



The role and impact of private schools in developing countries

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Acronyms

APPG	All-Party Parliamentary Group
ASER	Annual Status of Education Report
A 1-17	Assumptions 1-17
DFID	Department for International Development (UK)
EFA	Education For All
HDRC	Human Development Resource Centre
H 1-8	Hypotheses 1-8
KCPE	Kenya Certificate of Primary Education
LCP	Low-cost private school
LEAPS	Learning and Educational Achievement in Punjab Schools
LFP	Low-fee private school
NCAER	National Council of Applied Economic Research (India)
ODI	Overseas Development Institute (UK)
PEIRA	Private Educational Institutions Regulatory Authority (Pakistan)
PERI	Privatisation in Education Research Initiative
PPP	Public-private partnership
PRISAM	Private Schools Association of Malawi
PTR	Pupil-teacher ratio
R	Indian Rupee
RCT	Randomised controlled trial
UNESCO	United Nations Education, Scientific and Cultural Organization

Executive summary

Introduction

This paper presents a rigorous review of evidence on the role and impact of private schools on the education of school-aged children in developing countries. It was commissioned by the Department for International Development (DFID) and produced by a multi-disciplinary team of researchers and advisers with expertise in education, economics, international development and political economy from the University of Birmingham, Institute of Education, Overseas Development Institute (ODI) and the Education For All (EFA) Global Monitoring Report. The focus of the review is on private school delivery of education to poorer sections of societies, including private schools identified as low-fee private schools (LFPs). The strength of the evidence is assessed and gaps are identified which highlight areas for further research.

Following an initial sifting of the literature which produced extensive results, parameters were set by the review team to further narrow focus. Literature included in this review has therefore been published in the past five years, sourced from DFID priority countries, and includes only research judged to be of high or medium quality.

Conceptual framework

The research question driving the review is: *Can private schools improve education for children in developing countries?* The conceptual framework set out a number of hypotheses and assumptions that underpin the polarised debate about the potential and real contribution of private schools. These are interrogated through a rigorous and objective review of the evidence and findings are mapped on to an evidenced theory of change.

Methodology

A phased review process enabled a common working framework with investigation undertaken in careful sequence and in parallel across a team of researchers, co-ordinated by a team lead and reviewed by advisers. To ensure its reliability for policy-makers and researchers, the review adopted a comprehensive search strategy with transparent inclusion criteria which resulted in 59 eligible studies. Rigorous measures were put in place to ensure a balanced approach to assessing and synthesising the body of evidence.

Key findings

Where is evidence strongest/moderate?

- **Strong evidence:** Teaching is better in private schools than in state schools, in terms of higher levels of teacher presence and teaching activity as well as teaching approaches that are more likely to lead to improved learning outcomes.
- **Moderate evidence:** Private school pupils achieve better learning outcomes when compared with state schools. However, there is ambiguity about the size of the true private school effect. In addition many children may not be achieving basic competencies even in private schools.
- **Moderate evidence:** The cost of education delivery is lower in private schools than state schools often due to lower salaries for private school teachers compared with their government school counterparts. Most of the evidence does not rigorously analyse the cost-effectiveness of private schools; however, there is some limited

evidence to indicate higher cost-effectiveness of private schools than state schools in specific contexts.

- **Moderate evidence:** Perceived better quality of private schools (in terms of teaching, teacher attendance, school performance, small class size, discipline) compared with state schools is a key factor in parents' choice of private schools. Other important factors cited include English-language instruction, future occupation possibilities and promotion rates to secondary school.
- **Moderate evidence:** The perception of 'private schools as better quality' is informed informally, often through parents' informal social networks; such sources play a significant but often under-recognised role in informing users in their choice of school.
- **Moderate evidence:** Attempts by states to intervene in the private education sector are constrained by a lack of capacity, legitimacy and knowledge of the sector to implement effective policy frameworks.
- **Moderate evidence:** Where state regulation of private schools exists, it is not necessarily effective or may be selectively enforced offering opportunities for rent-seeking and bribery. Although the findings are mostly negative, there are some examples of positive state regulation supporting the expansion of private school provision; however there are also concerns that private sector provision may be promoted by states without adequate regulation and quality controls.
- **Moderate evidence:** There is moderate strength evidence that private schools tend to be more expensive than state schools in terms of both school fees and hidden costs such as uniforms and books.

Which areas of evidence are weak and inconclusive?

- Evidence on whether private schools are equally accessed by boys and girls is **inconsistent**. Several studies indicate that girls are less likely than boys to be enrolled in private schools, but this finding is context specific with some findings ambiguous on the issue and a minority of studies finding that private schools reduce the gender gap in certain contexts.
- The evidence is **ambiguous** about whether private schools geographically reach the poor. Although private schools are continuing to focus on urban areas, they are also becoming increasingly prevalent in rural areas; but research cautions against assuming this means they are reaching the poor.
- The evidence on whether the poor are able to pay private school fees is **ambiguous**. Most is neutral, some is negative, but there is no positive evidence. A number of studies find that a small minority of children of lower economic quintiles access private schools. Financial constraints are a key factor limiting or preventing poorer households from enrolling their children in private schools. Where children of poorer households do attend private schools, research indicates that welfare sacrifices are made and continued attendance is difficult to sustain.
- There are **very few studies** addressing rigorously the accountability of private schools to users. Of these, there is some **consistent** evidence that users participate in and influence decision making in private schools. While a small body of mainly anecdotal evidence indicates that teachers and schools may respond to parents' demands and complaints and ultimately the potential threat of parents exercising choice, no evidence was found in the studies reviewed that users do in fact change

schools in response to quality concerns, or are more likely to do so in the case of private schools than government ones.

- There is **limited evidence** to enable any conclusion to be drawn about the financial sustainability of private schools. The issue is not directly addressed in the literature reviewed. Indirect evidence based on the length of operation of schools suggests this is variable, with some private schools operating for many years. However, there is also limited evidence that indicates private schools, especially LFPs, may be vulnerable to closing down.
- The evidence on subsidies is **limited in scope, size and context**, but one donor-funded programme in Pakistan indicates that conditional and targeted subsidies can raise the quality of inputs.
- There is **little evidence** to support or refute the question of the system-wide effects of private education. The evidence base on whether private schools complement or compete with government school provision is very small, however some evidence indicates a supply-side synergy between government and private schools provision and there is evidence that private schools are filling gaps where supply of government schools is low, but also where government schools are performing poorly. The evidence on whether the effect of competition is to drive up the quality of public schools or to deplete it by encouraging more able students to exit the state sector is sparse and contested.

Where are the gaps?

In addition to the gaps identified from the areas that remain inconclusive, some overarching critical gaps in the evidence base were identified. These were:

- There is a lack of data on the true extent and diverse nature of private schools.
- The existing evidence is geographically heavily weighted to South Asia with a much more limited African focus. No material was found on conflict-affected or fragile states.
- Few studies focus exclusively on middle and secondary schools or on peri-urban areas.
- No research was found on the effect of international companies or chains of private schools.
- Types of research designs are limited with a paucity of longitudinal research, in-depth ethnographic research, and comparative work.
- Few studies offer a political economy analysis of private schooling.

Based on a gap analysis from the rigorous review, the report outlines some areas for further research that could strengthen this evidence base.

Arriving at general conclusions from the evidence reviewed is difficult because of the diversity of private schools, the significant gaps in the evidence and the fact that available research is rarely generalisable in itself. However, some of the findings were rated strong or moderate; while these findings cannot be universally translated into policy regardless of context, they do merit policy-makers' attention. What is clear, moreover, is the need for more targeted research to fill the gaps in our understanding of the role and impact of private schools in developing countries.

1. Introduction

1.1 Objectives and scope

This paper presents a rigorous review of evidence on the role and impact of private schools on education for school-aged children in developing countries. It was commissioned by the Department for International Development (DFID) and produced by a multi-disciplinary team of researchers and advisers with expertise in education, economics, international development and political economy from the University of Birmingham, Institute of Education, Overseas Development Institute (ODI) and the EFA Global Monitoring Report (see Appendix 1).

The focus of the rigorous review is on private school delivery of education to poorer sections of societies, including those private schools that are identified as low-fee private schools (LFPs)¹. The purpose of the review is: (i) to present the latest quality published evidence on whether and how private schools improve education; and (ii) to identify gaps in the evidence and highlight areas for future research. The paper presents a conceptual framework that hypothesises how private schools might improve educational outcomes for children in developing countries. Assumptions underpinning key hypotheses are tested and interrogated through a review of the evidence to arrive at an evidenced theory of change.

Following an initial sifting of the literature which produced extensive results, parameters were set by the review team to ensure a focus on publications of the highest quality and greatest relevance. Literature included in this review has therefore been judged to be of high or medium quality, published in the past five years and focused on DFID priority countries.

1.2 Defining private schools reaching disadvantaged children

It was necessary to clarify our definition because the term ‘private school’ is used with varying meanings in the literature and in the policy debate (Bangay 2007; Day Ashley 2009, 2013; Kitaev 1999; Lewis and Patrinos 2012; Moran 2006; Rose 2006; Srivastava 2013). This review adopted as the key factor defining ‘private schools’ that they are **dependent on user fees to cover all or part of their operational and development costs**. Thus, the distinctiveness of private schools is that they have to follow the market to attract and retain students in order to be financially viable. Some state schools may also charge fees so the review employed two other defining factors, that private schools are **managed largely independently of the state, and are owned and/or founded independently of the state**.

It is important to note that with any definition of private school, boundaries remain blurred. For example, ‘private’ schools may be partially funded and regulated by the state; even those that operate mostly independently of the state still interact with governments - whether to achieve registration, get teaching materials, follow a national curriculum or examination system, or just to avoid scrutiny. On the few occasions where blurred boundaries were apparent in studies to be reviewed, the above working definition was used pragmatically to decide whether they should be included in the review. In most of the literature reviewed, however, private schools were explicitly referred to as such. Less accessible in the literature was information on the extent of fees charged by private

¹ Also referred to as low-cost private schools (LCPs) in the literature. However, this term is contentious as some commentators consider that the poor demand education at a low price to them, not at a low cost of delivery which is often provided in an unregulated manner (APPG).

schools or whether profits were made. Therefore we are not always able to talk about ‘low-fee’ private schools or ‘for-profit’ private schools with certainty. However, it was clear that the studies included in the review were focusing on non-elite private schools.

The motivation for operating private schools (e.g. values, profit/non-profit, income, influence) was not used as a defining parameter in the review as this is an intangible descriptor that is complicated by the fact that school owners of any description may express their motivations as a combination of competing commitments to philanthropy, corporate social responsibility and business interests (see, for example, Ball 2007 and Srivastava 2007).

This rigorous review did not include studies that did not explicitly define their focus as *private* schools. It is intended that other non-state schools, such as schools run by charities, NGOs or religious organisations, will be the focus of a second rigorous review, and a further report will follow that will present a synthesis of the findings of the two reviews.

1.3 Emergence of the debate on private schools for the poor

Evidence on the mushrooming of LFPs in developing countries started to emerge from the late 1990s (for example, Kitaev 1999; Kingdon 1996; Latham 2002; Probe Team 1999; Tooley 1999; Tooley and Dixon 2003). From the outset, there has been strongly divided opinion on the relevance and appropriateness of these schools to the aims of Education for All. From one perspective, concerns were raised as to whether states alone would be able to meet the primary school targets under the Millennium Development Goals given the pressure they placed on public finances (International Finance Corporation 2002; World Bank 2002). The expansion of education as a result of the abolition of fees in government schools was also seen as detrimental to the quality of education, affecting the education chances of the poor. LFPs were, therefore, seen as a way of reaching more children with better quality education, while also benefiting from the private sector’s ability to reduce costs (Tooley and Dixon 2003).

From another perspective, some analysts raised concerns surrounding the appropriateness of the involvement of the private sector in the provision of education (Colclough 1996, 1997), particularly if subsidised by the state or donors. Some deemed it as being in conflict with the recognition of education as a human right which meant that the state should maintain the responsibility for education delivery. From this perspective, with the majority of the poorest and most vulnerable remaining in government schools, the policy priority should be on reforming these schools to ensure that children attending them receive quality education (EFA Global Monitoring Report 2009, 2013). Non-state actors might be engaged as *partners* with the state, rather than as wholly separate providers (Dyer and Rose 2005; EFA 1990, 2000; Rose 2006).

Well into the 2000s fee-dependent private schools remained ‘off radar’ to donors even though they were claimed to be significant providers of education for the poor (Bangay 2007). Over the past five years (the period of this review) there has been a surge of research and policy interest in private schools educating disadvantaged children in developing countries. This heightened interest may be partly a result of the polarised debates referred to above which have become increasingly public (Privatisation in Education Research Initiative, PERI; Oxfam blogs; All-Party Parliamentary Group, APPG). Second, fiscal austerity and the changing perspectives of some governments and donor agencies have led them to search for new ways of meeting education goals, for example through voucher programmes or subsidies to private schools (see, for example, the Human Development Resource Centre, HDRC, report on Private Sector Development: HDRC/DFID/UKAID 2013; and Morgan et al. 2013). A third reason for the heightened interest is that research-based evidence has itself gained increasing policy attention. The current review scrutinises the strength of this evidence.

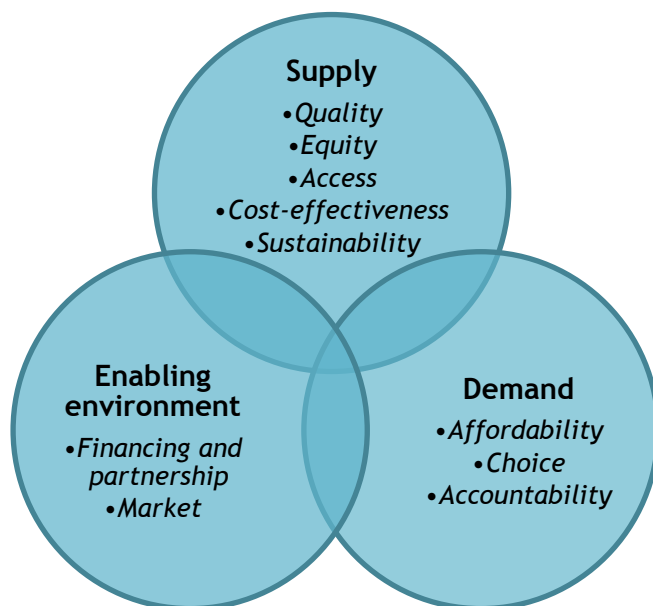
2. Conceptual framework: the initial theory of change

The research question driving the review is: *Can private schools improve education for children in developing countries?*

Guided by this research question, the review set up a conceptual framework to enable a systematic analysis of the literature and the clear identification of areas of research weakness and strength. The first dimension of the framework was to establish three thematic **fields of analysis**: supply, demand and the enabling environment. As illustrated in Figure 2.1:

- The nature of the supply of private education affects the quality, equity and accessibility, cost-effectiveness and financial sustainability of education.
- The dynamics of demand include issues of affordability, user choice and provider accountability.
- The institutional environment - market conditions and state interventions - may enable or impede private provision for all children.

Figure 2.1: Fields of the review: supply, demand and enabling environment



The second dimension of the conceptual framework was to draw up a theory of change, that is, testable propositions about the factors that lead to improved outcomes. The theory of change rests on a series of **hypotheses** about how supply, demand and environmental conditions could lead to impacts: improved learning outcomes, equity and access to quality education for all children in developing countries. Underlying the hypotheses are **assumptions** about how change works, and countervailing assumptions about why they may not: because the assumptions are specific and measurable they are the basis on which hypotheses are tested.

The hypotheses and assumptions were derived from a process of rapid appraisal of policy debates and research findings undertaken in the inception phase of this review. Two further criteria for the selection of hypotheses were used: (i) they had clear practical

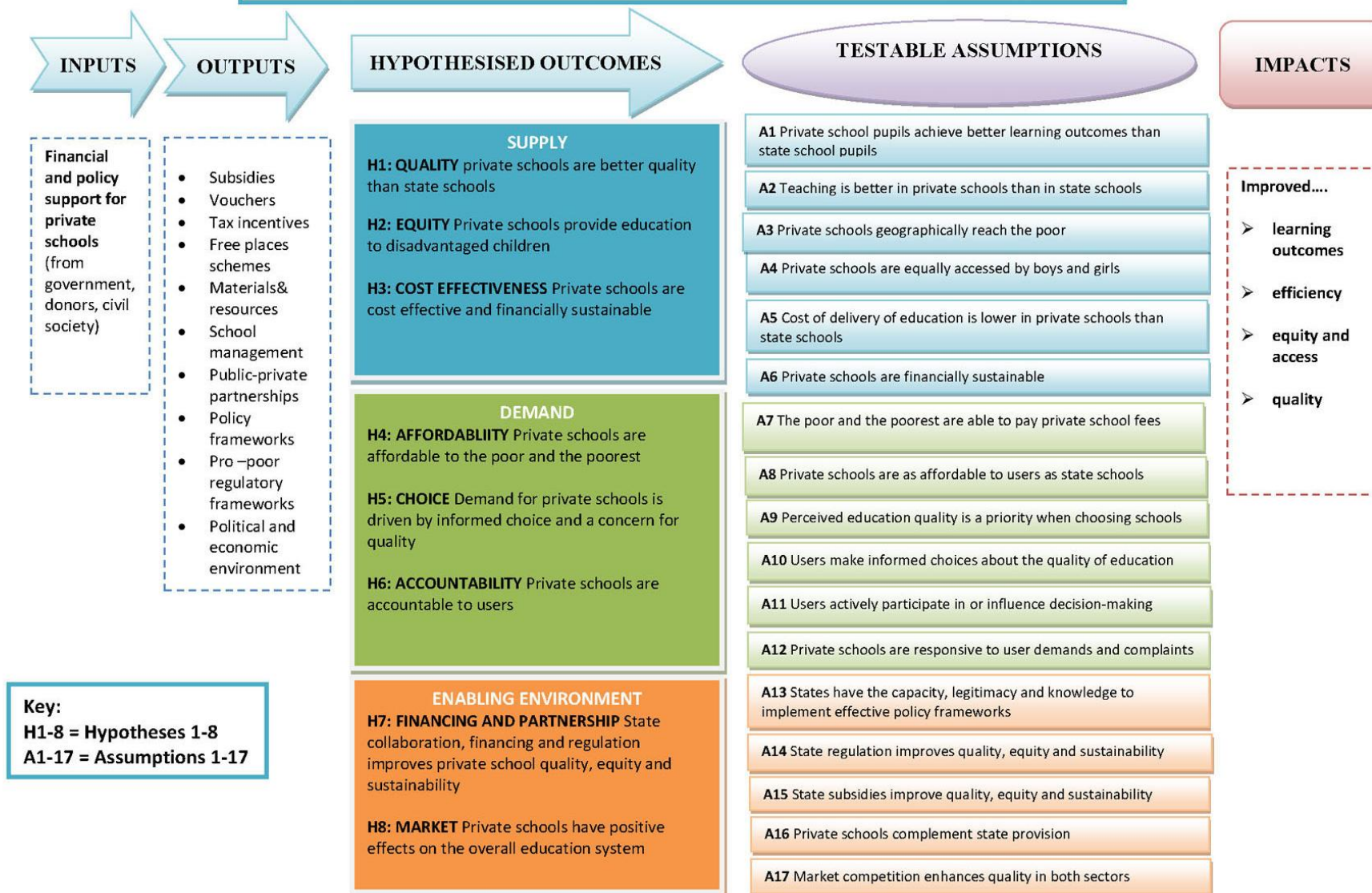
2. Conceptual framework: the initial theory of change

implications for policy-makers designing interventions in this area, and (ii) they are testable, meaning there appeared to be sufficient quality research available to make a meaningful assessment of them.

Figure 2.2 sets out the theory of change as a logical flow from policy inputs to policy outputs; to hypothesised outcomes, the assumptions on which they rest, and the counter-assumptions that challenge them; to the anticipated impact on learning outcomes, efficiency, equity and accessibility and quality. Appendix 3 sets out the hypotheses, counter hypotheses and assumptions more fully.

The hypotheses and assumptions were elaborated, interrogated and challenged throughout the review process using the methodology set out in Section 3. Section 4 addresses each assumption in turn, establishing the relative strength of the evidence for or against it. Section 5 synthesises the strength of the evidence across all of the hypotheses and identifies the gaps that indicate the need for further research. Section 6 proposes the 'evidenced theory of change' that emerges from the detailed analysis.

Figure 2.2: 'Private schools improve education for all': a *testable* theory of change



3. Methodology

The review was undertaken in phases (see Appendix 4) which enabled a common working framework with investigation undertaken in careful sequence and in parallel across the review team, co-ordinated by a team leader and checked in consultation with academic advisers. The rigorous review also underwent extensive independent peer review. To ensure its reliability for policy-makers and researchers, the review adopted a comprehensive search strategy with transparent inclusion criteria, and incorporated measures to ensure a balanced, objective approach to assessing and synthesising the evidence.

3.1 Search strategy

Although this desk-based review is not a systematic review, and therefore cannot claim to capture *all* relevant research published in this area, it is nevertheless comprehensive and in-depth. To capture the latest thinking and most rigorous empirical evidence, the researchers applied a multi-pronged search strategy, entailing:

- **Searching a wide range of citation and journal indexes**, online research and evaluation repositories, resource centres, development agencies, and other search engines which included (but was not limited to) the full list of sources included in Appendix 5.
- **Using the key search terms** set out in Appendix 4. These were formulated around the three key themes of the review (supply, demand and environment). Searches of major journal repositories, and of Google Scholar, deployed all synonyms listed (see Appendix 5). Searches of smaller research repositories and websites deployed only the search terms listed in the first column.
- **Building on recent policy-oriented reviews** undertaken by leading international organisations, as well as meta-reviews in this field of study, by identifying the key texts referenced within them (a process known as ‘pearl-growing’).
- **Verifying an initial master bibliography** of all materials compiled by the research team by circulating it among a selection of experts working in this area. The aim was to solicit feedback and to ensure the team had captured the best materials, including grey literature difficult to obtain online.

3.2 Inclusion criteria

The initial bibliography was collated following the above search strategy and applying the initial inclusion criteria as set out in Table 3.1 in the column entitled ‘First sift’. A large volume of studies was identified that was beyond the time and resources available for the study. Therefore the initial bibliography was subjected to a subsequent sifting exercise during which a more targeted second set of inclusion criteria was applied. These inclusion criteria were selected on the basis that they provided neutral and transparent measures for reducing the literature base to a manageable number, thus maintaining the commitment to objectivity and balance, and that they ensured a focus on publications of the highest quality and greatest relevance. The ‘second sift’ inclusion criteria are laid out in the second column of Table 3.1.

Table 3.1: Criteria for inclusion of studies in the review

Criteria	First sift	Second sift
Publication date	Material published from 2003 onwards	Material published from beginning of 2008
Relevance	Primary focus on private schools and that make a substantive, empirical finding on demand <i>or</i> supply <i>or</i> enabling environment	Substantive, empirical finding related to Hypotheses 1-8
Geography	Primarily developing countries emphasising DFID priority countries. Materials from more developed regions where they report findings applicable to developing countries	DFID priority countries only (i.e. Afghanistan, Bangladesh, Burma, Democratic Republic of the Congo, Ethiopia, Ghana, India, Kenya, Kyrgyzstan, Liberia, Malawi, Mozambique, Nepal, Nigeria, Occupied Palestinian Territories, Pakistan, Rwanda, Sierra Leone, Somalia, South Africa, Sudan, South Sudan, Tajikistan, Tanzania, Uganda, Yemen, Zambia, Zimbabwe) ²
Language	English	English
Quality	<ul style="list-style-type: none"> • Basic threshold of quality: based on empirical research or evaluation, or review of empirical research. • Cogent: clear presentation and logical conclusions that follow on from the findings 	Only empirical research rated high or medium quality according to the assessment of quality of individual studies (see below)
Repetition		Where publications repeat similar findings the most empirically focused or higher quality publication was included in the review

The second sift criteria differed from the first set in that:

- **The date of publication** was narrowed down from a focus on the past 10 years to the past five years i.e. 2008 onwards. This accounted for by far the largest proportion of the literature. The initial survey of the literature had shown that this was a ‘natural’ cut-off date with 79 percent of the studies in the initial bibliography dated from 2008. This indicates a significant growth in published research on private schools in developing countries in the past five years. This most recently published literature, often building on earlier research, was considered likely to be of most interest to readers.

² The studies in the review only covered 11 of these countries: Bangladesh, Ghana, India, Jamaica, Kenya, Nepal, Nigeria, Pakistan, Malawi, South Africa and Tanzania.

- **The geographical focus** was brought down to DFID priority countries only (see Table 3.1, second sift column for a list of these)³. This made sense given the emphasis on provision to the poor in the review, and again was considered to be of more interest to readers. It is recognised that this measure excludes important research from the Latin American context particularly in relation to school vouchers; moreover it is also noted that there is an existing systematic review that covers much of that literature (see Morgan et al. 2013).
- **The quality criteria** were more exacting: only studies based on empirical research and rated **high or medium quality** according to the assessment of quality of individual studies (see below) were included in the review. All studies rated as low quality were sifted out.

The second sift resulted in a final bibliography of 59 studies as listed in Appendix 2.

3.3 Assessing and recording data from individual studies

The quality of individual studies was assessed in accordance with DFID's *How to note* (DFID 2013). A 'checklist for study quality' was completed for each study included in the review and based on this the study was rated as high, medium or low quality with reference to a shared 'guide for grading the quality of individual studies' (see Appendix 6). Studies that were rated 'low quality' were not included in the review. These tools were applied since they enabled an assessment of quality of individual studies that 'acknowledges the diversity of methodological approaches of multiple academic disciplines' by focusing on 'principles of credible research enquiry that are common to all' (DFID 2013, p.10). This allowed for a common framework to be used across the team and across different methodological approaches, e.g. across observational and experimental studies.

The review of individual studies involved the completion of templates (see Appendix 7). These facilitated the extraction of relevant data in a consistent way across all the studies reviewed. They enabled the recording of substantive data as well as methodological information. Single research studies were described according to research type, design and method using a categorisation based on the DFID *How to note* (DFID 2013) (see Appendix 7). Additionally the methodological strengths and limitations of each study were recorded on the templates - both those noted by the authors of the studies themselves and any additional methodological weaknesses identified by readers that may qualify the study's findings.

3.4 Assessing and synthesising bodies of evidence

The assessment, review and synthesis of the evidence from the studies, grouped under each testable assumption, were conducted by two sub-teams of researchers with each team guided by an advisory panel member. The outputs culminating from this work were reviewed by two advisory panel members before being edited and cross-checked further by other researchers in the team. These reviewing and editing processes were implemented to enhance quality control, rigour and objectivity. Where studies in the review were authored by members of the team, care was taken to ensure that other team members extracted and synthesised these data.

The assessment of the body of evidence for each testable assumption involved two processes. First the extraction, synthesis and discussion of evidence that supported, countered, or was ambivalent or neutral in relation to the main assumptions. Here it was

³ DFID priority countries are listed on the DFID website www.gov.uk/government/organisations/department-for-international-development/about

important to distinguish between areas where there was evidence of positive or negative impact, and areas where there was no evidence of impact (i.e. knowledge gaps). Second an assessment was made of the overall strength of the body of evidence indicating positive, negative or neutral/ambiguous findings in relation to the assumption. Again the DFID *How to note* (DFID 2013) was drawn on to develop a guide for assessing overall strength using the criteria of **quality**, **size**, **context** and **consistency**. See Table 3.2 below.

Table 3.2: Criteria for assessing bodies of evidence

Quality	Size	Context	Consistency
Strong: >50% of studies rated strong (with remainder of studies rated medium)	Strong: >10	Strong (5+ countries)	Strong: Findings are highly consistent, with >75% of studies clearly supporting or refuting assumption
Medium ≤50% studies rated strong (with remainder of studies rated medium)	Medium: 6-10	Medium (3-4 countries)	Medium: Findings are moderately consistent, with 51% to 75% of studies clearly supporting or refuting assumption
Not used in the study (no low quality studies were included in the review)	Weak: ≤5	Weak (1-2 countries)	Weak: Findings are inconsistent, with ≤50% studies supporting/refuting assumption, or with a majority of neutral findings

Based on DFID's *How to note: assessing the strength of evidence* (DFID 2013).

Only high and medium **quality** studies were included in the review and therefore there was no weak rating for this category. A threshold was set so that if an assumption's body of evidence had more than 50 percent high quality studies then it would be rated as 'strong' quality overall; if it had 50 percent or less high quality studies or only medium quality studies then it would be rated as 'medium' quality overall⁴. **Size** refers to the number of studies reviewed for each assumption; these were counted. The thresholds were set as more than 10 studies for a strong rating, 6-10 studies for a medium rating and five or fewer studies for a weak rating. **Context** refers to the number of country contexts covered by the body of evidence under an assumption. The thresholds applied were 5 or more countries for a strong rating, 3-4 countries for a medium rating and 1-2 countries for a weak rating. **Consistency** refers to the extent to which there was or was not a clear consensus in the body of evidence supporting or refuting an assumption. Where more than 75 percent of the findings supported or refuted an assumption, a strong rating was given. Where 51 percent to 75 percent of the findings supported or refuted an assumption, a medium rating was given. Where 50 percent or less supported or refuted an assumption or where the majority of findings were neutral, a weak rating was given.

⁴ All bodies of evidence in this review were rated medium, i.e. none had more than 50% high quality studies.

The **overall strength of evidence** for each testable assumption was given by assessing the ratings across the four criteria as described below:

Weak (overall strength): If a weak rating appeared in any of the categories, then the body of evidence was rated as weak overall.

Moderate (overall strength): If two or fewer categories were rated strong and the remainder of categories were rated medium, then the body of evidence was rated as moderate overall.

Strong (overall strength): If all categories were rated strong or three were rated strong with one rated medium, then the body of evidence was rated strong overall.

Appendix 8 presents the assessment of overall relative strength of evidence for each assumption in relation to the rating of the categories of quality, size, context and consistency.

3.5 Limitations of the methodology

The following methodological limitations of the rigorous review are highlighted and need to be taken into account:

1. The review is limited by the level of detail given by authors in the studies reviewed. Authors of the studies reviewed did not consistently provide information on the types of private schools, including fee level (e.g. whether LFP or for-profit), primary, middle or secondary school, urban, peri-urban or rural. Additionally, only studies that were captured under the key search terms were included in the review, this may exclude any studies where authors do not use the term ‘private’ to describe fee dependent schools.
2. Due to the large volume of available material beyond the scope of the time and resources available for the review, the evidence base reviewed was narrowed down by applying thresholds of relevance and quality, and by focusing attention on DFID’s priority countries and on completed material published from 2008. The findings need to be understood in the context of these limits to the set of literature reviewed. Earlier relevant research and that conducted in non-DFID priority developing countries are cross-referenced in footnotes where appropriate to signpost the reader to related material not included in the review. Given the focus on quality **published** research in this rigorous review, it may not capture all of the current policy debate about private schools.
3. Rigorous measures were applied in order to reduce researcher bias and to enhance the review’s quality and objectivity. The review process was subject to continuous scrutiny by the advisory panel, and cross-checked, edited within the research team, and reviewed by external independent experts. Protocols were used to aid the consistency of approach across the team in the assessment, extraction and synthesis of the evidence. However it is important to note that, even with the most rigorous process, researcher subjectivity cannot be completely eliminated.
4. A rigorous and transparent protocol was followed in order to arrive at the overall strength of evidence. Although this took into account many dimensions including quality and size of studies, context and consistency, the **strength of evidence is a relative term** that should be understood in the context of the review. These indicators of strength and of positive, negative and neutral findings do not always capture nuances in the evidence and limitations of methodology which suggest caveats to our confidence. Where this is the case, it is highlighted in the text.

4. Outline and assessment of the evidence

The evidence relating to each testable assumption is presented and assessed below according to the following framework:

1. A box presents the testable assumption and:
 - (i) the total number of studies reviewed in relation to the assumption, followed by a breakdown of this number by country covered in the studies;
 - (ii) the number of studies where evidence supported (positive), countered (negative) or was ambiguous (neutral) in relation to the findings;
 - (iii) the overall relative strength of evidence for the assumption (as per the assessment described in the methodology section above⁵);
 - (iv) a summary assessment of the body of evidence.
2. A second box sets out the headline finding in relation to the assumption.
3. There then follows a narrative organised under subheadings presenting how evidence supports, refutes or is neutral/ambiguous in relation to the testable assumption.

4.1 Supply - an assessment of the evidence

Under 'supply', hypotheses relating to the **quality, equity and cost-effectiveness** of private schools are explored.

QUALITY: Hypothesis 1: Private schools are better quality than state schools

Two testable assumptions were identified that underpin this hypothesis: that pupils attending private schools achieve better learning outcomes than state school pupils (A1), and that teaching in private schools is better than in state schools (A2).

Assumption 1: Private school pupils achieve better learning outcomes than pupils in state schools
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No. of studies = 21: India (12), Pakistan(3), Kenya (3), Ghana (1), Nigeria (1), Nepal (1)
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*POSITIVE (14), Neutral (7)

Summary assessment of evidence: This assumption has the largest body of evidence related to a single testable assumption in the review. Studies are mostly medium quality (with three high quality studies including a high quality experimental design) across a relatively large range of countries . A medium level of consensus is arrived at with the majority of studies supporting the assumption but with a significant number of studies with neutral/ambiguous findings.

Overall strength of evidence: MODERATE

⁵Appendix 8 shows how the overall strength of evidence was arrived at for each assumption with a breakdown of strength in terms of quality, size, context and consistency of findings.

Headline finding:

Pupils attending private school tend to achieve better learning outcomes than pupils in state schools. However, studies aiming to identify these effects are typically faced with the problem of effectively accounting for social background factors and whilst several studies attempt to do so, many also recognise that it may be difficult to ascertain whether achievement advantage can be fully ascribed to private schools. It is important to note that many children may not be achieving basic competencies even in private schools.

Numerous quantitative studies have investigated the relationship between school type on the one hand, and student achievement on the other, in diverse country contexts. International comparisons have shown that these effects are **not uniform** either across or within education systems, and are likely to be context dependent (see: Rutkowski and Rutkowski 2008). Given the heterogeneity of private schools across the developing world, and the variety of research methods used to examine them, it is widely acknowledged that empirical findings in this area are difficult to interpret conclusively, let alone be generalisable (Chudgar and Quin 2012; Goyal 2009; Hartwig 2013). There are examples of well- and under-performing schools in both sectors, and probably in all countries.

Supporting evidence

Some recent quantitative studies have rigorously shown a significant **achievement advantage for students attending private, fee paying schools** even after social background is taken into account. Much of this research comes from India⁶, some of it using nationally representative data. For example, both Desai et al. (2008) (using National Council of Applied Economic Research, NCAER, data) and French and Kingdon (2010) (using Annual Status of Education report, ASER, learning data) 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. Using this 'fixed family effects' method, they control for most (observable and unobservable) factors that are shared among children within the household. Both find a significant positive private school achievement advantage based on standardised test scores. The size of the effect was appreciable -about one fifth to one third of a standard deviation in the above two studies. Moreover, the size of the private school effect was greater for children in the low income strata.

These findings regarding the private school effect are corroborated in other statistical analyses from India. Using cross-sectional data from Orissa, Goyal (2009) also finds a small but significant private school premium (as measured by mean test score differences in mathematics and reading) that cannot, he argues, be entirely explained through unobservable differences. Kingdon (2008) similarly finds a raw achievement advantage of private school pupils in urban India, although concludes that this is significantly reduced after controlling for personal endowments, and in practice only a minority of the difference in achievement can be explained through the influence of the school. Pal (2010) used data from five states of rural India and finds that the presence of private school has a significant positive impact on village-level, class 5 pass rates. In a relatively

⁶ Two RCTs in the context of Colombia have also shown a significant private school advantage in the short term, however these studies were pre-2008 and were not included in the review (Angrist et al. 2002, 2006).

rare example of evidence of the impact of private schooling over time, French and Kingdon's (2010) village-level panel survey between 2005 and 2007 showed that an increase in the proportion of village children attending private school is associated with an increase in average student achievement overall during the 3-year period of study.

Other high quality studies find a private school advantage even after controlling for the **additional effects of private tuition**. Given the high incidence of private tutoring (especially among private school students) in rural India and Pakistan (effectively constituting a double-advantage of private school students who can afford fees and private tuition), the need to control for it when trying to isolate the true private school premium is clear.⁷ Javaid et al.'s (2012) study in Pakistan finds that although controlling for this and other covariates causes the private school premium to decline somewhat, even with the most stringent analyses there is still a private school advantage: with students performing 0.038 standard deviations better than their government school counterparts. In other words, although private tuition had an independent positive (and significant) impact on pupil outcomes, controlling for it did not eliminate the significant private school premium. A study by Thapa (2012), using national data on School Leaving Certificate levels at secondary level in Nepal, also finds a large private school premium (as indicated by a pass rate of 45.1 percent for government school students and 87.2 percent for private school students) even after controlling for the effects of private tuition. However, the study concludes that overall, it was a combination of school/teacher and family attributes of the students that together explained the better outcomes for private school children.

The **scale of differences between learning outcomes of private versus state students varies across studies**, and is difficult to compare meaningfully, particularly where different statistical methods are used. In Andrabi et al.'s (2008) study of primary students in rural Punjab, the raw difference between public and private schools are deemed to be comparatively large - as indicated by the fact that in English, for example, an average child in a private school performed better than the top third of children in the public sector, even after controlling for parental education, wealth, age, and gender. Also in Punjab, and applying similar statistical controls, Aslam (2009) finds a 'substantial' advantage for private middle school pupils when compared with their government counterparts. In Africa, where generally the evidence is more mixed than in India or Pakistan, Bold et al.'s (2013) analysis of a cross-sectional dataset from Kenya (national primary exam result data: Kenya Certificate of Primary Education, KCPE) uses an empirical methodology that rests on the understanding that the growth of private enrolment will only affect average test scores in a district. The authors find a large private school premium, equivalent to one standard deviation. However, one criticism of Bold et al.'s (2013) study is that a significant proportion of students in the country do not reach grade 8 and these students almost inevitably belong to the most socially disadvantaged backgrounds. This suggests that private schools raise achievement of the middle and higher income students which raises equity concerns. Tooley et al. (2011), using data from Nigeria and controlling for covariates and using various empirical techniques, find that private school students persistently achieve significantly better outcomes than government ones.

Some evidence indicates **variation in the relative performance of private school pupils in different subject areas**. Kingdon (2008) concludes that private unaided schools are 27 percent more effective than private aided schools in their mathematics teaching in Uttar Pradesh. Using data from Andhra Pradesh, Singh and Sarkar (2012) similarly find a private school advantage in mathematics (though attainment was still lower than expected). Notably, however, in Kingdon's analysis (2008), all three school types studied

⁷See Aslam and Atherton, 2014. This study was not included in the review as it is forthcoming.

(government, private aided and private unaided) were equally effective in imparting reading skills. By contrast, emerging work by Muralidharan and Sundararaman (2013) reports that children in private schools in Andhra Pradesh are performing better in English and Hindi, and no worse in mathematics and Telugu. This is in spite of the fact that 40 percent less instruction time is dedicated to these subjects in private than in government schools (Muralidharan and Sundararaman (2013)). Dixon et al.'s (2013) multi-level regression analysis in the Kibera slums of Nairobi finds a positive relationship between attendance in private schools and test scores in mathematics and Kiswahili, but not English. One explanation given by the authors (which is also relevant in other multilingual contexts) is that English language skills, unlike mathematics, tend to be additionally learned outside the school environment, in the wider community. This leads to the broader question of the extent to which pupil attainment advantage relates to what is learned inside the school and outside the school, and where the latter is concerned socio-economic background is likely to be key.

Neutral evidence

Other high quality studies (sometimes using the same data as those that make positive claims in relation to this assumption) have made findings that are **more ambivalent, or outright question the true size of the private sector effect**. For example, Wadhwa (2009) (using ASER data from rural India) finds that upon controlling for covariates, differentials in reading outcomes between government-private schools disappeared in some states, widened in others and reversed in a few. Goyal and Pandey (2009) also question the scale and robustness of the private school advantage, showing that in Uttar Pradesh the advantage was only significant in grade 5. Similarly, Chudgar and Quin (2012) using nationally representative data find that while initial analysis indicated positive effects of private schooling (as a composite category) on achievement, further disaggregating the data showed that *low-fee* private schools did not always perform better than government school counterparts. A similar message of neutrality is conveyed in Johnson and Bowles (2010) who, using middle and secondary exam data from rural Madhya Pradesh conclude that private school students did not perform any differently from their government counterparts. Akaguri's (2011) analysis of LFPs in rural Ghana finds that once pupil characteristics and prior test scores are controlled for, there appear to be no systematic differences in performance between public and private schools.

There is also some indication in the literature that the **difference in outcomes of children attending private and public schools is greater in rural than it is in urban settings**. Comparing data from urban and rural Andhra Pradesh, Singh (2013) shows that while a private school achievement or 'value-added' premium exists in rural settings, no such advantage exists in urban settings. Much of this variation in achievement, moreover, is attributed to greater home investment and socio-economic background. Controlling for these differences causes achievement differences to remain only for older age groups, and the premium sizes are modest. Chudgar and Quin's (2012) analysis likewise finds a higher positive association between private school status and child test performance in rural than in urban areas across India.

Another way of approaching the private sector advantage is by analysing **rates of transition from primary to secondary schools**. On this question the evidence is mixed. In the context of Kenya the Kenya Certificate of Primary Education (KCPE) examination is compulsory for admission to secondary school (Ohba, 2012). In her study in Kibera, Ohba (Ibid) finds that eight out of the 12 private primary schools selected for her study had average KCPE scores lower than the two government primary schools. She also found that government primary school leavers were more likely to enter government secondary schools than private primary school leavers. Ohba (Ibid) suggests that these higher transition rates might be attributed to government quota systems aimed at ensuring all

government primary graduates benefit from government secondary schooling. She also explains that the government secondary schools tend to have more stringent admission requirements than the private secondary schools, and that the latter (in contrast to the primary sector) tend to have low status.

Important caveats

Comparing the effectiveness of ‘private’ with government schools in developing countries is problematic because a potentially very large proportion of schools are **unregistered/unaided and therefore typically missing from the analysis** (Tooley et al. 2011). If, as some studies have demonstrated, there is a difference between the performance of children in aided versus unaided⁸ private schools (Kingdon 2008), then research that does not differentiate between them risks misrepresenting the ‘true’ private school effect. There is also variation in the degree to which empirical studies address the recognised methodological puzzle of **accounting for unobserved/unmeasurable differences** in the socio-economic backgrounds of private and public school pupils. These unobservables, which include home educational environment, or the degree to which parents are educationally motivated, affect academic performance but cannot be easily adjusted for in a statistical study. If they are not taken into account, however, then the private school advantage is likely to be over-estimated and while many may not be able to address the puzzle given data and methodological limitations, most studies do recognise it; some even address it reasonably convincingly through methods such as family fixed effects (Desai et al. 2008), panel data approaches (French and Kingdon 2010) and randomised controlled trials (RCTs) (Angrist et al. 2002, 2006). Another major caveat is that the debate about the *relative* quality of education should not detract from the fact that **overall learning levels of children in rural areas in many countries remain worryingly low**, whether at private or public schools. As the latest ASER report from Pakistan acknowledges, the private school effect is often calculated relative to incredibly low achievement levels in state schools, which ultimately questions the real measure of the advantage for children attending them (ASER Pakistan 2014).

Notwithstanding the above caveats, the **majority of the evidence reviewed here supports** the assumption that children attending private schools do achieve better learning outcomes than their government counterparts, albeit to differing degrees, and with some significant exceptions. Importantly, however, the size of this advantage is sometimes small, always declines when unobservable and selection effects are controlled for, varies between countries, within them (between urban and rural areas), and between learning outcomes (e.g. numeracy, literacy) within schools. Additionally, it is widely recognised that while quantitative studies drawing on survey data can show correlation between school type and outcomes, they typically **cannot explain the causal processes underlying the observed correlations**.

⁸ Private aided schools receive grants from the government whereas unaided schools are entirely self-financed (Kingdon 1996).

Assumption 2: Teaching is better in private schools than in state schools

No. of studies = **14**: India (9), Pakistan (2), Nigeria (1), Kenya (1), South Africa (1), Tanzania (1) (*one study covers two countries*)

***POSITIVE** (12), Neutral (2)

Summary assessment of evidence: A relatively **high number** of studies of mainly **medium quality** (including three high quality studies one of which is an experimental design). A relatively **large range of countries** were covered and there was a **high level of consistency** in the findings with the vast majority of studies supporting the assumption.

Overall strength of evidence: STRONG

Headline finding:

Teaching in private schools tends to be better -in terms of more teacher presence and teaching activity, and teaching approaches that are more likely to lead to improved outcomes - than in state schools. Some evidence supports the explanation that this is due to increased accountability of teachers to employers in private schools. However, much of the evidence reviewed also indicates that private school teachers are often less formally qualified, have low salaries and weak job security; such conditions might in part explain the greater teacher effort in private schools.

One of the prominent explanations frequently given to account for better educational outcomes in private schools is that they generally deploy **better teaching practices**. With a minority of exceptions, all of the studies we reviewed, representing a diverse range of country contexts, do indeed indicate that teaching - as measured through levels of teacher presence/absence, the extent and quality of teacher activity, teaching approaches and pupil-teacher ratios (PTRs)-is often more conducive to learning in private schools than it is in state schools. As in the section above, however, relativity is an important caveat here: while comparative studies of a quantitative and qualitative nature often conclude in favour of the quality of private school teaching, there is little consistency in terms of what researchers consider to be high quality teaching, or therefore how it is assessed. Most studies stop short of claiming explicitly that teaching in private schools is good *per se*. In the absence of any kind of rigorous comparative framework for assessing teaching quality, the findings presented here are **not presently comparable, let alone generalisable, either between schools, or across countries**.

Neutral evidence

A minority of neutral evidence relates to PTRs, teacher attendance and activity. Goyal and Pandey's (2009) study of two states in India finds that teacher attendance and activity were similar for private and government schools in the same district or village. In Ohba's (2012) study in Kibera, Kenya, ten out of the 12 private primary schools had lower PTRs than both of the (two) government primary schools in the sample. Since these schools were purposively selected for the study and the number of government schools in the sample is particularly small compared with the private schools, this finding is rated as neutral. However, these neutral findings contrast with the majority of evidence reviewed which supports the assumption (see below).

Supporting evidence

The evidence reviewed mainly supports the view that **teachers in private schools are more likely to be present in schools** than their government counterparts, though to differing degrees and with some exceptions. Some rigorous quantitative studies show considerable variations in rates of teacher absenteeism in government versus private schools. Kingdon and Banerji's (2009) study in India, for example, finds that regular government teachers have higher absence rates (24 percent) than government contract teachers (12 percent), with private schools somewhere in between (17 percent). Andrabi et al. (2008) on Pakistan and Tooley et al. (2011) comparing India and Nigeria similarly conclude from their data that rates of absence are generally higher among government versus private school teachers.

Desai et al.'s study in India has more modest findings, indicating that government school teachers were only 2 percentage points more likely to be absent than their private school counterparts. This is at odds with the findings of Muralidharan and Sundararaman (2013) based on national data on 3600 schools from 20 states of India which indicate (using village fixed effects regression analysis) that within the same village the private school teachers' absence rate was 8 percentage points lower than the government school teachers' absence rate.

Using comparative cross-sectional data from India and Nigeria, Tooley et al. (2011) deduce that levels of **teaching activity** are significantly higher in private compared with government schools. Kremer and Muralidharan (2008), also on India, similarly conclude there is more teaching activity in private versus government schools, along with less multi-grade teaching, and substantially more contact time between teachers and pupils. Later work by Muralidharan and Sundararaman (2013) particularly emphasises that government school teachers tend to spend significantly more time on administrative work than private school teachers. Sometimes activity is equated with level of teacher 'effort', as in Kingdon and Banerji's (2009) study in Uttar Pradesh, in which government school regular teachers self-report spending about 75 percent of their school time teaching as compared to the 90 percent reported by private school teachers.

Not only levels of activity, but **approaches to teaching**, are sometimes considered to be of better quality in private versus government schools in our studies. One cross-sectional study by Aslam and Kingdon (2011) in Punjab, Pakistan finds that 'process' variables - effectively the 'black box' of how teachers spend their time in class - had a more significant effect on learning outcomes than the more observable teacher characteristics of certification and experience. Moreover, there were significant differences between these variables and within school types: good private schools often hired the best teachers (on observable characteristics), but their success lay in adopting a teaching **methodology** that encouraged pupil testing, alongside an interactive approach during lessons. These findings are corroborated by other studies of primary and secondary aged children across rural and urban India. In their mixed-methods study of private schooling in Andhra Pradesh, Singh and Sarkar (2012) find that a majority of private school teachers regularly checked the homework of children, which was determined to play a significant role in learning. This was partly aided by the prevalence of smaller class sizes in private schools, enabling teachers to offer higher levels of individual attention than in public schools. In a later study by the same author, Singh (2013) finds that teachers in private schools in rural areas are more likely to have adopted pedagogies and teaching styles that lead to improved student outcomes.

The evidence on **pupil-teacher ratios (PTRs)**, which are relatively easily observed compared with judging the quality of teaching, is fairly consistently in favour of private schools, though there are regional variations both between and within countries. Across India, Kremer and Muralidharan (2008), Goyal and Pandey (2009) and Maitra et al. (2011),

using largely quantitative observational methods, all find PTRs to be significantly lower in private than in state schools. A similar picture emerges from the African studies. In a study of 56 villages in Tanzania, Hartwig (2013) finds that private secondary schools on average have a PTR of 23.5:1 and government ones had a PTR of 61:1. A mixed-methods study of government and private schools across six districts in South Africa records less variation - in private schools, PTRs ranged from 11:1 to 24:1, and in government schools from 27:1 to 32:1 (Schirmer 2010).

Greater teacher accountability to employers in private schools⁹?

One leading explanation given for better quality teaching is greater **teacher accountability to employers in private schools**, when compared with state schools. Aslam and Kingdon (2011) attribute the differences in unobserved characteristics outlined in the Pakistan study above to the performance incentive mechanisms that operate in private schools - specifically, well performing private schools monitor presence, retain the better teachers, and fire the less effective ones. This is contrasted with the political economy of government teacher recruitment in Pakistan, which is deemed to be plagued by highly politicised, non-meritocratic recruitment, lax entry requirements, permanent jobs, and lack of monitoring at school level. Kremer and Muralidharan (2008) find that head teachers in private schools are more likely and able to take disciplinary action against shirking teachers. For instance, they found that only one head teacher in nearly 3000 public schools surveyed had ever reported dismissing a teacher compared with 35 head teachers reporting a dismissal for repeated absence in a smaller sample (600) of private schools (Kremer and Muralidharan 2008).

Unintended consequences: better teaching in private schools -but at what cost to teachers?

The widely held view that private school teachers are typically **less formally qualified**, and therefore make for ineffective teachers, receives a mixed reception in the literature. Several studies do find that private school teachers are often less qualified or trained than their government counterparts. Ohba's (2012) study, for example, points out that while levels of teacher qualifications do vary within private schools, overall a majority of those surveyed were unqualified or under-qualified. Specifically, teachers in government schools had on average 3 more years of experience than their private school counterparts (Ohba 2012). A large turnover of teachers was observed in these schools, and attributed to low pay and short-term contracts. Both Kremer and Muralidharan (2008) and Schirmer (2010) give similar findings. Aslam and Kingdon (2011) note that private schools often favour hiring female staff that can be paid less than males, are younger and often unmarried, and less experienced and less trained (though not necessarily less certified). Others argue hiring untrained female teachers in this way does not necessarily undermine the quality of education provision because the accountability mechanisms in private schools are assumed to be strong, and any potentially negative implications of untrained teachers are compensated by greater 'teacher effort' (Andrabi et al. 2008). As mentioned above, other studies find weak correlations between learning outcomes and observable teacher characteristics (Aslam and Kingdon 2011; Goyal and Pandey 2009). A potential **unintended consequence** may be highlighted here - that LFPs keep costs low by exploiting labour markets for less qualified and less experienced teachers working on significantly lower salaries¹⁰. From this perspective, greater teacher effort exerted by such teachers might be

⁹ It is important that teacher accountability to employers is differentiated from private school accountability to users. The latter is discussed under Hypothesis 6.

¹⁰ Exceptionally low salaries have been shown to be prevalent in private schools (Kingdon, 2008).

explained by more credible threats of dismissal given weaker job security combined with a lack of organisation as an effective pressure group/union. However, this reliance on greater teacher effort and poorer work conditions is potentially unsustainable, particularly if private school teachers were to demand comparable rights to their state school counterparts.

EQUITY: Hypothesis 2: Private schools provide education to disadvantaged children

Two particular disadvantaged social groups are the focus of the assumptions relating to this hypothesis: the economically disadvantaged, and girls. Thus, the testable assumptions interrogated in the review of the evidence are that private schools geographically reach the poor (A3), and that they are equally accessed by boys and girls (A4).

Assumption 3: Private schools geographically reach the poor

No. of studies = **8**: India (5), Kenya (1), Pakistan(1), South Africa (1)

***NEUTRAL** (4), Positive (3), Negative (1)

Summary assessment of evidence: This assumption is addressed by a **medium number** of studies of **medium quality** across a **medium number of countries** with **inconsistent findings**.

Overall strength of evidence: WEAK

Headline finding:

The evidence is ambiguous about whether private schools geographically reach the poor. While private schools continue to cluster mainly in urban areas, they are increasingly prevalent in rural areas. However, most research cautions against assuming that this means they are increasingly accessible to the poor.

There are opposing views on whether LFPs geographically reach the poor - with some arguing they are mainly confined to urban areas where the market conditions are likely to be more viable (i.e. there is willingness and ability to pay), and others suggesting they are extending access to previously underserved rural areas where large portions of poor people typically live. It is impossible to settle this debate with any certainty given the deficiencies in our knowledge of the scale and coverage of LFPs in developing countries. From the relatively small number of studies reviewed that address this question directly, however, there is a consistent finding that private schooling is not confined to urban areas. However, it is clear that the portion of the rural population with access to LFPs remains limited. Within these areas, the degree to which LFPs reach the poor varies significantly from one context to another.

Neutral evidence

Several studies find that LFPs do **operate in rural areas**, though this is rarely taken to mean they generally serve the poorest at the aggregate level. In South Africa, Schirmer’s (2010) analysis concludes that private schools exist in ‘unexpected places’ geographically, and in larger numbers than previously thought but they caution that their analysis does not imply LFPs are financially accessible to the poorest. Similar conclusions are reached by Woodhead et al. (2013) in India, who argue the biggest growth in them in recent years has occurred in rural regions of Andhra Pradesh, but they note that the largest share of private schools remains in urban areas. Baird’s (2009) nationally representative analysis in India finds no statistical relationship between a particular region’s wealth and levels of private school enrolment. According to their data, private schools in India are as likely to

exist in poor areas as they are in rich ones. Andrabi et al. (2008), for example, using Learning and Educational Achievement in Punjab Schools (LEAPS) data, document the significant extent to which the private school phenomenon has reached rural regions of Pakistan. However, they conclude from their data that, although unaided private schooling is closing disparities between rural and urban areas in Pakistan to a degree, it could still potentially widen disparities within them. This study also found that the presence of a private school was correlated with certain village characteristics, including not only infrastructure but also larger populations. Villages where there are private schools were found to be nearly three times the size of those with only public schools (Ibid). This, the authors deduce, is because private schools need a large number of children in their catchment area in order to operate a viable financial model.

Counter evidence

Though not nationally representative, Pal's (2010) study in rural areas of five Indian states suggests private schools are mainly located in better-off villages that generally have better infrastructure, thereby limiting the extent to which they can claim to reach the true disadvantaged. This resonates with arguments that private schools **cluster where the market for them is greatest**, typically in richer and more developed areas within urban and rural environments and therefore do not necessarily enhance equitable education.

Supporting evidence

In another study using nationally representative data in India, Kremer and Muralidharan (2008) find that 28 percent of rural India has access to a private school (although 72 percent does not). They also claim (contradicting Baird 2009) that the presence of private schooling in India is actually greatest in the economically poorest states (where government provision is poorest) and smallest in the richest states¹¹. Pal and Kingdon's (2011) Indian study identifies **intra-group variations** in the relationship between literacy and private schooling. Based on their analysis of panel data of literacy in secondary schools across India, the authors conclude private school growth could lead to large literacy boosts for Scheduled Caste and Scheduled Tribe children, relative to the general population, where it reaches them. Tooley et al.'s (2008) more confined analysis in Kibera, Kenya indicates that large numbers of children from disadvantaged areas are enrolled in LFPs close to where they live.

Assumption 4: Private schools are equally accessed by boys and girls
No. of studies = 11: India (6), Pakistan (3), Tanzania (1), Kenya (1)
* NEGATIVE (5), Neutral (4), Positive (2)
Summary assessment of evidence: Relatively high number of studies of mostly medium quality (with two high quality studies) across a medium number of countries with a weak level of consistency.
Overall strength of evidence: WEAK

¹¹ ASER India (2013) data show that almost 50% of rural primary-age children attended private schools in Uttar Pradesh in 2012, one of India's poorest states; this has risen from about 25% in 2005, denoting a furious rate of growth of private school enrolment in rural north India.

Headline finding:

Several studies reviewed indicate that girls are less likely to access private schools than boys. However, the evidence is context specific with some studies ambiguous on the issue and a minority of studies finding that in certain contexts private school reduce the gender gap that is found in state schools.

Counter evidence

There is rigorous evidence, largely from Pakistan and India, that private schooling is **not equally accessed by boys and girls**. Using national level data from India, Pal and Kingdon (2010) find evidence of gender differentials in access to private schooling. Härmä (2011) also documents girls being significantly less likely to attend LFPs in remote rural Uttar Pradesh. Further evidence elsewhere of inequality of access for girls to private schools is provided by Aslam (2009) in Pakistan and Nishimura and Yamano (2013) in rural Kenya. Some studies also indicate greater gender disparity in private than in public schools. Maitra et al. (2011) find the gender gap in private school enrolment in India was twice as large as that in public schools, worse in younger children, and increasing over time in rural areas. The authors attribute this to declining female labour force participation rates. Maitra et al. (2011) also indicate significant inter-state variation in the **degree of female disadvantage** with respect to private school enrolment, with large northern states in India having significantly higher female disadvantage rates when compared to southern ones. Girls whose mothers are more educated or who belong to wealthier households also faced fewer disadvantages.

A number of explanations are offered for the smaller proportion of girls than boys enrolling in private schools, where this is found. Härmä (2011) explains her findings partly in relation to a **selection bias towards boys**, linked to household poverty. Specifically, where poor households cannot afford to send all their children to private schools, and therefore have to choose *between* them, they are more likely to select boys.

Neutral evidence

Hartwig's (2013) study in rural Tanzania presents data indicating that more girls than boys were enrolled in the two mixed private schools in the sample¹² (a male:female ratio of 0.9:1) and that, by contrast, boys were more likely to be enrolled in the 20 mixed public schools in the sample (with a ratio of 1.4:1). However, due to the very small sample size and limited data - in relation to the mixed private schools - the finding is rated neutral. Johnson and Bowles' (2010) study of Madhya Pradesh does find enrolment bias in favour of boys, but also that private schools (in this case secondary schools) have marginally reduced the gap in girls' access to secondary schools - prior to the establishment of private schools, girls were already severely limited in accessing secondary schooling. Fennell (2012) and Pal (2010) also present a neutral argument in this respect.

Supporting evidence

There is a minority of evidence **refuting the gender bias in private schools**. Srivastava's (2008a) qualitative study finds an equal likelihood of sending girls and boys to LFP among the households studied in Lucknow, India. Andrabi et al. (2008) find that the presence of private schools is strongly associated with female enrolment in rural Pakistan: the share of

¹² The private secondary school sample included three single sex girls' schools and one single sex boys' school.

female enrolment in private schools is 3-5 percentage points higher than in government schools.

COST-EFFECTIVENESS: Hypothesis 3: Private schools are cost-effective and financially sustainable

The two assumptions for this hypothesis are as follows: private schools cost less to run than state schools (A5), and private schools are financially sustainable (A6).

Assumption 5: The cost of education delivery is lower in private schools than in state schools
No. of studies = 7: India (5), Kenya (1), South Africa (1), Nigeria (1) (<i>one study covers two countries</i>)
*POSITIVE (7)
Summary assessment of evidence: A medium number of studies of mostly medium quality (with one high quality study) across a medium number of countries with consistent findings supporting the assumption.
Overall strength of evidence: MODERATE

Headline finding:

The evidence shows that the cost of education delivery is lower in private schools than in state schools often due to the lower salaries of private school teachers. Some limited evidence indicates a relationship between lower relative costs and cost-effectiveness in certain contexts.

Comparative evidence on whether private schools are cost-effective when compared with state schools is limited in size, tends to be mostly of an observational, case-study nature, and is often restricted to a description of the *relative* costs (as opposed to cost-effectiveness *per se*) of private schools versus public schools. Cost-effectiveness is mostly dealt with weakly, often as an aside, and is **rarely a rigorous focal point of studies**. Moreover, there is little discussion of the relative cost-effectiveness of *different* private schools' operating models. Evidence of better education outcomes on the one hand, and evidence of the relatively low costs of private schools on the other, are often sweepingly conflated to mean that private schools are generally more cost-effective than private schools. However, in the absence of a critical mass of rigorous, comparative frameworks for studying the cost-effectiveness of different schools at a local level, such correlations cannot be read as conclusive.

Supporting evidence

Where costs are considered in studies or private schools, it is often in relation to the **costs of teacher salaries** (the main recurrent costs in any education system), which are often found to be significantly lower in private than in government schools. A cluster of evidence demonstrates that in the Indian case, private schools generally have smaller costs because they pay relatively low teacher salaries (Kingdon 2008; Kremer and Muralidharan 2008; Muralidharan and Sundararaman, 2013). For example, the nationally representative study by Kremer and Muralidharan (2008) in rural India notes that the upper bound estimates of mean teacher salaries for private school teachers in Indian

rupees (Rs) are Rs 1750/month compared to Rs 7500/month earned by government teachers (in 2003, the survey year). Expressed differently, Kingdon's (2008) estimate from Indian National Sample Survey data is that the ratio of private to government teacher salaries in Uttar Pradesh was 1:12 in 2008.¹³ Schirmer (2010) find similar salary differentials in South Africa, where public teachers are paid far more than teachers in registered private schools, and teachers in unregistered private schools are paid even less. There is widespread evidence that private schools can and often do operate more cheaply - at a lower unit cost - than government schools. Bold et al.'s (2013) analysis in Kenya gives a detailed account of this, for example. However, as raised earlier, an important **unintended consequence** is that this model of cost-effectiveness which relies on teachers (often women with restricted mobility) earning low salaries may be seen as exploitative. Alternatively, this model may give employment where it would otherwise not exist, and warrants further investigation.

Cost-effectiveness is more directly about the relationship between the **costs of education delivery relative to its benefits** (in this case, learning outcomes). The question is ultimately whether or not LFPs deliver value for money for users, funders and beneficiaries. Here there is only limited evidence, though some of it is rigorous. Moreover, as Goyal and Pandey (2009) point out, large salary differentials mean private schools could be considered more cost-effective even where there is no observed difference in test scores. Kingdon (2008) concludes in her study of middle schools in India that private unaided schools were twice as cost-effective as government schools or government aided schools, because they were producing the same level of mathematics achievement at less than half the cost. Other literature similarly indicates that by keeping salary costs low, LFPs can provide more conducive learning environments. Tooley et al. (2011), for example, find that lower private school teacher salaries enable lower PTRs in Nigeria and India.

Assumption 6: Private schools are financially sustainable

No. of studies = 2: India (1), Kenya (1)

***NEUTRAL (2)**

Summary of assessment of evidence: Small number of medium quality studies across a small number of countries with inconclusive evidence.

Overall strength of evidence: WEAK

Headline finding:

A small body of evidence indicates that while length of operation varies, private schools (particularly LFPs) may be vulnerable to closing down after short periods of time. There is a need for further research to more directly assess the financial sustainability of private schools.

Neutral evidence

The issue of the financial sustainability of private schools is not directly addressed in the literature reviewed. One indirect and imprecise measure that could be used is the survival

¹³ The author additionally notes that this was before the Sixth Pay Commission's recommendations were adopted which roughly doubled the salaries of government school regular teachers.

rates of schools over a school cycle. Contextual information appears in some studies reviewed showing that the length of operation of private schools varies, as would be expected in a heterogenous sector. However, these data can only tell us about *existing* schools and not about those that have ceased to operate. Two of the studies included in the review provide information on schools' closures *as well as* length of operation. These suggest that private schools (particularly LFPs) may be vulnerable to closing down after short periods of time. In her study in rural Uttar Pradesh, India conducted in 2005-6, Härmä (2009) observes that the 16 LFPs located in the study area had been operating for an average of approximately 10 years (with a mode of 0-1 year); however, as many as a quarter of the sample closed down within 12 months of the end of the fieldwork. The reasons for these school closures are not clear. Tooley et al (2008) found 76 private schools (primary and secondary) in Kibera, Kenya via a 'systematic sweep' of the area in 2003-4 with a reported mean length of operation of 7-8 years (and mode at 3-4 years). Tooley et al (Ibid.) also found that a further 36 private schools had recently closed mainly due to the introduction of free primary education, with other reasons including demolition due to building work, lack of funds, and mismanagement; two of these private schools had relocated and so remained open. Private school managers suggested a reason for private school closures was that 'as private schools run on a very tight budget, the loss of even a small number of children may make them unviable financially, and hence force them to close' (Ibid. p.459). There is a need for further research to more directly assess the financial sustainability of private schools. Such analysis could require, for example, an assessment of whether fees raised and other sources of income cover the costs of providing schooling over an entire school cycle, since for-profit private schools cannot be expected to operate at a loss.

4.2 Demand - an assessment of the evidence

Under 'demand', hypotheses relating to **affordability**, **choice**, and **accountability** (to users) of private schools are explored.

AFFORDABILITY: Hypothesis 4: Private schools are affordable to the poor and the poorest

Two testable assumptions were identified that underpin this hypothesis: that the poor and poorest are able to pay private school fees (A7), and that private schools are as affordable to users as state schools (A8).

Assumption 7: The poor and poorest are able to pay private school fees
No. of studies = 11: India (5), Pakistan (2), Ghana (1), Kenya (1), South Africa (1), Tanzania (1), Jamaica (1) (<i>one study covers two countries</i>)
* NEUTRAL (6), Negative (5)
Summary assessment of evidence: A relatively high number of medium quality studies across a relatively large range of countries with mostly neutral/ambiguous findings , and some findings refuting the assumption.
Overall strength of evidence: WEAK

Headline finding:

The evidence on whether the poor are able to pay private school fees is ambiguous. Most is neutral, some is negative but there is no positive evidence. A few studies find that a **very small minority of children of lower economic quintiles access private schools. Financial constraints are a key factor limiting** or preventing poorer households enrolling their children in private schools. Where children of poorer households do attend private schools, research indicates that **welfare sacrifices are made and continued attendance is difficult to sustain.**

The evidence addressing the ability of economically disadvantaged groups to pay private school fees is mixed - neutral and negative. These ambiguous findings are consequently rated 'weak'. Additionally, studies differ on what constitutes the 'poor', 'poorest', 'disadvantaged' or 'lower income' - making it difficult to compare across them.

Neutral evidence

The evidence finds that **households in the poorest quintile rarely enrol children in private schools.** In a secondary review of cross-country data, Heyneman and Stern (2013) cite private school enrolment rates of between 10-11 percent of students from the two lowest economic quintiles in Jamaica, and 10 percent of the poorest households in Pakistan (data from 2007 and 2000, respectively). Baird's (2009) nationally representative analysis of rural and urban India indicates that unrecognised schools do, in some cases, serve the poorest of the poor, though this is not a foregone conclusion. Akaguri (2013) adds another cautionary note in relation to his research in rural Ghana stating that '[t]he fact that some poor households enrol their children in LFPs is not to be taken as an indication that they can readily afford the costs' (p.158). Kremer and Muralidharan's (2008) study in rural India finds that while private schools mainly cater to the better off in rural areas, many children within them come from the more 'disadvantaged backgrounds. Different studies provide different (and not necessarily mutually exclusive) **explanations for affordability.** One explanation is that subsidies and concessionary places enable access for the poorest. In Kibera, Kenya, Tooley et al (2008) find evidence that not all children enrolled in LFPs were paying fees, including orphans and children from disadvantaged backgrounds that were given fee reductions or allowed to attend for free. In their ethnographic study comparing private secondary schooling in two regions of Tanzania, Phillips and Stambach (2008) raise the issue of the **political economy of assisted spaces.** They find that these spaces were typically not objectively assigned under a formal system of rules, but rather, tended to be allocated to children of families known to the school. The study observed local people deployed different strategies to cultivate their prospects for receiving financial assistance, including by increasing church attendance, or hiding their true income from community members so as not to undermine their worthiness for financial assistance.

Counter evidence

Limited **affordability is nevertheless a constraint** on access, as indicated by studies that find a mismatch between school preference and actual enrolment. In Singh and Sarkar's (2012) study in Andhra Pradesh, parents with children in government schools expressed helplessness in not being able to afford to send their children to private schools, which continued to serve the large majority of economically marginalised children¹⁴. Schirmer (2010) concludes similarly for South Africa. Likewise Härmä (2011) finds that despite a

¹⁴ Over 70 percent of the students enrolled in government schools belonged to households from the bottom two quartiles.

vast majority of parents indicating a *preference* for private schools over poor quality government alternatives, only 41.7 percent of the children in the sample were actually attending private schools. In addition, the study finds that the majority of those who access private schools are from richer households: a child's chance of attending private schooling only begins to increase as they reach the third economic quintile. In her analysis of primary and secondary schooling in one province of Pakistan, Fennell (2013) also reports that parents claim that poverty deters them from sending children to private schools. In all of these studies, poverty seemingly overrides preference.

Studies from elsewhere raise additional concerns that parents' **ability to pay is unsustainable, or increases household poverty**. Specifically, there is some indication of families cutting back on expenditure in essential areas in order to enrol children in private schools. Härmä's (2009) research in India, for example, finds that the percentage of the average household income required to access an LFP for an average-sized family in the poorest quintile is 30 percent for unrecognised and 25.6 percent for recognised LFPs, compared to 3.9 percent for government schools. In this study, 64 percent of LFP parents indicated they had made savings in areas such as clothing, healthcare, and livelihood inputs in order to pay for private school fees. Heavy borrowing to pay fees is also a concern, as indicated by Akaguri's (2013) study in Ghana. This finds that enrolment of just one child in an LFP by a household in the poorest quintile would require about a third (29.8 percent) of its income. Based on interviews with a small sub-sample of LFP drop-outs, the study finds that over half stayed away because of fee arrears, and a significant share had been suspended or punished for non-payment of fees.

Assumption 8: Private schools are as affordable to users as state schools
No. of studies = 7: Bangladesh (1), Ghana (2), India (3) , Kenya (1)
* NEGATIVE (5) Neutral (2)
Summary assessment of evidence: A medium number of medium quality studies (with one high quality study) across a relatively medium number of countries with findings mostly refuting the assumption
Overall strength of evidence: MODERATE

Headline finding:
The evidence indicates that private schools tend to be more expensive than state schools, both in terms of school fees and hidden costs such as uniforms and books. However there is some variation in certain contexts, for example according to private school registration status.

Counter evidence

The differential in total costs to households between public and private schools varies, but in some cases it is substantial. Among the sample of seven rural Ghanaian schools investigated by Akaguri (2013), the cost differential was approximately 40 percent. Härmä (2009) finds that among a sample of 16 LFP schools in India, the average full cost (including all other fees) of sending a child to a private school was approximately nine times as much as the cost of a government school. In the case of India, Siddhu (2011) and Sucharita (2013) find similar results in Uttar Pradesh and Andhra Pradesh, respectively.

The relatively higher cost of private schools compared with government schools also applies to the indirect costs to households apart from school fees. In Dimla, Bangladesh, Sommers (2013) finds that government schools charge less for books and uniforms than private tuition-charging schools. Akaguri (2013) also finds that *indirect* costs for private schooling are proportionately higher than their equivalents in state schooling.

Neutral evidence

Ohba’s (2012) study in Kibera, Kenya finds that the mean fee levels at Grade 1 of the 12 purposively-selected private primary schools were approximately 3.7 times more than mean fees in the two government primary schools that were selected, whereas at Grade 8 mean private school fees were only approximately 1.2 times more than mean government school fees. However it is important to note that this sample comprised incomparable numbers of private and government schools, and there was a variation of school fees within each sector. Heyneman and Stern (2014) report a difference in Ghanaian private school fee levels according to their registration status: registered private schools are more expensive to attend than government schools, but unregistered private schools are less expensive than government schools.

CHOICE: Hypothesis 5: Demand for private schools is driven by informed choice and a concern for quality

Two testable assumptions were identified that underpin this assumption: that perceived quality of education is a priority for users when choosing private schools (A9), and that users make informed choices about the quality of education (A10).

Assumption 9: Perceived quality of education is a priority for users when choosing private schools
No. of studies = 11: India (7), Kenya (2), Ghana (2)
* POSITIVE (8), Neutral (3)
Summary assessment of evidence: Relatively high number of medium quality studies across a medium range of country contexts with medium consistency- most findings support the assumption and some are more ambiguous.
Overall strength of evidence: MODERATE

Headline finding:
A majority of studies reviewed here indicate that perceived quality of education is a priority for users when choosing between schools, and that private schools are often perceived to be of higher quality than government ones. However, a number of other factors also affect preferences for schools, including language of instruction, with a preference for English in many contexts.

Supporting evidence

Perceptions (not necessarily evidence) of the **high quality of private schools** are often cited as an important reason why parents choose to send their children to them. Several studies from Africa and Asia, drawing on interviews with or surveys of parents, confirm

this assumption. Drawing on 38 interviews with heads of households in the Mfantseman District in the Central Region of Ghana, Akaguri (2011, 2013) concludes that LFPs were generally, though not uniformly, viewed as high quality. A similar conclusion is reached by Oketch et al. (2010) in Kenya, whose surveys find perceptions of teacher and/or school performance, and in particular levels of discipline, were the central reason for transfers into private schools (from public or other private schools). Singh and Sarkar (2012) also find perceptions of quality teaching to be the driver of decisions to send children to private schools Andhra Pradesh, India. This finding was later developed by Galab et al. (2013) in the same region of India. Their study robustly demonstrates that parental aspirations -both in terms of educational attainment and future occupation - were among the key demand factors driving the growth in uptake of private schooling there.

The closely related issue of **dissatisfaction with government schools** is also shown to be a driver of demand for and uptake of private schooling. In India, Srivastava (2008a) finds that all parents interviewed viewed private schools as offering their children a better quality education than government schools, with the main deficiencies in the state sector cited as poor attitudes and work practices of teachers (including irregular attendance and poor discipline). Johnson and Bowles (2010) likewise determine that the popularity of private schools in India is explained by parents 'voting with their feet', and choosing quality. Another survey in India, of parents in Hyderabad (Baird 2009), suggests dissatisfaction extends beyond concerns over poor infrastructure (such as toilets and walls) or high rates of teacher absenteeism, but includes dissatisfaction with government more broadly. Specifically, the less satisfied citizens were with the current government and the more they believed it was incapable of providing quality services, the more likely they were to place their children in private schools.

Neutral evidence -English language as a priority

While quality is generally listed as a leading reason for enrolment in private schools in studies focused on India, there is also evidence that **English-language instruction is equally and in some cases a more important factor**. In an ethnographic study comparing a government school and an LFP in the Ranga Reddy District of Andhra Pradesh, Sucharita (2013) finds this to be the major reason for choice of private schools. Härmä (2009) finds that among surveyed parents in the J.P. Nagar District in Uttar Pradesh, 95 percent preferred LFPs due to both quality and English language as the medium of instruction. Singh and Sarkar (2012) also find that English-language instruction is a major reason why parents choose private schools. Parents/guardians who sent their children to an LFP in Kibera, Kenya (Ohba 2012) listed several advantages, including a short journey to school, a better quality of education, small class sizes, scholarships, free meals and friendly teachers. All of these studies **nuance the assumption that perception of quality is the sole driver** of demand for private schools.

Assumption 10: Users make informed choices about the quality of education
No. of studies = 7: India (3), Bangladesh (1), South Africa (1), Ghana (1), Tanzania (1)
* POSITIVE (6), Negative (1)
Summary assessment of evidence: Medium number of medium quality studies across a relatively large number of countries with mainly consistent findings supporting the assumption.
Overall strength of evidence: MODERATE

Headline finding:

Informed choice implies users have adequate information on the performance of schools to be able to judge them. Informal sources including networks of parents were found to play a significant but often under-recognised role in informing users in their choice of school.

Supporting evidence

In the selection of private schools, there is some evidence - albeit frequently anecdotal - of the **signals that parents appear to use to inform their choice** and serve as proxies for the direct observation of education quality. Teacher engagement is often seen as central by parents. Among parents of children in LFPs interviewed in Härmä (2009), 95 percent preferred LFPs due to their ability to ensure some learning is occurring. Singh and Sarkar (2012) find a list of factors that determine whether a school is 'good' including children's happiness, promotion rates, teacher attendance and popularity. However, in some cases a large class size was viewed as a sign of popularity (Srivastava 2008a). Further, in Dhaka, Bangladesh (Cameron 2011), parents generally did not view the child's need for private tuition as a failing of the school, but simply as a necessity for progression. Testing and examination results are also frequently an important marker of quality. Parents surveyed in Johannesburg townships (Schirmer, 2010) argued that private schools scored better on examinations as a main reason for enrolling their children. However, perceptions of quality were not always reflected in reality. Akaguri's (2011) study of rural private schools in the Mfantseman District in the Central Region of Ghana finds that views of better quality in private schools were based on examination results from more advantaged urban settings rather than the local reality. Srivastava (2008a) argues that most parents were not found to have visited schools prior to enrolment - the majority of information came through conversations with other parents. The study questions assumptions about the 'false consciousness' of disadvantaged households, and the idea that poorer classes are dependent and incapable of making informed choices about education arguing instead that households in this study were engaged in 'active choice'.

Counter evidence

Phillips and Stambach's (2008) ethnographic study in Tanzania challenges the view that education markets operate on the basis of choice at all, showing that educational opportunities are cultivated through human interaction, agency and social relationships. It concludes that if there is a market for education, it is not 'free' but rather that opportunity is tied to social agency - specifically, relationships of reciprocity and exchange between families and their extended kin, benefactors and potential sponsors.

ACCOUNTABILITY: Hypothesis 6: Private schools are accountable to users

Accountability implies that users have the ability to influence how a service is provided and participate in decisions, thus the first testable assumption under this hypothesis focuses on whether users actively participate in or influence operational decision making in private schools (A11), while the other focuses on whether private schools are responsive to users' demands and complaints (A12).

Assumption 11: Users actively participate in or influence operational decision making in private schools

No. of studies = 3: Tanzania (1), South Africa (1), India (1)

***POSITIVE (3)**

Summary assessment of evidence: A small number of medium quality studies across a relatively medium number of countries with consistent findings supporting the assumption.

Overall strength of evidence: WEAK

Headline finding:

There is limited, though consistent evidence supporting the assumption that in private schools, users participate in and influence operational decision making. However, only one study reviewed directly compares the accountability of public and private providers to users.

Supporting evidence

In terms of **active user participation**, Hartwig's (2013) survey of private school parents in rural Tanzania shows that improving or maintaining high academic performance was a topic of 100 percent of private schools' annual parent-teacher meetings compared to just 53 percent in government secondary schools. The study does not, however, make clear whether private school parents were more likely to attend parent-teacher meetings, or how these values were arrived at. Schirmer's (2010) qualitative study of private schools in South Africa finds anecdotal evidence of private schools working closely with parents and of parents stating that the payment of fees made private schools more accountable to them.

With regard to **influencing actual operational decisions** within the school, there is some evidence from India that monitoring institutions (such as parent-teacher associations) were more effective in private schools than in public schools (Johnson and Bowles 2010). This could, however, be partly attributable to selection bias - that is, parents of private school children being on average wealthier, better educated and by implication more likely to take an active role in their child's education.

Assumption 12: Private schools are responsive to users' demands and complaints

No. of studies = 5: Bangladesh (1), South Africa (1), Pakistan (2), Tanzania (1)

***POSITIVE (5)**

Summary assessment of evidence: A small number of medium quality studies (including one high quality experimental study) across a medium number of countries with consistent findings supporting the assumption.

Overall strength of evidence: WEAK

Headline finding:

The evidence base is small, and often anecdotal based on surveys and interviews with parents rather than observed actions, but nevertheless the majority of relevant studies consistently indicate that private schools are responsive to user demands, complaints and the ultimate threat of exercising choice. However there is no evidence of users actually exiting schools due to quality concerns.

The literature covers two means by which users may express dissatisfaction with private education providers: first by **'voting with their feet'**, moving to another school or suggesting that they might (choosing an 'exit' strategy¹⁵), and second by **making demands or complaints** (expressing 'voice'). In principle, exit is a market strategy that depends on choice, while voice is more likely in a public sector setting. The hypothesis that private schools are particularly accountable to users is premised on the assumption that they will respond to complaints and strive to meet parental expectations, in order to avoid the implicit or explicit threat of the withdrawal of fees and reputational damage.

Supporting evidence

Schirmer's (2010) interviews with parents sending their children to private schools in South Africa indicate that parents felt **payment of fees made private schools more accountable to parents**, and that this was a major advantage of private schools over public schools. A study by Fennell (2013), comparing users of Pakistani government and private schools adds more nuance, however, finding that the likelihood of complaining about poor school performance depended more on the gender of the child and the parent than the type of school. Fathers generally only engaged with complaints on behalf of teenage sons and felt that they were listened to. Mothers engaged in far broader complaints but were more reluctant to do so due to their own lack of education and low social position.

Schools may encourage and respond to the **organised expression of demands (voice)**, or they may respond to more tacit signals of market preference. On the first, Hartwig (2013) compares the annual parent-teacher meeting agendas of private and public secondary schools in Tanzania. The author finds that private schools focused on the expectations of students and parents and their roles in achieving high academic and social results, while public schools were concerned more with infrastructure demands, problems of limited parent involvement, student discipline and absenteeism.

On the second, less organised **response to signals of preference**, drawing on interview data from northern Bangladesh, Sommers (2013) attributes fewer teacher absences and more teaching time to their awareness of dependence on tuition fees. Andrabi et al. (2009) provide stronger, experimental evidence in their national survey of private, rural schools in Punjab, Pakistan. Following the dissemination of comparative examination scores schools responded to the potential threat of parents exercising choice. Poorly performing private schools increased quality, while better-performing private schools decreased prices in order to maintain market share. However, the study also notes that in practice, when parents were informed that their school performed worse than expected according to exam results, they did not respond by enrolling their child elsewhere - i.e. pursue the exit strategy. The Pakistan study suggests a possible distinction of forms of response between public and private schools. The former may be more amenable to participatory demands, while for the second the potential (veiled) threat of parents exercising choice is what matters, making them alert to signals about users' preferences.

4.3 Enabling environment- an assessment of the evidence

Under 'enabling environment', hypotheses relating to private schools' **financing and partnership and market** are explored.

¹⁵ See Hirschman (1970) on exit, voice and loyalty.

FINANCING AND PARTNERSHIP: Hypothesis 7: State collaboration, financing and regulation improves private school quality, sustainability and equity

Under this hypothesis three testable assumptions are investigated: states have the knowledge, capacity and legitimacy to implement effective policy frameworks for collaboration and regulation of the private school sector (A13); state regulation is effective and improves the quality, equity and sustainability of private school provision (A14); and state subsidies improve the quality, equity and sustainability of private school provision (A15).

Assumption 13: States have the knowledge, capacity and legitimacy to implement effective policy frameworks for collaboration and regulation of the private school sector

No. of studies = 8: India (4), Pakistan (2), Bangladesh (1), Nigeria (1)

***NEGATIVE (8)**

Summary assessment of evidence: Medium number of medium quality studies across a relatively large number of countries with consistent findings refuting the assumption.

Overall strength of evidence: MODERATE

Headline finding:

There is consistent evidence across a range of contexts that attempts by governments to intervene in the private education sector are constrained by a lack of government capacity, understanding and basic information on the size and nature of the private sector. Attempts to enter into partnership and to apply regulatory frameworks suffer from poor implementation. The legitimacy of intervention has been damaged by past attempts to suppress the private sector and extract rents through regulation.

The review found a relative abundance of evidence on the issue of whether state regulation of the private sector is effective but the range of literature examining state-market collaboration and partnership between government and private sector schools in education is much more limited¹⁶.

Counter evidence

Studies in South Asia highlight **governments' poor understanding of private schools** which is likely to limit their ability to engage with and successfully regulate them. Humayun et al. (2013) point out that Pakistan's Private Educational Institutions Regulatory Authority (PEIRA) lacks a complete database of private schools and Sommers (2013) refers to the Bangladeshi Government's lack of information on private school attendance, repetition and drop out figures at the national, district and local levels.

Other South Asian studies point to the **lack of coordination of regulatory and collaborative frameworks**. The Indian regulatory framework and attempts to collaborate have come under particular criticism for their lack of co-ordination and coherence at a

¹⁶ Useful reviews of evidence on public-private partnership outside of the DFID priority countries include LaRocque and Lee (2011), and certain cases in Barrera-Osorio et al. (2012).

variety of levels (Srivastava 2008b, 2010; Verger and VanderKaaij 2012). Authors have noted the failure of these schemes to develop competition or enforce standards. Public-private partnership (PPP) contracts are frequently not subject to competitive bidding, performance evaluation frameworks are absent and there is a lack of mechanisms for disaffiliating the state with schools that are under-performing (Verger and VanderKaaij 2012)¹⁷. Fennell (2012) argues that in Pakistan there is a lack of co-ordination between different collaborative frameworks and national plans, and notes the failure of attempts to create a functional collaborative program in the Khyber Pakhtunkhwa Province.

There is also evidence that the **legitimacy of state efforts to regulate the private sector have been undermined by past interventions into the sector**. Regulations governing basic standards for schools have been used by officials to extort bribes from the owners of unregistered schools in both Nigeria and India. The result in Nigeria has been the formation of defensive private school associations (Härmä and Adefisayo 2013). India has seen an increased willingness among private school owners to pay bribes and evade regulation. Here the resentment felt for regulation is also amplified by the disparity in standards applied to private and public schools (Srivastava 2008b). In India the framework for private schooling established in the Right to Education Act has also been successfully challenged in the Indian Supreme Court and a court order to produce changes to the regulatory framework have not yet been acted upon, leading to questions as to its legitimacy (Ohara 2012).

Assumption 14: State regulation is effective and improves the quality, equity and sustainability of private school provision

No. of studies = 11: India (6), Pakistan (2), Bangladesh (1), Malawi (1), Nigeria (1), Kenya (1) (one study covers two countries)

***NEGATIVE** (6), Positive (3), Neutral (2)

Summary assessment of evidence: Relatively high number of medium quality studies across a wide range of contexts that have a medium level of consistency with a clear majority refuting the assumption, but with some positive evidence.

Strength of evidence: **MODERATE**

Headline finding:

Evidence indicates that where state regulation of private schools exists, it is not necessarily effective or may be selectively enforced. This may relate to a lack of sector knowledge and capacity by governments in some cases. However there is also evidence that it relates to unrealistically stringent regulation which may offer opportunities for rent-seeking and bribery to bypass recognition requirements. There is some evidence that positive state regulation can support the expansion of private school provision. However,

¹⁷ Verger and VanderKaaij (2012) also comment on the range of models that exist for public-private partnerships - identifying five broad categories: infrastructure (private built and government run); subsidies (government financing directed to private providers); charter (private organisations can contract to use public schools for their classes); support services (contracting out of non-core education services, e.g. community inspection, school libraries, ICT services etc.); and education vouchers. However, as noted in the following section, detailed evidence on the impact of these models is still lacking in the literature.

there are also concerns about private sector provision being promoted through collaboration without adequate regulation and quality controls. A positive unintended consequence has been identified in the literature, that despite ineffective or negligible enforcement, state regulation can set a benchmark for standards which may act as a proxy for quality in the market.

Counter evidence

In some contexts an absence of regulation is noted. For example, in Malawi the Education Act does not have any specific legislation governing the private sector and so there is no current framework for regulation of private schools. Plans to engage with the Private Schools Association of Malawi (PRISAM) to develop a basis for regulation and private sector expansion have not yet been acted upon (Chimombo 2009).

However, the key finding across a range of countries is that **there are severe difficulties with enforcing existing regulations**. Sommers (2013) reports negligible enforcement of the national curriculum in private schools in Bangladesh, for example. Several authors note the existence of a significant number of unregistered and unrecognised private schools which are not covered by government regulations or closed down. For example, Härmä and Adefisayo (2013) note that only 26 percent of private schools in Lagos, Nigeria are government approved. This lack of enforcement is in some cases attributable to a lack of sector knowledge and capacity in governments and agencies but there is also evidence that **regulations may be being set in an unrealistically stringent manner to provide either a deterrent effect or to allow for rent-seeking**.

In much of the literature the effects of state regulations are characterised as being fairly minimal with private schools adopting informal mechanisms for achieving recognition and avoiding regulation rather than complying with them. Srivastava (2008b) notes that in India the regulations for private unaided schools require a much higher standard in terms of infrastructure and teacher qualifications than is found in state schools and Härmä and Adefisayo (2013) similarly note that some 40 percent of surveyed heads of private schools in Lagos do not consider applying for government approved status due to the stringency of requirements. Ohara (2012) notes examples of strategies used by school managers to avoid regulations on teacher pay, while Srivastava (2008b) finds that all six of the government recognised private schools surveyed did not meet the criteria for state recognition in terms of infrastructure, teacher qualifications and fee levels. There also seems to be a widespread acceptance of the fact that recognition can be, and is, acquired by bribery and through political connections (Ohara 2012, 2013; Srivastava, 2008b). Similar issues are also noted in the context of Lagos by Härmä and Adefisayo (2013) where approved schools frequently do not meet the criteria for this status and government officials extort bribes from the owners of unapproved schools in return for not closing them down. Some of the literature suggests that officials may take a pragmatic approach to regulation in some cases recognising that private schools are an important element in achieving education strategies and understanding that an overly strict or unreasonable enforcement of regulations may do more harm than good.

Supporting evidence

The available evidence indicates a history of limited and dysfunctional regulatory engagement by government with the private sector. However, some studies (e.g. Rose 2010; Srivastava 2010) recognise that *in principle* a positive policy stance and effective regulation are necessary to private school expansion. Another study has detected a move in this direction in practice. Verger and VanderKaaij (2012) argue that in India the existence of a more supportive government policy has facilitated the expansion of private

schooling over the last decade as it has reduced uncertainty for private providers and politicians.

Neutral evidence

Two studies produce a mixture of positive and negative findings in relation to this assumption, both in the Pakistan context - thus they are categorised as providing neutral/ambiguous findings. Humayun et al. (2013) refers to the absence of private schools regulation suggesting that a lack of service standards may be a factor hindering private sector competition. However, also noted by this author is a potentially positive finding that PEIRA, the main regulatory body, has an explicit function to promote private education providers in the area of ICT (Humayun et al., 2013). Barrera-Osorio and Raju (2011) note a selective enforcement of regulation in the context of voucher schemes in Pakistan, where private schools seem to be given some leeway in terms of the time it takes them to reach minimal standards of PTRs, etc. These authors also provide a positive example of government intervention in private schooling with the establishment of the Punjab Education Foundation as a semi-autonomous conduit for PPP projects in the province. This foundation was the direct result of the government recognising the potential of private schools to improve education outcomes in the light of public sector failings in this area.

Unintended consequences 1: De-facto privatization?

Some authors (Srivastava 2010; Verger and VanderKaaij 2012) identify an **unintended consequence** in relation to Indian state collaboration with the private education sector. They speculate, though with limited evidence, that collaboration is occurring in the absence of agreed definitions, without proper co-ordination or regulation, and is largely acting to promote private sector provision without imposing adequate quality controls. The drive for co-operation between public and private sectors is thus resulting in the *de facto* privatisation of education, particularly given a lack of investment in public provision.

Unintended consequences 2: Unenforced regulation as a proxy for quality?

There is limited evidence that state regulation such as requirements for the recognition of private schools may set a **benchmark for standards** in the private education sector **despite ineffective or negligible enforcement**. Srivastava (2008b) expresses this most clearly with the idea of a 'shadow institutional framework' that operates for private schools in India. Essentially, while private schools do not generally comply with the regulations established by the state they do aspire to recognised status or to appear similar to schools that are recognised by the state. Recognition boosts the profile of a school and its reputation for providing quality education and so is a major advantage in competing within the education market. This leads to both recognised and unrecognised private schools adopting similar structures, norms and behaviours as the latter seek to mirror the first and so attract parents interested in quality education for their children. Evidence for this in India is also noted by Ohara (2013) in terms of school managers and their families often using previous experience in recognised schools in order to help the unrecognised schools they own to better conform to expected standards. There is largely anecdotal evidence (Srivastava 2008b) that government regulations and particularly government recognition of schools act as a proxy for quality in the market and so lead to improvements in standards as unrecognised schools seek to mimic them. It is notable that the evidence is highly concentrated on the Indian experience and there is no empirical evidence that directly addresses this view. However there is some evidence related to this issue in Bangladesh, where almost all private schools surveyed followed the national curriculum as required despite negligible enforcement (Sommers, 2013).

Assumption 15: State subsidies improve the quality, equity and sustainability of private school provision

No. of studies = 3: Pakistan (3)

POSITIVE** (3)**Summary assessment of evidence:** Small number of medium quality studies (including one high quality) in a single country context with consistent findings supporting the assumption.**Overall strength of evidence: WEAK*Headline finding:**

The evidence on subsidies is limited in scope, size and context (Pakistan), with two of three studies of a single quasi-voucher programme written by the same authors. This limited but consistent evidence indicates that conditional and targeted subsidies can raise the quality of inputs and perhaps outputs (test scores) in specific contexts, and set equity conditions such as increased female enrolment. However, it does not provide insights into whether subsidies improve the sustainability of private school provision.

The evidence on state subsidies to private schools was examined by looking at a number of mechanisms - including the creation of state-sponsored free school places at private schools, the provision of tax incentives for LFPs, voucher schemes and cash transfer schemes. However, only a narrow range of literature fitted the search criteria and this focused almost exclusively on voucher-style subsidies which allocated money on a per-student basis.

Supporting evidence

The main evidence supporting this hypothesis in relation to quality is focused on the specific context of LFPs (primary, middle and secondary levels in rural and urban areas) receiving public cash subsidies under the Foundation Assisted Schools programme run by Punjab Education Foundation in Pakistan (Barrera-Osorio and Raju 2010, 2011). However it is noted that this novel scheme is heavily supported and monitored by donors, which raises the question whether it is donor influence or state collaboration that is the main factor in the positive outcomes of the programme.

Under this scheme, private schools receive a per-pupil subsidy with both admittance to the programme and remaining within it being tied to specific criteria: schools must be above a certain size, meet minimum standards in terms of staffing and infrastructure and be providing education at such a level of quality that a set proportion of their students are able to pass an academic qualification test. Once in the programme schools can no longer charge user fees and must maintain their academic standards in annual tests, staffing and infrastructure (Barrera-Osorio and Raju 2011). The programme has been found to have had significant impacts on inputs such as enrolment levels at programme schools as well as on the number of teachers, classrooms and blackboards. However, the authors note that the increase in programme school enrolment may come from students transferring from other schools rather than previously underserved groups enrolling. Increases in the education resources were not matched by improvements in either PTRs or pupil-classroom ratios which may be better proxies for quality than absolute numbers of resources (Barrera-Osorio and Raju 2011). Attempts to analyse this programme in terms of improvements in actual education outcomes based on annual tests are inconclusive in terms of absolute improvements in student performance. There is clear evidence that programme schools

were strongly motivated to maintain education standards above the minimum level specified to stay in the programme. However, while the authors find that subsidies establish basic quality standards, they also find that subsidies do not provide incentives for continued improvement by better performing schools (Barrera-Osorio and Raju 2010)¹⁸.

Addressing whether subsidies improve equity of access, Fennell (2012) suggests, based on interview and focus group data in the Pakistan Khyber Pakhtunkhwa Province, that the expansion of private schools with government subsidies has allowed an expansion of female access at the primary level. However the extent to which a clear causal line can be drawn between the subsidies and rising enrolment, as opposed to private school expansion and enrolment, is unclear. Furthermore Fennell’s study (2012) indicates an **unintended consequence** whereby subsidies and interventions focusing on primary schooling in Pakistan have led to a bulge in private provision at this level. In the face of an almost total absence of private secondary schools, students graduating from private primary schools have had to attend public secondary schools.

MARKET: Hypothesis 8: Private schools have positive effects on the overall education system

Two testable assumptions were identified that underpin this assumption: that private schools complement government school provision (A16), and that market competition enhances quality in state and private sectors (A17).

Assumption 16: Private schools complement government school provision
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No. of studies = 4: India (1), Pakistan (2), Kenya (1)
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*POSITIVE (4)

Summary assessment of evidence: Small number of medium quality studies (including one high quality study) across a medium range of contexts that consistently support the assumption.
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Overall strength of evidence: WEAK

Headline finding:

The evidence base is too small to allow a firm conclusion on whether private schools complement government school provision. There is some evidence in the Pakistan context that indicates synergies between government and private school provision. There is also evidence that private schools are filling gaps where supply of government schools is low, and also where government schools are performing poorly - indicating potential blurred boundaries between whether private schools are complementing or competing with government schools.

There is ongoing debate about whether the relationship between private and state schools is **competitive or complementary**. The view that it is complementary suggests that private schools fill the gaps left usually by the under-provision of government schools. The alternative view is that private schools overlap and compete with government schools, thereby drawing students from the state into the non-state sector. On this question - which really goes to the heart of what is driving the apparent growth of private schools,

¹⁸Further evidence of the impacts of this programme is provided in Marcus (2013).

and the **system-wide dynamics** between the public and private sectors - the evidence to date is insubstantial.

Supporting evidence

Only a small number of studies demonstrate complementarity between private and government school provision. One example is Oketch et al.'s (2010) study in Kenya which finds that private schools operate in informal slum settlements precisely because there is insufficient access to government provision in slums. Similarly, based on an analysis of LEAPS data from Pakistan, Andrabi et al. (2008) conclude that villages with private schools showed greater overall enrolment, providing evidence that increasing enrolments in the private sector are not necessarily a source of decline in enrolment by state schools. Another study by Andrabi et al. (2013) emphasises a **supply-side synergy between government and private school provision** in rural Pakistan. They find that private schools are three times more likely to emerge in villages where there are government girls' secondary schools. In effect, private schools are dependent on a labour market of female graduates. The authors note two implications of this dependency: first, and paradoxically, private schools are viable in part because of government success in educating girls, and second, this dependency places constraints on the expansion of private schools where government secondary schools are absent.

The study by Kremer and Muralidharan (2008), using rural data from India, finds that private schools geographically congregate in areas where rates of government school teachers' absence are highest. This, the authors argue, indicates that private schools are complementary to state provision, a point reinforced by the fact that government and private schools continued to operate alongside each other in those areas. However, this type of private school 'gap filling' where there is poorly performing existing government provision should be differentiated from private schools filling gaps where there is a low supply of acceptable quality government schools. This indicates a potential blurred boundary between complementary and competitive provision in this debate, an area which would benefit from further research.

Assumption 17: Market competition enhances quality in state and private school sectors

No. of studies = 3: India (2), Pakistan (1)

* <i>NEUTRAL</i> (1), Positive(1), Negative (1)

Summary assessment of evidence: Small number of medium quality studies (including one high quality study) across a small range of contexts that give inconsistent findings.
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Strength of evidence: <i>WEAK</i>
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Headline finding:

The evidence on whether the effect of competition is to drive up the quality of public schools or to deplete it by encouraging better-off students to exit the state sector is sparse and contested.
--

Economic theory suggests the presence of private schools should enhance the performance of *all* school types within a more **competitive educational market**. This is underpinned by the idea of choice as a driver of quality. The view that private schools drive up quality

across the entire education system has not, however, been rigorously addressed through empirical research. The limited evidence comes from few contexts, and the findings to date are contradictory.

Neutral evidence

Few of the reviewed studies make claims about the **impact of private schools** beyond the educational outcomes of their own pupils. One exception is Pal (2010), who is neutral on the supposed effects of competition on the quality of education outcomes overall. Using data from five states across rural India, the study shows that the presence of a private school did have a significant positive impact on village-level class 5 pass rates, but failed to have any significant impact on village *government* school class 5 pass rates. This was attributed to a lack of real competition between private and government schools, the latter of which enjoyed secure enough funding to not be incentivised to compete on quality (Pal 2010).

Supporting evidence

Andrabi et al.'s (2009) rigorous RCT appears to contradict Pal's (2010) conclusion, finding that market competition *did* lead to quality improvements across all types of schools in rural Pakistan. Importantly, however, it was the provision of information that was key to spurring this competition: when comparable information on school performance was provided to users, all schools were pressured to pursue 'price-adjusted quality', although private schools were more responsive to this market pressure than the government schools.

Counter evidence

Härmä and Rose's (2012) findings in remote rural India more directly refute the assumption that competition is good for overall education outcomes, particularly in terms of equity. Their study highlighted some important **unintended consequences of market competition** between private and public schools. Not only did private schools have no positive effect on the quality of government schools, but exit from government schools by those who could afford to pay fees was seen to condemn the poorest households to lower quality government schooling.

4.4 Summary of the evidence

Figure 4.1 provides summary evidence maps indicating which studies produce positive, neutral and negative findings in relation to each testable assumption. Overall assessments of the body of evidence for each assumption are presented in the first row of the evidence maps. These assessments indicate (i) strength of evidence (strong, moderate or weak) and (ii) whether overall body of evidence supports (green positive symbol '+'), refutes (red negative symbol '-'), or is neutral (amber neutral symbol 'o') in relation to assumptions.

Individual numbered studies are listed by country in square brackets and evidence maps indicate whether the studies refute (negative), support (positive) or are neutral in relation to assumptions. Numbered studies marked with an asterisk were assessed as high quality; the rest were assessed as medium quality. The full list of the numbered studies reviewed is provided in Appendix 2.

Figure 4.1: Evidence maps for each assumption

Key**STRONG** = Body of evidence rated as 'strong' overall.**MODERATE** = Body of evidence rated as 'moderate' strength overall.**WEAK** = Body of evidence rated as 'weak' overall.

+ = Positive findings supporting assumption.

- = Negative findings refuting assumption.

o = Neutral findings ambiguous in relation to assumption.

* = Numbered study assessed as high quality (remaining are medium)

	[H1] QUALITY Private schools are better quality than state schools		[H2] EQUITY Private schools provide education to disadvantaged children		[H3] COST-EFFECTIVENESS Private schools are cost-effective and financially sustainable	
	(A1) Private school pupils achieve better learning outcomes than state school pupils	(A2) Teaching is better in private schools than in state schools	(A3) Private schools geographically reach the poor	(A4) Private schools are equally accessed by boys and girls	(A5) The cost of education delivery is lower in private schools than in state schools	(A6) Private schools are financially sustainable
ASSESSMENT	[MODERATE +]	[STRONG +]	[WEAK o]	[WEAK -]	[MODERATE +]	[WEAK o]
Positive	India [15, 18, 20, 31, 35*, 41, 48] Kenya [11, 16] Nigeria [55] Pakistan [3, 6, 29*] Nepal [54]	India [15, 32, 33, 34*, 35*, 47*, 48, 55] Tanzania [26] Pakistan [3, 7] Nigeria [55] South Africa [45]	India [33, 42] Kenya [56]	India [50] Pakistan [3]	India [21, 31, 33, 35*, 55] South Africa [45] Kenya [11] Nigeria [55]	
Neutral	Ghana [1] India [14, 21, 30, 47*, 58] Kenya [39]	India [21] Kenya [39]	Pakistan [3] South Africa [45] India [8, 59]	India [30, 41] Pakistan [17] Tanzania [26]		Kenya [56] India [25]
Negative			India [41]	India [23, 34*, 42] Pakistan [6] Kenya [36*]		

Summary evidence map 1: Supply

The role and impact of private schools in developing countries: a rigorous review of the evidence

	[H4] AFFORDABILITY Private schools are financially affordable for the poor and the poorest		[H5] CHOICE Demand for private schools is driven by informed choice and a concern for quality		[H6] ACCOUNTABILITY Private schools are accountable to users	
	(A7) The poor and the poorest are able to pay private school fees	(A8) Private schools are as affordable as state schools	(A9) Perceived quality of education is a priority for users when choosing private schools	(A10) Users make informed choices about the quality of education	(A11) Users actively participate in or influence operational decision making in private schools	(A12) Private schools are responsive to users' demands and complaints
ASSESSMENT	[WEAK ○]	[MODERATE -]	[MODERATE +]	[MODERATE +]	[WEAK +]	[WEAK +]
Positive			Ghana [1, 2] Kenya [40] India [8, 19, 30, 48, 50]	India [22, 48, 50] Bangladesh [12] South Africa [45] Ghana [1]	Tanzania [26] South Africa [45] India [30]	South Africa [45] Pakistan [4*, 17] Tanzania [26] Bangladesh [49]
Neutral	Ghana [2] Tanzania [43] India [8, 33] Kenya [56] Jamaica [27] Pakistan [27]	Ghana [27] Kenya [39]	India [22, 53] Kenya [39]			
Negative	India [22, 23, 48] South Africa [45] Pakistan [17]	Ghana [2] India [22, 46*, 53] Bangladesh [49]		Tanzania [43]		

Summary evidence map 2: Demand

	[H7] FINANCING AND PARTNERSHIP State collaboration, financing and regulation improves private school quality, equity and sustainability			[H8] MARKET Private schools have positive effects on the overall education system	
	(A13) States have the knowledge, capacity and legitimacy to implement effective policy frameworks for private school collaboration and regulation	(A14) State regulation is effective and improves private school quality, equity and sustainability	(A15) State subsidies improve private school quality, equity and sustainability	(A16) Private schools complement state provision	(A17) Market 'competition' enhances quality in private and state school sectors
ASSESSMENT	[MODERATE -]	[MODERATE -]	[WEAK +]	[WEAK +]	[WEAK ○]
Positive		India [44, 52, 57] Kenya [44]	Pakistan [9, 10*, 17]	India [33] Pakistan [3, 5*] Kenya [40]	Pakistan [4*]
Neutral		Pakistan [9, 28]			India [41]
Negative	Pakistan [17, 28] Bangladesh [49] India [37, 51, 52, 57] Nigeria [24]	Bangladesh [49] Nigeria [24] India [37, 38, 51] Malawi [13]			India [25]

Summary evidence map 3: Enabling environment

5. Synthesis of the evidence and gap analysis

5.1 Where is the evidence strongest and where is it weakest?

Below a synthesis of the evidence is presented by theme: **supply**, **demand**, and **enabling environment**, and then by overall strength of evidence: **strong**, **moderate** and **weak**.

Supply

Strongest evidence

Strong evidence supported the assumption that **teaching is better** in private schools than in state schools in terms of teacher presence, teaching activity and teaching approaches more conducive to improved learning outcomes (Assumption 2 (A2)). This was the only body of evidence to be graded 'strong'. Explanations for this in the literature include greater teacher accountability to employers in private schools. However, the evidence also revealed that private school teachers have fewer formal qualifications, lower salaries and weak job security, raising questions about whether teachers' working conditions are compromised in private schools.

Moderate evidence

There was moderate strength evidence to support the assumption that private school pupils achieve **better learning outcomes** than state school pupils (A1). While this assumption had the largest body of evidence, it did not reach a high enough level of consistency to warrant a strong rating. There was ambiguity around the extent to which the true size of the private school effect could be measured and the findings of appreciable private school learning outcome effects in some studies still need to be understood in the context of low learning levels overall across both government and private schools in rural areas of many developing countries.

A moderate strength body of evidence supported the assumption that the **cost of education delivery is lower** in private schools than in state schools (A5). This is often due to lower salaries of private school teachers and resonates with the questions raised in A2 above about the working conditions of private school teachers. Additionally, most evidence reviewed did not analyse the cost-effectiveness of private schools compared with state schools. The few attempts to do so indicate that private schools are more cost-effective than state schools in specific contexts.

Weak and inconclusive evidence

Evidence on **whether private schools are equally accessed by boys and girls** (A4) is inconsistent and therefore weak. Several studies report that that girls are less likely than boys to be enrolled in private schools, but this finding is context specific. Some studies were ambiguous and a minority of evidence found that the gender gap in private schools compared with state schools was reduced in some contexts.

The evidence was ambiguous about whether private schools geographically reach the poor (A3). What was found, however, was that while private schooling continues to focus on urban areas, it is **increasingly prevalent in rural areas**. However, most of the research also cautioned against assuming this meant that they are reaching the poor. More research investigating who attends private schools, particularly in these rural areas, would contribute to filling this evidence gap.

There was very limited evidence to enable a conclusion to be reached on whether private schools are financially sustainable (A6). The little indirect evidence on length of operation indicates that some private schools operate for many years. However, there is also some evidence that private schools, particularly LFPs, may be vulnerable to closing down.

Demand

Moderate evidence

Moderate strength evidence supported the two assumptions relating to private school choice: that perceived **quality of education is a priority for users** when choosing private schools (A9), and that users make informed choices about the quality of education (A10). As identified through large surveys and interviews, parents perceived private schools to have better attitudes and work practices among teachers, less teacher absenteeism, and lower PTRs. These perceptions are validated through the findings on A2 that private schools have better teaching than state schools. Other important drivers of demand for private schools were a general dissatisfaction with government provision and a desire for English-medium education. The ability to make informed choices and judgements about quality education depends strongly on context and information provision to users. A small number of studies consistently indicated that parents gain information about private schools primarily through informal sources, for example through the use of **informal social networks**. There was also evidence that perceptions of private schools as better quality than state schools were not often based on direct observations of local schools but on examination results of private schools in more advantaged areas. Evidence of moderate strength refuted the assumption that private schools are as affordable to users as state schools (A8) and showed that private schools tend to be more expensive to users in terms of costs of school fees and other more hidden costs such as books and uniforms, although there is some variation in certain contexts.

Weak and inconclusive evidence

With regard to affordability, a relatively large body of evidence had ambiguous findings in relation to the assumption that the poor and poorest are able to pay private school fees (A7). A very **small minority of children from lower economic quintiles** do appear to be accessing some private schools, however concerns were raised about the **welfare sacrifices** that this entails along with the difficulty of sustaining continued attendance. Many studies did not adequately disaggregate data to indicate whether -and what - household and welfare sacrifices are made in order to meet private school costs. Studies also differed on what constitutes the 'poor', 'disadvantaged' or 'higher income' and on the level of school charges.

The body of evidence on the accountability of private schools to users was too small to arrive at a firm conclusion. However, there was weak but consistent evidence supporting the assumption that **users actively participate in or influence operational decision making** in private schools (A11). There was also weak but consistent evidence to support the assumption that private schools are **responsive to users' demands and complaints** (A12). There was no evidence that users do in fact change schools in response to quality concerns, or are more likely to do so in the case of private schools than government schools.

Enabling environment

Moderate evidence

There was moderate strength evidence refuting the assumption that states have the knowledge, capacity and legitimacy to implement effective policy frameworks for collaboration and regulation of the private school sector (A13). Attempts by governments

to intervene in the private school sector were often **constrained by a lack of basic information** on the size and nature of private schools and suffered from poor implementation and legitimacy undermined by previous interventions. Evidence on whether **state regulation** is effective and improves the quality, equity and sustainability of private school provision (A14) was mostly negative. Regulation was found typically to be focused on inputs rather than educational outputs, unrealistically stringent and only selectively enforced. It offers opportunities for rent-seeking as a price for avoiding or bypassing regulatory requirements. However, the evidence also highlighted that even ineffectively enforced regulation can have positive effects, for example through setting standards among private schools that seek to confirm their status by using recognition (i.e. registration) as a proxy for quality. Some studies noted that positive government intervention can support the expansion of private school provision, but concerns were expressed in some contexts about government promotion of private schools without adequate regulation and quality controls.

Weak and inconclusive evidence

There was a surprisingly small amount of evidence fitting the criteria of the review in relation to the assumption that **state subsidies** improve the quality, equity and sustainability of private school provision (A15). The few studies were consistently positive but limited to a single programme in Pakistan. They provided examples of how conditional and targeted subsidies can raise quality and set equity conditions; but they did not provide insights on whether they can improve the sustainability of private school provision.

The two assumptions relating to the private school **market** also resulted in small bodies of evidence preventing any firm conclusion. A small amount of evidence supported the assumption that private schools complement government school provision (A16). However, an analysis of the evidence also revealed some ambiguities around whether private schools are filling gaps where there is a paucity of government schools or where government schools are performing badly. The evidence on whether market competition enhances quality in the state and private school sectors (A17) was sparse and highly contested. An example is given of market competition driving up quality in both private and state schools, and of private school competition potentially depleting government school quality by encouraging better-off government school pupils to exit.

5.2 What are the key gaps in the evidence?

The extent to which this review can address its guiding question - *can private schools improve education for children in developing countries?* - is limited by critical gaps in the evidence base. First, and most widely acknowledged, there is a **lack of data on the true extent and diverse nature of the private education sector** operating in developing countries. What we know about private schools often stems from limited knowledge of 'registered' private schools; less-well documented is the scale and coverage of 'unregistered private schools', which undoubtedly constitute a large proportion of providers. Published research does not always make the status of schools clear, but more often covers recognised schools whose operations are more overt, government-registered, regulated (in principle), and sometimes government-aided, than unrecognised schools. Second, the literature is **geographically heavily weighted** to South Asia (particularly India, but also Pakistan, Bangladesh and Nepal) with a much more limited African focus (Nigeria, Ghana, Kenya, Malawi, South Africa and Tanzania). No material was found on conflict-affected or fragile states, in spite of the policy emphasis on these countries. Third, the vast majority of the literature deals with primary schools exclusively or primary and secondary (and sometimes middle schools) combined. There is very little literature that focuses exclusively on **middle and secondary schools**. The degree to which private primary school pupils are able to transition into secondary schools is a related but largely underexplored question. The vast majority of studies focused exclusively on rural areas or

rural and urban areas combined. There was little reference to **peri-urban areas**. In addition to the above, the **effect of international companies or chains of private schools** has not yet found its way into the literature, except in the claims of those organisations.

Another set of gaps result from the limited **types of research design** used to study the role and impact of private education providers. In particular, there is a striking paucity of **longitudinal research** that can indicate trends over time - either in individual academic achievement or system-wide effects. Consequently, there is currently limited understanding of the long-term effects of donor or government interventions on the quality of private provision. Likewise, studies of the effects of private schooling on equity are currently limited to snapshot or cross-sectional designs. This leaves unanswered questions about the long-term impact of private schooling on employment, social mobility, or, given the gender differential, women's economic participation. Likewise, few in-depth analyses or ethnographic studies have looked at the effects of private schooling on household poverty over time. In addition, **comparative work is thin**, leaving little room for meaningful comparison across and within contexts.

Further, though it is widely acknowledged that the performance of education systems has to be understood in the particular socio-economic and political environment in which they operate, there are **few political analyses of private schooling in developing countries**. This is limiting our understanding, in particular, of how incentives enable or constrain public-private collaboration directed towards quality improvement, and the small-scale politics of negotiated 'choice' at community level. Further unravelling the relationships of accountability and control between parents, users, policy-makers and politicians is necessary to understand how the market for private schooling works for and against poor people and the potential effects of external interventions on this market.

5.3 Where might future research focus?

Based on the findings synthesised above, further research in the following areas could strengthen the evidence base on the role and impact of private schools in developing countries.

- **Quality:** There is a need for more research on whether private schools provide quality education in absolute terms, and not just by comparison with state schools. This is particularly important in the context of the worryingly low overall learning levels in government and private schools in rural areas in many countries. The review has also identified the need for more studies using rigorous methodologies accounting for pupil social background to attempt to identify more rigorously the true extent of the private school effect on pupil learning outcomes. Finally there is a need to research the nexus between quality of teaching, teacher accountability, teachers' salaries and working conditions given the concern raised in some of the literature as to whether these are compromised in private schools, and particularly LFPs.
- **Equity:** Further research is needed in a range of contexts to investigate who is accessing private schools, particularly given their increased prevalence in rural areas, and whether private schools are meeting the needs of an underserved population. In particular research that clearly disaggregates the effects of class, caste, gender, ethnicity or social exclusion on access and affordability is needed.
- **Cost-effectiveness:** More detailed case study data and analysis of private schools' costs, inputs and outputs are necessary to arrive at a more reliable account of their cost-effectiveness. Further research is also needed on the financial sustainability of private schools, and the comparative sustainability of different funding models over time.

- **Affordability:** There is a need for more long-term studies that can track the total costs of private schooling over a sustained period on lower-income household expenditure, to identify the extent and types of welfare and other sacrifices households make in order to pay private school fees, and to assess the value of the trade-offs households make.
- **Choice:** Future studies could grapple with the conceptual challenge of understanding how parents/guardians form views of quality and expectations of private and state schools in different contexts, in particular how information is communicated, and how it influences choices. Do parents make ‘active’ choices or are they bound into a political economy of ‘choice’ -for example, how socio-economic status influences school options at the local level?
- **Accountability:** More research is needed on how everyday accountability relationships between schools and users operate in practice, and whether and how these differ between private and state schools. Further examination of the factors, including gender, and informal power relationships, affecting the extent to which parents/guardians exert pressure on schools is needed to understand the political economy of accountability. Alongside this, studies of whether and how schools respond to parental pressure or engagement, and whether parents disappointed with school quality or teacher attendance withdraw children from schools, would help clarify the prevalent but largely untested assumptions about the operation of accountability in market and state systems.
- **Enabling environment:** There is a dearth of high quality empirical studies focused on the enabling environment. This includes both the influence of the overall political and market conditions within which education providers operate, and the effects of the relationship between the public and private sectors. As this review shows, we do not have sufficient evidence to understand whether education markets drive up quality, whether regulation and interventions such as state financing and partnership distort or support education markets, or whether support for private schools diverts donor and government support and/or students away from public schools thereby reducing their quality. The effects of different financing models currently being applied and supported by development agencies and governments, including subsidies and vouchers, are not widely interrogated in published research. Studies reporting on the impact of new interventions and policies, some of which are underway but unpublished, could begin to fill this gap¹⁹.

All these issues need to be investigated in such a way as to get beyond descriptive comparisons of the performance of schools to identify the factors that explain variations between state and private schools and different ways of organising both sectors. This review’s initial and evidenced theories of change indicate the sort of explanatory factors that need to be considered.

¹⁹ See for example, Noronha and Srivastava’s (forthcoming) report on India’s Right To Education Act under which all private schools must reserve 25% places for socially and economically disadvantaged children.

6. Conclusion: the effects of private schools on education, an evidence-based theory of change

This review set out to rigorously and objectively interrogate a number of hypotheses and assumptions that underpin the polarised debate about the potential and real contribution of private schools to improving education for children. Arriving at general conclusions is difficult because of the diversity of the private school sector, the significant gaps in the evidence, and the fact that available research is rarely generalisable in itself. However, of the 17 assumptions tested in this review, one was rated ‘strong’ and seven were rated ‘moderate’. While these findings cannot be universally translated into policy regardless of context, they do merit policymakers’ attention. What is clear, moreover, is that the majority of the assumptions at the heart of this debate are in fact weakly evidenced. There is more contestation than there is consensus in the literature, with a number of findings inconsistent and some being outright contradictory. Further research in targeted areas, such as those suggested above, could lead to a strengthening of this emerging evidence base.

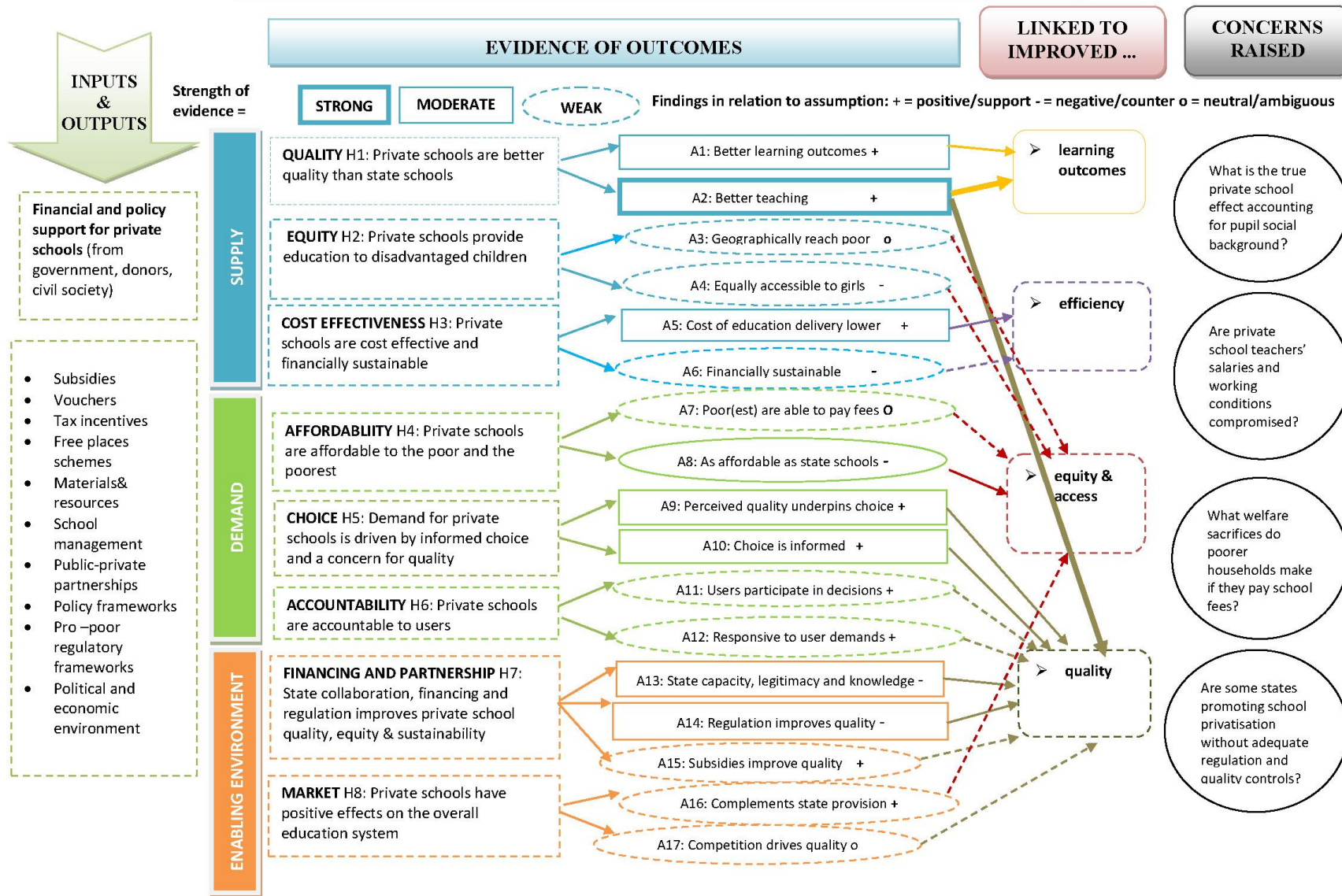
What do these limitations and contradictions mean for the theory of change linking private schooling to improved learning outcomes, quality, efficiency, access and equity of education in developing countries? The evidence is more indicative than it is conclusive. Figure 6.1 maps the key findings from the review of the evidence onto the initial theory of change to present an evidenced theory of change. This enables us to visualise the strength of evidence supporting (positive), refuting (negative) or ambivalent (neutral) in relation to the tested assumptions and how these may (or may not) contribute to improved **learning outcomes, efficiency, equity and access and quality** (indicated by the arrows on the right side of the figure). On the far right of the figure are some of the **concerns raised** in the literature reviewed; these refer to unintended consequences or gaps in the evidences that link to some of the targeted areas of further research suggested above.

Findings related to improved **learning outcomes** are supported by moderate strength evidence indicating a positive contribution of private schools to better learning outcomes and strong evidence that better teaching practices are more likely to lead to improved learning outcomes. This finding needs to be understood in the context of overall low levels of learning outcomes across private and state schools particularly in rural areas of many developing countries. It also raises some concerns related to ambiguities around the size of the true private school effect, or whether higher learning outcomes relate more to pupils’ social backgrounds.

With regard to improved **quality**, although a strong body of evidence was found to support the assumption that private schools have better teaching, other assumptions relating to quality had less conclusive findings. Underpinning the idea that private schools drive up quality are the concepts of market competition, choice and accountability. Moderate strength evidence was found to support the notion that perceived quality of education is a key factor for parents when choosing private schools and that this choice is informed, albeit through informal social networks and general perceptions of private schools rather than more systematic information or direct observation of schools. However, when it comes to investigating how parents exercise this choice, the evidence is scarce. The little evidence there is indicates that users participate in and influence decision making but there was no evidence that parents actually exit private schools due to quality concerns. Similarly there was a very small body of literature relating to market competition and this evidence was particularly inconsistent with concerns being raised that competition can deplete state school quality with better-off pupils exiting state schools. This insufficient evidence poses a challenge to the often claimed assertions that higher accountability in

6. Conclusion: the effects of private schools on education, an evidence-based theory of change

Figure 6.1: 'Private schools improve education for children': evidence-based theory of change



private schools and market competition drives up quality across the education system.

Also related to improving **quality** are the findings on state financing and partnership with the private sector. There was moderate strength evidence showing that governments were often found to have a lack of knowledge, capacity and legitimacy to implement effective policies for collaboration and regulation of the private schools sector. However evidence on the effectiveness of policies in improving quality was more mixed. Although some positive examples were found of state intervention through regulation and collaboration (e.g. through subsidies) potentially leading to improved quality of provision, there was also much negative evidence. Additionally concerns were raised about whether some states were promoting the expansion of private schools without adequate regulation and quality controls. More research is needed here to identify how appropriate collaboration, financing and regulation can improve quality as well as the equity and the sustainability of provision.

Findings relating to whether private schools lead to improved **efficiency** were also inconclusive. There was insufficient evidence on whether private schools are financially sustainable. However, there was moderate strength evidence that the cost of education delivery was lower in private schools than in state schools. These lower costs were often clearly related to lower teacher salaries which raises some questions and concerns about the working conditions of private school teachers which needs investigating further.

Finally, findings relating to improved **equity and access** were overwhelmingly negative and neutral, but mainly weak. There was some evidence that girls are less likely to attend private schools, although this finding was context specific. There is a moderate strength body of evidence showing that attending private schools tends to be more expensive for users than attending state school in terms of school fees and meeting the more hidden costs of uniforms and books, etc. The findings on whether private schools geographically reach the poor are ambiguous largely because who accesses private schools is not investigated head-on in the studies reviewed. What was found, however, is that private schools are increasingly prevalent in rural areas, but it should not be assumed that the poor are accessing these schools more. Linked to this is the ambiguity around whether the poor and poorest can pay school fees, with the studies having a mix of neutral and negative (but no positive) findings in relation to this assumption. There is some evidence of a small minority of children from lower economic quintiles attending private schools, but concerns were raised about the welfare sacrifices that poorer households make in order to meet the costs of private schooling. There was also evidence that financial constraints prevented children from poorer households enrolling in or continuing their attendance at private schools. Finally, the evidence on whether private schools complement state provision was very thin. Examples were found of both private schools filling gaps where there are fewer government schools, and private schools operating where there is an adequate supply of government schools but where they are performing poorly. This indicates a potential blurred boundary around whether private schools complement or compete with state provision.

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Appendices

Appendix 1: Authorship of the report

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Appendix 2: Studies included in the review

No. of studies = 59

Country contexts, total = 11

Asia	Africa	Caribbean
India, Pakistan, Bangladesh, Nepal	Nigeria, Kenya, Tanzania, Ghana, South Africa, Malawi	Jamaica

References for individual studies

Key = Primary and empirical [P&E]; Secondary [S]; Experimental [EXP]; Systematic review [SR]; Observational [OBS]; Other review [OR].

No	Author(s) and date	Type	Full reference	Quality assessment
1	Akaguri (2011)	[P&E; OBS]	Akaguri L (2011) <i>Quality low-fee private schools for the rural poor: perception or reality? Evidence from southern Ghana</i> . CREATE Pathways to Access Research Monograph No 69. Falmer: University of Sussex. .	Medium
2	Akaguri (2013)	[P&E; OBS]	Akaguri L (2013) Fee-free public or low-fee private basic education in rural Ghana: how does the cost influence the choice of the poor? <i>Compare: A Journal of Comparative and International Education</i> DOI: 10.1080/03057925.2013.796816. .	Medium
3	Andrabi et al. (2008)	[P&E; OBS]	Andrabi T, Das J, Khwaja AI (2008) A dime a day: the possibilities and limits of private schooling in Pakistan. <i>Comparative Education Review</i> 52: 329-355.	Medium
4	Andrabi et al. (2009)	[P&E; EXP]	Andrabi T, Das J, Khwaja AI (2009) <i>Report cards: the impact of providing school and child test-scores on educational markets</i> . BREAD Working Paper.	High
5	Andrabi et al. (2013)	[P&E; OBS]	Andrabi T, Das J, Khwaja AI (2013) Students today, teachers tomorrow: identifying constraints on the provision of education. <i>Journal of Public Economics</i> 100: 1-14.	High
6	Aslam (2009)	[P&E; OBS]	Aslam M (2009) The relative effectiveness of government and private schools in Pakistan: are girls worse off? <i>Education Economics</i> 17(3): 329-354.	Medium
7	Aslam and Kingdon (2011)	[P&E; OBS]	Aslam M, Kingdon G (2011) What can teachers do to raise pupil achievement? <i>Economics of Education Review</i> 30(3): 559-574.	Medium
8	Baird (2009)	[P&E; OBS]	Baird R (2009) <i>Private schools for the poor: development, provision, and choice in India</i> . Chennai: Grey Matters Capital.	Medium
9	Barrera-Osorio, and Raju (2011)	[P&E; OBS]	Barrera-Osorio F, Raju D (2011) <i>Evaluating public per-student subsidies to low-cost private schools: regression-discontinuity evidence from Pakistan</i> . Washington, DC: World Bank.	Medium

Appendix 2: Studies included in the review

10	Barrera-Osorio and Raju (2010)	[P&E; OBS]	Barrera-Osorio F, Raju D (2010) <i>Short-run learning dynamics under a test-based accountability system: evidence from Pakistan</i> . Washington, DC: World Bank.	High
11	Bold et al. (2013)	[P&E; OBS]	Bold T, Kimenyib M, Mwabuc G, Sandefurd J (2013) <i>The high return to low-cost private schooling in a developing country</i> . London: International Growth Centre (IGC) London School of Economics.	Medium
12	Cameron (2011)	[P&E; OBS]	Cameron S (2011) Whether and where to enrol? Choosing a primary school in the slums of urban Dhaka, Bangladesh. <i>International Journal of Educational Development</i> 31(4): 357-366.	Medium
13	Chimombo (2009)	[P&E; OBS]	Chimombo J (2009) Expanding post-primary education in Malawi: are private schools the answer? <i>Compare: A Journal of Comparative and International Education</i> 39(2): 167-184.	Medium
14	Chudgar and Quin (2012)	[P&E; OBS]	Chudgar A, Quin E (2012) Relationship between private schooling and achievement: results from rural and urban India. <i>Economics of Education Review</i> 31(4): 376-390.	Medium
15	Desai et al. (2008)	[P&E; OBS]	Desai S, Dubey A, Vanneman R, Banerji R (2008) <i>Private schooling in India: a new educational landscape</i> . Maryland: University of Maryland.	Medium
16	Dixon et al. (2013)	[P&E; OBS]	Dixon P, Tooley J, Schagen I (2013) The relative quality of private and public schools for low-income families living in slums of Nairobi, Kenya. In: Srivastava P (ed.) <i>Low-fee private schooling: aggravating equity or mitigating disadvantage?</i> Oxford: Symposium.	Medium
17	Fennell (2012)	[P&E; OBS]	Fennell S (2012) Why girls' education rather than gender equality? The strange political economy of PPPs in Pakistan. In: Robertson S, Mundy K (eds) <i>Public-private partnerships in education: new actors and modes of governance in a globalizing world</i> . Cheltenham: Edward Elgar Publishing.	Medium
18	French and Kingdon (2010)	[P&E; OBS]	French R, Kingdon G (2010) <i>The relative effectiveness of private and government schools in rural India: evidence from ASER data</i> . London: Institute of Education.	Medium
19	Galab et al. (2013)	[P&E; OBS]	Galab S, Vennam U, Komanduri A, Benny L, Georgiadis A (2013) <i>The impact of parental aspirations on private school enrolment: evidence from Andhra Pradesh, India</i> . Oxford: University of Oxford. Young Lives Working Paper 97.	Medium
20	Goyal (2009)	[P&E; OBS]	Goyal S (2009) Inside the house of learning: the relative performance of public and private schools in Orissa. <i>Education Economics</i> 17(3): 315-327.	Medium
21	Goyal and Pandey (2009)	[P&E; OBS]	Goyal S, Pandey P (2009) <i>How do government and private schools differ? Findings from two large Indian states</i> . Washington, DC: World Bank.	Medium

22	Härmä (2009)	[P&E; OBS]	Härmä J (2009) Can choice promote Education for All? Evidence from growth in private primary schooling in India. <i>Compare: A Journal of Comparative and International Education</i> 39(2): 151-165.	Medium
23	Härmä (2011)	[P&E; OBS]	Härmä J (2011) Low cost private schooling in India: is it pro poor and equitable? <i>International Journal of Educational Development</i> 31(4): 350-356.	Medium
24	Härmä and Adefisayo (2013)	[P&E; OBS]	Härmä J, Adefisayo F (2013) Scaling up: challenges facing low-fee private schools in the slums of Lagos, Nigeria. In: Srivastava P (ed.) <i>Low-fee private schooling: aggravating equity or mitigating disadvantage?</i> Oxford: Symposium.	Medium
25	Härmä and Rose (2012)	[P&E; OBS]	Härmä J, Rose P (2012) Is low-fee private primary schooling affordable for the poor? Evidence from rural India. In: Robertson R, Mundy K (eds) <i>Public-private partnerships in education: new actors and modes of governance in a globalizing world</i> . Cheltenham: Edward Elgar Publishing.	Medium
26	Hartwig (2013)	[P&E; OBS]	Hartwig KA (2013) Using a social justice framework to assess educational quality in Tanzanian schools. <i>International Journal of Educational Development</i> 33 (5): 487-496.	Medium
27	Heyneman and Stern (2013)	[P&E; OBS]	Heyneman SP, Stern, JMB (2013) Low cost private schools for the poor: what public policy is appropriate? <i>International Journal of Educational Development</i> http://dx.doi.org/10.1016/j.ijedudev.2013.01.002	Medium
28	Humayun et al (2013)	[P&E; OBS]	Humayun S, Shahzad, R. and Cunningham, R. (2013) Regulating low-fee private schools in Islamabad: a study in policy and practice. In: Srivastava P (ed.) <i>Low-fee private schooling: aggravating equity or mitigating disadvantage?</i> Oxford: Symposium.	Medium
29	Javid et al. (2012)	[P&E; OBS]	Javid K, Musaddiq T, Sultan A (2012) <i>Prying the private school effect: an empirical analysis of learning outcomes of public and private schools in Pakistan</i> . Lahore: University of Management Sciences (LUMS), Department of Economics.	High
30	Johnson and Bowles (2010)	[P&E; OBS]	Johnson C, Bowles MT (2010) Making the grade? Private education in northern India. <i>The Journal of Development Studies</i> 46(3): 485-505.	Medium
31	Kingdon (2008)	[S; OR]	Kingdon G (2008) School-sector effects on student achievement in India. In: Chakrabarti R, Peterson P (eds) <i>School-choice international: exploring public-private partnerships</i> . Cambridge, MA: MIT Press.	Medium
32	Kingdon and Banerji (2009)	[P&E; OBS]	Kingdon G, Banerji R (2009) <i>Addressing school quality: some policy pointers from rural north India</i> . Cambridge: Research Consortium on Educational Outcomes and Poverty (RECOUP).	Medium
33	Kremer and Muralidharan (2008)	[P&E; OBS]	Kremer M, Muralidharan K. (2008) Public and private schools in rural India. In: Peterson P, Chakrabarti R (eds) <i>School choice international</i> . Cambridge, MA: MIT Press.	Medium

Appendix 2: Studies included in the review

34	Maitra et al. (2011)	[P&E; OBS]	Maitra P, Pal S, Sharma A (2011) <i>Reforms, growth and persistence of gender gap: recent evidence from private school enrolment in India</i> . Bonn: Institute for the Study of Labor.	High
35	Muralidharan and Sundararaman (2013)	[EXP]	Muralidharan K, Kremer M, Sundararaman V (2011) The aggregate effect of school choice - evidence from a two-stage experiment in India. Cambridge, MA: The National Bureau of Economic Research. Working paper no. 19441.	High
36	Nishimura and Yamano (2013)	[P&E; OBS]	Nishimura M, Yamano T (2013) Emerging private education in Africa: determinants of school choice in rural Kenya. <i>World Development</i> 43: 266-275.	High
37	Ohara (2012)	[P&E; OBS]	Ohara Y (2012) Examining the legitimacy of unrecognised low-fee private schools in India: comparing different perspectives. <i>Compare: A Journal of Comparative and International Education</i> 42(1): 69-90.	Medium
38	Ohara (2013)	[P&E; OBS]	Ohara Y (2013) The regulation of unrecognised low-fee private schools in Delhi: potential implications for India's Right to Education Act. In: Srivastava P (ed.) <i>Low-fee private schooling: aggravating equity or mitigating disadvantage?</i> Oxford: Symposium.	Medium
39	Ohba (2012)	[P&E; OBS]	Ohba A (2012) Do low-cost private school leavers in the informal settlement have a good chance of admission to a government secondary school? A study from Kibera in Kenya. <i>Compare: A Journal of Comparative and International Education</i> 43(6): 763-782.	Medium
40	Oketch et al. (2010)	[P&E; OBS]	Oketch M, Mutisya M, Ngware M, Ezech AC, Epari C (2010) Free primary education policy and pupil school mobility in urban Kenya. <i>International Journal of Educational Research</i> 49(6): 173-183.	Medium
41	Pal (2010)	[P&E; OBS]	Pal S (2010) Public infrastructure, location of private schools and primary school attainment in an emerging economy. <i>Economics of Education Review</i> 29(5): 783-794.	Medium
42	Pal and Kingdon (2010)	[P&E; OBS]	Pal S, Kingdon G (2010) <i>Can private school growth foster universal literacy? Panel evidence from Indian districts</i> . Bonn: Institute for the Study of Labor (IZA).	Medium
43	Phillips and Stambach (2008)	[P&E; OBS]	Phillips KD, Stambach A (2008) Cultivating choice: the invisible hands of educational opportunity in Tanzania. In: Forsey M, Davies S, Walford G (eds) <i>The globalisation of school choice?</i> Oxford: Symposium, pp. 145-164.	Medium
44	Rose (2010)	[S; OR]	Rose P (2010) Achieving Education for All through public-private partnerships? <i>Development in Practice</i> 20(4-5): 473-483.	Medium
45	Schirmer (2010)	[P&E; OBS]	Schirmer S (2010) <i>Hidden assets: South Africa's low-fee private schools</i> . Johannesburg: Centre for Development and Enterprise.	Medium

46	Siddhu (2011)	[P&E; OBS]	Siddhu G (2010) <i>Can families in rural India bear the additional burden of secondary education? Investigating the determinants of transition.</i> Pathways to Access Research Monograph No 50. Falmer: University of Sussex.	High
47	Singh (2013)	[P&E; OBS]	Singh A (2013) <i>Size and sources of the private school premium in test scores in India.</i> Oxford: University of Oxford. Young Lives Working Paper 98.	High
48	Singh and Sarkar (2012)	[P&E; OBS]	Singh, R, Sarkar S (2012) <i>Teaching quality counts: how student outcomes relate to quality of teaching in private and public schools in India.</i> Oxford: University of Oxford. Young Lives Working Paper 91.	Medium
49	Sommers (2013)	[P&E; OBS]	Sommers C (2013) <i>Primary education in rural Bangladesh: degrees of access, choice, and participation of the poorest.</i> CREATE Pathways to Access Research Monograph No 75. Falmer: University of Sussex.	Medium
50	Srivastava (2008a)	[P&E; OBS]	Srivastava, P. (2008a). School Choice in India: disadvantaged groups and low-fee private schools. In M. Forsey, S. Davies and G. Walford (Eds.), <i>The Globalisation of School Choice?</i> (pp. 185-208). Oxford: Oxford Studies in Comparative Education.	Medium
51	Srivastava (2008b)	[P&E; OBS]	Srivastava P (2008b) The shadow institutional framework: towards a new institutional understanding of an emerging private school sector in India. <i>Research Papers in Education</i> 23(4): 451-475	Medium
52	Srivastava (2010)	[S; OR]	Srivastava P (2010) Public-private partnerships or privatisation? Questioning the state's role in education in India. <i>Development in Practice</i> 20(4-5): 540-553.	
53	Sucharita (2013)	[P&E; OBS]	Sucharita V (2013) Negotiating between family, peers and school: understanding the world of government school and private school students. <i>Compare: A Journal of Comparative and International Education</i> DOI:10.1080/03057925.2013.792671.	Medium
54	Thapa (2012)	[P&E; OBS]	Thapa A (2012) Public and private school performance in Nepal: an analysis using the SLC examination. <i>Education Economics</i> DOI:10.1080/09645292.2012.738809..	Medium
55	Tooley et al. (2011)	[P&E; OBS]	Tooley J, Bao Y, Dixon P, Merrifield J (2011). School Choice and academic performance: some evidence from developing countries. <i>Journal of School Choice</i> 5(1): 1-39.	Medium
56	Tooley et al. (2008)	[P&E; OBS]	Tooley J, Dixon P, Stanfield J (2008) Impact of free primary education in Kenya: a case study of private schools in Kibera. <i>Educational Management Administration and Leadership</i> 36(4): 449-469.	Medium

Appendix 2: Studies included in the review

57	Verger and VanderKaaij (2012)	[P&E; OBS]	Verger A, VanderKaaij S (2012) The national politics of global policies: public-private partnerships in Indian education. In: Verger A, Novelli M, Altinyelken HK (eds) <i>Global education policy and international development</i> . New York: Bloomsbury.	Medium
58	Wadhwa (2009)	[P&E; OBS]	Wadhwa W (2009) <i>Are private schools really performing better than government schools?</i> New Delhi: ASER.	Medium
59	Woodhead et al. (2013)	[P&E; OBS]	Woodhead M, Frost M, James Z (2013) Does growth in private schooling contribute to Education for All? Evidence from a longitudinal, two cohort study in Andhra Pradesh, India. <i>International Journal of Educational Development</i> 33(1): 65-73.	Medium

Appendix 3: Hypotheses (H) and counter hypotheses (CH)

The following tables set out the key hypotheses of the review alongside the counter hypotheses and, underneath, the assumptions and counter assumptions that underpin them.

Supply

H1: Private schools are better quality than state schools

- Teaching in private schools is better than in state schools.
- Private schools are better resourced than state schools.
- Students achieve better educational outcomes in private schools.

CH1: Private schools are not better quality than state schools

- Curriculums used by private schools may be unregulated and of low standard, not permitting transfer to secondary or tertiary sectors.
- Private school teachers may be inexperienced, unqualified, and poorly paid thereby limiting the quality of teaching and learning.

H2: Private schools provide education to disadvantaged children

- Private schools geographically reach the poorest.
- Private schools are equally accessed by girls and boys.

CH3: Private schools do not provide education to disadvantaged children

- Private schools do not reach the poorest, or fill the gaps in geographical coverage of state provision.
- Private schools cluster in urban areas and cities where the market is more viable than in rural areas - i.e. they 'follow the money'.
- Private schools may be accessible to girls and boys but household decisions may influence whether attendance is equal.

H3: Private schools are cost-effective and financially sustainable

- Private schools are (more) cost-effective (than state schools) partly because overheads are low.
- Private schools are financially stable. Fee collection, even from the poorest, is a sustainable financial model for private schools.

CH2: Private schools are not cost-effective and financially sustainable

- Fee-paying schools operate for profit. If they are 'viable' it is at the cost of teachers who earn low salaries.

Demand

H4: Private schools are affordable to the poor and the poorest

- The poor and poorest are able to pay private school fees.
- Private schools are no more expensive (or no less affordable) than state schools (which often have implicit costs, e.g. uniform, transport, food, textbooks, exam fees).
- Those in the poorest quintile are willing and able to pay for private schools.

CH4: Private schools are not affordable to the poor and the poorest

- The costs of fees and desire for private schooling may reduce the money available to the household to invest in other beneficial activities. Where parents cannot judge education quality this may lead to inefficient investment (and potentially risky borrowing and exploitation by money lenders) and so poorer welfare outcomes.
- The cost of fees may lead to a redistribution of resources and inequity within households. Money may be taken from less favoured or female children to send the favoured or male children to private school.

H5: Demand for private schools is driven by informed choice and a concern for quality

- Perceived quality of education is a priority for users when choosing private schools.
- Private school users make informed choices about school quality.

CH5: Demand for private schools is not driven by informed choice and a concern for quality

- School choice is mainly based on social, cultural, linguistic and religious preferences, resulting in social segregation.
- Asymmetric information means parents are often unable to judge quality meaningfully.
- Demand for private schools is driven by a (mis)perception of comparatively low quality state provision.
- Uptake of private schooling is driven by a lack of accessible state provision.

H6: Private schools are accountable to users

- Private schools make information on school performance accessible and understandable to users and prospective users.
- Users actively participate in, or influence, operational decision-making in private schools.
- Users in private schools respond to the information they receive by, for example, protesting to teachers or headmasters, or ‘voting with their feet’.
- Private schools are responsive to users’ demands and complaints.

CH6: Private schools are not accountable to users

- Private schools provide no more information to parents than state schools or possibly even less depending on the regulatory framework.
- Parents lack knowledge on their children’s performance, and are unwilling or unable to challenge school authorities.
- The lack of regulation of private schools means there are no effective mechanisms or organisations through which they can voice concerns.
- The lack of quality alternative schools limits the real power and control of users, making them ‘captive’ consumers.
- Local power structures prevent accountability or collective action to improve private schooling.

Enabling environment

H7: State collaboration, financing and regulation improves private school quality, equity and sustainability

- States have the capacity, legitimacy and knowledge of the private sector to implement frameworks for collaboration.
- State subsidies to users of private schools (e.g. vouchers and cash transfer schemes) improve quality, sustainability and equity.
- State regulation of private schools is effective and improves quality, sustainability and equity.

CH7: State collaboration, financing and regulation does not improve private school quality, equity and sustainability

- Expectations that governments also collaborate with, subsidise and regulate private schools divert vital capacity from the state education sector.
- Self-regulation/minimal regulation is needed for competitive markets.
- Regulation has been used to control the non-state sector or defend the state sector against competition, potentially stifling innovation and restricting flexibility.

H8: Private schools have positive effects on the overall education system

- Private schools drive up quality across the education system by generating competition.
- Private schools are complementary to state provision.

CH8: Private schools do not have positive effects on the overall education system

- Private schools have encouraged migrations away from the state sector.
- There is a trade-off between enrolment in non-state schools and enrolment in state schools.
- Private and state schools often compete with (rather than complement) each other.

Appendix 4: Review process and search terms

Figure showing four-phased review process

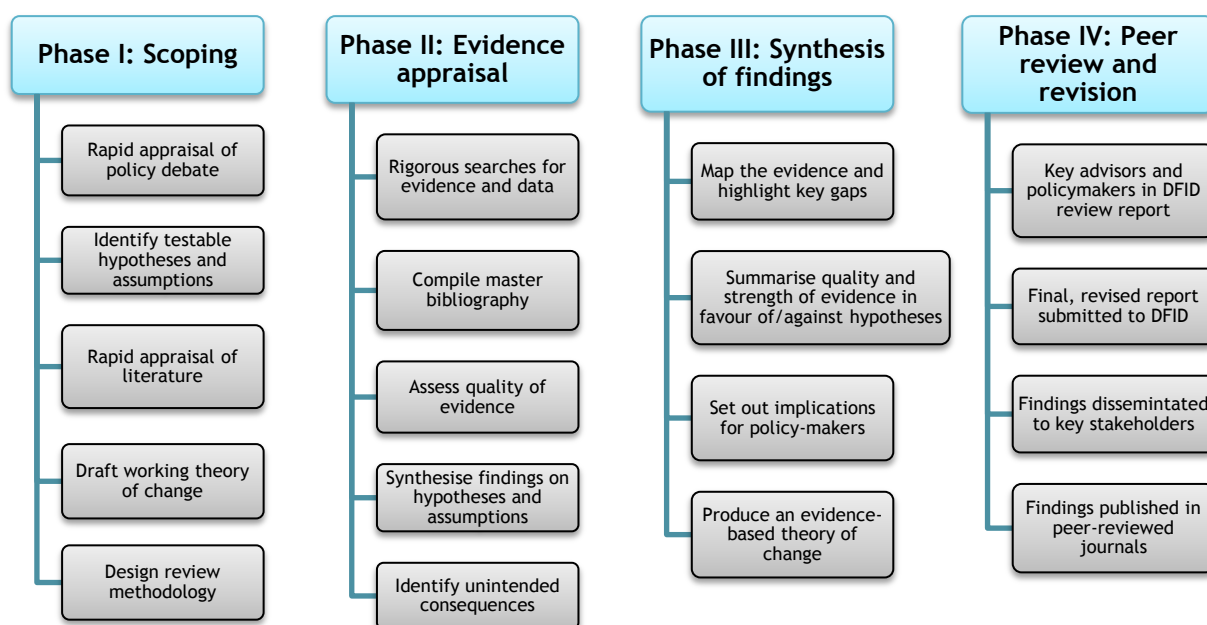


Table of search terms

Key search terms	Synonyms
Educat** ²⁰	school - tutor*- learn - teach -instruct - pedagog*- + provider/ provision
<i>And</i>	
Privat*	- market - neoliberal - fee - cost - low cost/ LCPS - low fee / low-fee / LFP - elite / high / middle fee
+	
Supply	- effect - effective - cost - quality - financ* - sustainab*- capacity - achieve* - attain* - outcome - standards - improvement - perform* - selection - technolog* - innovate* - profit - evaluation - teacher - labour - deploy - access - equity - disadvantag* - marginal - poor /poverty - excluded / exclusion - girls - social justice / inclusion / inclusive / segregation / cohesion -
<i>Or</i>	
Demand	-user - client - consumer - parent - choice / choose- decision / decide - inform* - bounded rationality - perception / perceive - opportunity pay - price - expenditure / expense - invest - afford - household - micro-finance - competition - migration/migrate - accountab* -

²⁰ Truncation was used so that searches would return words with different endings, e.g. Educat* = education, educating, educate.

<i>Or</i>	
Enabling environment	-politic*- investment climate - market - econom* - legal rights / literacy - govern*- policy - state - public - policy - incentive - intervention - dynamic - relationship - interact/ interaction - collaborat*- partnership - PPP -right to education - socialisation - regulation/regulate - manage / management - plan / planning - voucher - subsidy/subsidies - grant - scholarship - bursar* - free place - reserve / reservation - corporate social responsibility / CSR - international organisation / company/ies / donor / aid stewardship - principal-agent -

Appendix 5: Sources

These sources were thoroughly checked for the production of the master bibliography.

Research institutes	Key journals
<ul style="list-style-type: none"> • Centre for Global Development • Centre for International Education, University of Sussex (CIE) • Centre for Universal Education (Brookings) • Consortium for Research on Educational Access, Transitions and Equity (CREATE) • CfBT Education Trust • Education Resources Information Center (ERIC) • Health and Education Advice and Resource Team (HEART) • Institute of International Education • Institute of Education, University of London • Research Consortium on Educational Outcomes and Poverty (RECOUP) • UNESCO International Institute of Educational Planning (IIEP) • UNESCO Global Monitoring Report 	<ul style="list-style-type: none"> • Compare: A Journal of Comparative and International Education • Development Policy Review • Development and Change • Development in Practice • Economics of Education Review • Education Economics • Globalisation, Societies and Education • International Journal of Educational Development • International Studies Review • IDS Bulletin • Journal of Development Economics • Journal of International Development • Oxford Bulletin of Economics and Statistics • Oxford Development Studies • Public Administration and Development • Review of African Political Economy • Third World Quarterly • World Development • World Bank Research Observer
Citation indexes and bibliographic databases	Other websites
<ul style="list-style-type: none"> • EconPapers • EconLit • ERIC • JSTOR (<i>limited to the following databases: economics, education, psychology, public administration and sociology</i>) • Oxford University Press journals (<i>limited to the subject of Social Sciences</i>) • Pro-Quest (<i>limited to the following subjects: Economics, Education, Psychology and Social Sciences</i>) • REPEC/IDEAS • SAGE Journals Online • Science Direct • UNESDOC (UNESCO) 	<ul style="list-style-type: none"> • All-Party Parliamentary Group on Education for All www.appg-educationforall.org.uk/ • CODESRIA • Campbell Collaboration • Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI) • Eldis • Educational Quality Improvement Programme, USAID • Governance and Social Development Resource Centre (GSDRC) • Google Scholar • PERI Global • Poverty Action Lab

<ul style="list-style-type: none">• Ingentaconnect	<ul style="list-style-type: none">• 3ie• Research For Development (DFID)• UNESCO EFA Global Monitoring Report• UNDP Oslo Governance Centre• World Bank - Education• Results for Development Institute• Young Lives• Centre for Global Development• ASER (India and Pakistan)• Research Consortium on Educational Outcomes and Poverty (RECOUP)• The LEAPS project• The Centre for Researching Education and Labour, University of Witwatersrand• Centre for Civil society, New Delhi• Enterprising Schools
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Appendix 6: Tools to assess and rate individual study quality

Checklist for study quality

Principles of quality	Associated principles	YES/NO
Conceptual framing	Does the study acknowledge existing research?	
	Does the study construct a conceptual framework?	
	Does the study pose a research question?	
	Does the study outline a hypothesis?	
Openness and transparency	Does the study present or link to the raw data it analyses?	
	Does the author recognise limitations/weaknesses in their work?	
Appropriateness and rigour	Does the study identify a research design?	
	Does the study identify a research method?	
	Does the study demonstrate why the chosen design and method are good ways to explore the research question?	
Validity	Has the study demonstrated measurement validity?	
	Is the study internally valid?	
	Is the study externally valid?	
Reliability	Has the study demonstrated measurement reliability?	
	Has the study demonstrated that its selected analytical technique is reliable?	
Cogency	Does the author 'signpost' the reader throughout?	
	Are the conclusions clearly based on the study's results?	

(Source: DFID 2013: *How to note: assessing the strength of evidence*, p.14)

Guide for grading the quality of individual studies

Study quality	Abbreviation	Definition
High	↑	Demonstrates adherence to principles of appropriateness/rigour, validity and reliability; likely to demonstrate principles of conceptual framing, openness/ transparency and cogency
Moderate*	→	Some deficiencies in appropriateness/rigour, validity and/or reliability, or difficulty in determining these; may or may not demonstrate principles of conceptual framing, openness/transparency and cogency
Low	↓	Major and/or numerous deficiencies in appropriateness/rigour, validity and reliability; may/may not demonstrate principles of conceptual framing, openness/ transparency and cogency

(Source: DFID 2013: *How to note: assessing the strength of evidence*, p.15)

Appendix 7: Tools for reviewing individual studies

Templates for extracting data and recording methodological information

Full reference of text:	
<i>Hypothesis/es: (State each hypothesis if paper refers to more than one. If paper is not relevant to any of the hypotheses do not continue the rest of the template.)</i>	
Type of study, design and method (<i>refer to table below for categories</i>)	
Assessment of quality: high/medium/low	
Describe the overall methodological weaknesses and limitations of the study identified by (i) the author, (ii) the reviewer.	
Country/ies	
Private school type: low-fee or other (specify)	
Primary or secondary level (specify ages)	
Geographic location: urban, peri-urban or rural	
Describe key findings of the paper, particularly in relation to the hypotheses. State findings that (i) support and/or (ii) refute hypotheses. (<i>please give a paragraph of 4-5 key points per relevant hypothesis.</i>)	
What factors account for the findings in the author's view?	
Does the author identify unintended consequences- how are they described/explained?	
Any other/related issues that may be relevant to the review or have implications for donors?	

Table for categorising research type, design and method

Research Type	Research Design
Primary and empirical (P&E)	Experimental (EXP) + <u>state method used</u>
	Observational (OBS) + <u>state method used</u>
Secondary (S)	Systematic review (SR)
	Other review (OR)
Theoretical or conceptual (TC)	N/A

(Source: DFID 2013: *How to note: assessing the strength of evidence*, p.9)

Appendix 8: Assessment of overall strength of body of evidence for each assumption

Hypotheses and assumptions	Quality	Size	Context	Consistency	Overall strength
[H1] QUALITY Private schools are better quality than state schools					
(A1) Private school pupils achieve better learning outcomes than pupils in state schools	Medium (18 medium; 3 high)	Strong (21)	Strong (India, Pakistan, Kenya, Ghana, Nigeria, Nepal)	Medium*Positive (14) Neutral (7)	MODERATE
(A2) Teaching is better in private schools than in state schools	Medium (11 medium; 3 high)	Strong (14)	Strong (India, Pakistan, Nigeria, Kenya, South Africa, Tanzania)	Strong*Positive (12) Neutral (2)	STRONG
[H2] EQUITY Private schools provide education to disadvantaged children					
(A3) Private schools geographically reach the poor	Medium (8 medium)	Medium (8)	Medium (India, Pakistan, Kenya, South Africa)	Weak*Neutral (4) Positive (3) Negative (1)	WEAK
(A4) Private schools are equally accessed by boys and girls	Medium (9 medium; 2 high)	Strong (11)	Medium (India, Pakistan, Tanzania, Kenya)	Weak*Negative (5) Neutral (4) Positive (2)	WEAK
[H3] COST-EFFECTIVENESS Private schools are cost-effective and financially sustainable					
(A5) The cost of education delivery is lower in private schools than in state schools	Medium (6 medium; 1 high)	Medium (7)	Medium (India, Kenya, South Africa, Nigeria)	Strong*Positive (7)	MODERATE
(A6) Private schools are financially sustainable	Medium (2 medium)	Weak (2)	Weak (India, Kenya)	Weak *Neutral (2)	WEAK
[H4] AFFORDABILITY Private schools are affordable to the poor and poorest					
(A7) The poor and poorest are able to pay private school fees	Medium (11 medium)	Strong (11)	Strong (Ghana, Jamaica, Pakistan, India, Kenya, South Africa, Tanzania)	Weak*Neutral (6) Negative (5)	WEAK
(A8) Private schools are as affordable to users as state schools	Medium (6 medium; 1 high)	Medium(7)	Medium (Bangladesh, Ghana, India, Kenya)	Medium*Negative(5), Neutral (2)	MODERATE

[H5] CHOICE Demand for private schools is driven by informed choice and a concern for quality						
(A9) Perceived quality of education is a priority for users when choosing private schools	Medium (medium)	(11)	Strong(11)	Medium (Ghana, Kenya, India)	Medium*Positive (8) Neutral (3)	MODERATE
(A10) Users make informed choices about the quality of education	Medium (medium)	(7)	Medium (7)	Strong (India, Bangladesh, South Africa, Ghana, Tanzania)	Strong*Positive (6) Negative (1)	MODERATE
[H6] ACCOUNTABILITY Private schools are accountable to users						
(A11) Users actively participate in, or influence, operational decision making in private schools	Medium (medium)	(3)	Weak(3)	Medium (India, South Africa, Tanzania)	Strong*Positive (3)	WEAK
(A12) Private schools are responsive to users' demands and complaints	Medium (medium; 1 high)	(4)	Weak (5)	Medium (Bangladesh, Pakistan, Tanzania, South Africa)	Strong*Positive (5)	WEAK
[H7] FINANCING AND PARTNERSHIP State collaboration, financing and regulation improve the quality, sustainability and equity of private schools						
(A13) States have the knowledge, capacity and legitimacy to implement effective policy frameworks for collaboration and regulation of the private school sector	Medium (medium)	(8)	Medium (8)	Medium (Pakistan, India, Bangladesh, Nigeria)	Strong*Negative (8)	MODERATE
(A14) State regulation is effective and improves the quality, equity and sustainability of private school provision	Medium (medium)	(11)	Strong (11)	Strong (India, Bangladesh, Kenya, Nigeria, Malawi, Pakistan)	Medium*Negative (6) Neutral (2) Positive (3)	MODERATE
(A15) State subsidies improve the quality, equity and sustainability of private school provision	Medium (medium; 1 high)	(2)	Weak (3)	Weak (Pakistan)	Strong*Positive(3)	WEAK

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[H8] MARKET Private schools have positive effects on the overall education system					
(A16) Private schools complement government school provision	Medium (3 medium; 1 high)	Weak(4)	Medium (<i>India, Pakistan, Kenya</i>)	Strong*Positive(4)	WEAK
(A17) Market competition enhances quality in state and private school sectors	Medium (2 medium; 1 high)	Weak(3)	Weak (<i>India, Pakistan</i>)	Weak *Neutral (1 Positive (1) Negative (1))	WEAK

- Key:** (+) Positive majority - more studies supporting assumption than refuting
(o) Neutral majority - more studies are ambiguous rather than supporting or refuting
(-) Negative majority - more studies refuting assumption than supporting

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Day Ashley L, Mcloughlin C, Aslam M, Engel J, Wales J, Rawal S, Batley R, Kingdon G, Nicolai S, Rose P (2014) The role and impact of private schools in developing countries: a rigorous review of the evidence. Final report. Education Rigorous Literature Review. Department for International Development.

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