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An agnostic framework for managing public and private education

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Executive summary

This paper intends to offer policy-makers, whatever their goals, a framework that will help them to understand how to regulate and finance publicly and privately provided schools. It is not intended to be a prescriptive framework. We believe that there are many plausible arrangements of public and private education provision and financing that could achieve meaningful educational goals, and that the right arrangement will reflect a country's educational history, culture, government capacity and the political economy of interactions between education stakeholders. However, we also believe that an effective policy, regulatory and financing framework is better in all cases than no framework, and it is towards that end that we offer this paper.

The paper is structured around three main goals which policy-makers working in education systems might choose to pursue: human capital, equity and socialisation. For each of these goals, we look at theory and evidence to understand whether private or public financing and provision are likely to better help policy-makers maximise them.

On maximising **human capital**, we find that in theory there is no reason for a policy-maker to be biased in favour of, or against, private sector involvement in education if their aim is to deliver better learning outcomes. Although there are clear reasons why choice can lead to better learning outcomes, a system financed mainly through out-of-pocket expenditure is likely to not to produce the improved learning outcomes which accrue solely through a larger number of people in a society being educated. The evidence does not offer much further guidance, as its findings on learning outcomes in private schools are sparse and mixed. In light of this, we recommend that policy-makers focus their efforts on: ensuring all children have access to finance; giving parents access to quality information to choose between schools; giving parents ways to express their views about school quality; increasing the amount of school choice available to parents; and fostering systems which recruit, support and manage teachers carefully.

As far as maximising **equity** is concerned, it matters whether schools are predominantly privately or privately run, even if they do not select on the basis of ability to pay. This is particularly the case in situations where schools are selective and it is difficult to regulate private schools' selection processes, or where the geographical distribution of schools is unequal. Public intervention is necessary in the financing of private schools. As the market is distributionally blind, it is impossible for a society to achieve equal access to education by allowing it to be fully funded through out-of-pocket expenditure. There is very little direct evidence on how the private sector compares to the public sector in achieving 'true' equality of opportunity in education, but what is available tends to suggest an ambiguous effect, or a negative effect, of private provision and financing on equity. Our recommendation is that, to maximise equity in education, education needs significant public financing, coupled with additional funding to disadvantaged groups. It is also paramount that the state ensures that all children have access to education within a reasonable distance of where they live, and that it regulates private providers and invests in the state's capacity to do so.

With respect to maximising **socialisation**, our conclusion is that if private financing contributes to segregation (by class, race, gender or religion), and if diversity across those dimensions is an explicit goal of the state, the government is more likely to achieve its goals through a publicly financed and publicly provided education system, or by intervening directly in school composition.

Most policy-makers will be interested in a combination of the goals we have outlined above. This will introduce competing tensions among the 11 strategies our paper outlines for achieving these goals. These strategies are not all mutually consistent and there are trade-offs and synergies between these goals, which are further explored in the paper. Specifically, we suggest that it may be difficult to pursue equity and increased accumulation of human capital at the same time, or to

attempt to maximise socialisation and human capital concurrently. On the other hand, having parents, students and communities who are better informed and better able to monitor the quality of the education services received is likely to help progress with respect to both human capital and equity. Similarly, working on improving governments' regulatory capacity to structure incentives in a way which is appropriately linked to the overall goals pursued will help ensure progress is made towards each of the goals.

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1 Introduction

Education is the process of transferring skills, and of socialisation, through inculcating values and beliefs. The global history of education broadly reflects three ways of thinking about the subject. In an early phase, much emphasis was placed on education as a tool of social engineering. Many governments universalised education systems to help inculcate beliefs that supported the dominant ideology, whether this was religious, nationalist or economic (Pritchett and Viarengo, 2015). Education systems were often designed and organised primarily to reproduce this dominant ideology, with strong state involvement not just in the curriculum but also in, for instance, where children went to school and with whom. Governments recognised the role of education in the formation of social networks and capital (Bourdieu and Passeron, 1977) amongst those who passed through education at the same time – friends, to non-economists.

From around the 1970s, most global and national education policy-makers thought increasingly about education as a universal human right, and concentrated on ensuring all children had access to a school.¹ In many countries, policy required government primary schools to stop charging fees; in some, cash transfers were offered to families who sent children to school. Substantial policy attention and technical support was devoted to this area. Poverty and social exclusion remain barriers to attending school, but they affect fewer and fewer children. Enrolment levels are now at record levels globally – 93% of children around the world were enrolled in primary education in 2015 (UN Educational, Scientific and Cultural Organization (UNESCO), 2015).

In the current era, more attention is being paid to the role of education in improving human capital and allowing individuals and societies to innovate, compete, and produce more. The greatest challenge facing global education today seems to be no longer getting children into schools but making sure they learn something valuable when they are there.² Government policy-makers, their organisational partners and researchers are grappling with this challenge: building new curricula, testing new approaches to pedagogy, and finding ways to make teachers more effective and schools more accountable.

Around the same time as this third, current, phase began, non-government actors – and particularly private sector organisations – started playing increasingly significant roles in education. Non-government actors have of course played central roles in education for centuries: faith-based and charitable organisations were the first to open schools in most countries, and they continue to run schools across the world today, either alongside or as part of governments' own efforts to universalise schooling. But the really spectacular change in the global educational landscape is the involvement of the private sector – for profit and non-profit enterprises – in education. Not only do private companies and individuals now run millions of schools alongside government schools all over the world (and their students are sometimes financed by governments), but they also play central roles in many other parts of the education supply chain, both supplying to and supporting government education by producing textbooks, designing curricula, training, and sometimes managing, teachers, leasing school buildings, supplying meals, and sometimes managing government schools entirely.³

One comparatively visible dimension of this growing involvement is the rapid growth of privately owned and run schools in low and middle income countries. A census in Lagos State, Nigeria,

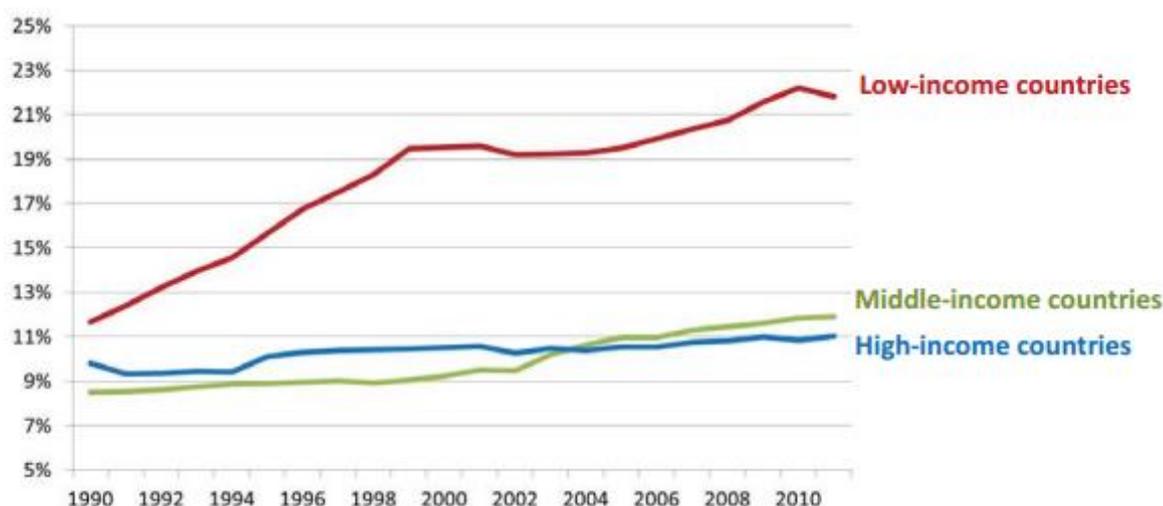
¹ This focus was represented in the Millennium Development Goals for education, in the Global Monitoring Report on education, and in the education policy documents of most low and middle income country governments.

² This is reflected in the Sustainable Development Goals. Some argue that this shift risks leaving behind vulnerable and disadvantaged children who are still unable to attend school on a regular basis.

³ Though this is impossible to measure accurately, the involvement of the private sector in the education supply chain is probably now far more entrenched than was ever the case with faith-based and charitable organisations.

found that 57% of all primary education students in the state are educated in private institutions (Härmä, 2016). In Pakistan and India, roughly 32% and 28%, respectively, of primary education students attend private schools (Pratham, 2012). Although globally most students are enrolled in government schools, a significant number of students in most countries are now in private schools. In over 70 of the world's countries, more than 20% of students at either primary or secondary level attend private schools (World Bank, 2013).

Figure 1: Proportion of students at either primary or secondary level who attend private schools



Source: World Bank (2014)

Private sector involvement in education is the subject of vigorous debate. One particularly heated discussion is that around the involvement of the private sector through owning and running schools, especially for profit schools in low and middle income countries catering to relatively poor households, which is the focus of this paper.⁴ This debate is often highly polarised. Some argue that the growth of private schools is a key part of improving learning: private schools offer a choice to households who are otherwise dependent on often ineffective government schools, stronger accountability to their clients (who can vote with their feet if dissatisfied), the prospect of better management, and more flexibility around inputs (including teacher selection and management, choosing learning materials and assessments, and sourcing infrastructure). According to this point of view, governments should therefore liberalise, and encourage, markets in education. Others counter that the rise of private schools is pernicious: poor households over-pay for a product that is of questionable and hard-to-measure quality that they can ill afford. Longer-term, there are high risks that the poorest children will be excluded from schooling because private schools can raise prices, and because having a greater number of children in private schools can reduce governments' incentives to invest in public schooling. According to this viewpoint, governments should therefore impose tight controls on private schools.

Both the theory and the evidence relating to private schools in education systems are much more ambiguous in their implications than the strength of the rhetoric on both sides would suggest, and public policy must seek to steer a subtle path between these conflicting visions. This paper uses economic theory and available evidence to offer a framework for policy-makers to think about

⁴ Surprisingly, rather less attention is paid, in this polarised good/bad debate, to the involvement of the private sector in other parts of the 'education supply chain'. Arguably, some of the most promising (and controversial) interventions to improve learning quality in government schools include some form of private sector participation, including innovative pedagogy, stronger teacher accountability, and private management of government schools.

private ownership and management of schools, in particular in low and middle income countries where education systems and regulation are developing. Using theory is important because while the evidence is very clear that growing numbers of children attend private schools, it is inconclusive and sparse on many important dimensions of the issue. In particular, there is little or no evidence on the long-term systemic implications of the growing number of private schools, and on government capacity to regulate private schools. The evidence on private school quality fails to account for the great variety in private schooling. The absence of a useful theoretical framework, and the fact that the evidence or a does not point in a clear direction, makes it very difficult for policy-makers to engage with private schools. As a result, many countries lack a coherent approach to private schools. This, we argue, is problematic – not least because so many children, rich and poor, attend them.

This paper aims to set out what economic theory, available evidence, and political economy considerations imply for a policy-maker interested in any of the three education goals with which we introduced this chapter:

1. maximising the **human capital** of children in their country without worrying whether ability is fairly distributed (Phase 3 – Human capital);
2. maximising **access** to education for everyone, regardless of location, poverty, status, gender and other socioeconomic characteristics (Phase 2 – A human right); and
3. maximising education's impact on **beliefs** and social networks (Phase 1 – Socialisation).

To explore the role of private schools in achieving these goals, we look at two dimensions of education: school provision and student financing. For simplicity, but not because it is unimportant, we here ignore the role of the private sector in other parts of the education supply chain.

There are two key dimensions to consider: the provision of education and the financing of education. All education systems include a spectrum of school **provision**, from schools owned and run entirely by the government, to schools owned and run entirely by private companies or organisations (and several examples in between). We define private schools very broadly to include all schools that are managed, financed, founded and owned largely independently of the state (this definition includes religious and charitable schools).⁵ In these schools, a non-state entity has primary control over the management of the school and its teachers, and pupils' parents are therefore entering into a schooling contract with a non-state entity, which they mostly hold accountable for education provision.

Students need **financing** to attend school. Irrespective of which sort of school a student attends, they can be entirely publicly financed, entirely privately financed, or something in between. By private financing, we mean household out-of-pocket expenditure (as opposed to government tax revenue). Table 1 below provides examples of the different types of schools which can be conceptualised through this framework.

⁵ This is in line with a recent systematic review of private education (Ashley *et al.*, 2014) and the discussions around it (Tooley and Longfield, 2014)

Table 1: Financing and provision education matrix

	Private provision	Public provision
Private financing	Independent private schools; home schooling; tutoring	User fees; student loans
Public financing	Government-funded private schools; privately managed schools; voucher schools	Public schools with no user fees

Source: Baum *et al.* (2014)

Our intention is to offer policy-makers, whatever their goals, a framework that helps them understand how to regulate and finance publicly and privately provided schools. This is not intended to be a prescriptive framework. We believe that there are many plausible arrangements of public and private education provision and financing that could achieve meaningful educational goals, and that the right arrangement will reflect a country's educational history, culture, government capacity and the political economy of interactions between education stakeholders. However, we also believe that an effective policy, regulatory and financing framework is better in all cases than no framework, and it is towards that end that we offer this paper.

The rest of this paper is structured as follows. Chapter 2 discusses the particularities of education as an economic good. Chapter 3 presents a framework summarising the considerations relevant for each goal, as well as the potential trade-offs a policy-maker should consider if they are interested in pursuing different goals at the same time. Recognising that with limited resources it is difficult to fulfil all objectives at once, Chapters 4, 5, and 6 focus on different objectives (quality, access and equity, and socialisation, respectively). Each chapter presents the issues that a policy-maker prioritising a specific goal (ability, access, and social goals) must consider. For each goal, we consider theoretical arguments for financing and provision separately. We then survey the evidence, together with context-specific factors which may be important, and suggest strategies for achieving the goal by engaging with different types of actors: users of education, education providers, and policy-makers. Whilst we recognise that policy-makers will often pursue all of these objectives at once, we discuss them separately to be clear about different types of justifications and evidence. Chapter 7 concludes the paper.

2 Characteristics of education as an economic good

Seeing education as a process of socialisation, as a human right and as an input to human capital formation are each very different ways of thinking about the same thing. None of these perspectives gives a clear framework for how education should be provided or financed. In this section, we use concepts from economics to analyse the characteristics of education and to answer questions about provision and financing. This analysis and these answers will be helpful whichever way a policy-maker thinks about education. Specifically, we think about education as an economic good that is provided by a market. We do this not because we believe that this is the only way to think about education, or even because it is necessarily the best way to think about education, but because thinking about education markets is necessary if we wish to reflect the reality for a very large number of households in most low and middle income countries, who purchase education from a market. Moreover, this framework can be used to describe many different types of 'markets', including systems with one supplier – like an entirely government-provided education system. We believe this description is useful for helping policy-makers decide how to run and intervene in these markets.

In this section, we first discuss in more detail the key conceptual differences between education and other economic goods. We then explain how these particularities might influence the outcomes of a pure education market. In the other sections of the paper we link the specific characteristics of education as an economic good more directly to the three objectives inherent in an education system: ability, access, and socialisation.

2.1 Why education is different from other economic goods

Education is a good with various types of value to those that consume it. Here, we discuss two key characteristics.

Most obviously, education is valuable because it is a process whereby ability is transformed into increased productivity through pupils acquiring new hard (e.g. multiplication) and soft (e.g. communication) skills. In most schools, this vector is influenced by three key features: a student's capacity to absorb education (including ability, previous education and parental support), the quality of education provided by the school (including the appropriateness to the student), and the capacity and behaviour of other students. If this was all there was to education, an efficient allocation of education (from the human capital perspective of maximising productivity) would allocate most years of education to students with high ability and high vectors, where marginal return is highest.

However, education is also valuable because it confers a signal to the labour market, in the form of a diploma or grade, and this signal is at least in part a positional good (Hirsch 1976; Adnett and Davies 2002). This view of education as providing a positional good implies that a substantial part of the value of education is defined in relation to the level of education that others have acquired. Positionality might arise, for example, because grades are given according to a bell curve (so only some can come first), or because the labour market uses education to allocate scarce jobs, so what matters is not your grade but your grade relative to other candidates. Assuming the value of education increases with its cost (i.e. in an upward sloping price/quality curve), the market for positional goods will not produce an efficient or socially optimal allocation of resources because buyers with more money to spend will obtain more education and a better position, rather than the market allocating education to where marginal return is highest (i.e. to students whose ability would increase the most with education).

2.2 Market failures arising from the particularities of education

We first observe that a pure market system for education would not maximise the goals policy-makers generally pursue. We then explore the reasons why market failures arise in education markets.

In a pure market system, given a similar willingness to pay, buyers with similar levels of income will buy from similar schools – meaning in practice that children from poor households will go to school with children from other poor households, and rich children with children from other rich households. This leads to several problems, of which we mention two. First, if less money buys a worse quality schooling, this means there is an inefficient allocation of educational value (because marginal returns will not be highest) and also an unjust one (from a Rawlsian perspective of equality of opportunity and benefit to the least advantaged).⁶ Both the inefficiency and injustice are exacerbated to the extent that educational outcomes are co-produced by other students and a part of the value that other students bring is driven by other inputs from their households, which will be limited by their ability to spend. Second, the social capital consequences of education, which in highly segmented or informal labour markets can be as important as the skills aspects – will also lead to the reproduction of social hierarchy, with students allocated to schools based on parental income.

As well as being positional education also has positive externalities that cause market failure.⁷ For example, Arjun benefits from Sita's education because Sita may, as a result of her productivity improvement, produce something that benefits Arjun. To the extent that these externalities hold, individuals may underinvest in education compared with a socially optimal level (i.e. one that would maximise the total ability in society). Note that the positionality of education means that this underinvestment may not be in the aggregate, but will be maximised for high ability, high vector students with low budgets—and in fact wealthy, low ability, students will over-invest compared to the socially optimal level of investment. In other words, the clever poor will not get enough education and the stupid rich will get too much.

Because the way in which education is transformed into increased productivity is highly complex and can be difficult to assess, asymmetric information is particularly likely to impair the function of the market in education. Buyers have far less information about the value of education sold by a school than the proprietor, and often rely on poor signals of quality (such as being educated in English, uniforms, or the promise of computers). This is compounded by an unwillingness to transfer students between schools rapidly or frequently (for instance because parents believe, usually correctly, that children's impedes their educational and social development). In education markets, asymmetric information about school quality and school choice 'stickiness' can lead to suboptimal resource allocation as parents spend on poor quality schools and keep spending on them even when they realise they are poor quality.⁸

Linked to this issue of asymmetric information is the underlying principal–agent relationship between the parent and the child in education. Parents typically decide what sort of education children should receive, but may not always do so in the best interests of the child. Moreover, their decisions may not tally with the government's views about what children should be learning, particularly for the purposes of socialisation. For these reasons many countries have regulations around compulsory education, home schooling and child labour, and tight control of curricula. In

⁶ Rawls outlines these principles of justice in his 1971 classic, *A Theory of Justice*.

⁷ The question of whether education is a public good is more vexed. To the extent that it is positional, it is rivalrous. To the extent that it is provided through fee-charging schools, it is excludable. As we show, however, to achieve most reasonable policy objectives, governments should be involved in provision even if education is not a public good.

⁸ Akerlof (1970) explains why markets for these low quality 'lemons' continue to exist.

theory the state could just regulate a private market to achieve these aims but in practice it is hard to verify that parents and private schools are making appropriate decisions and teaching appropriate things, and this partly explains why in practice there is so much state provision of education, and not just state financing.

High barriers to entry can also affect market competition. Setting up a school can involve substantial fixed costs (building rent, teacher salaries, registration costs, curriculum development costs etc.), which allows uncompetitive (i.e. low quality, expensive) schools to persist. This is even more likely at secondary level where the requirements of specialised teachers and equipment raise costs further (and potentially above the level of household budget constraints). School choice is also limited by physical accessibility, so it is likely that, for example, in rural low income areas a market would only provide low quality schools, or even no schools at all.

2.3 High-level policy implications of the particularities of education as an economic good

The above considerations demonstrate why a pure market for education would fail, and how it would lead to iniquitous outcomes. Economic theory and political and social/moral considerations both demand government involvement in education markets. Governments with ability, access or socialisation objectives will therefore wish to intervene in the market for education in order to achieve these objectives as efficiently as possible.

In too many countries, however, government involvement in education has focused on the provision of education through (often very bad) government-run and government-funded schools, while the (sometimes very large and often also very bad) private education market has been left to its own failures of efficiency and distribution, with minimal intervention or attention from government. Moreover, the available evidence does not suggest that the quality of most private schools in low and middle income countries is especially high: while there are some excellent and very expensive private schools, the majority appear to achieve outcomes comparable with government-run schools. These market failures and the low quality of both public and private education should be of major concern to governments, regardless of whether they are interested in building human capital, realising human rights, or socialising their populations. The rest of the paper discusses the options available to governments to intervene in the market for education, depending on the goals they are trying to achieve.

3 Policy trade-offs and synergies

Table 2 below provides a snapshot summary of the framework in this paper. It suggests that, whether a policy-maker is interested in maximising human capital (or ability), equity or socialisation, they will wish to provide extensive public financing. Public involvement in the provision of education is likely to be necessary for a policy-maker to achieve socialisation goals, and also for maximising ability and equity in contexts where the market is functioning poorly. However, privately provided schools are likely to be an important part of maximising ability in a population. Moreover, private schools are a reality in most countries. The task of the state is to ensure that they regulate and finance this provision to ensure education-related goals without curtailing individual liberties too greatly. Throughout the paper, we suggest that the state's ability to regulate, monitor, and finance education effectively is necessary if private provision of education is to be successful in achieving increases in quality and equity.

Most policy-makers will be interested in a combination of the goals we have outlined above. This will introduce competing tensions among the 11 strategies we outline for achieving these goals (see Chapters 4 to 6). The goals are not all mutually consistent and there are trade-offs between them. In this section, we highlight the types of policy trade-offs that a policy-maker might face. We also discuss some of the synergies between the strategies that might contribute to the achievement of each goal, grouped according to the key stakeholder with which the strategy engages.

Table 2: Summary of theoretical predictions, evidence, and policy trade-offs

	Human capital	Equity	Socialisation
Provision (theory)	Ambiguous	Ambiguous	Public
Financing (theory)	Public	Public	Public
Evidence	Ambiguous	Ambiguous	Public
Trade-off	Equity, socialisation	Human capital	Human capital

3.1 Trade-offs between goals

The potential **conflict between pursuing both equity and human capital** is due to the fact that the evidence available so far seems to suggest (weakly) that in certain contexts private schools achieve better learning outcomes than public schools. There appears to be a stronger case in terms of human capital for having private providers (which are not, however, privately financed). With the evidence in this field growing and developing, it may well be that, in the future, lower or higher human capital gains will be attributed to private providers than is currently the case. The theory on the equity merits of encouraging private provision is ambiguous, as is the evidence regarding the equity effects of private involvement in education provision and financing. In particular, and related to the fact that a growing evidence base might change our conclusions in this section, private provision of education is not likely to maximise either equity or human capital goals in the presence of unaddressed imperfections, such as information asymmetries, and in the absence of strong regulation. Private education provision in the absence of strong regulatory and procurement capacity on behalf of the government could mean a failure to achieve long-term human capital and equity goals. What is more, the theory is consistent in suggesting that for both human capital and equity reasons, public financing of education is desirable. This is also the case if the policy-maker is pursuing equity in quality and not just equity in access: a system based entirely on private financing will mean that high ability, high vector and low income students receive a suboptimal amount of education with respect to maximising the amount of ability in the

population. This will also influence the education acquired by their children, and in this way will further an inequitable (both with respect to access and ability) social hierarchy. This suggests, therefore, that whilst in the short term private provision and financing of education might improve quality, the theoretical grounding for pursuing this approach over the long-term is less solid. Since it is possible that the advantages that private schools currently possess (as shown in empirical evidence) are due to accountability in private schools, it also seems crucial that improvements in quality and equity are not pursued without a clear focus on governance.

The **trade-off between human capital and socialisation** goals is likely to arise from the fact that building social capital might not necessarily be related to developing human capital. Indeed, in light of the current existing evidence on private schools delivering slightly better learning outcomes, it would appear that the policy-maker would be sacrificing better skills if they pursued single-mindedly social goals.

3.2 Synergies between strategies

There are some synergies between the goals. For example, theory suggests that as far as equity, human capital, and socialisation are concerned, public financing is preferable for achieving these goals. For private provision, the theory is more ambiguous, and under certain conditions either public or private provision can be advantageous. This suggests that a range of public finance—private provision and public finance—public provision mixes can achieve the desired goals.

In order to find the best public financing—private provision or public finance—provision mixes to help achieve the desired policy goals, we suggest that policy-makers adopt certain strategies, grouped according to the key stakeholders engaged: education users, education providers. Whilst these strategies (which are presented in Chapters 4–6) are tailored according to the key objective pursued, there are important synergies between them, as highlighted in Table 3 below. We did not include any strategies to achieve socialisation objectives by working with users of education directly, because in this area most interventions which involve an education system are likely to be at the provider level.

Table 3: Summary of strategies and their synergy themes

	Human capital	Equity	Socialisation	Synergy themes
Users of education	Strategy 1, 2, 3	Strategies 6, 7	n/a	Better information, increased community capacity for monitoring performance, need for public financing
Education providers	Strategies 4, 5	Strategy 6, 8, 9	Strategy 10, 11	Structuring the incentives of private and public providers to be better aligned with the goal pursued

Specifically in regard to achieving human capital and equity objectives by working with users of education, it is important that parents, students, and communities are better informed, and, in general, better able to monitor the quality of the education services received – and more specifically the extent to which teachers and school proprietors deliver on their contractual promises.

The main theme which arises from working with education providers is the need to structure their incentives in a way which is appropriately linked to the overall goal pursued, be it equity, ability or socialisation. This requires an understanding of providers' motivations and behaviour, and of the wider context in which they operate. It ultimately requires that considerable effort is put into the

designing of contracts and rules to achieve the goals pursued, and that the rules of the game – registration requirements, grading, teacher training standards etc. – are clarified. It also requires ensuring that schools are equipped to be able to deliver to the demands placed on them, which refers to physical and human resources inside the school, as well as easy access to ancillary services (e.g. teacher training, access to credit, etc.). The government's ability to work with education providers will also depend on the existing regulatory capacity to monitor the enforcements of contracts entered into with education providers, quality assurance of curriculum materials, and clear evaluations of the impacts of specific policy choices on desired outcomes.

4 Prioritising the development of human capital

In this chapter we focus on the factors relevant for a policy-maker whose aim is to maximise the amount of human capital, or ability, in their population.⁹ Learning outcomes that are measured against the curriculum are a popular and often poor proxy for ability. Ability should be defined as the full range of skills, hard and soft, that people can develop, given their endowments, in order to function as effectively as possible in a given economic and social system. Here, in the interests of simplicity, we focus on learning outcomes. We look first at the theory, and then discuss how theory and evidence can inform policy.

4.1 Economic theory: Would the private sector or the government be better placed to deliver better learning outcomes?

Does economics offer any guidance as to whether public sector or private sector provision or financing of education are better placed to deliver improved learning outcomes? This thought exercise allows us to distinguish the theoretical links between private provision of education and human capital, on the one hand, and private financing of education and human capital on the other. We find that a market for private schools might be better placed to deliver high quality education where it is able to increase choice. However, unfettered private financing of education will almost certainly be suboptimal.

4.1.1 School provision

A highly stylised argument from economic theory suggests that the more parents are able to choose between schools, the more efficient schools will be at producing good learning outcomes. This holds in a setting where parents have accurate information about learning outcomes in schools, and where learning outcomes are the key determinant of parents' choice of school. Because the argument focuses on the provision of education in a setting in which financing is entirely immaterial to school choice, parents' backgrounds and peer effects do not play a crucial role in determining learning outcomes. To illustrate the basic logic, consider a setting with a provider-neutral voucher system, as all parents are able to send their children to a school of their choice. In theory, choice would give schools greater incentives to deliver better learning outcomes because schools which are unable to do so will attract fewer students than the schools that can. That is, if a new school could raise a student's achievement, it would be expected to draw the student away from his or her current school. This process would continue until the new type of schools replaced the old type of school or the old types became more adept at raising students' learning outcomes whilst maintaining the same cost (Hoxby, 2003).

The advantages of the system outlined above will only hold insofar as it is indeed able to introduce more choice. The degree of choice introduced through a system of private provision is likely to be lower the higher the barriers to entry into private schooling (such as the cost of investments in buildings and textbooks). Once a school is set up, it can also experience high fixed costs, which will further curb its profitability. These factors might diminish the choice advantage introduced by a system of private schooling, and lead to the consolidation of a few large private schools as opposed to a wider range of smaller schools. Whilst a market with a few private education providers still provides more choice than a public school system where children are assigned to schools, a private education system with limited competition might not have any learning outcome advantages resulting from choice, as compared to a public school system. Furthermore, a public

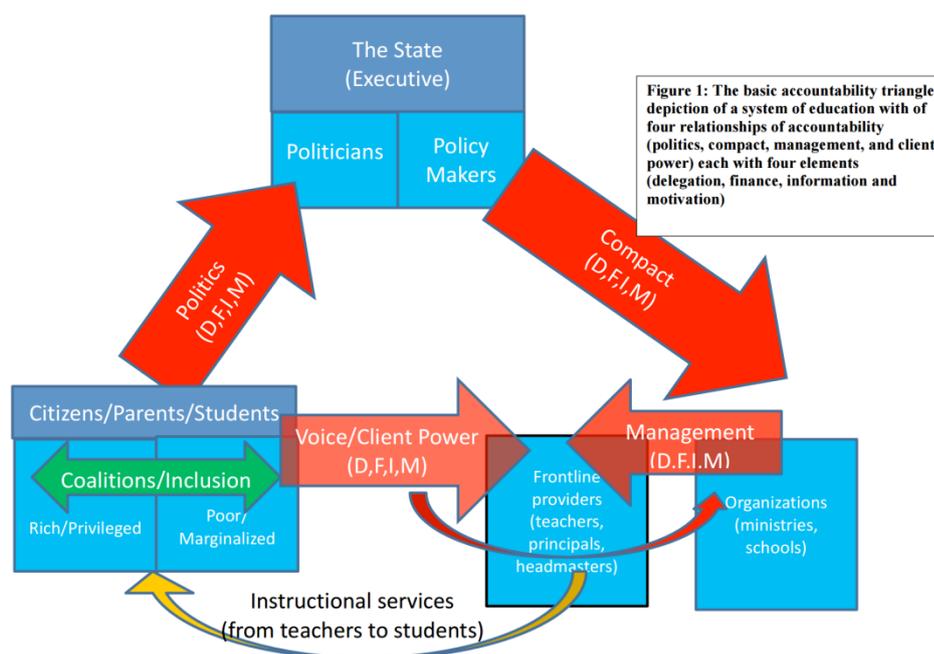
⁹ We are not arguing that maximising human capital (rather than social objectives or human rights) is necessarily the best objective, but many policy-makers currently appear to see it this way. We would seek to change this view.

school system which through its design allows a similar degree of choice between schools and a similar flexibility for schools to respond to market incentives (e.g. similar contracts for teachers) is likely to achieve the same quality advantages as the private system outlined above. In addition, informational asymmetries might mean that parents are not able to discern school quality, and schools will instead compete on imprecise signals, such as the quality of uniforms or the presence of computers in the school.

The likely consequence of parents not being sufficiently informed about the average learning outcomes achieved by the school is that they are less likely to respond to the incentive introduced by increased school choice for parents. To the extent that parents' socioeconomic background might also be correlated to parents' levels of information, a choice-based system can create inefficiencies, both directly (better-off parents choose higher quality schools for their children, therefore undermining the link between ability and quality of education acquired) and indirectly (high income, low ability students become more likely to attend high quality schools than low income, low ability students). Asymmetries in parents' information will affect the quality delivered by private and public schools alike.

Furthermore, assuming again that parents are altruistic and make informed decisions on behalf of their children, we can explore what the possible implications of the two provision systems would be for accountability. The diagram below presents an adaptation of the accountability framework for an education system, conceptualised by Pritchett (2015).

Figure 2: Private accountability triangle



Source: Pritchett (2015)

In a public system teachers are accountable to the education ministry, which in turn is accountable to the state. Politicians and policy-makers are linked to citizens through the accountability of the political process. In contrast, in a private system, teachers are accountable to government in so far as the schools in which they teach are regulated. However, they are more accountable to parents and school principals, through a shorter accountability route. A private sector-led model with choice entails a credible threat of parents withdrawing their children from a school and moving to another one. Because of the way in which teacher contracts are structured, a system of private provision also entails a more credible threat of dismissal due to poor performance. In this simplified

structure, therefore, it seems that private education systems may provide a greater degree of accountability to parents. However, public systems can be modified to incorporate many of the features of accountability that private systems have: for example by strengthening the voice/client power link which runs from citizens/parents/students to organisations (ministries and schools). Also, the accountability links between private providers and parents and students may be further complicated in the presence of information asymmetries and powerful oligopolistic or monopolistic providers of education. Furthermore, the difficulties of effectively regulating private producers mean that the private sector may not be truly accountable, making the process of accountability even more ambiguous.

In sum, in a stylised world where a private education system is able to deliver more choice than a public education system, and parents have good information and care about the learning outcomes, learning outcomes should be higher. Furthermore, private schools may be able to provide better quality education as they are, at least theoretically, accountable to parents through a shorter accountability route. However, where a public system is able to deliver the same degree of choice as a private system, and where parents are informed, learning outcomes are likely to be the same under the two systems. With high barriers to entry and low profitability, the difference in learning outcomes between the two systems will diminish. Information asymmetries, which are highly prevalent, can also undermine the benefits of choice and increased accountability, by making it harder to observe the quality within a particular school, thus decreasing the ability to choose and diminishing the “client power”. Furthermore, oligopolistic or monopolistic behaviour in a private education market can weaken the accountability links between citizens/parents/students and education providers, by raising the cost of exercising school choice.

Policy-makers who care about maximising ability, therefore, do not have an *a priori* reason to favour either public or private education provision. The decision will need to take into account the ability of each type of provider to provide choice, address information asymmetries and surmount barriers to entry into the education system.

4.1.2 Student financing

In the discussion of private provision above we worked on the theoretical assumption that all students would be equally able to afford the different types of schools, and thereby we were able to set aside concerns about whether the way in which education is financed can in itself have implications for learning outcomes. Here, we assume instead that all schools deliver the same quality, and that parents are aware of this, such that the key conceptual difference is between a world in which schools are fully or partially financed through tax revenue (this includes the voucher system used as an example above) and one in which they are financed from out-of-pocket expenditure (i.e. households pay for their own education).

The theoretical choice in this case, starkly presented, is between two options: i) allowing individuals to choose the amount of education based on how much they value it and are willing to pay for it; or ii) the policy-maker influencing their choice by financing education and thus decreasing or eliminating the out-of-pocket cost. To the extent that there are benefits to education which accrue not only to the person making the education decision but also to society at large (e.g. externalities), letting parents vote with their wallets for how much education their children are to receive is likely to lead to a lower than desired society-wide level of learning outcomes.¹⁰ As

¹⁰ The externalities to education are not just related to society-level learning outcomes. Parents' education can plausibly affect health and the probability of being engaged in criminal activities (see Holden and Aslam, 2014). These will also be related indirectly to learning outcomes. We focus here on factors, such as parents' education, which are likely to more directly influence society level learning outcomes because we have assumed this to be the policy-maker's primary objective.

Holden and Aslam (2014) argue, one of the strongest relationships in the education economics literature is between a parent's education level and a child's education level. Genetic transmission of ability is only partially responsible – Tsou et al. (2011) find that Taiwanese adoptees raised by more educated parents have higher educational attainment. The implication is that more educated children will result in more educated and productive grandchildren. Parents do not always account for the way in which the choices they make will result in lower levels of education for their children, grandchildren and so on, therefore reducing the levels of education in society on aggregate. Lower enrolment levels, and enrolment in lower quality schools due to parents' failure to account for the positive externalities of their children's educations, are issues which the policy-maker pursuing higher learning outcomes may well try to address.

Theoretically, there are many other reasons why parents may purchase less education if they have to pay for it out of their own pocket (see Holden and Aslam, 2014 for a review). For example, parents' lack of information about the returns to education will lead to underinvestment – even in comparison to what is individually desirable, and not just the social optimum discussed above. Similarly, even if parents are well-informed and acting in the best interest of their children, the returns to education are so uncertain that it is in fact rational to underinvest compared to what would be optimal for society (Stiglitz and Weiss, 1981). Equally, a system based entirely on private financing will mean that high ability, low income students may receive a suboptimal amount of education with respect to maximising the amount of ability in the population, even if parents have full information on the benefits of education. This is because, if higher quality schools also charge higher prices, only higher income families will be able to afford them. High income students who have low ability would therefore receive higher quality education compared to low income students who have high ability. This would not, on the whole, maximise the overall level of ability in society, and it would be inefficient, as education would not be allocated where its marginal cost (in terms of transforming education inputs into increased ability) is lowest.

Policy-makers who care about maximising ability, therefore, should offer public financing for education, however it is provided.

4.2 Evidence: Does the private sector deliver better learning outcomes than the public sector?

Section 3.1 has argued that, in theory, there is no reason for a policy-maker to be biased in favour or against private sector involvement in education if their aim is to deliver better learning outcomes. Whereas there are clear reasons why choice can deliver better learning outcomes, a system financed mainly through out-of-pocket expenditure is likely not to produce the improved learning outcomes which accrue solely through a larger number of people in a society being educated. In this section, we look at the evidence on learning outcomes in private schools, in order to provide a more nuanced picture for policy-makers.

A recent systematic review of the role and impact of private schools in developing countries (Ashley *et al.*, 2014) suggests that there is moderate evidence that children attending private schools achieve better learning outcomes than their government counterparts. The evidence reviewed is mostly from India (12 out of 21 studies), but empirical studies from Pakistan, Kenya, Ghana, and Nigeria were also reviewed. Private schools do not provide a consistent advantage across countries, urban vs. rural areas, or type of learning outcome (numeracy or literacy). The most convincing evidence comes from Desai *et al.* (2008) and French and Kingdon (2010) (using Annual Status of Education Report (ASER), learning data). These authors compare the difference in achievement levels of two or more children from the same household who attend private and public schools, adjusting for each child's grade and gender. They find a significant positive private

school achievement advantage based on standardised test scores. Adding to the favourable picture, teaching in private schools also tends to be better – teachers are more present and active, and more often adopt teaching approaches that are more likely to lead to improved outcomes (Ashley *et al.*, 2014).

Whilst the evidence is positive overall with respect to the ability of private schools to deliver better learning outcomes, policy-makers should take into account the fact that the advantage associated with attending a private school is not homogenous. Instead, it varies depending on the type of test (numeracy vs. literacy), area (urban vs. rural), and country. Moreover, the extent to which increased choice, the main theoretical channel identified above, is directly responsible for the better learning outcomes is not clear. Indeed, Hsieh and Urquiola (2006) find that the 1981 Chilean reform, which introduced nationwide school choice by providing vouchers to any student wishing to attend private school, made no difference to average educational outcomes (test scores, repetition rates, and years of schooling). When schools were provided with incentives to improve absolute outcomes and also allowed to choose their student body, they appeared to respond by trying to attract better students rather than by making real value-added improvements. A systematic review of the connection between choice and learning outcomes in the United States is similarly cautionary, concluding that the effects appear to be ‘substantively modest’: between one-third and two-thirds of the estimates lack statistical significance, and the methods applied are often not the most convincing (Belfield and Levin, 2002).

What is more, existing evidence also casts doubt on the extent to which parents are currently able to choose schools based on objective indicators of quality, such as learning outcomes, as opposed to their own perceptions of school quality. A randomised control trial conducted by Andrabi *et al.* (2014) in rural Pakistan examined the effects of introducing a community report card providing individual test scores, average scores and school rankings in 112 randomly selected villages in three regions of Pakistan’s Punjab province where there is a high degree of choice between private and public schools. The study found that public distribution of test scores and rankings altered parents’ perceptions of school quality, and, although there was little evidence of switching between schools, there was some evidence that enrolments in low-performing public schools dropped in favour of public schools. Scorecards also created a competitive environment in which all schools were pressured to pursue ‘price-adjusted quality’: average test scores in the villages where scorecards were distributed rose by 0.10–0.15 of a standard deviation compared with control villages. Poorly performing private schools were more responsive to this market pressure than government schools. The worst-performing private schools made the most significant improvements in quality (as measured in test scores), and government schools made some, but more modest, gains on learning outcomes. The highest-performing schools – where the ‘cost per test score’ was the greatest – made little improvement in test scores but reduced their fees by up to 20%.

In an India-based study of teacher absenteeism, one of the most common indicators of governance failures in education, Kremer *et al.* (2005) found that 25% of teachers were absent from school, and only about half of those present were teaching. The study also found that while private school teachers were only slightly less likely to be absent than public school teachers, they were 8% less likely to be absent than public school teachers in the same village. Kremer *et al.* (2005) also found that higher pay was not associated with lower absence. Additionally, they found that strengthening local community ties did not necessarily reduce absence, with teachers from the local area having similar absence rates as teachers from outside the community, and the existence of a parent–teacher association (PTA) not being correlated with lower absence. This all points to the difficulty of holding education providers accountable.

Another study in the Indian state of Uttar Pradesh (Kingdon and Muzammil, 2008) showed how teachers had become embedded in the political system, and uncovered the ways in which teacher associations and unions had actively pursued demands through various strikes and other forms of action. Although teachers had been successful in improving pay, job security and service benefits, less progress had been made on broader improvements in the schooling system, such as the promotion of education in general or improving equity and efficiency in the system.

In sum, we find, from a geographically limited set of studies in developing countries, that private schools tend to deliver slightly better learning outcomes where they are run at roughly the same cost per student as government schools, depending on the type of test results investigated, the urban/rural context, etc. However, why this is the case is very difficult to pin down. Some of the evidence on teaching practices in developing countries does suggest that private schools seem to be better at providing value added over their public counterparts, but the extent to which this is driven by competitive pressures, or greater accountability mechanisms and better management practices, is unclear. Indeed, whilst clear information about learning outcomes has been seen, in a specific context, to put pressure on private schools to improve their learning outcomes and lower their fees, there is also evidence to suggest that ‘cream-skimming’ (i.e. private schools’ ability to select more able students, who will often also come from better-off families) or selection bias (i.e. households who care more about education send children to private school, and caring about education improves learning outcomes) are important factor driving a private schooling system’s superior outcomes.

Similarly, though there are some theoretical grounds for assuming a shorter accountability route between private schools and parents/children, which could translate into better learning outcomes, the evidence is mixed on the extent to which this is the case. The report card intervention (Andrabi, 2014) is the only experimental piece of evidence supporting the view that private schools might quickly respond to the threat of parents choosing a different school if they are informed of its better quality, by upping standards. On the whole, the evidence of accountability is weak and is likely to be highly context dependant.

4.3 What can a policy-maker who is prioritising human capital do?

In light of this, what should the policy-maker do? Below, we present a set of strategies for the policy-maker solely interested in maximising education’s contribution to human capital. The strategies are structured according to the group whose behaviour it is attempting to change: users of education (parents and children), education providers, or other policy-makers.

Maximising human capital by working with users of education (parents and children):

Strategy 1: Ensure all children have access to finance. The theory and evidence are very clear: policy-makers seeking to maximise the contribution education makes to human capital should ensure education is publicly financed. If the system involves private schools, this could mean vouchers for students or public contracting of private schools. If not, all students must be able to access good quality public schools. In theory, it would be optimal in terms of maximising ability to allocate finance to students who would benefit most from education. In practice, it is usually impossible to work out who this would be, and trying to do so through testing at an early age actually reduces the contribution education makes to human capital accumulation, by introducing stress and creating incentives to teach to a test.

Strategy 2: Give parents access to quality information with which to choose between schools. Regardless of whether education is privately or publicly provided in this publicly financed system, parents' level of knowledge about children's learning outcomes needs to be sufficient so as to enable them to base their schooling decision on objective indicators of school quality. This intervention is key for stimulating better competition between existing private schools, and for improving quality in public schools.

Strategy 3: Give parents ways to express their views. Information needs to be accompanied by meaningful ways for parents to express their voice and grievances directly to providers. In a publicly provided education system, in particular, the feedback mechanism must be designed in a way which ensures that parents can hold schools accountable directly. Indeed, this mechanism should perhaps be at least as strong as the accountability achieved through the political process, and might usefully include the involvement of parents in the allocation of education financing (as per Filmer and Pritchett, 1999).

Maximising ability by working with education providers:

Strategy 4: Increase the amount of choice available to parents by supporting privately provided, publicly financed providers. This can be operationalised through carefully designed voucher systems which enable parents to choose private schools in their neighbourhood for their children to attend. In designing voucher systems, policy-makers should pay close attention to the types of private providers which would be eligible to admit students using these vouchers. It is important that these are not oligopolistic or monopolistic providers whom it might be difficult to hold accountable. It is also paramount that education providers are not able to select based on income or social status, as this is unlikely to achieve the goal of maximising ability. The details of the policy are likely to be context-specific, and they are likely to be important in determining its success or failure.

Strategy 5: Recruit, support and manage teachers carefully. Both in a privately provided, publicly financed system, and in a publicly provided, publicly financed system, teacher incentives can be effective in the short term at improving teacher accountability. The evidence of one study has shown that offering teachers monetary rewards for improvements in learning outcomes improved average test scores by 4.54 standard deviations per \$100 in the second year, though the effect disappeared in the long run (Glewwe *et al.*, 2010). Hiring additional contract teachers can be a very cost-effective way of improving education outcomes – the cost-effectiveness of this intervention is arguably infinite, as contract teachers are substantially less costly than public sector employees, according to evidence from Kenya (Duflo *et al.*, 2015). Similarly, regardless of the type of provision, better monitoring of teacher attendance, such as conditioning their wages on objective markers of attendance (such as photographs), as shown in Duflo *et al.* (2012), can have significant positive effects on attendance. A publicly financed education system needs to incorporate these kinds of mechanisms in order to hold education providers accountable.

5 Prioritising equity

In this chapter we focus on the factors relevant for a policy-maker whose aim is to maximise equity in the educational system. An equitable system is one in which primary schooling of equally good quality is accessible by everyone, regardless of location, poverty, status, gender and other socioeconomic characteristics. In this chapter we also adopt the view that the policy-maker is concerned with increasing equality because this matters in and of itself, beyond mere improvements in, say, average learning outcomes. Such policy-makers are likely to view education as a human right. As in the previous chapter, we analyse the theory and evidence around achieving equity in education, and then discuss how they can inform policy.

5.1 Economic theory: Would the private sector or the government be better placed to deliver equity?

Again, we use a thought experiment to explore this question. First, we imagine that all students have equal access to finance, and consider what differences in equity would arise from a system with private schools or a system with public schools. The key differences in equity outcomes, then, arise from schools' ability to select their student body. Next, we assume that all schools will make fair admission decisions, and explore what differences in equity arise from private financing or public financing.

5.1.1 School provision

If schools do not select on the basis of ability to pay, does it matter for equity whether schools are predominantly privately or publicly run? In general, it does in situations where schools are selective and it is difficult to regulate private schools' selection processes, or where the geographical distribution of schools is unequal.

Although schools may not select on the basis of ability to pay, they may select on the basis of other characteristics that can be detrimental to equity. Consider four examples:

First, schools may select on the basis of where students live, and this may link to household wealth and/or be correlated at a general level with household attitudes to, and support for, education. This might mean that area-based selection leads to some schools having a student body that comes from households that are either wealthier, or more interested in education, or both. On the basis that the quality of education depends at least on the behaviour of other students in class (peer effects), it is plausible that students in these schools will receive a better education – increasing inequity.

Second, schools may select on the basis of ability. This may increase inequity, again due to peer effects. Third, schools may select on the basis of values or attitudes, which may affect equity for the same reason, but would also be significantly detrimental to any attempt to improve equity by mixing school groups.. We discuss this more in the section on socialisation.

Finally, schools may select on the basis of wealth, even where fees are fully financed, because poorer students may require additional expenditure on lunches, uniforms, etc. We discuss the implications of this further below.

Of course, both private and public schools could in theory be selective. In a system of public provision, a policy-maker who is interested in equity could mandate that schools must not be selective. However, in a system of private provision, a policy-maker interested in equity would have

to make this form of selection illegal, and would need to enforce this effectively. Principal-agent theory indicates that this enforcement would be very challenging and expensive, due to difficulties in observing the behaviour of schools and how exactly selection decisions are made.¹¹

Finally, it may matter for equity whether provision is public or private if there are geographical areas where schools are not established. It may well be the case that there are small geographical communities where the per-student costs are very large because the fixed costs of establishing a school are high. Private providers are unlikely to be able to run such schools in a profitable or even break-even way without charging fees that exclude many students. A policy-maker will need therefore either to structure financing such that per-student costs are higher in these areas, or to fund student transport costs (recognising that this may cause difficulties for some households who are unwilling to let children travel), or to set up a publicly run school in these communities.

To maximise equity, policy-makers should regulate private schools' selection processes and design a policy which encourages an equitable geographical distribution of schools.

5.1.2 Student financing

Whilst in the area of private provision it is unclear whether governments or markets are better able to deliver equity, the answer is much clearer when considering financing. As the market is distributionally blind, it is impossible for a society to achieve equal access to education by allowing education to be fully funded through out-of-pocket expenditure. In Section 1.1.2, we presented the choice faced by the policy-maker as one between i) allowing individuals to choose the level of education based on how much they value it and are willing to pay for it, or ii) influencing their choice by financing education and thus decreasing or eliminating the out-of-pocket cost. We explained there that higher overall enrolment levels, as well as higher enrolment in better quality schools, is likely to improve society-level learning outcomes, which makes public financing worthwhile from the policy-maker's perspective. We pointed out that parents will purchase less education if they have to pay for it out of their own pocket as parents will not take into account the benefits of living in an educated society, which are more than the sum of the benefits each individual obtains from their own education. Parents may also purchase less education because they might inaccurately estimate the returns to education, or because these returns might be uncertain. Additionally, even when returns are well-understood, information on school quality may be of a poor quality, resulting in lower levels of education being achieved. It is conceptually plausible (and, as we will see later, has been empirically proven) that families with higher incomes and higher levels of education are also likely to invest more in their children's education, and better understand the returns to schooling. Therefore, a system in which all education is financed out-of-pocket will likely see the poorest and most marginalised purchasing less education than others, directly contradicting the policy-maker's goal of promoting equal access to education for all.

We argued above that allowing schools to choose their student body may lead to segregation on the basis of ability, and this can be detrimental to equity. Due to the higher costs of educating poorer students (e.g. due to the necessity to provide school lunches, uniforms, materials, behavioural support), or students with disabilities, or simply due to discriminatory preferences, a system of private provision is often resisted due to the social inequities it could create. Hoxby (2002), however, has demonstrated that the higher cost of educating certain categories of students can be conceived of as an externality. Because it decreases the resources available for educating the rest of the student body, it affects the quality of the education that other students receive. However, the market can be well-equipped to deal with such externalities. Hoxby (2002) describes how, by appropriately pricing the additional resources that specific categories of students require to

¹¹ The same problem does exist to some extent for public schools, but in a milder form.

be educated, and ensuring that both schools and parents actively rank schools to reflect their preferences, a voucher system can achieve student body compositions that are at least as equitable as current school law in the United States. What is more, she suggests, such a system can achieve superior outcomes because it allows the market to decrease the perceived costs of educating certain categories of students as schools begin to realise that these were incorrectly priced due to negative biases. It also has the advantages of maximising parents' and students' choice and increasing the probability that they will be matched with their most-preferred school.

Ensuring that higher amounts of resources are spent by the state on educating children if they are at a higher disadvantage as compared to their peers is an important step in ensuring equality of opportunity (Brighouse and Swift, 2008). This is particularly the case given the positional nature of education. Since the quality and amount of education received leads to stark disparities in a person's ability to meaningfully access other important goods, such as jobs, prestige, social standing, ability to participate in the democratic process, etc., and since there is no inherent justice in the genetic level of ability one is born with, it is especially important for the state to ensure that the primary education received by each individual is proportional to their needs. This enables citizens to compete fairly for the benefits that are conferred by the positional good.

The problem with the solution proposed in Hoxby (2002) is that the complexity of its design and the active choice required by the system makes it a less plausible solution in developing countries where informational asymmetries between parents, schools, and the government designing the vouchers are likely to be substantially larger than in a developed country context. So far, the theory is silent on the implications of considering the particularities of developing countries. The consequences of this lack of clarity in the theory are particularly important when considering the implications of a choice system for ensuring education that is of equal quality for all students. We noted in Chapter 2 that, aside from its positional nature, education is special because the quality of the education received depends on the abilities of one's peers, and on the social networks it confers upon its students (Calvó-Armengol *et al.*, 2009). Imperfections in the design of voucher systems of the kind that Hoxby proposes, that result in students from better socioeconomic backgrounds or ability levels systematically choosing different types of schools than their worse-off peers, will have direct and negative consequences for the equity of the education system.

Policy-makers who care about maximising equity, therefore, should offer public financing for education, however it is provided.

5.2 Evidence: Does the private sector provide more equitable outcomes than the public sector?

There is very little direct evidence on how the private sector compares to the public sector in regard to achieving 'true' equality of opportunity in education. The composition of private compared to public schools in terms of gender, class, religion, etc. is only a proxy for equality of opportunity, and cannot account for some of the subtler biases which might be present in schools. Primary education also cannot fully correct for the lack of equality of opportunity a person's parents have faced, or for the unjust power distributions in society. An important part of achieving equity is not only that the composition of schools are similar, but also that teaching standards and learning conditions are the same for all those enrolled in schools. We have discussed in the previous section that the evidence suggests that there are currently important differences in the quality of teaching and the learning outcomes achieved in private schools compared to public schools, and that this may be inequitable in so far as we cannot fully account for the fact that private schools are able to select based on ability and income.

The evidence on whether low-cost private schools in developing countries can be accessed by all is ambiguous to negative. On geographical access, a recent systematic review (Ashley, 2014) concludes that while private schools continue to be clustered mainly in urban areas, they are increasingly prevalent in various forms in rural areas, including in some of the poorest states, though the quality of these schools is not always high. Overall, though, it is not currently the case that all those who might value attending a private school can currently access one. In many areas, public education is all that is available, irrespective of the quality offered.

Ashley's review also finds that households in the poorest quintiles rarely enrol children in private schools, and that it is not always the case that they can afford the school fees charged by the low-cost private schools. Srivastava's (2013) review of the evidence on equity in private schools also suggests that it is not the case that the students in low-cost private schools tend to always come from privileged backgrounds – many are likely to be first-generation learners whose parents make sacrifices in order to enable them to afford an education.

However, fee-charging schools are not always truly affordable for the bottom deciles and quintiles of the income distribution. Evidence from Pakistan suggests that low-cost private schools set up using World Bank subsidies to serve girls in poor rural communities were not sustainable after the programme ended without increasing fees and lowering teacher salaries (Alderman, 2003). Recent evidence from Lagos, Nigeria, also suggests that whilst a majority of parents preferred private to public education for their children, only 41% of them were able to afford it (Härmä, 2011). This is very much in line with theoretical predictions: in the absence of substantial government funding, it is unlikely that private schools can maintain the low fees which make them affordable for the poorest. In light of this evidence, it is clear that public – and free – schooling remains the only option for many of the most marginalised communities across the developing world. There is, however, some evidence that providing per-pupil subsidies to private schools can address this issue by increasing levels of enrolment and female participation in schooling (Patrinos *et al.*, 2009; Fennell, 2012).

5.3 What should a policy-maker prioritising equity do?

In light of this, what should the policy-maker do? Below, we present a set of strategies for the policy-maker who is solely interested in maximising the contribution education makes to equity. The strategies are structured according to the group whose behaviour each strategy is attempting to change: users of education (parents and children), education providers, or other policy-makers.

Improving educational equity by working with users of education (parents and children):

Strategy 6: It is clear that to maximise equity in education, education needs significant public financing. In the first instance, policy-makers will need to solve the problem of the affordability of education, including both direct and indirect costs. This means that good quality education for every child needs to be paid for by the state, either by providing free public education, or by providing free private education (i.e. paying private schools), or by paying for children to attend private schools through vouchers. Whilst the theoretical and empirical evidence from the US and the Netherlands suggests that designing and implementing good voucher or subsidy systems can overcome some of the inequities of private sector involvement in education, such systems are difficult to implement in a way that improves equity. The state's capacity to implement these systems effectively is likely to be the crucial determinant of whether collaboration with the private sector can be leveraged to deliver both better quality and more equity in education systems. In addition, the state will need to meet the indirect costs of education, such as school

buses or transportation vouchers, uniforms or materials. Finally, education must be mandatory for all children, irrespective of the opinions of their parents.

Strategy 7: Provide additional funding to disadvantaged groups. Policy-makers interested in equity could go further than Strategy 6 providing additional financing to children who start at a disadvantage, because of learning difficulties, poorer educational history, or less parental support. Children belonging to these groups will almost certainly be prohibitively difficult to assess, and the assessment will in any case distort incentives, so this is unlikely to be effective. There may in addition be a strong case to incentivise parents to send children belonging to these groups to schools. This could be achieved through additional financial incentives for parents or through strong behaviour change and advocacy campaigns targeted specifically at including the marginalised in education.

A further strategy that may in theory improve equity of outcomes would be to attempt to prevent households making out-of-pocket expenditures (e.g. private tutoring) on education. However, in most societies this would violate the principle of liberty, and would likely be unworkable, and so is not recommended.

Improving educational equity by working with providers of education:

Strategy 8: Ensure that all children have access to education within a reasonable distance of their home. Where the problem with equity in access is distance, governments should ensure that good public schools are available in remote communities, or encourage the establish of private schools in such areas (provided they can be regulated and held accountable).

Strategy 9: Regulate private providers and invest in the state's capacity to do so. Better regulation of the private sector can improve the equity of the outcomes it delivers. Many of these interventions relate to facilitating private school registration and recognition, and better regulation to ensure that schools do not discriminate in their selection of students. Unfortunately, attempts by governments to intervene in the private education sector have often been constrained by a lack of government capacity, understanding, and basic information on the size and nature of the private sector. The implementation of attempts to enter into partnership or regulate have often been found wanting (Ashley *et al.*, 2014). Therefore, improving equity in the private schooling system would have to be preceded by a strengthening of the government's capacity to regulate and collaborate with the private sector (e.g. in the field of procurement and management of contracts). Where state capacity is not sufficiently developed to be able to collaborate with the private sector, further investment in the public sector, with its tighter regulations with respect to equity, is likely to be a more feasible short-term solution.

6 Socialisation as the policy-maker's priority

Many education systems were developed specifically to inculcate certain values in students (e.g. being a good citizen, communist, liberal, Christian, Muslim, etc.), or to form networks with different groups in society (e.g. school bussing in the USA following the civil rights movement). Having socialisation as a primary objective requires a policy-maker to think about service provision and financing in education differently than if equity or human capital were the primary objective. The theory and evidence around socialisation and education are less well-developed. This does not mean, however, that this goal deserves less attention. Discussing socialisation as a goal is particularly important and interesting in the many countries where private provision is running ahead because it is perceived to lead to greater human capital development. Indeed, we speculate that countries that ignore this goal risk setting up education systems that may prove detrimental to long-term political and social formation. Below we analyse the theoretical implications of private financing and provision for this objective, and articulate some strategies aimed at different types of stakeholders: education users and education providers.

6.1 Economic theory: Is the private sector or the government better placed to maximise socialisation?

As in the previous chapters we consider private provision and private financing separately. This means that when discussing theoretical arguments about the effect of private provision on socialisation, we assume that all parents are equally able to finance their children's education. The key differences in socialisation outcomes, then, do not arise from financial incentives but rather from other aspects of the way in which accountability relationships are structured when provision is private. By contrast, when we explore arguments about private financing, we focus on the role played by financial incentives in modifying behaviour. In this way, we separate the theoretical links between private provision and private financing, on one side, and socialisation, on the other. In theory, public financing and provision is necessary to achieve socialisation goals. In practice, the evidence on socialisation in private schools is insufficient for any clear conclusions, and mixed.

6.1.1 Private provision

Socialisation as a goal of education has some distinctive features, as explained by Pritchett and Viarengo (2015). Unlike the types of skills that can be measured and verified through tests, as explained in the section on learning outcomes, the beliefs and attitudes inculcated as part of socialisation are far more difficult to verify. It is simpler to pretend to have beliefs that one does not possess, than it is to pretend one has skills such as literacy and numeracy when one does not. The lack of verifiability of socialisation and the inculcation of beliefs makes third party contracting for socialisation problematic. In addition, beliefs and ideology are more important to states (even if only for the reason that they are instrumental in keeping governments in power or securing the stability of the state as such). The extent to which the government might accept private provision of education would depend, in this model, on the extent to which what subjects/citizens believe is different from what the government desires that they believe. Therefore, if people are opting for private schools explicitly to resist socialisation in the state's ideology, strong efforts to expand public provision of schooling are to be expected. Support for private schools would be rare and limited to providers which the regime perceives as safe bets.

A separate aspect of socialisation relates to the extent to which the state may wish to encourage a high level of diversity in the composition of schools. This is likely to depend to a high extent on existing class dynamics, as well as on a history of exclusion of specific groups from education. The

more a government is concerned with achieving a high level of diversity, the more likely it is to insist upon a system which is publicly provided, or to tightly regulate private schools' admission decisions.

Policy-makers who care about maximising socialisation, therefore, should assess the extent to which private schools' objectives are aligned with its socialisation goals, and then publicly manage or introduce strict admission criteria in those schools which diverge substantially.

6.1.2 Private financing

The discussion of financing in this context is an extension of the considerations surrounding provision. Whilst the model explained in section 6.1.1 does not focus on the source of the financing, the preferable set-up for financing arrangements can be inferred from our discussion of accountability in the section on learning outcomes. In a privately financed system, financial accountability flows connect education providers more closely to parents and students than in a publicly financed system where financial accountability must flow through taxation. Where parents are seeking to pay out of their own pocket for private education specifically in order to evade the inculcation of certain beliefs, out-of-pocket financing is likely to be banned. Tax-funded education systems usually entail an increased level of control by the state over curriculum development, teacher training, certified textbooks, and approved teacher practices. On the other hand, where out-of-pocket expenditure is pursuing goals other than the avoidance belief-inculcation, private financing is likely to be permitted to a larger extent. The same will hold with respect to diversity.

If private financing contributes to segregation (by class, race, gender, religion, etc.) and diversity across those dimensions is an explicit goal of the state, the government is more likely to achieve its goals through a publicly financed education system.

6.2 Evidence: Does the private sector deliver better socialisation than the public sector?

Most of the evidence on this issue is based on historical analysis and comes from the same Pritchett and Viarengo (2015) paper already cited. The overall picture seems to be that attitudes to private sector provision and financing depend to a large extent on socialisation goals, and, historically, states which have been both most insistent and most successful at achieving the inculcation of specific beliefs have relied on publicly financed and publicly provided education to achieve this. Specifically, nearly all countries with an extended period of communist or one-party state have banned private schooling and nearly all countries with very low shares of private schooling are one-party states – either communist or some other type of socialist. In addition, some of the countries with the highest preponderance of private secondary schooling are religiously heterogeneous (Netherlands), or have specific histories of religious differences (e.g. Belgium, Lebanon). Pritchett and Viarengo (2015) also discuss the case of indifferent countries, such as India and Pakistan, where the state does not oppose the default beliefs arising in the absence of efforts to inculcate a specific set of beliefs. Both India and Pakistan are characterised by a high share of private sector involvement in education.

6.3 What can a policy-maker who is prioritising socialisation do?

Strategy 10: Run a publicly provided and financed education system. A policy-maker who is particularly concerned with socialisation, and who is worried about citizens opting for privately financed and provided education in order to evade their children being subject to the inculcation of

certain beliefs by the state, should be operating an education system which is fully publicly financed and provided. Inculcating beliefs might also be important in contexts with fractured or heterogeneous populations, and where the creation of a national identity is important. In adopting this strategy, however, it is important to establish whether belief-inculcation through public education has any legitimacy. The policy-maker (at least in a democracy) is unlikely to wish to break the social contract or oppress minorities through its policy on socialisation. Similarly, intervening to maximise socialisation through public education in contexts where private providers do not have a strong incentive to inculcate opposing beliefs to those advocated by the state might be a wasteful exercise.

Strategy 11: Consider intervening in school composition. Depending on the type of socialisation outcomes that a policy-maker is interested in, they may wish to ensure that schools have a particular mix of students. If diversity is of particular importance, the policy-maker should aim to regulate which students go to which schools, which would require school providers taking the students they are given (not selecting based on ability or background).

7 Conclusion

This paper has used approaches from economics to provide a framework for policy-makers to think about what they are trying to achieve in education, and how they can interact with the private sector in order to achieve it. We have in several places referred to the 'education market', as this is in line with the way in which areas of human activity are explained in the field of economics. We have also started from the premise that there will be in most countries many private schools operating with or without the regulation or support of the government. Neither of these starting points should be interpreted as a normative judgement. We do not believe that a market framework is the best or only way of thinking about education, nor do we believe that there should necessarily be privately run schools. And we recognise that this is a contentious field. We have tried, therefore, to offer some concepts that may help policy-makers dealing with these difficult challenges to decide what they want to do, and how to do it.

The discussion in this paper has tried to emphasise that there is no one-size-fits-all recommendation for the appropriate degree of involvement of the private sector in education. Indeed, the way in which policy-makers should engage with the private sector will depend on their primary objectives in terms of human capital, equity, and socialisation, as well as on features of the context. Policy-makers will also need to account for a country's specific historical trajectory, culture and politics in designing their strategies for engaging with the private sector in education systems. We have also, at various points, made clear that the evidence is often insufficient to inform clear policy recommendations, though we have sought to suggest how strategies might differ depending on the key group that policy-makers seek to engage with, and depending on the objective pursued.

What should also have become apparent from the discussion is that it is not so much private sector provision *per se*, but choice and shorter accountability routes that can, theoretically, deliver superior outcomes for certain policy goals (e.g. human capital), and inferior outcomes for others (equity, socialisation). Therefore, the private–public dichotomy in education provision is important only insofar as one system (usually market-based) can deliver more choice and direct accountability levers than another. On the other hand, the analysis in this paper has suggested that in order to achieve human capital and equity, the public financing of education is a prerequisite. This is largely due to the particularities of education as an economic good, as it is positional (and therefore particularly prone to equity failures), and due to the positive externalities associated with education that a system wholly financed by out-of-pocket expenditure cannot address.

Finally, the paper has emphasised that policy-makers pursuing human capital, equity, and social objectives need to be cautious regarding some of the inherent trade-offs between these goals. We have also acknowledged some of the synergies that exist between these goals aimed at users of education and education providers. Specifically, and regardless of the objective pursued, policies aimed at students and parents need to focus on improving their capacity to understand and monitor the quality of the education received, and to hold policy-makers accountable. This will likely involve a behaviour change component. Policies aimed at education providers are primarily about structuring incentives in ways which are aligned with the objectives pursued, as well as improving the capacity of the state to regulate, manage and monitor education service delivery.

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