies elsewhere in the event that the university exits the market.

Schools in England also increasingly have significant autonomy. Each school is able to choose to become an Academy, meaning that, while remaining state owned, it becomes operationally independent of local government. In addition, failing schools are also forced to join existing Academy chains but are given no choice as to which one to join. In January 2018, 72% of secondary schools were academies, 93% in some areas (see NAO, 2018). They receive payment for each additional student enrolled and this includes a premium for enrolling disadvantaged students. The government has also sponsored entry by new ‘free’ schools in many locations. There is however a risk that this sponsorship is inconsistent with competitive neutrality principles and distorts the level playing field. This is because local authorities are prevented from bidding for funding from central government to set-up a new school. This has contributed to 84% of new secondary schools being opened by incumbent school chains (Cullinane et al, 2018). The risk of the government sponsoring the creation of local concentration is therefore a significant one.

Four percent of schools are selective and so can choose students on the basis of performance in tests at age 10 (grammar schools),⁵ however a number of researchers have concluded that it is not clear that these provide a better education than non-selective schools (Gorard & Siddiqui, 2018, Sullivan et al, 2014, Coe et al, 2008). On average, after fully adjusting for the characteristics of the students they enrol, they appear to add the same value as non-selective schools both for students from low-income families and the average student (while OECD, 2017, suggests that, as in most of the OECD, after adjusting for sociodemographic background, students in UK state-funded schools outperform those in privately funded schools). Meanwhile the students they enrol are less likely to be from low-income families or ethnic minorities. The ability of these schools to select their students reduces the choice of school for students and their families. It also prevents neighbouring non-selective schools from offering prospective students a student intake that is of balanced ability (they cannot be a ‘comprehensive’ school), the effect is to restrict demand and raise their costs, thereby limiting the competitive constraint they impose. In light of the effect

that selection has on educational outcomes, the government has for 22 years prohibited the opening of new grammar schools. However no steps have as yet been taken to address the distortionary effect of the remaining selective schools. Unlike in the university market, no independent regulator has been set up to promote choice and competition in the schools market.

Notes:

¹ See <https://www.university-autonomy.eu/countries/united-kingdom/>

² See <https://www.thetimes.co.uk/article/ex-minister-andrew-adonis-calls-in-watchdog-over-university-tuition-fees-cartel-kb06k8mcx>

³ 82% of places at Oxford and Cambridge went to the richest 22% of the population. <https://www.theguardian.com/education/2017/oct/19/oxbridge-becoming-less-diverse-as-richest-gain-80-of-offers>. Meanwhile 10 of 32 Oxford Colleges were found to have failed to admit a single black student in 2015: <https://www.theguardian.com/education/2017/oct/19/oxford-accused-of-social-apartheid-as-colleges-admit-no-black-students>

⁴ See <https://www.theguardian.com/education/2019/jan/09/oxford-and-cambridge-reject-adonis-proposal-for-access-colleges>

⁵ See total number of students in school here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/723851/2018Release_Projections_Text.pdf and number of students in selective schools here: <https://www.telegraph.co.uk/news/2018/01/02/number-pupils-grammar-schools-hits-new-high-official-figures/>

4.3. How should services be paid for?

4.3.1. The different payment systems

51. There are four main approaches to funding allocations for schools (OECD, 2012; Levacic, 2008; European Commission/Eurydice, 2000):

- administrative discretion, based on an individual assessment of each school's needs
- historical costs, which considers historical expenditure in the calculation of the allocation for the following year
- bidding and bargaining, in which schools respond to open competition or make the case for additional resources
- formula funding, using objective criteria with universally applied rules.¹⁶

52. In each case a school might hope to obtain some increase in its funding if it can register additional students. However in order for there to be an incentive for them to compete to attract students they will need to expect that the additional funds will be sufficient to cover the additional cost of educating those students. Universally applied rules removes any uncertainty on the additional funding that will be received for each student that registers. These are therefore the most popular funding option (European Commission/EACEA, 2014, and Fazekas 2012). However uncertainty may remain as to the precise cost of educating a given student, for instance the cost of ensuring they achieve a target uplift in their grades. In contrast, systems of administrative discretion and systems based on historical cost leave significant uncertainty without giving the school any choice over whether to take the risk of bidding for new funds.

53. Under a bidding and bargaining payment system a school might make a bid and decide in light of the response whether the funding available is sufficient to make it worthwhile to proceed. Such a competitive procurement approach delivers a price but as noted in section 4.1 leads to weaker incentives for providers to improve. Moreover, as noted when competitively tendering for experience goods it can be difficult to write contracts that

are effective in holding bidders to delivery of the levels of quality that they promise during bidding processes.¹⁷ Such approaches are therefore more suited to the tendering of a lease on a school building rather than the operation of the school, where the number of non-verifiable aspects of quality quickly multiply.

4.3.2. *Which formula?*

54. If formula funding is adopted then a key role for the state is to ensure that the price it pays a school to educate each student is greater than the expected cost of that education. Failing to do so will result in a market based system setting incentives for schools to discourage applications from, or to otherwise exclude, unprofitable students. See for instance the phenomenon of ‘off-rolling’ in which high cost or underperforming students are expelled or withdrawn from exams in order to improve the visible results and hence increase the surplus or profit that the provider earns.¹⁸ To the extent that these unprofitable students are also higher cost students that require more investment and attention, smaller classes, and additional support, this can be expected to ingrain educational inequalities. To address this risk and to actively tackle educational inequalities some systems calculate funding formulas that allocate significantly greater funding towards the education of those students, making it important for schools to attract them (see boxes 3, 4 and 5 on England, and Belgium and Chile).

55. Indeed if voters and policymakers also see education as a means to create a more cohesive harmonious society, then a pricing formula might be constructed to also reward schools with a more diverse mix of students from different socioeconomic, racial and religious backgrounds (see Box 4 on Belgium). This might for instance include premiums for all students that are educated alongside refugees or non-native speakers. Formulas might also include direct adjustments to reflect the schools record in adding value to a student’s grades.

56. In most OECD countries compulsory school age education is provided for free. This means students face no price differential when choosing one school over another. However, they often do face travel or inconvenience costs when choosing a school further from home. Support for those traveling from further afield (see school buses in the United States) can help reduce this price differential. Such differentials can have significant effects on student choices, and this is unsurprising since the price increase can tend towards infinity if transport to the closest option is almost costless). The most effective way to drive competition on quality (rather than convenience) will therefore be for funding formulas to pay for or reimburse a large proportion of the student’s transport costs.

57. A particular challenge is how a funding formula should deal with the costs of spare capacity. This is important because the state has a very low tolerance for the existence of spare capacity that increase the cost of the service. This is because from a static accounting perspective an unfilled place at a school that faces certain fixed costs can appear to present an obvious opportunity to increase efficiency. Indeed for the school it does, and a school can therefore be expected to invest in attracting students to fill that spot and to bring in the associated funding without incurring an additional fixed cost. However if the state decides to direct students towards the school in order to fill that capacity then the desirable incentive effect is lost. Furthermore if, anticipating that it cannot direct students, the state denies schools permission to expand capacity, on the basis of the risk that the school will not fill that capacity, then the state removes the ability to expand and grow.

58. Including reimbursing a portion of fixed costs within the payment that a school receives for each student might minimise the risk of distortions. However there will remain

a free-riding issue since providers that invest in fixed costs will see this inflate the price that all providers receive. There is thus an incentive for each provider to underinvest in fixed costs and free-ride on the uplift created by others investments. This incentive may be welcomed by policymakers that would prefer providers to minimise spare capacity and hence the fixed costs that they are reimbursed for through the funding formula.

59. However, this incentive to underinvest does pose risks to the quality and efficiency of the service. The competitive risk of losing students as a result of underinvestment can be expected to constrain such underinvestment. However this risk does provide another rationale for a quality regulator to inspect the quality of the products of fixed costs (e.g. buildings).

4.4. Should providers be allowed to set top up fees?

60. In some countries payment systems have allowed for the possibility that schools charge parents a top-up fee in addition to the payment they receive from the state (see Box 5 on Chile). In others, tax exemptions are applied to the purchase of private education. Notably tax exemptions have precisely the same effect as allowing schools to charge top-up fees. These constitute an effective subsidy to private schools for those that can afford it (though there is no direct subsidy). This creates a topping-up problem in which, as explained in Biggar & Fels (2017), the wealthiest top-up the subsidy with their own contribution in order to ensure they receive better access and potentially better quality services than those on low incomes. Such top-ups can simply lead to schools inflating the prices that they would set in the absence of the subsidy from the state.

61. Moreover, this approach actively undermines the ability of choice and competition to help deliver the common policy goal of reducing educational inequalities. It therefore illustrates the way in which pro-competitive reforms can either help or hinder inclusivity, depending on the detailed design of the reforms. It is important therefore to be clear that such top-up fees are neither required, nor helpful for the introduction of choice and competition, and hence if they are introduced this can only be attributed to the adoption of some other public policy objective (dampening social mobility and the protection of special interest groups).

62. In contrast in a university setting in which education is non-compulsory and many students choose not to purchase (in most countries less than half attend university), or to purchase a digital alternative, universities are sometimes free to set their own prices and to engage in price competition.

63. Where students are well-informed on the overall value offered by a university course this might make sense. However a common problem is that in the absence of information, or the capability to understand it, students may use price as an indicator of quality, or as a signal of a more valuable social network. Where such beliefs are common (whether or not they are valid), this makes the product a luxury good, and hence removes the incentive to cut price in order to attract students, instead the incentive is to increase price in order to attract a larger volume of students. This might lead to universities grouping their fees at the limit of any price control that exists (as seen in England), or to significant list price inflation. Notably however this price inflation can nevertheless be combined with personalised means tested discounts to ensure that talented low-income students can still get into the university and help to improve its results and preserve its reputation and the strength of its brand (see section 4.5 on selection).

Box 4. Schools in the Flemish Community of Belgium

Belgium has three separate education systems reflecting the three language-based communities in Belgium (Flemish, French and German-speaking) and each has near full autonomy for education matters. The Flemish Community's education system is based on the constitutional right of "freedom of education"¹ and contain two aspects: i) freedom for students and parents to choose the school they prefer; and ii) freedom to organise schools. This led to establishment of three main types of schools: state schools managed by the relevant community, state schools managed by the municipalities, and private schools managed by non-profit private associations. The largest share of private schools is run by denominational foundations, predominantly Catholic, but there are also private schools that use specific pedagogic methods (e.g. Steiner schools).

All schools enjoy considerable autonomy and are run by school boards (or a "governing body") that often operate one or more schools, and which are free to choose their own teaching and education methods, course content (within the defined minimum curriculum), timetables, exams² and recruitment of their own staff (Flemish Ministry of Education and Training, 2008). However, a regulator inspects and assures the quality of all schools. The result is a comparatively high level of competition among schools (OECD, 2017), however, a lack of capacity means that in practice choice is not always guaranteed and can be limited.

There are no tuition fees and schools receive a payment for each student they enrol. This payment that follows the choices of students depends on the socio-economic status and education needs of each student (Friant, 2016). Schools are not allowed to select students based on the results of admissions tests, performance, religious background or gender (Friant, 2016, OECD, 2017). Instead priority is given to ensuring a diverse mix of students that reflects the proportion of the socio-economic composition of each school's neighbourhood. A 'local consultation platform', regulates school enrolment in order to achieve this outcome. The authorities have also sought to incentivise school collaboration by providing funding for partnerships between schools in the same geographical area (Nusche et al, 2015).

Notes:

¹ Article 24 of the Constitution of 18 February 1831

² There is no standard national examination, however the majority of schools do use standardised tests developed by their networks.

4.5. Should providers be allowed to select students?

4.5.1. Why select?

64. In a normal market when a firm is able to restrict output, increase its price (or reduce its quality) and thereby increase its profit this demonstrates that it holds market power. When a school or university decides not to admit a student that wants to use their allocated funding to purchase a place, it is restricting its potential output and similarly demonstrating its market power. While this restriction on output does not increase the price, it nevertheless increases the provider's profit (or surplus) since the students it rejects are those that offer a smaller profit margin (the margin between the funding they bring in, and the cost of educating them, plus any spill-over effects on the costs of educating other students or on future demand).¹⁹

65. This is the same incentive that insurers or lenders face when deciding to refuse to serve certain consumers because of the risk that they will not repay the loan, or that they are highly likely to make claims. In publicly-funded healthcare markets such insurers are prohibited from discriminating against those patients with pre-existing conditions. Similarly in single payer health services, providers are largely prohibited from selecting which patients they treat. The rationale being that this guards against ‘cream-skimming’. However in education such rules are not always in place, and indeed cream-skimming is in some cases not only tolerated, but actively encouraged (see designated selective schools in England, Box 3).

66. There may also be a long run effect on demand for the school or university. By rejecting an under-performing student the school or university turns down the opportunity to increase volume in the short run in order to increase the valuation that other students put on enrolling at the school, thereby increasing future demand for places. In essence preserving an exclusivity that increases demand amongst other users that value such exclusivity. A similar interpretation might apply to luxury brands that refuse to sell to online retailers who sell at low prices, or through discount supermarkets (see cases in the United Kingdom, France and Germany).²⁰

4.5.2. The anti-competitive effect of selective schools

67. The concerns regarding cream-skimming are two-fold. The first relates to other policy goals, in particular two important goals of many school systems are i) to provide equality of opportunity; and ii) to improve educational outcomes. Selection or cream-skimming segregates schools, and, as the OECD have found, this reduces the value that the educational system adds to the vast majority of students and leads to poorer quality outcomes for the system and for students as a whole.²¹ Allowing selection within a publicly funded education market therefore contradicts important policy goals.

68. The second concern is that permitting selection also distorts competition and damages efficiency, thereby reducing the quality of the service. For example where schools are not prevented from selecting students, the schools with excess demand can be expected, as discussed, to select the students that cost least to teach (and hence offer the highest margins). This leaves the remaining schools with the public service obligation of accepting the higher cost students. By selecting its students, a school therefore raises its rivals’ costs and, consequently, reduces its rivals’ ability to compete with them for low-cost students. This reduces the competitive threat that these rivals pose, reduces choice for students, and hence protects the market power of the selective school.²² While this might not lead to higher prices if these are fixed, it may lead to lower quality services, or perhaps more likely in this context, a smaller quantity of service. Rejecting students on the basis of ability where rivals are under a public service obligation, while restricting capacity might therefore be seen as an abuse of dominance.²³ In addition, if regulations permit certain schools to select students, for example, privately owned state funded schools, then that rule would appear likely to distort competition and breach the principles of competitive neutrality. The introduction of competition should therefore be combined with a prohibition on selection.

69. Prohibiting selection is not as simple as applying a rule against explicit selection. Given the incentives, schools can be expected to use workarounds to select in other ways. This means that application processes need to remove scope for such behaviour, for example by prohibiting interviews, and by requiring that schools accept a quota of students from each performance group (e.g. 25% of places being reserved for students in the lower quartile of performance, while similar quotas might be applied to universities based on the

type of school that the student attended). Regulators must also prevent schools from selecting via their exclusions policy ('off-rolling').

70. Where capacity is limited, and selection is prohibited this leaves a problem of what should be done when there is excess demand for a school. This is a challenge both in systems that use competition and in those that do not. Proximity is often used to ration places, however this can lead to wealthier families in effect paying for access by paying a premium to live within the catchment area of high performing schools. Alternatively in universities it can mean rationing on the basis of legacy status (Hurwitz, 2011), or potentially on expected endowments.

71. One option to address this is a lottery-based system, as is the case in the United States for over-subscribed charter schools (see Box 2). Alternatively, a more radical option, is that of Biggar & Fels (2017) who propose that the application process be conducted two or three years before the start date, in order to give schools sufficient time to make all necessary arrangements to ensure they have the capacity in place to accept every application they receive. Capacity constraints of existing buildings make this challenging, however the obligation would not relate to a particular building, but rather the school that operates it. Therefore oversubscribed schools might expand by acquiring (taking on the operation of) undersubscribed schools. Where such acquisitions are driven by user demand they would be unlikely to require merger review by the competition authority.

Box 5. Schools in Chile

In Chile, education is compulsory from ages 6 to 18 years old, and divided between Primary school from ages 6 to 13 years old and Secondary school from ages 14 to 18 years old. In addition, children can attend free pre-school from 0 to 5 years old.¹ In Chile, there are three types of school providers: State owned (Municipal) schools, privately owned schools that receive subsidies, and Privately-owned schools that do not receive subsidies (Santiago et al, 2017).²

In Chile, the government had made numerous reforms of the education system since the 1980s. The big reform in the Chilean education system began in the 1980s, and had two main goals: to improve the overall education system in Chile and to increase the equality of opportunities between children with different background (Bettinger, 2011). The reform included two components; one was decentralising state schools administration responsibilities to municipalities; the second was implementing a nationwide universal voucher programme, where a fixed subsidy per student was paid directly to the state or private school that was selected by the student (Alves et al, 2015).

Chile moved from a centralised to a decentralised system, the ministry of education transferred all the administrative and infrastructure of all the state schools to municipalities while retaining a role as a regulator (Santiago et al, 2017).³ Municipal education authorities took responsibility for the operation of state owned schools, including their financial management, teaching workforce and curricula within the boundaries set by the Ministry's regulatory framework. There was a difference in the degree of autonomy between state and private schools that receive subsidies; Municipal schools had some autonomy: in 2011, about half of the decisions that affect educational practice took place at the school level. While, private schools that received subsidies had a high degree of autonomy, including aspects of curriculum (OECD, 2013).

The second component of the reform was implementing a universal voucher program. Under the reform, the Ministry of Education began to pay a fixed per capita amount per student enrolled attending classes to both state (municipal) and private schools. As a result, the revenues of schools were determined directly by the number of students that enrolled (Hsieh & Urquiola, 2005).

In addition, the voucher system gave parents' a free choice of schools. Parents had the opportunity to choose between state and private schools. The government allowed private schools to also charge families a top-up fee. In addition, private schools were allowed to select the students that they enrolled, for example, by interviewing parents and assessing a student's achievement and socio-economic background (Santiago et al, 2017).

As a result, many private schools entered the market, earning funding from government, and many students switched to private schools. Rounds (1996) finds that the poorest families were less likely to attend private schools (Bettinger, 2011). This is perhaps unsurprising since many would not be able to afford to pay the top-up fees. In addition, Hsieh and Urquiola (2005) suggest that schools selecting their students created a cream skimming problem which led to high levels of segregation. They also note that private schools benefited from peer effects, under which students preferred to select schools that provide wealthier and high performing peer groups and not on the quality of the education provided. They therefore found that the system led to a higher fraction of students from high socio-economic groups enrolling in private schools, while not appearing to improve academic achievement.

Given these undesirable outcomes, the Chilean government initiated reforms which created larger financial incentives for schools to enrol students from low-income families, thereby increasing the choice of schools that could be chosen by those students (Bettinger, 2011). In addition, in 2015, under the School Inclusion Law, schools receiving public funding were prohibited from being for-profit organisations. In addition, they were prohibited from charging tuition fees and from operating a selective admission process. In instances where the number of applications exceed the number of available places, schools are required to select students based on a lottery. Moreover, schools receiving public funds are unable to transfer or expel student based on academic achievement (Santiago et al, 2017, OECD, 2018).

Notes:

¹ See <https://www.chileeducation.info/education-system/index.html>

² Schools with delegated administration: schools owned by the ministry of education and mostly offering technical-professional education whose administration is delegated to public or private non-profit organisations.

³ The Ministry of Education sets the central framework and guides national education policy, set the priorities and decision making for all educational levels (pre-primary to tertiary), and is responsible for co-ordinating and regulating all aspects regarding education, designing policies, developing programmes, defining quality standards (including the curriculum), and recognising schools. (Santiago, P. et al. (2017)).

4.6. Who should be able to enter and compete?

4.6.1. The role for profit-making providers

72. In education, as in other public services, there is considerable confusion over marketisation and privatisation. Privatisation itself means different things to different people. Logically, a state-owned enterprise (SOE) is privatised when the enterprise itself is sold to private investors (see the privatisation of utilities). However some consider that privatisation also occurs when a private investor is allowed to invest in an SOE without gaining control. Others consider a privatization to be a sale of an asset (e.g. a building) to a privately owned enterprise (though if the asset is then switched into a different use this

might no longer be considered privatisation). Others even consider that when an SOE loses a contract to operate an asset for a fixed period (e.g. to run a school for five years) to be privatisation. It is also not entirely clear whether each of these apply if the winner of the contract is a charity without any private investors.

73. In any case, as should be evident, marketisation or the use of choice and competition does not require any of these forms of 'privatisation'. For instance it is possible to create competition between SOEs or between SOEs and charities without involving profit-making firms. It is true that some countries have proceeded with both marketisation and privatisation in tandem. However this is a policy choice, and one that appears to hold considerable risks. For instance, while experiences differ, OECD evidence suggests that on average for-profit schools are worse than public or charitable providers. This can be seen in their inability to increase the grades of their students by as much as not-for-profit providers. In Sweden for example it would appear that for-profit providers have competed in part on impressive buildings, inflated grades, and by offering a degree of social segregation (see Box 6). Moreover there is reportedly little sign of any particularly innovation in pedagogic approaches.

74. It is therefore not at all clear what is gained by opening entry to for-profit schools, particularly in light of the risks on non-verifiable quality that are involved, and the conflicts of interests they might bring.²⁴ What matters instead is that new, innovative ideas and new capacity can find a way into the market. Therefore unless it is clear that restrictions on profit-making firms are preventing such developments then those restrictions may be justified (Besley & Malcolmson, 2017). One case where it is likely to be important is pre-school education, where many governments are increasingly funding markets in pre-school education, but without having the capacity to provide those services. Reducing barriers to entry in such cases will therefore be important for building capacity in the absence of large scale supply side investment by government. In contrast, in compulsory schooling the capacity largely exists already, even if there may be small changes from year-to-year.

75. Entry may also be required where the quality of existing provision is weak. In such circumstances the most straightforward solution is to force the exit of underperforming providers and offer their capacity to new entrants or successful existing providers. This is what happens when there is an orchestrated forced acquisition (led by the regulator or the ministry). Where there is interest from a successful non-local school, the neighbouring schools should not be involved in such orchestrated acquisitions since they risk reducing competition. In contrast, they should be free to make their own takeover bids, though any such bids should be assessed, either by the competition agency if they constitute a change of control, or by the regulator if the schools have a degree of autonomy on those factors described in section 3.2, but not enough to constitute a change of control.

76. Entry into local markets can of course also be facilitated by permitting existing high performing schools to open new facilities in new areas. However to preserve competitive neutrality such entry should be at the schools own risk, and should not receive preferential funded by the government. Sponsored entry should instead be reserved for those cases where there is a demonstrated lack of any existing provision, and in all cases should be preceded by a competitive assessment, and implemented using a transparent and competitive process. This limits the risk that it will distort competition (and breach the principles of competitive neutrality). There is a considerable risk that such competitive distortions will occur when there is sponsoring of new entry of untested providers without any significant competitive assessment, and without allowing any local or non-local

schools to bid for those same funds (see the United Kingdom's Free School programme). Sponsoring entry in such circumstances can be expected to induce inefficient levels of entry and to involve inefficient schools that have little to lose from accepting the subsidies offered by government.

Box 6. Schools in Sweden

In Sweden, comprehensive education is compulsory for children aged 6 to 16 years old. Students, who pass exams at the age of 16, go on to upper secondary (post-secondary) school for three years, while the others study educational programmes tailored to their needs.¹

In Sweden, a major reform was undertaken in the late 1980s and early 1990s. Sweden moved to a decentralised system, where managerial, decision-making and financial responsibilities were moved from central government to the local municipalities. The government set objectives for results, and retained a role providing scrutiny and evaluation. For example, it initiated an inspection system with a national curriculum and national tests and examinations; however, it allowed schools to mark the exams of their own students (Dovemark et al, 2018).

In parallel, Sweden introduced a school choice system, under which students and parents have the opportunity to choose their own school, using a voucher to pay the school they choose. Students could choose between state and private schools (also named independent schools or 'free-schools', see Bettinger, 2011 and Arreman & Holm, 2011). In addition, private schools that received public funding were prohibited from charging top-up fees and selecting students on the basis of ability.² Private schools were allowed to operate as for-profit organisations, and so private educational providers entered the market by opening new private schools and by acquiring state schools (Dovemark et al, 2018, Lundahl et al, 2013).

As a result, the Swedish education system became both a market-based system, and a partly privatised system: around 20% of schools are privately owned and around 80% of its private schools are commercial companies. These include private equity firms, and the two largest companies are listed on the Stockholm stock exchange (Dovemark et al, 2018). Firms have also exited the market, either by being acquired (when there remains a demand from students for the capacity that their assets provide), or by declaring bankruptcy and shutting down the school (where the demand from students is insufficient).³ In addition, schools use marketing strategies to attract students. These include open-days for students to come and see the school, school fairs, printed materials, such as catalogues, leaflets and brochures, advertisements on radio and TV, offers on free gifts on enrolment to students, introducing branding in the school's name and the pedagogical approach (Arreman & Holm, 2011, Lundahl et al, 2013).

Private schools are subject to less regulation than state schools. For example, private schools are able to employ less qualified teachers, to provide a narrower range of programmes, and to provide fewer services and facilities such as health and social care, laboratories and library facilities. As a result of these lower quality standards it is therefore perhaps unsurprising that private schools are reported to have lower costs and a lower teaching cost per student (Arreman & Holm, 2011, Lundahl et al, 2013).

Researchers have also raised a number of other problems. For example a smaller number of school age children in an area combined with the increase in competition, is said to have

increased the risk of school bankruptcy (Lundahl et al, 2013). This has led to some schools closing down without there being adequate protection for students that are left-behind. For instance, these students have no automatic right to be offered a place in a similar study programme at another school (Arreman & Holm, 2011).

There is also evidence that schools' focus on competition and the lack of independent exam boards to mark the standardised exams has led to schools inflating grade in order to attract students (Lundahl et al, 2013, Hinnerich, 2017, Wennstrom, 2017). In addition, the introduction of competition and school choice without incentives or quotas to ensure schools enrol a diverse mix of students appears to have increased social segregation. For example, school segregation has increased significantly in Sweden since the early 1990s when the school choice reform began. Recent studies find that school segregation has increased between students with different migrant backgrounds as well as between those with different parental education backgrounds. In addition, they found that residential segregation is the main contributor to school segregation. However, school segregation increased more than segregation between neighbourhoods, and the studies found a positive association between school choice and segregation between immigrants and natives (Holmlund, 2016, Hansen & Gustafsson, 2016).

Despite these problems, the evidence suggests that choice and competition had positive effects on outcomes (Bergström and Sandström, 2001, Ahlin, 2003, Björklund, et al, 2003, Böhlmark et al, 2006, Lindbom, 2010, Vlachos, 2010, Nepal et al 2013, and Wondratschek et al, 2014).

Notes:

¹ <https://sweden.se/collection/from-preschool-to-university-in-sweden/article/free-education-from-age-6-to-19/>; <http://www.oecd.org/education/school/Improving-Schools-in-Sweden.pdf>

² When a school is oversubscribed, it can allocate place on the basis of students' proximity to school, position on a waiting list, and whether they have a sibling in the school. P. https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-private-education-80_en.

³ Arreman & Holm (2011) and <https://www.thelocal.se/20130612/48452>

4.7. What incentives should there be to compete?

4.7.1. The strength and short-term nature of incentives

77. Beyond the question of which schools or universities should be permitted to enter and expand, there is also a question of what incentives should be created for those providers. This is particularly important when, as in most countries, the majority of services are provided by state owned or not-for-profit enterprises. While the ability to retain any surplus they earn can incentivise these enterprises, in the absence of shareholders, they will lack a profit motive and will therefore have weaker incentives to expand. However more importantly it might also mean weaker incentives to act early to tackle failure.

78. For example, the lack of shareholders means that there are no long-term investors to provide oversight on the long-term consequences of the board's decision-making. The boards themselves are also unlikely to remain in place over a long period of time. Therefore while as in any market the consequences of bad decisions will be borne by a future version of the current organisation, there is a risk that this future version will be one in which the current management have no significant interest (financial or otherwise). Since the financial crash, we have learned about the effects of short-termism in the private sector and the way that regulation can encourage that bias. In this case, however, it is a problem of public (and third sector) short termism. Fortunately, some of the same techniques applied

in the financial sector might apply here. For instance, the pay and pension of senior managers in autonomous state-owned enterprises might be made conditional (subject to claw-backs) upon the long-term performance of that organisation in order to help create the accountability that is required for good long-term decision making.

4.7.2. Exit risk

79. A lack of accountability can also arise regardless of the nature of the organisation if the state is unwilling to allow efficient exit. For example, such a refusal may in practice arise from concern over the consequences of any discontinuity in service that occurs as a result of a necessary exit of a provider. For instance, an inefficient school or university that ceases to provide services would leave students in the midst of their courses. This prospect can understandably drive governments towards short-term measures to prop-up and support failing organisations. However, the prospect of such financial support, and the absence of exit risk that it brings creates a moral hazard problem. This undermines the incentive for failing organisations to address the challenges they face, knowing they will in any case be bailed out. It also undermines the incentive for successful organisations to invest in expanding, given the likelihood that this will trigger support for a rival that is designed to prevent the expansion becoming a permanent one.

80. A special administration regime is therefore required that goes further than protecting the value of the business as an ongoing concern (which is what would happen in a standard administration procedure). Such a regime must have a duty to protect students, which is not part of the remit for a standard administrator (except to the extent that this affects the goodwill value of the business). It must therefore be triggered much earlier in the process, and be capable of taking on management of the service while a new provider is contracted to take on the operation of the service. An interesting example is the ‘living will’ that UK universities are required by regulators to draw up and make the necessary arrangements for (see box 3). These specify which other institutions would accept the responsibility of completing the education of each of the students on each course that the university offers in the event that the university were to go bankrupt.

4.7.3. Autonomy

81. In the case of state-owned enterprises, they may also lack the autonomy of a profit-making firm. They may face public-sector pay constraints that restrict their ability to attract more or better staff, they may not be able to borrow in order to invest. Most importantly, they may find that when politicians change, their autonomy can quickly vanish. Such restrictions and uncertainties are likely to reduce the strength of the competitive incentives for these organisations to invest in improving the quality and efficiency of their services. The increase in the autonomy that schools and universities have, which allows them to make decisions on inputs like curricula, staff recruitment, and resource allocation decisions, while being held accountable for the outputs they deliver, has therefore been a key part of strengthening competitive incentives (OECD, 2017).

4.8. How should co-operation between providers be delivered?

82. Competition agencies will be keen to ensure that schools and universities in publicly-funded markets are competing against one another for the good of students’ welfare. They will therefore look closely at mergers (see Box 7) and co-operation agreements between them in order to understand whether these include anticompetitive provisions. After all there is a history of collusive agreements in the sector that includes

price-fixing amongst schools and universities that also benefit to some degree from public funding.²⁵ For example the private universities price-fixing cartel in the United States in 1991, and the English private schools price fixing case in the United Kingdom in 2005 (see Box 1). While price-fixing might not be an area of concern in those markets that do not involve top-up fees, it is nevertheless the case that non-compete market sharing agreements on geographic lines, or in respect to specialties may be problematic. Similarly agreements might also fix capacity, and thereby undercut competitive incentives of each school.

83. At the same time schools and universities may be keen to co-operate in ways that do not harm competition. Policymakers are often also keen to see high performing schools sharing their expertise with those that are struggling. In such cases competition agencies can help by being pro-active in publishing guidance on what types of co-operation are unproblematic from a competition perspective. For instance, while agreements or information sharing on capacity, or the other competitive parameters (e.g. student teacher ratios) would raise concerns, high performing schools should not hesitate, if they wish to explain the secrets of the success to underperforming neighbours. While this might voluntarily give up a competitive advantage and might therefore not be commercially rational, such altruistic behaviour would not be anti-competitive, indeed it might be more comparable to the release of proprietary information in a patent application (particularly if that proprietary information is seen to belong to the taxpayers that publicly fund all schools, rather than to an individual school). Finally, chains of schools can co-operate in any way they like provided they obtain clearance for the mergers or acquisitions that create the chain.

84. An interesting example of co-operation that is often driven by government, rather than schools, is the negotiating of a national wage for teachers. In effect this involves each school agreeing to abide by wage caps set by the government. Given the importance of teachers in adding value to students' education the quality of the teachers that a school can attract is perhaps the most important competitive lever available to schools. By agreeing with the government, and hence one another, not to compete for teachers by offering them higher wages, the schools therefore reduce teacher wages. This could mean that the supply of high quality teachers is artificially constrained, and so teachers do not earn their marginal revenue product, and those that might teach, choose not to do so, leaving shortages in certain subjects and certain parts of the country (Britton & Propper, 2014).

Box 7. University mergers and reorganisation in Europe

Globalisation and internationalisation of the higher educational services market (both learning and research) and the impact of international university rankings has increased global competition between universities for students, academic staff, funding and recognition (Curaj et al, 2015).

In response, various European governments have initiated reforms to restructure higher education systems in order to boost productivity, enhance quality and increase effectiveness and efficiency across institutions. Governments have supported institutional collaborations such as alliances, mergers, and consolidation as a strategic policy tool, which has led to many cases of institutional collaborations in higher education sector across the countries of Europe. For instance, the new Law on Education in Romania, adopted in 2011, explicitly refers to mergers in higher education, setting out a framework for university concentrations (Curaj et al, 2015). The French government meanwhile made it mandatory for universities to group into "University Communities", paving the way for voluntary merger processes (Pruvot et al, 2015). In Norway, the government legislated to

introduce a minimum size for universities and released a white paper on further restructuring of higher education and research. This outlined its vision for the future of the sector and supported the decision of twelve institutions to merge voluntarily into five by 2016 (Pruvot et al, 2015). In Sweden, the government supported mergers between small higher education institutions (HEIs) and larger universities in order to pool resources and increase quality of research (Curaj et al, 2015).

The hope was that this would lead, as highlighted by the European University Association (EUA) in 2012, to economies of scale, enhanced regional or international impact, increased quality through rationalisation and consolidation, and synergies in education and research (Curaj et al, 2015). The dominant trend has been to move from relatively small and often highly specialised institutions towards fewer, larger and more comprehensive institutions, and from single site and single campus to multi-site and multi-campus institutions (Harman & Lynn Meek, 2002). Some collaborations have been between universities with the same specialist departments, while others have been between universities with different specialties (Harman & Lynn Meek, 2002). In addition, there has been a trend towards increased autonomy in terms of the ability for universities to decide freely in different aspects, such as internal organisation, internal financial affairs, staffing and human resources, and academic content.¹

In addition, a common framework for university education has been developed within the European Higher Education Area (EHEA), in which 48 European countries are official signatories to the Bologna process. The technical goals of the Bologna Process are “converging degree structures, shared standards for quality assurance, and common recognition practice”. By enabling people, universities and employers to have confidence in the qualifications obtained from universities across the continent, these may help to move towards a single market in higher education. Most countries have now made the reforms required under the Bologna guidelines (European Commission/EACEA/Eurydice, 2018).

Notes:

¹ <https://www.university-autonomy.eu/>

4.9. How should MOOCs and other new digital services be regulated?

85. As in many other markets the traditional model for delivering of education services is also challenged by digitalisation and the potentially disruptive innovation that it enables. The key development is the offering of Massive Open Online Courses (MOOCs).

86. Here firms such as Futurelearn, Coursera and edX are partnering with established Universities and Colleges to offer a wide range of courses of varying lengths.²⁶ They combine content with discussion forums, a mix of digital teaching tools (videos, audios, graphics or slides) and assessment tools (Orr et al., 2015). By the end of 2018, more than 100 million students around the world had used a MOOC, and more than 900 universities around the world were offering approximately 11 400 courses, about 2 000 of which were added during 2018. (Shah, 2019). They are increasingly being monetised, for instance Coursera reported revenues of USD 140 million (United States dollars) in 2018 and edX, which announced a paywall for graded assignments at the end of 2018.

87. While many MOOCs are shorter courses, there are now 45 full online degrees, in which universities offer additional services such as mentorship, office hours, and exams that are invigilated online. As an example the iMBA offered by University of Illinois via Coursera costs USD 22 000 and has over 800 enrolled students. There are also smaller courses that are accredited by universities.

88. There a number of key differences between the business models that give MOOCs disruptive potential. As with other digitalised products the marginal cost of providing these courses is much smaller than those of the traditional delivery model. They can also be consumed flexibly according to the students' timetable (on-demand). The model also removes the need for admissions criteria for online degrees, allowing providers to enrol any student that completes the initial elements of the programme.

89. As a result, MOOCs offer a differentiated product, and in effect offer a huge capacity of that differentiated product. While it is notable that the MOOC platforms are partnering with existing institutions this does not mean the market is unchanged, rather these institutions are now each reaching into thousands of local markets. Moreover like sellers on Amazon they appear on the platform alongside one another with a rival being just a click away (and often with free course content available so users can try before they enrol).

90. The potential impact on education and skills markets is therefore huge, and though policymakers might worry down the line about the potential market power of platforms that draw together these courses, for now the consumer welfare benefits of the development of these services are enormous. Moreover the disruption might grow and it is not impossible to envisage lecturers bypassing their university and contracting directly with the platform if the platform can accredit their course (as Uber and Lyft accredit and rate and review the products of their drivers).

91. The concern must therefore be whether there are anti-competitive rules or regulations, or indeed practices or agreements on the part by existing incumbents that might inhibit the development of MOOCs. For instance, are there barriers to accrediting a course? Do employers or associations not recognise qualifications that are earned online? Do credits from universities that students might switch to or from fit with credits earned online? Furthermore are there pro-active pro-competitive rules that policymakers might take to facilitate the development of these services. For example, is there sufficient portability of credits between different institutions? Are there standards for assuring the quality of online invigilation?

4.10. Which institutions do you need to regulate the market?

92. Given the issues identified a publicly funded education market will need a number of institutions in order to function effectively. It should be noted however that such bodies would generally be required for any education system whether or not market mechanisms are adopted.

93. Firstly it will need an independent quality regulator to ensure adherence to a minimum acceptable level of quality, both at the institutional level and at the professional employee level.

94. Secondly it will also need an independent exams and enrolment body to conduct standardised tests and comparisons across different schools or universities. This should also have investigative powers to ensure that neither formal nor informal ex ante nor ex post selection are taking place. This might also be charged with the important role of co-ordinating the choice process and providing choice advice and support to all students.

95. There will need to be an oversight body to monitor the financial stability of all providers, and a special administrator for when they get into difficulties (see Sweden and the United Kingdom). The ministry might be expected to retain the rarely required role of procuring new schools where none exist.

96. Given the peculiarities of the market there will need to be a market regulator (or a specialised unit within the authority in the case of combined competition authorities) to enforce choice rules, assess mergers, investigate anticompetitive conduct and agreements, and to enforce a sector-specific competitive neutrality framework. Notably following advocacy by the Competition Authority the United Kingdom has introduced a regulator for the university market with a primary duty to promote competition, though it has no similar regulator for its school, pre-school or lifelong learning markets.

97. Price setting should also be within the functions of this market regulator. The market regulator (or the combined competition authority) needs to be structurally independent of the regulator of SOEs, the quality regulator and government ministers in order provide trust that it will not make decisions in the interest of supporting SOEs or indeed any incumbent provider.

5. Conclusions

98. This paper argues that choice and competition can play a useful role in improving the quality of education services, but that different choices made when designing competitive systems can lead to very different results. Expert advice is therefore important since a generic deregulatory approach appears unlikely to succeed. Competition authorities appear to have played a relatively small role in these markets and in many of the reforms that created them. This paper therefore argues that while competition agencies face many challenges in these markets, they can and should step up efforts to advocate for the use of carefully-designed choice and competition incentives in education markets. It suggests that this should not be simply about deregulating, but instead about smarter design of regulations to introduce the type of competition that helps policymakers achieve their objectives.

99. The key points that emerge are as follows.

- Firstly, giving students the right to make meaningful choices wherever possible (and not having procurers choose between competitive tenders) creates stronger competitive incentives on the aspects of the service that matter to students. Empowering students to make these choices means not only giving them the information they need, but also personalised advice on how to interpret and apply it, and reimbursing travel costs.
- Second, funding should be allocated through transparent objective criteria with universally applied rules that are linked to the number of students choosing to enrol at the school or university in question. These prices should be set at levels that ensure that there is an incentive to compete for each student. This means ensuring that there are large premiums for attracting students that are likely to be more costly to educate than others. Payments might also be adjusted to deliver other goals that are important to policymakers. For instance, premium payments on students educated in diverse classes (and alongside migrant children) might incentivise schools to compete to offer an environment that helps build social cohesion, while premiums on certain university or adult education courses might help to pursue industrial policy goals of developing a countries comparative advantage in certain sectors or technologies.
- Thirdly we identify the corrosive role of selection in these markets. Allowing publicly funded schools to select students either through their admissions criteria

or by charging top-up fees drives segregation and reduces equality of opportunity, which can bring competition into conflict with those policy goals. It also reduces quality of an education system's outcomes. In universities, the policy goals are likely to differ and so the same policy conflict might not arise. However, from a competitive effects perspective, in both cases selecting students limits student's choices and raises the costs of rivals, thereby potentially restricting competition between providers. While this might not lead to higher prices if these are fixed, it may lead to lower quality service, or perhaps more likely in this context, a smaller quantity of service. It might therefore be considered that operating a selective admissions policy while also restricting capacity constitutes an abuse of dominance.

- Fourthly, barriers to entry and expansion such as the ability for successful providers to expand their capacity need to be addressed in order to incentivise competition. Such expansion provides increased capacity, as well as helping to diffuse good practice, and generate new innovation. However, allowing expansion and new entry should not mean providing funding or sponsorship, unless the service is in an unserved area. Sponsoring new entry in underperforming areas risks distorting competition in favour of untested new providers. In these markets, which have been created and funded by governments, there is also a question of whether these subsidies can be too easily captured by firms, thereby creating a straight transfer payment from taxpayers to shareholders that might drive rent-seeking. Hence, whether licenses should be available to profit-making firms or only to non-profit organisations remains unclear. For instance, it may be relevant to consider whether patients have adequate information on quality, can use that information to make a meaningful choice, and what, in practice, for-profit firms might bring to the market that might otherwise be absent (and which could not be purchased by state or not-for-profit providers).
- Finally, a key advantage of choice and competition in these markets is to make sure that failure is not sustainable and hence does not endure. Failing providers that are unable to provide good services in an efficient fashion therefore need to be allowed to exit the market and to be acquired by better performing institutions. Special administration regimes and planning for potential failure scenarios (e.g. 'living wills') are therefore necessary to ensure that in these instances the transition to a new operator occurs smoothly and without disrupting students' education.

Endnotes

¹ Note for instance that private universities in the United States and their students receive public funding through the availability of government loans and grants. Meanwhile US community colleges are often fully funded.

² Page 414 and Table D6.5, available on line <https://www.oecd-ilibrary.org/docserver/eag-2018-en.pdf?expires=1549556724&id=id&accname=ocid84004878&checksum=7319D6597F1DF172F2291CBD8BC6DE19>

³ Burgess et al (2015) find that most families have strong preferences for schools' academic performance, and that parents also value schools' socio-economic composition and distance. Carrell et al (2018) estimate the impact of disruptive students on outcomes.

⁴ An externality is anything for which the marginal net social benefit is differs from the marginal net private benefit

⁵ See for example the European Union's press release to its Rethinking Education strategy in 2012: http://europa.eu/rapid/press-release_IP-12-1233_en.htm

⁶ Similar effect can be expected from the disruptions that automation is likely to bring (OECD, 2018).

⁷ OECD (2013) explains that policy goals for education systems typically emphasise the following: the personal development of individuals; the acquisition of skills and competencies (e.g. learning in the course of life, critical thinking); equality of educational opportunities; equity of access, participation and outcomes; values and attitudes (e.g. civic skills, fundamental rights, principles of democracy, respect of diversity, protection of the environment).

⁸ An education service can be differentiated in numerous ways. We can therefore expect to see differences between schools and universities in the value they add, their speciality subjects, their pedagogic approach, their innovation, their classroom sizes, their success in eliminating bullying, the religious or non-religious nature of their approach, their gender-based admissions policy, their selective admissions policy, their resources, their infrastructure, their syllabus, the achievements of the alumni, their success in sending students onto university, specific universities, jobs, or successful careers, or their relationships with businesses.

⁹ In Finland, research-based teacher education has four characteristics. First, the study programme is structured according to the systematic analysis of education. Secondly, all teaching is based on research. Third, activities are organised in such a way that students can practise argumentation, decision-making and justification while investigating and solving pedagogical problems. Fourth, students learn academic research skills. (Toom et al, 2010, p. 333).

¹⁰ It may, however, still have value if it builds student commitment to the course they have selected.

¹¹ However, where schools are free to withhold the provision of comparative information students may find it difficult to compare, this would soften competition. In addition an entirely unregulated market might lead to exclusionary behaviour by dominant schools as well as the build-up of local concentration.

¹² The same might apply where schools have a subject specialism that students have a preference for or against. Some also suggest that students will be better matches at schools that suit their abilities. This is based on the finding by Duflo et al (2011) that students do better in classes that are a better match to their abilities. However, there is no reason why schools cannot allocate students to the class that best matches their abilities. This would deliver the benefit of ability matching without consigning students to schools in which all students are low-ability and there is no opportunity to go up a level without changing schools.

¹³ See Education Commission of the States: <https://www.ecs.org/>

¹⁴ See for instance the range of different priorities for students located in Canada (Drewes & Michael, 2006), Italy (Petruzzellis, & Romanazzi, 2010).

¹⁵ See dimensions of quality (Gibbs, 2010)

¹⁶ Where school is compulsory there is no need to insure against the need for it. Similarly university education is typically consumed prior to earning a salary that would allow a student to insure against the decision to take up the opportunity. We therefore do not see mandatory insurance markets of the type that are sometimes found in healthcare. Such models might however have a role to play in adult education, particularly that which is necessitated by job losses.

¹⁷ Where the value of a product cannot be observed at the point of purchase effective competition requires that the buyer is able to ensure that the delivered value for money (at the execution stage) is in line with that which was promised (at the contract award stage). If this is not possible then bidders can simply compete to promise the best value, rather than to deliver it (see Albano, 2017).

¹⁸ House of Commons Library Briefing Paper (2019)

¹⁹ Carrell et al (2018) estimate the impact of disruptive students on outcomes.

²⁰ See Competition and Markets Authority Press release, “CMA fines Ping £1.45m for online sales ban on golf clubs,” published 24 August 2017, available online at <https://www.gov.uk/government/news/cma-fines-ping-145m-for-online-sales-ban-on-golf-clubs>. See also Décision n° 12-D-23 du 12 décembre 2012 relative à des pratiques mises en œuvre par la société Bang & Olufsen dans le secteur de la distribution sélective de matériels hi-fi et home cinema, available online at <http://www.autoritedelaconcurrence.fr/pdf/avis/12d23.pdf>. See also Bundeskartellamt, Case Summary: Unlawful restrictions of online sales of ASICS running shoes, Decision B2-98/11, published 25 January 2016, available online at https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2016/B2-98-11.pdf?__blob=publicationFile&v=2.

²¹ Gorard & Siddiqui (2018) follow Halsey and Gardner 1953; Halsey, Heath, and Ridge 1980, Coe et al. 2008; and Sullivan et al. 2014 in concluding that students in selective schools do not benefit. Meanwhile as others have shown (Atkinson, et al 2006; Levačić and Marsh 2007; Prais 2001) and OECD (Schliecher, 2016) have identified, there is also a damaging effect on students in other schools. The overall impact is therefore likely to be a negative one.

²² In healthcare cream-skimming is also a concern as noted in OECD (2018), however, in healthcare there is little evidence of network effects, and so any provider, including those without market power, might, if permitted, select its patients. This might suggest that regulation to protect users as the appropriate policy response. In contrast in education, a school that lacks high performing students and the strong network effects (and market power) they generate, will not be able to select students (refusal to serve being contingent on a lack of spare capacity). While regulation to protect users from selection would also help to address these problems, the need for a provider to have market power in order to select means there is then also a case for investigating whether selection constitutes an abuse of dominance.

²³ It is true that selective schools may nevertheless compete with other selective schools for high performing low cost students, however to the extent that these are located further away and given the importance of convenience in student choice, the competitive threat will inevitably be softened.

²⁴ For example, cross-selling or advertising of products that the firm might sell in other markets.

²⁵ Note that private universities in the United States and their students receive public funding through the availability of government loans and grants. Private schools in England also receive funding through tax breaks related to their charitable status.

²⁶ Notably firms such as Pearson, Embanet, 2U and Wiley Education Services also provide services to universities that outsource their online programmes to them in return for a share of tuition fees.

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