

ECONOMICS AND PRIVATE SECTOR

PROFESSIONAL EVIDENCE AND APPLIED KNOWLEDGE SERVICES

Topic Guide

Non-Traditional Financing for Education

Amy Bellinger and Bev Fletcher

May 2014













About EPS-PEAKS

EPS-PEAKS is a consortium of organisations that provides Economics and Private Sector Professional Evidence and Applied Knowledge Services to DFID. The core services include:

- Helpdesk
- Document library
- Information on training and e-learning opportunities
- Topic guides
- Structured professional development sessions
- E-Bulletin

To find out more, access EPS-PEAKS services or feedback on this or any other output, visit the EPS-PEAKS community on: http://partnerplatform.org/eps-peaks or contact Alberto Lemma, Knowledge Manager, EPS-PEAKS core services at: a.lemma@odi.org.uk.

About the authors

Amy Bellinger: Independent international education consultant, and former Head of International Education at Absolute Return for Kids (ARK).

Bev Fletcher: Independent education and social development consultant, and former Senior Human and Social Development Consultant / Regional Education Lead at Coffey.

Acknowledgements

This topic guide has been funded by UK aid from the UK Government. The views presented in this paper are those of the authors and do not necessarily represent the views of consortium partner organisations, DFID or the UK government.

This guide was written under the guidance of DFID. It has benefited from the expert comments and suggestions of DFID staff: Nicole Goldstein, Martin Johnston, Paul Atherton, Chris Berry, Ellie Cockburn, Ross Ferguson and Gemma Wilson-Clark.



Thanks also go to external experts interviewed as part of this research, especially Emily Gustafsson-Wright, who also provided comments on a draft.

List of experts consulted

Expert	Position	
Vineet Bewtra	Director, Investments (including education), Omidyar	
Liesbet Peeters	Founding Partner/Impact Investment Advisor, Dalberg	
Ankur Shah	Head, Sector Strategies/Education Portfolio Lead, Acumen	
Toby Eccles	Development Director/Founder, Social Finance	
Nick Burnett	Managing Director/Education Group Lead, R4D	
Harry Patrinos	Lead Education Economist, World Bank	
Paul Atherton	Education Economist, DFID	
Katelyn Donnelly	Managing Director, Pearson Affordable Learning Fund/Punjab Education Sector Roadmap	
Juliana Guaqueta	Education Specialist, IFC	
Mohammed Ali Khan	Education Specialist, IFC	
Gurmeet Kauer	Head, Impact Investments, DFID Impact Fund, CDC	
Rob Davies	Private Sector Team, DFID	
Robert Filipp	President/Founder, IFF, and CEO, Pimacom Ventures	
April Golden Donor Specialist, GPE		
Aleesha Taylor	Deputy Director, Education Support Programme, Open Society Foundation	
David Easton	Easton Director Investments, Direct Investments (including Education), CDC	
Liesbet Steer	Fellow, Center for Universal Education in Global Economy and Development, Brookings Institute	
Emily Gustafsson-Wright	Guest Scholar, Center for Universal Education in Global Economy and Development, Brookings Institute	
Tamar Atinc	Visiting Scholar, Global Economy and Development Programme	

Abbreviations and Acronyms

AIDS Acquired Immune Deficiency Syndrome

AMC Advanced Market Commitment

ARK Absolute Return for Kids

ASER Annual Status of Education Report

BoP Bottom of the Pyramid

BRICS Brazil, Russia, India, China and South Africa

CCT Conditional Cash Transfer

CDE Center for Development and Enterprise

CGD Center for Global Development

CIFF Children's Investment Foundation

COD Cash on Delivery

CSR Corporate Social Responsibility

DAC Development Assistance Committee

DCDB Debt Conversion Development Bond

DfE Department for Education

DFI Development Finance Institution

DFID UK Department for International Development

DIB Development Impact Bond

DWP Department for Works and Pensions

ECOSOC UN Economic and Social Council

EFA Education For All

EGRA Early Grade Reading Assessment

EPS- Economics and Private Sector Professional Evidence and Applied Knowledge Services

PEAKS

EU European Union

EVS Education Voucher Scheme

FAS Foundation Assisted School

FSSP Female School Stipend Programme

FTT Financial Transaction Tax

FYE Fe y Alegría

GBCE Global Business Coalition for Education

GDP Gross Domestic Product

GEC Girls' Education Challenge

GNI Gross National Income

GNP Gross National Product

GIIRS Global Impact Investment Rating System

GPE Global Partnership for Education

GPOBA Global Partnership on Output-Based Aid

HIPC Heavily Indebted Poor Country

HIV Human Immunodeficiency Virus

IADB Inter-American Development Bank

IBRD International Bank for Reconstruction and Development

IDA International Development Association

IFC International Finance Corporation

IFF Innovative Finance Foundation

IFFIm International Finance Facility for Immunisation

INGO International Non-Governmental Organisation

IPA Innovation for Poverty Action

IRC International Rescue Committee

IRIS Impact Reporting and Investment Standards

IYF International Youth Foundation

LCPS Low-Cost Private School

LIC Low-Income Country

LGBF Loan and Grant Blending Facility

LMIC Lower-Middle-Income Country

MDG Millennium Development Goal

MIC Middle-Income Country

M&E Monitoring and Evaluation

NEA New Enterprise Associates

NGO Non-Governmental Organisation

OBA Outcomes-Based Aid

ODA Official Development Assistance

ODI Overseas Development Institute

OECD Organisation for Economic Co-operation and Development

Ol Opportunity International

OPIC Overseas Private Investment Corporation

P4R Program-for-Results

PALF Pearson Affordable Learning Fund

PbR Payments by Results

PEF Punjab Education Foundation

PPP Public-Private Partnership

PRI Programme-Related Investment

PTR Pupil to Teacher Ratio

QAT Quality Assurance Test

R4D Research for Development Institute

R&D Research and Development

RBA Results-Based Aid

RBF Results-Based Financing

SIB Social Impact Bond

SMEs Small and Medium Enterprises

SYN Social Yield Note

TSFD Travellers' Savings Fund for Development

UCT Unconditional Cash Transfer

UIG Urban Investment Group

UK United Kingdom

UMIC Upper-Middle-Income Country

TOPIC GUIDE

UN United Nations

UNDP UN Development Programme

UNESCO UN Educational Scientific and Cultural Organisation

UNICEF UN Children's Fund

US United States

USAID US Agency for International Development

USE Universal Secondary Education

WEF World Economic Forum

Glossary of terms

Concessional loans Extended on terms more favourable than market loans

Conditional cash transfers
Cash payments to poor households conditional on certain activities or results

Cream skimming Selection or targeting of 'best' students (i.e. with best grades), leaving 'worse'

students behind

Crowding-in Pooled increase in funders (i.e. investors, donors) or finance

Debt servicing How much money is owed on a loan, including both the interest and the principal

amounts, often calculated on a yearly basis

Debt swaps / conversions The creditor country cancels a debt at its nominal value and the debtor, in return,

invests part of the cancelled amount in development projects as previously

negotiated and agreed between both parties

Demand side Market desire for a specific quantity of a good or service, e.g. parents' desire to

choose low-cost private schools in areas without sufficient public schooling

Education ecosystem Systems at national and subnational levels and in public or non-public spheres

Efficiency Most educational gains made for least cost / inputs

Equity (finance) Ownership of any asset after all debts associated with that asset are paid off

Equity (education) A right to basic functioning, literacy and numeracy (OECD, 2007), and to fair

access, treatment and achievement not determined by factors such as gender,

socio-economic status or ethnicity (Field et al., 2007)

Financial-first Investments that expect market rate financial returns

Grant Financing that does not need to be repaid

Impact-first Investments that prioritise social impact over financial impact

Incubation Investment in start-ups to help grow a stable base of operations

Philanthrocapitalism Individuals and organisations bringing business techniques to giving and social

investing

Returnable capital A financial investment that expects to see a return

Securitisation Pooling debt and selling it, for example as bonds to investors

Security (bond) A financial instrument that represents a creditor relationship with a government

body or corporation and some financial value

Contents

Executive Summaryi	
Introduction and overview	i
Sources of non-traditional finance	i
What is working and what shows potential to work in the future?	ii
Moving forward	iv
Conclusions	V
1: Introduction	
About topic guides	1
Overview of this topic guide	1
2: Overview of non-traditional financing	
Non-traditional financing	3
Why do we need non-traditional financing?	4
Traditional sources of finance are underperforming	5
The extent new models of non-traditional financing are emerging	6
The role for non-traditional financing	7
3: Non-traditional sources of finance	
Foundations	8
High net worth individuals	9
Corporations	9
Private domestic funds	11
Non-DAC donors	11
Citizen contributions	12
Multilateral and bilateral institutions	12
4: Mapping the evidence – Non-traditional financing instruments	
INSTRUMENTS TO RAISE ADDITIONAL FUNDS	13
Social impact investing	13
Social impact hands	10

	Development impact bonds	21
	Social yield notes	23
	Conclusions on social impact investing	24
	ACCESS TO FINANCE FOR SCHOOLS AND FAMILIES	24
	School financing through loans	24
	Education-related access to finance for parents and students	26
	DEBT SWAPS	28
	BONDS	30
	Debt conversion development bonds	30
	Diaspora bonds and remittances	32
	Bonds secured on the basis of future higher education revenues	34
	Debt contract securitisation for bonds	35
	Conclusion on bonds	35
	BLENDED FINANCE	35
	Blended finance – debt buy-downs	37
	GLOBAL SOLIDARITY LEVIES	39
	OTHER POTENTIAL SOURCES YET TO BE EXPLORED IN DETAIL FOR EDUCATION	40
	Advanced Market Commitments	40
	Travellers' Savings Fund for Development	41
	RETURNABLE CAPITAL	41
	DEMAND-SIDE MECHANISMS TO SPEND FUNDS MORE EFFECTIVELY	42
	Cash transfers	42
	Vouchers	44
	SUPPLY-SIDE MECHANISMS TO MAKE EDUCATION FUNDING GO FURTHER	46
	PPPs	46
	Payment by Results	51
5	: Key and emerging issues	
	Communication and the role of the private sector	55

	Learning and evidence	55
	Involvement and ownership by developing countries	55
	Clarity on the 'investment opportunity' in education	55
	Delivering outcomes for those who need it	56
	A clear, measurable issue to rally round	57
6	The way forward58	
	What shows significant potential to work in the future and how can we evaluate success?	58
	What is needed to make instruments work better/be adopted more widely?	65
	What are the appropriate roles for different stakeholders to play?	66
7	Conclusion69	
R	eferences	

Executive Summary

Introduction and overview

Aid to education is declining, and aid to basic education fell by 20% from 2009 to 2012 (Steer, 2014). Public spending on education is falling short, with only 25% of countries spending the recommended 6% of gross national product (GNP) to deliver quality education (Ibid.). A \$38 billion funding gap remains in terms of providing good-quality basic and lower-secondary education for all by 2015 (UNESCO, 2014). Given the success of non-traditional financing in the health sector, the education sector has started to explore its potential to see if it can provide additional and alternative sources of finance to address some of the financing gap.

Non-traditional financing includes ways to 'generate public and private funds to provide global public goods' (Douste-Blazy, 2014); 'new or novel ways to generate predictable, additional and sustainable finance' (Filipp, 2014); and the raising of funds from unconventional sources or mechanisms to make existing funds 'go further' (Rose and Steer, 2013; author interviews with Steer, Gustafsson-Wright, Atinc, March 2014). Note that it is not just about private sources of finance, or solely about funding the private sector; there are many types of non-traditional financing instrument that can also help the public sector deliver on its responsibilities.

Non-traditional financing is more than raising additional funds; it is also about spending resources more effectively and finding novel approaches to addressing education issues. We therefore explore instruments that may raise additional funding and mechanisms to spend funds more effectively. Those to raise additional funds include social impact investing, such as Social Impact Bonds (SIBs), Development Impact Bonds (DIBs) and Social Yield Notes (SYNs); access to finance for schools and families, such as school loans, student loans and community saving schemes; debt swaps; bonds, such as Debt Conversion Development Bonds (DCDBs) and diaspora bonds and blended finance, including debt buydowns; and global solidarity levies. Mechanisms to spend funds more effectively include cash transfers, vouchers, public–private partnerships (PPPs) and Payments by Results (PbR).

Sources of non-traditional finance

Sources of non-traditional finance include newer players such as business-orientated foundations; corporations (philanthropy, corporate social responsibility (CSR) and commercial investment); private domestic funds; non-Development Assistance Committee (DAC) donors; and citizen contributions. Some multilaterals and bilaterals such as the UK Department for International Development (DFID) are also pioneering non-traditional instruments.

What is working and what shows potential to work in the future?

Non-traditional financing is nascent and accounts for only a small percentage of current education spending. In terms of what is working, evidence is limited. Some non-traditional financing instruments with a longer history in education, for example cash transfers, vouchers and PPPs have shown signs of success in certain contexts, but there are still many gaps in evidence, especially in Africa. Some have only recently been implemented in education, for example social impact investing and PbR. Some are not in developing countries, for example SIBs, and therefore cannot yet demonstrate when and how they may work most effectively. Other instruments have yet to be implemented in education at all, for example DCDBs and diaspora bonds.

To evaluate the potential of the various instruments, we have undertaken a high-level assessment, using the following criteria: impact on learning outcomes; equity; enabling governments to deliver on their responsibilities; potential additional funds; sustainability and predictability of funding; innovation; efficiency; and ease of implementation. Overall, this suggests the following instruments have the most potential (listed in order of potential and with a short definition next to each):²

- SIBs and DIBs: forms of outcomes-based contracts whereby the public sector or donor pays a service provider for the outcomes delivered by a specific intervention or set of interventions (Filipp and Lerer, 2013). These focus on education outcomes and can therefore foster innovation as they allow for flexibility in delivery, can enable governments to address system-wide education issues and target inequity and can provide upfront and predictable funding from new sources. Their fundraising potential is uncertain, however, and they are complex and costly to set up. Their biggest potential lies in addressing clearly defined measurable education issues where intervention can make savings at a later date, and where innovation in delivery is needed, for example expansion of early childhood or secondary education, or girls' education.
- Blended finance for the public sector: a third party buys down all, or a part of, either or both of the interest and the principal of a loan between a country and a lending organisation, thereby releasing the borrowing country from all or some of its future repayment obligations (R4D, 2013). Debt buy-downs can be triggered on education and equity outcomes, can enable governments to access additional funding through borrowing when otherwise they would not have been able to (and use this to deliver education plans) and provide predictable funding as long as triggers are met. However, there is a risk of further indebtedness, and the ease of implementation is unknown. The biggest potential is for countries about to graduate from the International Development Association (IDA) to the International Bank for Reconstruction and Development (IBRD), who still

¹ This criterion was proposed by Samoff and Irving (2014).

² All instruments have been evaluated, but only those with the most potential have been included in the executive summary.

- have major basic education issues to address, for example India, Nigeria and Pakistan (R4D, 2013).
- Blended finance for the private sector: the combination of grant and loan or equity funding to reduce the financial risk of an investment. This can leverage additional funds and encourage innovation, and could lead to an indirect improvement in learning outcomes. However, its impact is limited to parts of the education sector with a potential revenue stream that may not serve the most vulnerable (although it could be replicated in the public sector), and agreeing who bears the risk and when could make implementation complex. The potential lies in subsidising or incubating education businesses for the poor to build a pipeline for social impact investing (see below).
- Social impact investing (outside of SIBs/ DIBs): investing with the intention 'to create positive impact beyond financial return' (O'Donohoe et al., 2010). This can attract new funding to education, fosters innovation within the education ecosystem and can drive efficiencies. However, although it creates a focus on impact, impact may not be measured by learning outcomes. Impact is limited to parts of the education sector with a potential revenue stream that may not serve the most vulnerable (although could be replicated in the public sector), and currently there are few 'ready-to-go' investments. Its potential is in driving innovation in tools and services for the education ecosystem, and in stimulating education markets for the poor where the public sector is struggling to deliver, for example early childhood education and youth training.
- Bonds: an investment in a debt, whereby the investor receives a fixed return on the principal and interest of the underlying security (Filipp and Lerer, 2013). DCDBs and diaspora bonds have the potential to leverage substantial new sources of funding, for example local assets estimated at \$6 trillion (Bond, 2013) and diaspora savings estimated at \$30 billion for low-income countries (LICs) (Ratha and Mohapatra, 2011). The funding would be predictable, and governments could use funds to address systemic issues. However, implementation is limited to countries with outstanding debt or with a large diaspora, and with a financial market sophisticated enough to issue bonds. Guarantees may be needed in this economic climate. Bonds have the potential to raise funding for education issues that need a large capital outlay, for example expansion of early childhood or secondary education (or primary where that need has yet to be met).

Mechanisms to spend funding more efficiently and effectively are also assessed, using the following criteria: impact on learning outcomes; equity; enabling governments to deliver on their responsibilities; innovation; efficiency; and ease of implementation. The two with most potential are outlined below:

• **PbR:** payment for a programme or service based on predefined and independently verified results. PbR drives a focus on outcomes that could improve learning or equity, can work with government or non-state implementers and can lead to innovation, given the flexibility in delivery and efficiencies if well structured, but it is complex and time consuming to implement effectively.

- PbR has the most potential when incentives would improve performance, when a clear measurable outcome can be achieved in a relatively short timescale and when there is capacity to implement. It could be used to address education issues with those criteria.
- PPPs: government-funded but privately delivered education (Patrinos et al., 2009). PPPs aim to support the government to deliver education for all by providing access to education that is free at the point of use. They can drive innovation and efficiencies through autonomy, management effectiveness and competition; however, evidence is mixed on their ability to improve learning outcomes and to address equity PPPs have to be regulated and incentivised effectively to facilitate this. PPPs have the potential to open up the education system so children can access free, quality education regardless of who delivers it, and so would be most effective in areas where the public sector has a supply gap, such as early childhood and post-primary education.

None of the instruments evaluated looks set to make a significant dent in the financing gap yet. Their potential is most likely to be realised when they can leverage their particular 'value add', such as a focus on learning outcomes or innovation to address a specific education issue.

Key issues that cut across non-traditional financing need to be addressed: clarity of communication on what non-traditional financing is, and the role of the private sector; lack of evidence and learning about what works; the need for more involvement and ownership by developing countries; clarity around the investment opportunity; and how to reach the most marginalised. There are also a number of implementation challenges, such as sometimes high transaction costs, an unfavourable economic climate and competition with other sectors.

Moving forward

Non-traditional financing remains at an early stage, but needs to move forward from theory into practice. We suggest two initial phases to make instruments work better or to be adopted more widely:

- Phase 1: focusing on one or two specific education issues; developing better understanding of
 the instruments and the contexts in which they may work to understand what the most promising
 instruments may be; forming multiple stakeholder collaborations around specific opportunities that
 address those issues; piloting; and capturing learning and evidence.
- Phase 2: profile raising, greater coordination and ultimately scaling of the instruments that work.

This needs to be enabled by key stakeholders playing important roles:

 Donors: work with governments to pilot non-traditional approaches where appropriate; provide technical assistance; fund research, pilots, impact evaluations, knowledge sharing and scaling; provide concessionary funding/guarantees; and support improvement of education data and metrics.

- Governments: encourage multi-stakeholder dialogue; pilot new approaches; invest in sound
 education management and information systems; and adopt mechanisms or innovations that
 have been proven, at scale.
- **Non-governmental organisations:** encourage multi-stakeholder dialogue; monitor needs of the most marginalised; pilot and implement; and become more outcome orientated.
- Foundations: bear initial risk when piloting new instruments and making social impact investments; collaborate to fund pilots, rigorous evaluations and incubation; and catalyse the ecosystem.
- **Civil society:** contribute to multi-stakeholder discussions; monitor the needs of the most marginalised; and advocate for transparency and accountability.
- Private sector: take part in multi-stakeholder discussions; collaborate to implement pilots and
 collect evidence; invest in education not just for profit, and, when for profit, in education
 businesses that serve the poor and have an educational impact; and raise the profile of education.
- Think tanks: drive one or two key issues; convene multi-stakeholder discussions; conduct thought leadership; undertake research; facilitate knowledge sharing; and attract high-level support.

Conclusions

Non-traditional financing is not a quick win, and will take time to test and evaluate. It is also unlikely to be able to fill the entire funding gap or address all education issues. Therefore, the education sector must continue to advocate for traditional finance to be raised through domestic revenue via increased allocation to education and the strengthening of tax systems (UNESCO, 2014); this will be the most sustainable source of education funding and will enable developing countries to have greater ownership of their education systems (Samoff and Irving, 2014). In addition, despite the reversing trend, the education sector must advocate for countries to meet their overseas aid commitments and reach the target of 0.7% of gross national product (GNP) so the global commitment to education for all can be supported by a global commitment to funding (Ibid.).

1: Introduction

About topic guides

Topic guides aim to provide a clear, concise and objective report on findings from rigorous research on critical areas of development policy. Rather than provide policy guidance or recommendations, their purpose is to signpost policymakers and practitioners to the key debates, evidence and research gaps on the topic of focus, to help support informed decision making.

Overview of this topic guide

The aim of this topic guide is to answer four research questions:

- To what extent are new models of financing education emerging (i.e. instruments, sources of finance, and aims of investors)? How does this compare with traditional models and are the new models additional or replacing traditional models?
- What is working (for who, where and why)? What shows significant potential to work in the future and how can we evaluate success?
- What is needed to make new instruments work better or to be adopted more widely (assuming researchers believe they represent an advance)?
- What are the appropriate roles for donors, non-governmental organisations (NGOs), governments and the private sector to support innovations that allow the different models to function and improve the quality of education for low-income groups in developing countries?

The topic guide is based mainly on secondary evidence (published and 'grey' literature as well as evaluation reports and other documents). This is augmented by interviews with key stakeholders who are working on relevant models and projects.

The topic guide covers education from Early Childhood Education (ECE to tertiary, and focus where possible on countries where the UK Department for International Development (DFID) operates (including Sub-Saharan Africa and South Asia). It explores non-traditional financing instruments to raise additional funds, as well as mechanisms to make funding go further.

The guide navigates advisors through best-quality, recent and seminal research and evidence currently available in this area, as well as the latest thinking on new financial instruments and mechanisms. It describes the different types of financial instruments as they have been, or can be, applied to education, highlighting their strengths and challenges and providing examples. It outlines current issues and, drawing on the research, assesses the relative potential of each instrument as well as what is needed to move forward with non-traditional financing in education.

This guide provides an overview of non-traditional financing (Section 2), and outlines the sources of non-traditional finance (Section 3), non-traditional financing instruments to raise funds, and the mechanisms to use existing funds more effectively (Section 4), the key crosscutting issues (Section 5), what is needed to move forward (Section 6), and conclusions (Section 7). A full list of references is provided (Appendix A).

2: Overview of non-traditional financing

Non-traditional financing

Non-traditional financing originated during the Monterrey³ Conference on Financing for Development, which sought to clarify how much it would cost to fund the Millennium Development Goals (MDGs). This section provides an overview of non-traditional financing, why it is needed, what its role is, how it is funded, the extent to which it is emerging in relation to traditional financing and how much more funding can be expected.

What is it?

The following definitions encompass this topic guide's interpretation of non-traditional financing:

- Ways to 'generate public and private funds to provide global public goods' (Douste-Blazy, 2014).
- 'New or novel ways to generate predictable, additional and sustainable finance' (Filipp, 2014).
- The raising of funds from unconventional sources, or mechanisms to make existing funds 'go further' (Rose and Steer, 2013; author interviews with Steer, Gustafsson-Wright, Atinc, March 2014).

What is it not?

- Non-traditional financing is not just about raising more funds, but about using existing resources more effectively.
- Non-traditional sources of finance are not just from the private sector, and non-traditional
 instruments are not just used to fund the private sector. Non-traditional financing can also help
 the public sector deliver its responsibilities.

Aspects of non-traditional financing covered in this guide

- Non-traditional sources of finance
- Non-traditional financing instruments that may raise additional funds, including: social
 impact investing; access to finance for schools and families; debt swaps; bonds; blended finance;
 and global solidarity levies.
- Non-traditional mechanisms to spend funds more effectively, including: demand-side
 mechanisms such as cash transfers (including girls' stipends and scholarships) and vouchers;
 and supply-side mechanisms such as public-private partnerships (PPPs); and Payment by
 Results (PbR).

³ http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf

Key readings

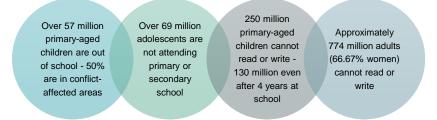
- Innovative Financing Opportunities for Scaling Education Brookings Institute Panel Discussion
- Innovative Financing for Global Education Innovative Finance Foundation

Why do we need non-traditional financing?

The global learning crisis is ever present

There is a global learning crisis (see Figure 1): 250 million primary-aged children cannot read or write; since 2010, education achievements have slowed, and even reversed in some countries; and, while the number of out-of-school children dropped from 105 million in 1999 to 67 million in 2013, the rate of decline is slowing and it is estimated the number will rise to 75 million by 2015. The situation is worst for the most marginalised, including girls and those in conflict (Steer, 2014; Task Force on Innovative Financing, 2012; UNESCO, 2014).

Figure 1: Global learning crisis



Source: Adapted from UNESCO et al. (2013).

'The population of 15 to 24 year olds is now over one billion in the developing world, roughly one-sixth of the world's population. Confronted with limited investments in quality education, we face a reality of the largest population in history without the skills, knowledge or attitudes to engage positively in society' (UNESCO et al., 2013).

There are four potential actions in response (Douste-Blazy, 2014):

- Increase traditional official development assistance (ODA): this will be challenging when levels have been dropping and following the global financial crisis.
- Ask emerging economies to give aid to education, such as the BRICS (Brazil, Russia, India, China and South Africa).
- Increase national education budgets, for example through raising tax or better public financial management.
- Use non-traditional financing: the area of focus for this topic guide.

The global education financing gap is getting bigger

The 2010 Education For All (EFA) Global Monitoring Report stated that 'one of the biggest failures of the EFA period has been fulfilling the pledge that no country would be thwarted in achieving its goals due to lack of resources' (UNESCO, 2014), and an additional \$16 billion per year will be needed in external financing to achieve good quality basic education for all in 46 low-income countries (LICs) and lower-middle-income countries (LMICs) by 2015 (Ibid.). Yet for the first time since 2002, 24 donors (including 9 of the 15 largest) reduced their spending to the extent that the UN Educational, Scientific and Cultural Organization (UNESCO) now estimates it will now require an additional \$29 billion per year of additional financing between 2012 and 2015 (Steer, 2014), and, if lower-secondary targets are added post-2015, this will require an extra US\$12 billion, leaving an annual shortfall of \$38 billion (Winthrop et al., 2013).

This represents a huge challenge when total aid declined by 3% from 2010 to 2011, and in basic education by 6%, from \$6.2 billion in 2010 to \$5.8 billion in 2011, with a 7% decline of approximately \$149 million in the poorest countries (Rose and Steer, 2013). Allowing for the \$3 billion of donor aid, there is an annual financing gap of \$26 billion for basic education (Steer and Wathne, 2009; UNESCO, 2014). At a per child level, primary education is estimated to cost \$131. Average government spend is \$41, with \$16 from donors, leaving a shortfall of \$74 per child (Steer, 2014).

Traditional sources of finance are underperforming

Domestic financing

Governments need to increase education expenditure to at least 6% of gross national product (GNP) and at least 20% of budget (UNESCO, 2014). Government spend in GPE (Global Partnership for Education) countries in 2002-2013 rose from 17% to 19.4% of national budgets, and from 3.8% to 5.8% of gross domestic product (GDP) (Burnett et al., 2013; Steer, 2014; UNESCO, 2014).

Only 25% of countries are spending the recommended 6% of GNP to provide basic education, while some of the most populous countries and those with the largest numbers of out-of-school children, such as Bangladesh, Pakistan and 23 other countries, spend less than 3% of GNP on education. Although tax revenues have been rising in most developing countries (an additional \$3 billion for education each year), many are failing to mobilise revenues or manage finances effectively, leaving billions of potential education funding untapped, including an estimated \$224 billion of tax revenues. For example, if 67 LICs/middle-income countries (MICs) made a small increase in tax, and allocated 20% of increased revenue to education, this could increase education spending by \$153 billion, or 72% (UNESCO, 2014). A total of 17 LICs / MICs also have the natural resources to raise an additional \$5 billion per year (Rose and Steer, 2013).

Donor financing

Education sector aid declined by 20% between 2009 and 2012 (Steer, 2014), and research suggests this trend is likely to continue. At the same time, concessional lending for education is declining. For example, the share of International Development Association (IDA) support to basic education dropped from around 63% in 2002-2004, to 55% in 2009-2011 (Brookings Institution, 2013; Burnett et al., 2013; UNESCO, 2014). Many of the countries that will graduate out of non-concessional aid eligibility in the near future, are those with some of the largest numbers of out-of-school children and the greatest educational needs - for example Nigeria. There is also a general trend away from traditional grant giving by many donors, and some, including DFID, are looking at making a proportion of their aid 'returnable capital'.⁴

The extent new models of non-traditional financing are emerging

It will be impossible for domestic revenues or donor financing to bridge the global education financing gap; a combined effort requiring additional and alternative sources of financing from 'non-traditional' sources and decision makers will be needed (Rose and Steer, 2013; Steer and Wathne, 2009).

Non-traditional financing in development is estimated to have grown over the past decade to more than \$50 billion; indeed, non-traditional sources could add up to \$60-70 billion per year in additional development assistance (Burnett and Bermingham, 2010). However, non-traditional financing in education remains nascent, and many financing instruments have not even been implemented in the education sector. Our expert interviews state:

- There is lots of theory but little evidence, and it's not yet clear what the reality of gaining significant additional funding for education is (author interviews with Steer, Gustafsson-Wright, Atinc, March 2014).
- There is very little non-traditional financing happening in the education sector; it's nascent (author interview with Filipp, February 2014).
- Some shifts appear to be occurring, but not much yet. This isn't replacing traditional finance so
 much as providing additional finance (author interview with Burnett, February 2014).

As with traditional financing, education currently receives much less non-traditional financing than comparative sectors such as health. Through World Bank non-traditional financing, for example, education received less than 2% between 2000 and 2008, whereas health received 12%.

Sceptics remain, particularly as education has not yet been able to implement any scalable initiatives (Rose and Steer, 2003). However, although few of these mechanisms have been trialled in education yet,

⁴ The amount of revenue an investment can generate over a given period of time as a proportion of the amount invested.

a number have been piloted with some success in the health sector, and are estimated to have raised an additional \$7.15 billion since 2002 (Burnet and Bermingham, 2010).

The role for non-traditional financing

Non-traditional finance differs in a number of ways. It can be more focused on outcomes than inputs; apply commercial principles; tap into private / philanthropic sources; and, make traditional funds work better.

Five reasons that innovative financing is needed for education:

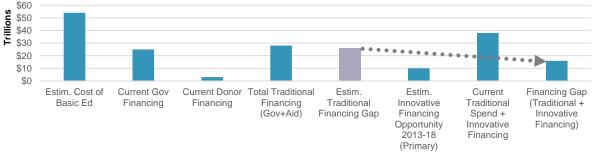
- To reduce the financing gap and increase total resources for education.
- To raise the profile of education on global and national agendas.
- To improve effectiveness, efficiency and equity of education spending.
- To meet the needs of fragile states (especially conflict-affected states).
- To promote innovation in education (Burnett and Bermingham, 2010).

Non-traditional financing could provide a predictable stream of funding (through frontloading), which traditional sources are unable to, allowing recipient governments to plan and implement programmes to scale up. The International Finance Facility for Immunisation (IFFIm) is an example used in health (Steer and Wathne, 2009). Key benefits include:

- From 2000-2008, non-traditional sources yielded approximately \$57 billion.
- Creative leverage of existing funding and revenue streams, infrastructure, expertise and networks, and new impact in terms of: financing; efficiency; and reduction of business risk.
- More stable and predictable than ODA.

Non-traditional financing is intended to be complementary to, not a replacement for, traditional financing and 'creates opportunities for new forms of partnership which can leverage the best that each has to offer' (Burnett and Bermingham, 2010; CGD and Social Finance, 2013). It has significant potential to reduce the financing gap. Figure 2 shows the additional of primary education non-traditional funds.

Figure 2: Estimated basic education finance gap – low to middle-income countries



Source: Adapted from Steer (2014).

3: Non-traditional sources of finance

This section provides an overview of non-traditional sources of finance (i.e. non-government) and some traditional financing sources that are sources of non-traditional finance. They can play a vital role in increasing the amount of funding to education, fostering innovation and instilling business-like principles. The education sector needs to offer concrete opportunities to leverage these new sources of finance.

Foundations

'There has been increasing interest on the role of private foundations in education finance and delivery' (Srivastava and Oh, 2010). Overall international development financing by US foundations reached \$5.4 billion in 2007, rising from \$1.6 billion in 1998. The foundations to provide the largest amount of funding specifically to education in developing countries are Fundacao Bradesco: \$150 million; the Open Society Foundation: \$60 million (funding much of the research on innovative financing); and the Mastercard Foundation: \$20 million (Van Fleet, 2011). However, these foundations give much less than some health foundations (e.g. the Bill and Melinda Gates Foundation, which gave over \$1.9 million in grants to health in 2011 (www.gatesfoundation.org).

Foundations set up by families, individuals or companies have funded education in developing countries for many years – for example the William and Flora Hewlett Foundation and the Mastercard Foundation. Recently, there has been a trend for foundations to be set up by business leaders or entrepreneurs who aim to take a more business-like approach to education, and are therefore often interested in non-traditional financing. This is sometimes referred to as 'philanthrocapitalism' (van Fleet, 2011). An example is the Children's Investment Foundation (CIFF), which has recently approved the piloting of a Development Impact Bond, together with the UBS Optimus Foundation. Another recent type of foundation is one leveraging both public and private resources: an example is Dubai Cares, which had raised nearly \$1 billion by 2008 and allocated money to the UN Children's Fund (UNICEF) and Save the Children (UNESCO, 2008).

Foundations based in developing countries are also playing more of a role in funding or even delivering education. For example, the MTN Foundation aims to improve the quality of basic education in Nigeria through interventions that strengthen technology, infrastructure, learning and creativity in schools;⁵ the Bharti Foundation runs 254 schools in rural India.⁶ The proportion of funding provided by local foundations does remain small, however, compared with international foundations. 'Emerging models of local intermediation have the potential to promote more vibrant local funding markets' (Dalberg Research, 2013). For example, Dasra serves as an intermediary grant maker, channelling philanthropic funds to

⁵ www.educationinnovations.org/program/mtn-foundation-basic-education-program

⁶ www.bhartifoundation.org/home

high-impact Indian NGOs and social enterprises. Dasra mobilises funders through 'giving circles' comprising small funding groups focused on particular themes, two of which have focused on education (Ibid.).

High net worth individuals

A lack of transparent information hampers understanding of how much these individuals fund education in developing countries. An analysis of the 25 wealthiest shows the following all indicate they make contributions to this sector: Carlos Slim (Mexico); Lakshmi Mittal (India); Li Ka-shing (Hong Kong); and Liliane Bettencourt (France). Unlike health, however, education has yet to become the sole focus of a billionaire. An individual donor of that magnitude has the potential to make a tremendous impact to education by committing personal resources and leveraging additional contributions from the public and private sector (van Fleet, 2011).

Corporations

Corporates need to recognise the business case for investing in education and coordinate their efforts towards global and national education priorities. 'For those involved in [...] education [...] the comparative success of the global health sector in mobilising corporate resources for external financing is considered a gold standard model' (van Fleet, 2011). Corporations support education in a number of ways: through philanthropy (sometimes via foundations - as above); corporate social responsibility (CSR); and commercially.

Philanthropy and CSR

Corporate philanthropy is typically driven by benevolent motives. CSR, however, is often driven by business interest, for example brand profile; leadership reputation; or meeting the demand for social responsibility (van Fleet, 2011).

It is thought that the annual US corporate contribution to education in developing countries could be half a billion US dollars, making US corporates the seventh largest donor to education in development (van Fleet, 2011). But only 64% of the 100 largest global companies direct resources to education in developing countries; most contribute less than \$5 million dollars annually. Petrobras (Brazil) and Banco Santander (Spain) are the exception, with each reporting contributions in excess of \$20 million, the latter to tertiary education (Ibid.).

The World Economic Forum (WEF) played a role in trying to leverage private sector support for education in 2003-2011; however, only \$100 million was raised. There are now new coordinated approaches that aim to harness the private sector: the Global Business Coalition for Education (GBCE); the private sector seat on the GPE; the Inter-American Development Bank (IADB) Red; and Latinoamericana de Organizaciones de la Sociedad Civil por la Educación (Ibid.). The GBCE, the Brookings Institution and

Accenture (Winthrup et al., 2013) have written a compelling business case for why corporates should invest in education in developing countries:

- Access to a good-quality education for all young people is a strategic growth factor for business that has a direct impact on the bottom line.
- There is a significant return on investments in education, as well as a potential to close a tremendous value gap.

They suggest corporates fund education through some of the non-traditional financing instruments outlined in Section 4, as many have a more business-like approach, suited to these instruments.

It is hoped these new approaches might provide concrete opportunities to attract significantly more corporate funding to education, and that they will be able to coordinate corporate giving and channel it towards the EFA goals.

Table 1: Trends, strengths and challenges of corporate philanthropy

Trends

The largest corporate contributor to development education is the energy sector, giving \$14 million. The second-largest, providing \$10.1 million per year, is technology. The third-largest is consumer products, giving around \$4.5 million.

Corporates provide contributions to education in more than 100 countries in all regions, particularly emerging economies.

75% of developing countries receive a contribution to education from at least one US corporate.

Most contributions to education are given to international NGOs (INGOs) and local NGOs in developing countries.

In times of disasters, even those without formal strategies make donations, but usually to general disaster relief, not education.

Strengths	Challenges
The majority of corporate giving to education in developing countries is in cash. Corporations give around \$100.6 million per year in direct cash to education in developing countries, nearly twice as much as corporate foundations.	Although companies give approximately \$500 million a year, most contributions are small. This may encourage innovation, but such fragmentation ignores sustainability and scalability. Rarely aligned with major actors and geographically disbursed.
Global reach/connections and investments linked to business goals that provide a direct link to economic opportunities.	Does not target or reach the most poor and most marginalised people.
Flexible funding and a desire to innovate.	Lack of impact evaluation and metrics.

Source: van Fleet (2011).

Commercial investment in education

Some corporates are now investing for commercial aims in education for low-income customers in developing countries. For example, Pearson has launched its \$15 million Affordable Learning Fund, which has invested in Omega Schools, a chain of low cost private schools in Ghana. Bridge International Academies has attracted commercial investments from venture capital investors such as New Enterprise

Associates (NEA) and Khosla Ventures. However, the majority of emerging market 'financial-first' small and medium enterprise (SME) investors are concentrated in the less risky upper and middle education markets, with more certain financial returns; 'impact-first' investors are investing in businesses that serve lower-income customers (see sections on social impact investing and 'What is the investment opportunity in education').

The concept of shared value is described as a business approach that increases profits by improving the effectiveness of education systems at scale. For companies that sell products and services for the education market, shared value opportunities are driven by a rapidly expanding global market for products that deliver the most cost-effective improvements in educational outcomes. In Brazil, Pearson's Sistemas (school learning systems) provides 2,000 schools with a subscription-based package of curricula, technology, analytics platforms, teacher professional development and school management. As well as earning revenue, 90% of students in Sistemas public schools tested at least 20% above the national standard (Ibid.). Shared value is also created by redefining productivity in the value chain, and by improving the external business and institutional context in which companies operate (Ibid.). In 2012, five of Latin America's leading employers – Walmart, Caterpillar, Microsoft, CEMEX and McDonalds – joined with the IADB) and the International Youth Foundation (IYF) to train a million youth in Latin America and the Caribbean by 2022, and create a cost-effective talent pool to meet their pipeline needs (Ibid.).

Private domestic funds

More than \$6 trillion of private assets are held by pension funds (estimated to total over \$1 trillion globally in developing countries, and up to \$80 billion in Africa), insurance companies, mutual funds etc. in developing countries that need to be invested on a long-term basis, and these are growing by 15% a year (UNESCO, 2014). JP Morgan reported that, if just 5% of the roughly \$3 trillion of formalised domestic savings in developing countries were invested in local development, it would represent \$150 billion, or twice the funding given by the World Bank Group that year (UNESCO, 2011). These private assets could be leveraged by launching debt conversion development bonds or domestic bonds specifically for education (see Section 4).

Non-DAC donors

There is limited coordination between Development Assistance Committee (DAC) and non-DAC donors in the education sector, yet there has been much interest in basic education from newly emerging donors in Asian and Arab countries (Steer and Wathne, 2009). General non-DAC development aid is also increasing. A UN Economic and Social Council (ECOSOC) study estimated that 'Southern contributors' disbursed \$9.5-12.1 billion in development assistance in 2006. The BRICS provide large amounts of

⁷ See http://sharedvalue.org/new-role-business-global-education

funds for development. India recently announced expenditure of around \$1 billion a year for development cooperation (OECD, 2009) and figures suggest the Saudi Fund for Development extended \$297.5 million in 2007 to finance development projects in 12 countries (ECOSOC, 2008). It is unclear how much these non-DAC sources allocate specifically to education.

Citizen contributions

Citizens have been contributing to development projects in a number of innovative ways. One example is crowd funding. Crowd-funding platforms raised more than \$2.7 billion in 2012 for more than 1 million projects; an 81% increase in volume is forecast for 2013, equivalent to \$5.1 billion (Leading Group on Innovative Financing for Development, 2014). It has not been possible to find data on the amount crowd funding has raised for education in developing countries, but websites such as www.globalgiving.co.uk and www.indiegogo.com feature education projects.

Another source of citizen contributions has been the Product (RED) Initiative, which was created to raise money for the Global Fund. Consumers buying RED products from major brands such Gap and Nike have raised \$250 million since 2006. An initiative like this has yet to be implemented for global education.

Multilateral and bilateral institutions

Multilateral institutions have played a leading role, often in partnership with bilateral donors, to mobilise non-traditional financing: for example \$23 billion through the World Bank (Rose and Steer, 2003). There is increasing interest in using non-traditional financing strategies for education among leading agencies such as the World Bank, the GPE and DFID (van Fleet, 2011). For example, the World Bank is piloting its Program-for-Results (P4R) investment lending instrument and has led a great deal of the research on PPPs in education; the GPE is developing a pilot approach to loan buydowns and is planning to implement a results-based aid approach across its portfolio from 2015; and DFID has been piloting results-based aid for secondary education in Ethiopia and Rwanda, matched funding for corporate partnerships in the Girls Education Challenge and access to finance for low-cost private schools in Pakistan, and is exploring a development impact bond (DIB) for secondary education in Rwanda. Non-traditional financing has yet to be implemented for education by most other bilateral institutions.

4: Mapping the evidence – Non-traditional financing instruments

This section of the topic guide will set out the range of non-traditional financing instruments, and outline for each instrument:

- What it is
- · Strengths and challenges
- Evidence and examples of implementation in the education sector
- Potential
- A selection of key readings

The instruments are grouped into:

- Those that may raise additional funds: social impact investing; access to finance for schools
 and families; debt swaps; bonds; blended finance; global solidarity levies; and others not fully
 investigated for education.
- Those that may spend funds more effectively: demand-side financing such as cash transfers and vouchers; supply-side financing such as PPPs; and PbR.

INSTRUMENTS TO RAISE ADDITIONAL FUNDS

Social impact investing

Social impact investing is said to be investing with the intention 'to create positive impact beyond financial return' (O'Donohoe et al., 2010). Bugg-Levine and Emerson (2011) see it as a broader concept that involves 'reorientation around blended value as the organizing principle of our work'. They describe blended value as the 'recognition that capital, community, and commerce can create more together than the sum of the three independently.'

Social impact investing is currently a hot topic in development, with 2014 suggested to be the 'year of impact investing' (Sirull, 2014). J.P. Morgan estimated that global impact investments exceeded \$50 billion in 2010 and predicted that invested capital in the impact investing market could reach \$400 billion to \$1 trillion by 2020 (O'Donohoe et al., 2010). There is increasing interest from investors, governments are supportive (e.g. David Cameron announced the G8 Social Impact Investment Task Force) and bilateral organisations are starting to pilot it (e.g. DFID's Impact Fund). But is this hype grounded in evidence that it works? And, what potential does impact investing have for education? In this section, we explore social impact investing, including tools such as Social Impact Bonds and Development Impact Bonds, and provide a brief overview of social yield notes.

There is a broad spectrum of social impact investment: from philanthropic programme-related investments (PRIs), which seek social outcomes, and often some form of financial sustainability rather than a financial return; to financial-first investments that expect market rate financial returns (see Figure 3). Blended, 8 or impact-first, investments sit somewhere in between; these typically prioritise social impact and expect a financial return (though below market rate) (Dalberg Research, 2013).

Impact-first investors Financial-first investors Philanthropy Blended / Balanced / Impact-first Commercial Program-Related Investments returning reasonable, but below market-Investments generating a market-rate Grants Donations rate, returns risk-adjusted return Innovative /growth ideas ·Principal back · Earlier-stage investments · More established initiatives Expect low returns · Emerging markets with higher cost to invest Active social goal (zero coupon) Global Fund grant to Gates Foundation PRI to · TIAA-CREF direct investment in ProCredit Holding · Global Environment Fund AG (22 banks in transition econo Ministry of Health scale small holder farming Skoll PRI to ShoreCap to SGB Funds & Inclusive Business Funds World Food Examples IGNIA fund \$2MM investment in Premin for Mexico Programme grow small business banks housing project IRR 3-5% Negative 0% Market returns Impact investing

Figure 3: The impact investment spectrum

Source: Dalberg Research (2013).

Strengths of social impact investment

- Attracts private capital that would otherwise not have been invested in education.
- Is often willing to bear more risk (than governments and solely commercial investors), and so is willing to fund experimentation and catalyse innovation (Dalberg Research, 2013; van Fleet, 2012).
- Can be used to scale up proven models (Dalberg Research, 2013).
- Encourages commercial-like discipline in investees, e.g. financial sustainability and measurement.

Challenges for social impact investing in the education sector in LICs

- Few proven, successful interventions that generate social and financial returns (Dalberg Research, 2013).
- Financial returns often very slow until a significant scale is reached.
- Little consensus on how to measure impact (author interview with Peeters, February 2014).
- Recipient organisations potentially in need of support in absorbing and using investment capital effectively.

⁸ Blended in this context means blended financial and social aims of the investment.

Controversial: perception from some of the education community that social impact investing
may be about making money from the poor (author interview with Peeters, February 2014).

Social impact investing in education and evidence of effectiveness

Dalberg Research's report 'Impact Investing for Education', funded by the Open Society Foundation,
estimates that impact investing accounts for \$3 billion of the \$2.5 trillion spent annually on education
(excluding parental contributions) – that is, only 0.12% – and so it is still at a very small scale. Figure 4
shows that, when targeting the most vulnerable population, even impact-first investment is rarely used,
and the focus is on grant making. This exemplifies the trade-off between financial and social returns. The
Acumen Fund is an example of an investor that undertakes impact-first investments in education,
providing long-term capital in early stage companies for an eventual 'below market rate' financial return.
Financial-first investors like the International Finance Corporation (IFC) focus on upper-middle-income
countries (UMICs), and typically invest in private tertiary institutions or high-end private school networks
(see examples in Table 2).

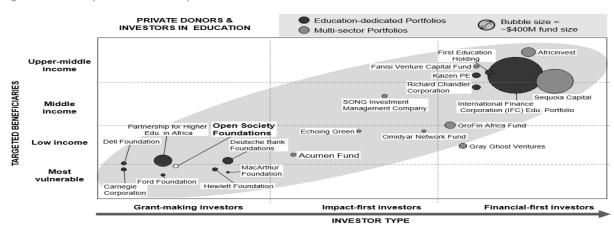
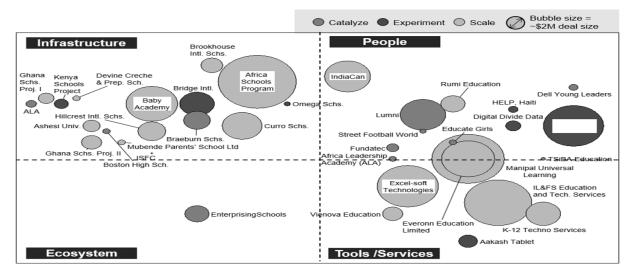


Figure 4: Landscape of education impact investors

Source: Dalberg Research (2013), from Foundation Center Top Education Grants 2009; fund/investor websites; investor interviews.

Figure 5 shows most investments are in school infrastructure. Investments in people typically include student loans, vocational training and teacher training; investments in tools and services are largely focused on technology, whether for education delivery or for managing the back office. There are very few transactions to build the education ecosystem. Investees are playing a range of roles: filling the gap through direct service provision, building capacity and the broader education ecosystem and supporting public delivery (Dalberg Research, 2013).

Figure 5: Examples of transactions in education impact investing



Source: Dalberg Research (2013).

There is no robust research on the evidence of the success of impact investment, let alone in education. Part of the reason is that investment funds are reluctant to share financial returns, and returns take time. Global standards, for example the Global Impact Investment Rating System (GIIRS) and Impact Reporting and Investment Standards (IRIS), aim to address the way social impact is measured consistently, but it is very early days and there is limited information.

We can, however, illustrate some of the lessons learnt in implementing social impact investing, using the three different funds in Table 2. The most common lesson is the difficulty of finding sound education investments for bottom of the pyramid (BoP) customers. Experience from DFID's Impact Fund has reinforced this, as it has yet to make an education investment.

Table 2: Examples of social impact investing lessons

	Acumen Fund	Pearson Affordable Learning Fund (PALF)	IFC
Type of funder	Impact-first	Financial-first/strong impact focus	Financial-first
Source of funding	Not-for-profit sources	Pearson PLC	World Bank
Size of fund/no. of investments in education	\$6m 3 investments totalling \$3.5m	\$15m 7 investments totalling \$9m	\$1.1b commitments 35-40 active investments
Type of investments	Equity	90% debt school chains, 50% debt, 50% equity other	90% debt, 10% equity/quasi- equity
Focus	Education services, skills or vocational training	Low-cost private school sector including tools and services	70% higher education, some middle- to high-end private school networks

	Acumen Fund	Pearson Affordable Learning Fund (PALF)	IFC
Lessons learnt	High deal drop-off from generation to completion: 80 deals evaluated for 3 investments Much of education sector is highly regulated, which limits innovation and investment Education delivery traditionally needs capital investment; this makes it harder to scale Some challenges in education systems limit no. of investment opportunities, e.g. lack of consistent outcome measures; quality teachers; technology use	Insufficient growth investments so invested a lot earlier in companies and therefore took greater risk Running businesses on the ground is very difficult, especially recruiting and managing human capital – need support Getting right mix on the Board, and balancing global and local investment, education and government experience Some stringent vetoes are required, e.g. included a veto on price rises so businesses invested in continue to serve those on low incomes	Finding the right size of equity investments – exploring mechanisms to make smaller investments Finding organisations to invest in that serve BoP Finding investments of the right quality, with right management and financial sustainability, and where regulation is stable Due diligence needs to happen over long timescales
Opportunities	Companies that deliver curricula training and support services for Science, Maths and English	To scale proven companies – likely to launch much larger fund and will need co-investors	Higher education Blended finance

Source: Author interviews, February and March 2014.

From an investee's point of view, investment is crucial to reach scale and ultimately profitability. For example, Shannon May (co-founder of Bridge International Academies) stated at the 2014 Brookings Symposium on Education Financing that the initial investment by the Omidyar Network changed things for it, in terms of its ability to attract funding. To scale further, it then had to attract commercial investment (IFC/CDC Group) and debt (Overseas Private Investment Corporation (OPIC).

The potential

The potential for impact investments in primary education is estimated at \$10 billion during the next five to ten years, while the potential for other parts of the education sector could be equally high, if not higher (O'Donohoe et al., 2010).

The Dalberg Research report (2013) recognises that the opportunity for quick financial returns while targeting the most vulnerable in education is small, but it suggests impact-first investment has significant potential to catalyse longer-term benefits and recommends that impact investment in education:

- Helps build the education ecosystem through developing education tools and services that can be applied across it, and by supporting the public sector through PPPs.
- Supports innovation.
- Is channelled through intermediaries who can deploy capital more efficiently.
- Is rigorously measured and evaluated.

Given the early stage of the education investment market, and the lack of readily investible opportunities, incubation may help small businesses in the education sector whose customers are low income to grow into businesses that are ripe for impact investment and therefore scale. Blended finance (see p35) could also be used to reduce the risk of the initial period of investment and attract investors at an earlier stage.

Impact investment could be considered when:

- Some form of financial return is possible at the same time as an education impact.
- Education businesses that serve low-income customers have the potential to reach scale.

It should be noted that education impacts resulting from social impact investing do not have to be limited to the low-cost private sector. Innovations that work could be adopted by government schools, and many tools and services would be just as applicable for the public sector as for the private sector.

Key reading

• Impact Investing in Education – Dahlberg Research

Social impact bonds

A social impact bond (SIB) is a social impact investing tool. It is a form of outcomes-based contract whereby the public sector (in most cases) pays a proven service provider for the outcomes delivered by a specific intervention or set of interventions. Private investment, which can be philanthropic or commercial, is used to fund the intervention. 'Financial returns to investors are made by the public sector on the basis of improved social outcomes. If outcomes do not improve, then investors do not recover their investment' (Social Finance, 2013⁹). The business case works when 'better [social] outcomes lead to tangible public financial savings' (Mulgan et al., 2011). Note that a SIB is not technically a bond, as it does not offer a fixed rate of return and cannot be traded (Filipp and Lerer, 2013).

Toby Eccles from Social Finance (author interview, February 2014) outlines two types of SIBs, those that:

- Enable scale: these can be used when there is sufficient evidence to accurately assess likely outcomes from given interventions.
- **Support innovation:** the service provider has the flexibility to adapt and change the implementation approach as long as they deliver the outcomes.

One participant particular to a SIB is the intermediary. 'SIB intermediaries play an integral role in developing, launching, and managing SIBs', for example in structuring and raising capital for investments, 'as well as conducting research and education to help build the market'. They also help bridge the 'cultural divide between investors and government, as well as in ensuring the interests of the populations being served are protected' (Social Finance, 2013).

⁹ For all references in this section to Social Finance, see http://www.socialfinance.org.uk/ for more information

Strengths of SIBs

SIBs have several strengths for those involved in their financing and implementation:

- For the public sector: SIBs should lead to lower costs, given that services are paid for only if
 and when outcomes are delivered. SIBs delay payment and encourage new investors through
 attracting upfront private investment, they incentivise service providers to focus on evidence and
 outcomes and encourage innovative approaches to complex system-wide problems, which may
 not attract sufficient funding.
- For the service provider: SIBs allow flexibility in delivery, provide a level of funding certainty
 over time (as long as outcomes are met) and provide technical assistance, especially in
 measurement.
- For commercial investors: SIBs provide the opportunity to generate both financial and social returns.
- For philanthropists: SIBs allow them to influence a system-wide approach to tackling a social problem and therefore amplify their impact, SIBs also encourage a focus on outcomes, prevention and government efficiency and offer the opportunity to make investments rather than grants (Disley et al., 2011; Hughes and Scherer, 2014; Loder et al., 2013; Mulgan et al., 2011; Social Finance, 2013).

Overall, they allow all of these stakeholders to work together to achieve outcomes better than they would have been able to deliver individually (CGD and Social Finance, 2013).

Challenges

A number of challenges need to be addressed when designing and implementing SIBs:

- Need for very robust evidence to accurately estimate outcomes and returns.
- Measurement approaches that limit perverse incentives as far as possible.
- High cost of monitoring and evaluation (M&E) (given challenges such as disentangling the impact of interventions on outcomes from other influences within the ecosystem).
- Stakeholders' interests that must remain aligned throughout the programme.
- High overall transaction costs owing to complex arrangements involving intermediaries
 (especially when the cost of borrowing for governments is usually relatively low) (Disley et al.,
 2011; Hughes and Scherer, 2014; Loder et al., 2013; Mulgan et al., 2011; Social Finance, 2013).

SIBs in education and evidence of effectiveness

SIBs have only been implemented since 2010 (Social Finance), and as such there is insufficient evidence on their success or otherwise. Early lessons from the first pilot indicated that new sources of funding were realised; the funding is perceived to be more flexible than traditional funding and there has been flexibility in the intervention model. But developing a robust outcome measure (agreed by all stakeholders) was

extremely time consuming, and developing an agreed payment model relied on a detailed understanding of the costs of the non-success (Disley and Rubin, 2014; Disley et al., 2011).

As at April 2014, there were only 20-25 active SIBs, 14 of which were in the UK, 5 in the US, 2 in Australia, 1 in the Netherlands and 1 in Belgium. They have raised \$100 million in investments and there are over 100 proposals in progress (Social Finance, 2013). All existing SIBs are in developed countries and only the one in Utah in the US has focused on education (see example below). Some LICs and MICs are now starting to explore the use of SIBs for education, for example to improve access to and quality of early childhood education in South Africa¹⁰ and to reduce school dropouts in Colombia.¹¹

Example: Utah High Quality Preschool Program

In August 2013, Goldman Sachs Urban Investment Group (UIG) and J.B. Pritzer committed \$7 million to increase school readiness and academic performance among at-risk three and four year olds, with the intention that they would need fewer special education and remedial services throughout their school careers, resulting in cost savings for school districts, the State of Utah and other government bodies. Funding was given to the United Way of Salt Lake (the service provider) in two loans. Private and public sector funding will be used to repay the loans based on the cost savings made. If the results are not achieved, there is no obligation on the part of Salt Way or the public sector to repay the loans (Goldman Sachs et al., 2014).

As this has only launched recently, evidence is not yet available, but early lessons include:

- The importance of having a strong proponent in government.
- The need for evidence-based interventions and data that an investor can get excited about and everyone buys into.
- The need for clarity on which organisation is playing which role within the partnership, and patience and time to build the partnership (Patel, 2014).

The potential

Although SIBs are very new, they offer the opportunity to attract new capital, minimise government risk and encourage an outcomes-focused approach. But they do bear a high transaction cost given the M&E and contracting requirements.

SIBs could be considered when:

- Prevention could lead to cost savings for the government at a later date.
- There is a clearly defined proposition with experienced service providers to deliver it.
- There are clear measurable outcomes backed up by evidence and the availability of robust data.
- Innovation in delivery is needed.
- A system-wide solution would be more effective than individual programmes.
- The government can pay for the service (as opposed to a donor) and provides strong leadership (Hughes and Scherer, 2014; Social Finance, 2013).

¹⁰ Bertha Centre for Social Innovation and Entrepreneurship, University of Cape Town, is attracting funding for a feasibility study.

¹¹ Instiglio investigated the application of SIBs to programmes that reduce the dropout rate among secondary school students.

In the education sector, potential areas that are suitable for SIBs include:

- Early childhood education, as the evidence is well known as to the positive impact it can have on future learning and health.
- Girls' education to the end of secondary school, as again there is a lot of evidence on potential savings, for example in future health costs.

Some considerations to take into account:

- The level of rate of return should be tailored to the investment. For example, sometimes 10% might be possible but other times a return of 70% of the capital invested might be all that is possible (author interview with Eccles, February 2014).
- Tax incentives could be provided to encourage investors.
- The £30 million Department for Works and Pensions (DWP) Innovation Fund in the UK has used proxy indicators such as school attendance to release payments more quickly than waiting for the long-term school outcomes (Loder et al., 2013).

Key readings

- Social Impact Investment: the Challenge and Opportunity of Social Impact Bonds The Young Foundation
- Social Impact Bond For Early Childhood Education Goldman Sachs

Development impact bonds

DIBs are a variation on SIBs, and the principles are the same. The key difference is that, in a DIB, the public sector may not be able to afford to pay for the service, so it is paid for by a donor (which could, for example, be a government agency or a foundation).

Additional strengths of DIBs (as opposed to SIBs)

- Can improve the efficiency of spending on aid by focusing on implementation quality and results (CGD and Social Finance, 2013).
- Can attract private sector investment for innovations that might be too risky for traditional donors (Ibid.).
- Can show greater transparency in how aid is spent (Author interview with Eccles, February 2014).

Additional challenges for DIBs

- Public sector agencies need to be accountable for programmes when they are not defining the way in which outcomes should be achieved (CGD and Social Finance, 2013).
- In developing countries, there are no experienced intermediaries to manage contracts, yet
 intermediaries have been key to the success of SIBs to date in the UK; building the capacity
 could be expensive if expatriates need to be used (Robinson, 2013).

DIBs in education and evidence of effectiveness

As at February 2014, there were no active DIBs anywhere in the world, so there is no evidence to support their effectiveness. However, DFID recently announced a DIB to prevent sleeping sickness in Uganda, and a public and private coalition has announced the Mozambique Malaria Performance Bond to implement a malaria control programme. A number of organisations are exploring the feasibility of implementing DIBs in education; for example, UBS Optimus Foundation, CIFF and Educate Girls are planning to launch a DIB to improve girls' education in Rajasthan, India (to be finalised in June 2014). The example below outlines some of the considerations.

Example: A potential DIB for secondary education in Rwanda

DFID Rwanda is designing a DIB to improve access to and quality of secondary education in Rwanda. The DIB is still under discussion but could provide over 12,000 school places in 20 new schools, and could work as follows:

- A service provider would build and manage additional schools and deliver interventions to improve the quality of education.
- Private investors (foundations or impact investors) would fund the initial investment and working capital.
- DFID (by itself or with other funders) would pay the investor, based on the outcomes delivered.
- An independent evaluator would assess whether the outcomes are delivered or not.

Key considerations that are currently being worked through:

- Who could play the role of an intermediary organisation in Rwanda?
- Who would invest in a relatively unproven model?
- What should the performance metrics be and would a 'basket' of metrics be best?
- What should the procurement approach be? (Robinson, 2013).

The potential

DIBs provide an opportunity to combine an outcomes-based aid approach with the potential to raise new finance, especially when a large amount of funding is needed at the beginning. However, pilots need to be implemented, and learning captured, so the true potential of DIBs can be evaluated.

Like SIBs, DIBs could be considered when:

- The intervention could lead to cost savings for the government at a later date.
- There is a clearly defined proposition, with clear measurable outcomes backed up by evidence.
- Innovation in delivery is needed, or a proven model needs to be scaled.
- A large amount of upfront funding is needed.
- A donor will pay for at least part of the service.

In education, they could be particularly relevant for:

• Early childhood and girls' education, which have known links to future health savings.

- Delivery of pre-school or secondary education, given the need for upfront funding to expand provision.
- PPPs, where the government commits to funding ongoing costs.

In their report on DIBs, CGD and Social Finance (2013) recommend that DIB outcome and investment funds be established to pilot a variety of DIB models.

Key reading

• Investing in Social Outcomes: Development Impact Bonds – The Report of the Development Impact Bond Working Group – CGD and Social Finance

Social yield notes

The 'Investment in Global Education' report (Winthrop et al., 2013) introduced a new financial instrument: Social Yield Notes (SYNs). They build on a SIB/ DIB to facilitate multi-stakeholder outcome models with goals, governance and incentives aligned; and move from a model of bilateral grants and aid, to an equity framework, where the equity has a value as a function of the delivery of social outcomes (Ibid.). The report outlines how SYNs work:

- 'An implementer creates a limited liability company (L3C in the US or the proposed UK SELLP) to
 issue Social Yield Notes (SYN) based on its ability to achieve future savings or benefits by
 meeting social goals according to an agreement with government/donors.
- 'Investors fund the most qualified solution providers by purchasing SYNs from L3Cs they believe can accomplish the goal, injecting competition to the goal.
- Outcomes of the intervention are measured by an independent auditor and reported to Public Sector.
- 'The Government (or donor) pays out returns based on level of contractual outcome achieved.

 Quicker the impact, higher the return.
- 'Just like regular bonds, the instruments can be traded in a secondary market, bringing added liquidity to social services' (Winthrop et al., 2013).

The report outlines the benefits for different stakeholders:

- 'For investors: it allows different risk returns to be taken by each class of investor in the structure, allowing effective cross-subsidisation. For the for-profit player in this partnership, it provides access to subsidised capital and the ability to access new markets.
- 'For social investors: the proposed structure allows social investors (government or foundations), at their discretion, to cross-subsidise the entry of commercial investors into a partnership, with social impact hard-wired. In addition, if the collaboration provides strong social

- and economic returns, it allows the social investor to receive equity returns based on the success and cash flow of the collaborative partnership.
- 'For implementing agencies: this process allows them to become beneficiaries in the implementation of a new tangible social good, where they now "own" equity, which will have value as a function of the delivery of the social outcomes. Achievement of the mission becomes the driving definer of a structure that can be applied to any social issue' (Winthrop et al., 2013).

Given this is such a new concept, it remains to be seen how it is implemented in practice.

Key reading

• Investment in Global Education a Strategic Imperative for Business – Brookings Institution/Accenture Development Partnerships/Global Business Coalition for Education

Conclusions on social impact investing

There is a great deal of interest in social impact investing from many stakeholders, but it is still very early days in terms of assessing its effectiveness in raising significant amounts of new finance for education and in delivering educational outcomes. The impact investment market in education is nascent, with only a limited number of businesses ready for impact investing. Both investors and investees are still learning how to speak the same language and to understand what is possible; investment is required in researching investments, structuring them effectively, measuring the right outcomes, collecting longitudinal evidence and sharing that and lessons learnt in order to understand what works.

ACCESS TO FINANCE FOR SCHOOLS AND FAMILIES

This section examines debt in terms of school financing and access to finance for parents and students.

School financing through loans

As various studies have shown, many low-income parents are sending their children to low-cost private schools (LCPSs) (Tooley, 2009), for example in Kenya (Oketch et al., 2010), Nigeria (Härmä, 2011), India (Pratham, 2013) and Pakistan (ASER Pakistan, 2013), among others. These LCPS are typically owner-operators with limited access to capital to expand their infrastructure, or working capital to manage the higher operating costs associated with greater pupil numbers (given the high proportion of outstanding fees in some cases) (Wheeler and Egerton-Warburton, 2012a).

LCPSs fall outside the market for microfinance (as the loans they need are too big) and SME finance (as the loans they need are too small) (Wheeler and Egerton-Warburton, 2012a). They do have positive characteristics for lending though, for example assets in the form of school buildings, operating plans and comparable costs (Ibid.). Some financing companies have therefore started to offer loans specifically to these LCPSs to invest in infrastructure and improve the quality of education they deliver. This represents

a new way of raising finance for the low-cost private education sector from both local and potentially international investors, and addresses one of the critical education market failures.

Strengths

- Provides access to capital that LCPSs would otherwise be unlikely to obtain so they can grow, be sustainable and improve the quality of education they deliver.
- Financing sometimes provided with access to training on school management and interventions to improve quality so the schools can be run more effectively.
- School financing companies that have the potential to reach a scale where they can be invested
 in themselves, which can help further scale the LCPS.

Challenges

- Finance is often used to improve elements of the school that do not have a big impact on learning outcomes, for example infrastructure.
- High interest rates could mean some schools serving the poorest communities may not be able to afford the loans.

School financing in practice and evidence of effectiveness

It has been very difficult to find academic research on the evidence of the effectiveness of these school loans in delivering better education and learning outcomes for the poor. In practice, there tend to be two approaches, which involve:

- A finance company directly providing loans to schools as a commercial venture with no additional interventions – for example the Indian School Finance Company has provided over 1,000 secured and unsecured loans to LCPSs in India since 2009 (www.isfc.in/).
- A foundation or the IFC providing an initial credit guarantee to an existing microfinance institution to start lending to schools to prove the market, plus training in school management or quality interventions to improve learning. Edify has undertaken this approach in Rwanda, Ghana and the Dominican Republic, investing \$6.9 million since 2010 in working with local microfinance companies to provide loans to 660 schools and training almost 3,000 teachers (www.edify.org/). The IFC Africa Schools Program (Kenya, Ghana, Rwanda and Uganda) combined organisational and staff skills development training and in-depth advisory services (business plans and diagnostic reports to schools) to at least one partner bank in each country, with the goal of the bank providing financing to the schools that develop business plans and diagnostics (IFC, 2011).

Neither of the above models directly links credit provision to learning outcomes. However, DFID Pakistan is piloting an access to finance scheme that aims to do just that (see example below).

Example: Pakistan Access to Finance for LCPSs

DFID Pakistan is aiming to address the lack of financial intermediation that means LCPCs in Pakistan do not get access to formal credit. Given the estimated 69,000 LCPSs in Pakistan, the estimated unmet credit need is £450 million (Ferguson, 2013, unpublished). Key elements of the pilot programme are:

- Use of a DFID-designed lending tool that enables lending officers at existing microfinance institutions to assess a school's capacity to absorb credit and repay loans easily.
- Provision of a credit guarantee to a portion of each school loan made by a microfinance institution to incentivise them to lend.
- Two loan types: 1) school improvement (to improve school infrastructure and quality); and 2) school enhancement (to upgrade a school to the next phase over a longer time period).
- Education service providers who will deliver a package of quality improvement services to each participating school it is hoped this will be facilitated in the future through an education market place in which microfinance institutions and service providers work together.

Potential

There has been some growth in finance companies offering school financing loans to LCPSs in some countries, like India, Rwanda and Ghana, but the market is still relatively unserved and, given the large number of LCPSs, the opportunity exists to catalyse a relatively new market.

The opportunity could be accelerated by support from donors or investors to:

- Provide guarantees for existing lending institutions that offer a new school financing product (Wheeler and Egerton-Warburton, 2012b).
- Impact invest in school financing companies to help them deliver to the scale of the LCPS.
- Encourage the linking of loan provision to better quality of education delivered.
- Encourage the development of other financial products for schools, for example asset financing.
- · Collect and share evidence on what works.

The aim should be to catalyse the market so it can operate sustainably by itself in the future.

Key reading

Catalysing Investment In LCPSs: Scoping Paper – Wheeler and Egerton-Warburton

Education-related access to finance for parents and students

Despite tuition fees having been abolished for basic education in many countries, parents contribute the largest amount of private finance to education. A report in 2011 estimated that parents cover about 25% of all education expenditure in the countries studied. Parental contribution to public schools is often driven by 'extras' that parents need to pay for, like registration fees, books, school supplies, uniforms and contributions to parent associations, but parents are also choosing to pay private school fees or for after-school tuition (UNESCO Institute of Statistics, 2011).

These fees often come in lump sums, and not all parents have ready access to finance to cover them.

This section looks at relatively new finance products, for example parent loans, student loans and student savings programmes that provide parents and students with the cash flow they need.

Strengths

- Provides parents with access to cash flow for education.
- Enables students from lower-income backgrounds to access higher education.

Challenges

- Parents and students end up paying more for their education than they would have done if they
 had not had to borrow the money; some of the interest rates can be as high as 30%. This could
 lead families into further debt.
- It does not support the EFA goal of free, universal basic education.

Access to finance in practice and evidence of effectiveness

It was very difficult to find academic research on the use of parent and student financial schemes specifically in improving educational outcomes, but some examples of education-specific schemes are outlined below.

Mechanisms for parents to save or borrow for education include:

- Community-based loans: in Côte d'Ivoire, the International Rescue Committee (IRC) has set up
 a community-based savings and loan programme under which groups of 25 families with out-ofschool children combine resources and offer loans to members for economic activities over 14
 months. IRC estimates that participants can earn an average 11% return. Participants receive
 training on the impact of education and financial management (Samoff and Irving, 2014).
- Loans to parent groups: Opportunity International (OI) provides loans to parent groups comprising existing entrepreneurs in Uganda. To ensure the money goes to education, OI pays the school directly on provision of an invoice.
- Insurance: Ol also provides Edusave, micro-insurance against death/disability that guarantees a
 payout for education of \$150.

Mechanisms for students to save or borrow include:

• Student loans for low-income students: FINAE partners with 10 universities in Mexico to share the costs and risks with providing student loans. Their main product, *ennti*, is a long-term payment plan that covers up to 100% of university costs and lasts up to three times the duration of studies. The loan is paid back in low monthly instalments that increase following graduation. FINAE has just launched the first student loan securitisation in Latin America, guaranteed by the IADB and with a 5/5 GIIRs rating.

- Vittana provides microloans to students in developing countries who otherwise wouldn't be able to attend higher education. It raises money through its online platform. It also uses the money raised to provide interest-free capital and technical assistance to microfinance institutions to kickstart student loan markets. It has 23 loan programmes across 13 countries and is expected to reach 30,000 students by the end of 2013.12
- Super Savers program: this is being piloted in Uganda by Innovation for Poverty Action (IPA) and Yale Economist Dean Karlan. It encourages students to deposit change into savings boxes to help them and their families save for school fees and promote financial education.¹³

Potential

Supporting access to finance for parents through savings schemes is perhaps more ethical than lending parents money to finance education at high interest rates when education should be free, particularly for basic education. Student loans, however, do have potential for widening access to higher education for students from lower-income families and, given the expected increase in salaries on graduation, may be affordable. Much more research needs to be done on affordability and whether the loans contribute to better learning outcomes and ultimately higher earnings.

Key reading

FINAE Student Loans for Higher Education in Mexico - Centre for Education Innovations

DEBT SWAPS

'Debt swaps, also referred to as debt conversions, are a form of debt relief in which the creditor forgives debt on the condition that the debtor makes available some specified amount of local currency funding to be used for specific developmental purposes' (Task Force on Innovative Financing for Education, 2012). This local currency funding is created from the 'fiscal space' governments have through not having to service the debt payments.

Strengths

- Debt-for-education swaps should increase net financial transfers to recipient countries¹⁴ (UNESCO, 2011).
- Funding can be channelled to support an existing education sector strategy.

Challenges

Debt swaps count as part of a donor's ODA and therefore may crowd out other funding that would have been provided to the recipient country for development purposes. This is evidenced

See http://www.educationinnovations.org/program/finae-student-loans-higher-education-mexico
 See http://www.usaid.gov/div/portfolio/country and http://www.usaid.gov/div/portfolio/country and http://www.usaid.gov/div/portfolio/country and http://www.usaid.gov/div/portfolio/country and http://www.poverty-action.org/project/0079

¹⁴ Although this is not always the case – see challenges.

- in empirical studies that indicate debt swaps have not been additional (see, for example Ndikumana, 2004) sources of funding (UNESCO, 2011).
- Even if they do provide additional funding, they may not result in those extra resources being spent on education, as the debtor government may reduce its own contribution to the education budget (UNESCO, 2011).
- They incur high administration costs, as transactions need to take place country by country (Samoff and Irving, 2014).
- The funding is not sustainable (Samoff and Irving, 2014).

Debt swaps in education and evidence of effectiveness

Debt swaps have been active since the 1980s and have taken place in education. For example, Spain and Ecuador agreed a \$10 million debt swap to fund a rural school construction programme, which was deemed a success, as was the debt swap between France and Cameroon outlined below. Very few evaluations have been undertaken however (Samoff and Irving, 2014).

Example: Debt swap between France and Cameroon for Cameroon's Education Sector Strategy

A debt swap agreement between France and Cameroon in 2006 provided €90 million for Cameroon's Education Sector Strategy: €45 million for an increase in contract teachers and €45 million to build schools. We focus on the former, where the aim was to reduce pupil to teacher ratios (PTRs) in lagging regions and formalise the status of qualified temporary and community teachers while maintaining financial sustainability, and recruit 37,200 contract teachers over five years.

Cameroon continued to make its debt payments to France, but France then reimbursed Cameroon into a special bank account from where the funds were disbursed to the different sectors. Cameroon did not miss a single payment and there were no delays in providing funds. Committees ensured proper governance.

Evidence of success:

- The target number of teachers was recruited each year.
- The PTR fell from over 60 to the low 50s.
- The net primary completion rate in 2009 was 73%, 21% higher than in 2006.

Lessons learnt:

- Additional teachers need ongoing funding so sustainability needs to be considered from the outset.
- High administration costs exist, given complex conditions for spending swap funds.
- Policy and system alignment led to strong government support (UNESCO, 2011).

The potential

A very rough estimate of the amount of debt available for swaps in LICs or LMICs is \$236 billion (UNESCO, 2011). Filipp and Leder (2013) undertook some high-level analysis and estimated that France has €300 million per year, Germany €150 million, Spain \$150 million and Italy €130 million. However, to date, debt swaps have not raised a significant amount of funds; a Fundación SES survey found that more than a third were worth under \$10 million, just over a third were worth \$11-50 million and only 11% were worth more than \$100 million (Mealla, 2007; Samoff and Irving, 2014). A much more detailed analysis needs to be undertaken country by country to understand what the potential debt relief would be.

If swaps were to take place, only a portion of the amount available would be allocated to education, as other sectors, for example health and climate change, would also be advocating for their share. UNESCO suggests individual bilateral creditors unite in larger multi-creditor swap initiatives to create more impact.

Key reading

Debt Swaps and Debt Conversion Development Bonds for Education: Final Report for UNESCO Advisory
 Panel of Experts on Debt Swaps and Innovative Approaches to Education Financing – UNESCO

BONDS

'A bond is an investment in a debt, whereby the investor receives a fixed return on the principal and interest of the underlying security. Borrowing from investors in the capital market involves the issuance of a bond certificate that states the interest rate (coupon) and the time when the funds (bond principal) will be returned (maturity date)' (Filipp and Lerer, 2013).

Debt conversion development bonds

A DCDB is created when the 'fiscal space' created from the debt swap (see p28 above) is used to issue a bond that is sold in local currency on the local capital market, which would then be invested in by local pension funds. Bonds are often issued by developing countries, but countries are often constrained by the lack of fiscal space, to ensure the bond(s) can be repaid (UNESCO, 2011).

A number of conditions need to be in place for a DCDB to work in a country (Filipp and Lerer, 2013):

- Available debt for conversion.
- Available creditor(s) ready to cancel debt.
- Successful legal approval of a new type of debt conversion arrangement.
- Sufficient monetary credibility to achieve acceptable rates of interest.
- · Relatively mature bond market.

Strengths

For developing countries, a DCDB would:

- Provide upfront capital for development purposes, which is then paid back using funds from the
 fiscal space over time; this means large-scale capital expenditure can take place straight away
 and in support of public education systems (Task Force on Innovative Financing for Education,
 2012).
- Provide local institutional investors, for example pension funds and safe, long-term assets to invest in and therefore help build the capital market (UNESCO, 2011).

- Encourage local institutional investors to invest in development and mobilise the significant amount of domestic savings¹⁵ (Task Force on Innovative Financing for Education, 2012; Filipp and Lerer, 2013).
- Reduce demand on the country's foreign exchange reserves as the bond would be issued in local currency (UNESCO, 2011).

For the donor country, a DCDB would:

Mobilise a substantial amount of aid now, but pay for it over time, which could be helpful in times
of austerity (Bond, 2013).

Challenges

- The poorest countries are unlikely to have a sufficiently mature capital market (Filipp and Lerer, 2013).
- Government policies would have to be aligned on the use of debt swaps (UNESCO, 2011).
- They are relevant only for countries with debt left to swap.

DCDBs in education and evidence of effectiveness

Debt swaps/conversions have been happening for decades, but there are no DCDBs currently in practice in any sector.

In 2012, UNESCO commissioned Affinity Microfinance to explore a pilot. Affinity Microfinance selected and visited Bangladesh and Jordan, which both met the criteria and were very interested as recipients. However, Japan as the creditor country decided it was not the right time to take this approach further and the pilot has stalled.

The potential

The opportunity is about mobilising the \$6 trillion in domestic savings for development (Bond, 2013).

Much more research needs to be done on where the right conditions exist and what the true potential value is, but it is likely that the greatest opportunity for DCDBs is for MICs, such as India, Ghana, Pakistan, the Philippines, Indonesia and Egypt, and non-Heavily Indebted Poor Country (HIPC) LICs, for example Kenya and Bangladesh, as most of these countries have not had large debt write-offs over the past decade, and therefore may have sufficient debt to swap (Bond, 2012).

_

¹⁵ It is estimated that local institutional investors hold assets of \$6 trillion and this is growing by 15% each year (Bond, 2013).

Key readings

- The Future of Education Financing Mobilizing Domestic Savings? Norrag
- Debt Swaps and Debt Conversion Development Bonds for Education: Final Report for UNESCO Advisory
 Panel of Experts on Debt Swaps and Innovative Approaches to Education Financing UNESCO

Diaspora bonds and remittances

'A diaspora bond is a debt instrument issued by a country – or potentially a private corporation – to raise financing from its overseas diaspora' (Ketkar and Ratha, 2011). The diaspora may do this out of a desire to 'invest in' or 'give back' to their former country and are likely to be less risk averse to receiving payments in local currency.

Strengths

Diaspora bonds have the following strengths for country governments:

- Can raise funds when they may not be able to access capital markets.
- Can raise funding at a lower cost than capital markets, as the diaspora may be willing to accept lower returns than on the open market.
- May help improve ratings on a country's sovereign debt, given the stability of funding (Ketkar and Ratha, 2011).

Challenges

Diaspora bonds have not always been successful (e.g. Kenya and Ethiopia) and have a number of challenges:

- It may be difficult to convince the diaspora to invest in a country they may have fled from, or where they have seen evidence of corruption or violence.
- Making the diaspora aware the bond exists and treating them as returning customers is difficult.
- Bonds need a revenue stream to service the debt; in education this is challenging when servicing low-income populations; higher education could be a possible sector to target.
- There is likely a need for credit enhancements and / or investor protections to convince the diaspora they will get a return on their investment, and the money will be spent appropriately (Ketkar and Ratha, 2011).

Diaspora bonds in practice and evidence of effectiveness

India and Israel have raised \$32 billion and \$11.3 billion, respectively, through forms of diaspora bonds (Fatunla, 2013). Israel has regularly raised money to support projects such as in water, transport and energy, whereas India has raised money to support its balance of payments at times when it could not access sufficient funds on the capital markets. Ethiopia has issued two diaspora bonds, one more successful than the other. Lessons include the following: the bond should be open to all classes of

investors; and, to make the funds transparent, they should be earmarked for a particular project (Samoff and Irving, 2014).

Most countries are still unaware of the potential of diaspora bonds and to date no country has issued one for education (Ketkar and Ratha, 2011).

The potential

Table 3 outlines the diaspora stock and savings for LICs, which amounts to \$30 billion.

Table 3: Potential for diaspora bonds insurance

LIC	Diaspora stock (millions)	Diaspora savings est., 2009 (\$ billions)	Savings as % of domestic saving
Bangladesh	5.4	4.6	29.9
Haiti	1	3.7	-
Afghanistan	2.4	2.6	-
Ghana	0.8	2	85.4
Ethiopia	0.6	1.9	157.1
Kenya	0.5	1.8	78.1
Somalia	0.8	1.8	-
Zimbabwe	1.3	1.6	-
Korea, D.R.	0.3	1.4	-
Cambodia	0.4	1.3	73.4
Lao PDR	0.4	1.3	-
Congo, D.R.	0.9	1.1	59.2
Nepal	1	1	98.9
Myanmar	0.5	0.8	-
Uganda	0.8	0.6	31.9
Kyrgyz Republic	0.6	0.6	-
Liberia	0.4	0.6	-
Mozambique	1.2	0.6	264.6
Tajikistan	0.6	0.5	-
Tanzania	0.3	0.5	-

Source: Ratha and Mohapatra (2011).

Research by Ratha and Mohapatra (2011) indicates that the diaspora has the ability to invest in bonds; however, to do so specifically for education may require allaying investor concerns about the ability of the government to provide a return on their investment, and about managing investments without corruption. Conditions on how educational investments are managed could be included, and they could be channelled through existing structures such as the GPE or independent state authorities (Ketkar and Ratha, 2011).

Diasporas in the US from Haiti, Kenya, Rwanda and Nigeria have expressed an interest in diaspora bonds (Ketkar and Ratha, 2011), so these could be explored further.

Some suggest migrants' remittances could also be harnessed. However, research has shown that a large proportion of remittances are spent on education anyway (Ratha and Mohapatra, 2011), and therefore reducing the amount of remittances through a contribution to a country-level education fund, for example, could be counter-productive (Samoff and Irving, 2014). Methods to reduce the cost of sending remittances could be beneficial, however:

- At the Leading Group in January 2014, Australia and Canada proposed a mechanism to reduce the cost of migrants' remittances (Leading Group on Innovative Financing for Development, 2014).
- The University of Michigan has developed a money transfer platform called EduPay, which provides migrants with the ability to pay educational institutions in their country of origin directly, without channelling the funds through a relative or other 'trustee'. The system also provides information report cards and attendance records to the remittance sender on the performance of the sponsored student. The university has partnered with the Bank of the Philippine Islands and a respected Philippine NGO to pilot EduPay with funding from the US Agency for International Development (USAID).¹⁶

Key reading

• Diaspora bonds for funding education – Ketkar and Ratha

Bonds secured on the basis of future higher education revenues

Bonds can be established on the basis of any future revenue streams. One potential use of bonds is to fund higher education. The IFC has supported bonds issued by universities based on future tuition payments and securitised by student loans. This assumes students (or their parents) will be able to fund some of their higher education and graduates to repay their student loans with their future earnings

¹⁶ See http://www.usaid.gov/div/portfolio/remittances

(UNESCO, 2011). These bonds could be backed by a partial credit guarantee by a development finance institution.

Debt contract securitisation for bonds

'Securitisation is a financial practice of pooling contractual debt and selling it in smaller tranches to investors as a debt instrument' (Filipp and Lerer, 2013). The IFFIm uses pledges from donor governments to securitise and sell bonds in the capital markets, making funds immediately available for the GAVI Alliance to spend on reducing vaccine-preventable deaths. The IFFIm has raised \$3.7 billion since 2006 from its vaccine bonds (Ibid.). If this is to work within education, funds should be used for specific, time-bound interventions with short-term improvements in results that also have a long-term impact on employability, for example Maths or Literacy programmes.

Key reading

• Innovative Financing for Global Education, Working Paper No. 58. 2013 - Filipp and Lerer

Conclusion on bonds

Although they offer the ability to tap into national institutional assets, all bonds have these challenges to their implementation:

- Given the economic climate, it is likely that bonds would have to be guaranteed by multilateral agencies (Filipp and Lerer, 2013).
- There is likely to be competition for raising bonds from other sectors (Samoff and Irving, 2014).
- The interest and principal on bonds needs to be repaid to the bond holder. This needs some form of revenue stream, which could be provided through debt relief in the DCDB, but otherwise needs to be provided by a financial return or the government. If the government has to pay, there is the potential that spending on education could be reduced (Samoff and Irving, 2014).

BLENDED FINANCE

Blended finance is the combination of grant and debt or equity funding with the purpose of reducing the financial risk of a particular investment. Blended finance can be used in different ways and to fund both the private and the public sectors. The IFC uses it to subsidise private sector investment through combining concessional donor funding with IFC non-concessional funding to loan funds at lower than market rates (The Bretton Woods Update, 2013). The European Union (EU) has set up five Loan and Grant Blending Facilities (LGBFs), which combine EU grants with loans from European bilateral or financial institutions to fund infrastructure or regional investment (Ferrer and Behrens, 2011). Debt buydowns are another example of blended finance used to fund the public sector, as they reduce the interest rate to be paid on loans. These are outlined in more detail below.

Strengths

- Can encourage additional development finance, which otherwise would not have been provided, and from sources that may not have previously invested; for example, with the EU LGBFs, €519 million of grants have leveraged €9.56 billion in development loans for projects worth €19 billion (Ferrer and Behrens, 2011).
- The costs of blended mechanisms are modest (Ibid.).
- Blended finance facilities can coordinate investments in development, make investments more strategic, encourage collaboration, prevent duplication and therefore lead to greater impact (Ibid.).
- Blended finance for the private sector can be used to make investments more attractive in early stage education businesses, for example (Morton and Kimball, 2013).

Challenges

- There is little research on how blending works in practice, which methodology or procedure works best and whether a certain governance model is more effective in reaching its objectives (ODI, 2011).
- It should only be used when it will not distort the market.
- Using blended finance as part of a social impact investment needs a clear understanding of who bears the risk and when (author interview with Kauer, February 2014).
- It suits programmes/projects where there is a future return on investment, which limits opportunities within the education sector to those with a revenue stream, or those on which government can afford to make the loan repayments.

Blended finance in education and evidence of effectiveness

Blended finance has been in operation for a number of years by the EU and the IFC.¹⁷ However, we have not found specific examples in education.

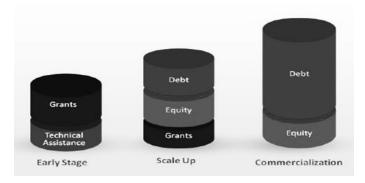
Potential

Blended finance can be implemented at different scales and for different purposes, for example:

- For the public sector: donor funding can be used to make debt more concessionary, for example to help a government implement a large-scale secondary school building programme.
- For the private sector: philanthropic grant funding can be provided as part of a social impact investment, used to bear the financial risk in the initial years, so education businesses that serve the poor can scale to the point they are ready for commercial investment (see Figure 6).

¹⁷ Since 2009, the IFC has invested approximately \$225 million in concessional funds using a blended finance approach but not specifically in education (The Bretton Woods Update, 2013).

Figure 6: Different stages require different capital mixes



Source: Morton and Kimball (2013).

Blended finance could be considered when:

- For the public sector: governments need to borrow to address issues within their education system but cannot afford the interest payments.
- For the private sector: education businesses that serve low-income customers need some initial subsidisation to reach the scale to attract social impact investment.

Much more thought needs to be given as to how to operationalise blended finance, however. Morton and Kimball (2013) emphasise that aligning philanthropic, development finance institution (DFI) and private capital against clear priorities is key.

Key readings

- Innovative Approaches to EU Blending Mechanisms for Development Finance Núñez Ferrer and Behrens
- The Case for Capital Alignment to Drive Development Outcomes Morton and Kimball

Blended finance – debt buy-downs

'Buy-downs are an arrangement whereby a third party buys down all, or a part of, either or both of the interest and the principal of a loan between a country and a lending organisation, thereby releasing the borrowing country from all or some of its future repayment obligations' (R4D, 2013). The funding that would have been used to repay or service the loan must then be invested in development projects. The buy-down is triggered on the certified achievement of agreed outcomes of those projects. Debt buy-downs are a form of blended finance, as the third party has used funding to make the loan terms more favourable.

Strengths

- Can encourage governments that would otherwise not borrow to take out a loan to invest in education (R4D, 2013).
- Encourage a focus on results as buy-downs can be triggered based on results achieved (R4D, 2013).

Challenges

- Risk of increasing a country's indebtedness (R4D, 2013).
- Need to choose triggers carefully to ensure 1) their relevance to project outcomes; and 2) that they can be easily monitored (R4D, 2013).
- Very limited number of lending agencies and third parties so far been involved in buy-downs and much needs to be learnt on how to make them work effectively (R4D, 2013).

Debt buy-downs in education and evidence of effectiveness

Very few buy-downs have taken place, and those that have been implemented have been mainly in the health sector, with bilateral agencies or the Bill and Melinda Gates Foundation buying down loans from multilateral banks. There has been only one buy-down in education, which involved DFID buying down an International Bank for Reconstruction and Development (IBRD) loan to China to IDA terms in 2003: a \$100 million loan was made and the value of the buy-down was \$34.5 million. The project was evaluated by an independent group as satisfactory (R4D, 2013).

The GPE is, however, exploring a pilot loan buy-down (see example below) that it hopes will be approved at its Board meeting in June 2014.

Example: Pilot for a loan buy-down by the GPE from the Islamic Development Bank

GPE would buy down a loan from the Islamic Development bank. All the details are currently being worked through but the aim is for the pilot approach to be presented to the Board in June and for it to be implemented directly after.

Key considerations that are currently being worked through:

- Which countries should be eligible for loan buy-downs? There is a need to take into consideration existing
 debt, economic growth, good performance in the education sector and attraction of resources that would not
 otherwise be available.
- What are the triggers for the buy-down? Which performance indicators will encourage good performance and will not punish for reasons outside a country's control?
- When should the triggers be? Should they be linked to policy reform upfront or to indicators during the course of the agreement?
- There is a need to ensure the funding is truly additional and the government contribution to the education budget does not subsequently decrease.

Potential

The report by R4D (2013) for the GPE suggests 'the immediate potential seems greatest with regard to lending by the World Bank Group (both non-concessional IBRD and concessional IDA) and the Islamic Development Bank (mainly non-concessional) and especially for countries on both sides of the IDA/IBRD graduation threshold that still have major basic education challenges. This includes countries such as Angola, Bangladesh, India, Nigeria, Pakistan and Sri Lanka. Another possible category would include low-income countries unable to take on more debt but in serious need of external support for basic

education, such as Afghanistan, Burundi, Chad, Democratic Republic of Congo and Tajikistan. As these countries are not creditworthy, any buy-downs for them would have to be to grant or near-grant terms.'

Loan buy-downs to do have the potential for raising additional funds, although the amounts are modest (the most that has been raised from one buy-down to date seems to be \$37 million (R4D, 2013). They encourage a focus on results but are untested; there are significant risks and many operational issues to be worked through (Ibid.).

Key reading

• Final Report on Buying Down Loans for Education to the Global Partnership for Education – R4D

GLOBAL SOLIDARITY LEVIES

A global solidarity levy aims to 'levy global economic activity to pay for global public goods' (Taskforce on International Transactions and Development, 2010. It could be applied to any industry sector that is driving global economic growth.

Strengths

- Large sums of money can be raised from small amounts of tax owing to the high volume of transactions involved.
- The funds can be used to address a specific cause.

Challenges

- Gaining multi-country agreement to what the levy can be applied to, the rate of the levy and what the funds should be used for.
- Potential distortion to the market.

Global solidarity levies in practice and evidence of effectiveness

The air ticket levy used to fund 65% of UNITAID is the most widely quoted example of a successful global solidarity levy (see example below). In July 2013, the European Parliament approved the introduction of a Financial Transaction Tax (FTT) to be applied to certain financial transactions between institutions. A total of 11 countries have signed up, and it is expected to raise €30-35 billion per year. It is likely to be implemented in 2014, but the UK is challenging the legality of the proposal. ^{18/19} No final agreement has been made on what proportion can be allocated to development, let alone to education. The UN Special Advisor on Innovative Financing and the IFF are also trying to put in place a global solidarity levy funded by the extractive industries (Filipp and Lerer, 2013), and UNESCO has called for a sports levy on football broadcast and sponsorship revenues, which the European premier leagues have been encouraged to adopt. However, this has yet to happen (Samoff and Irving, 2014).

¹⁸ The UK challenged the legality of the decision of 22 January 2013 of the Council to authorise enhanced cooperation on a common framework of FTT and the scope and objectives of the initial commission proposal. This has no suspending effect.

¹⁹ http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/index_en.htm

Example: Air ticket levy

The air ticket levy has been implemented in nine countries in both the Northern and the Southern hemispheres. A small levy is charged on each flight leaving the country, the country decides on the amounts and the levy is implemented through the adoption of a law or decree and simply added to an existing airport tax. The funds have been used to fund UNITAID, which aims to shape markets for HIV/ AIDS, malaria and tuberculosis.

Evidence of success:

- The French air ticket levy has raised \$1 billion since 2006 (UNITAID, 2013) and funding remained stable through the economic crisis.
- UNITAID's five-year evaluation (ITAD, 2012) stated 'the airline ticket levy can be considered a success and an important "proof of concept".
- There are strong indications that many of UNITAID's projects achieve better outcomes than those of traditional investments because of a multiplier effect (ITAD, 2012).

Lessons learnt:

- Strong leadership from France and early partners including the UK has been key to success.
- African countries have implemented the levy to raise funds for their own populations.
- No additional costs have been required to collect the tax as it uses mechanisms already in place.
- No evidence has emerged on any negative effects on air traffic.

Potential

The likely introduction of the FTT provides an important opportunity for education advocates to lobby for a proportion of the funds to be channelled to the education sector.

Key reading

• UNITAID 5 Five-Year Evaluation: Summary -- ITAD

OTHER POTENTIAL SOURCES YET TO BE EXPLORED IN DETAIL FOR EDUCATION

Advanced Market Commitments

An Advanced Market Commitment (AMC) is a PPP between donor countries and private companies. Donors commit funds to guarantee the price of a specific development-related product once it has been developed. These commitments provide manufacturers with an incentive to invest in research and development (R&D) and expand manufacturing capacity for this product. In return, these companies provide the products at an agreed affordable long-term price to developing countries (Leading Group on Innovative Financing for Development, 2014).

This approach has been used very effectively for pneumococcal vaccines. With the GAVI Alliance and support from donor countries (\$1.5 billion), including the UK, GlaxoSmithKline and Pfizer are currently supplying GAVI countries with vaccines tailored to developing country needs, at a price more than 90%

lower than the vaccine is sold for in developed countries. A total of 17 countries have already introduced this vaccine using AMCs, with a further 41 scheduled to do so by the end of 2015 (DFID, 2013).²⁰

We have not found any research on the use of AMCs for education but Filipp and Lerer (2013) propose they have potential for digital devices or PPP schools.

Key reading

• Innovative Financing for Global Education – Innovative Finance Foundation

Travellers' Savings Fund for Development

The Leading Group on Innovative Financing for Development in 2012 proposed a Travellers' Savings Fund for Development (TSFD). This is 'an instrument (financial mechanism) that increases participation/social investment as well as mitigates the risk associated with exposure to currency fluctuations by civil society, private foundations, NGOs, and travellers at large' (Task Force on Innovative Financing for Education, 2012). It seems to involve influencing tourism organisations that run 'voluntourism', or tourists who undertake voluntourism to direct their funds to education projects.

Key reading

Innovative Financing for Education: Moving Forward – Education Task Force

RETURNABLE CAPITAL

Returnable capital means making investments, rather than giving grants, and so expects a financial return in the future. Loans and social impact investment are forms of returnable capital where an organisation such as DFID would invest rather than provide a grant. It is not a financial instrument in itself.

Returnable capital has implications for DFID, as those investments are held as assets on the balance sheet and therefore need careful risk management and a different approach and skillset to making grants. This is a growing area of DFID's work, but DFID is approaching it very carefully and in a very risk-managed way. DFID are exploring returnable capital if an investment creates greater development impact than a grant. This could happen when funds are able to be recycled, or when a private partner needs an investment.

At the moment, DFID's main focus in implementing returnable capital is on economic development, although it is being approached in a sector-agnostic way: there are no near-term plans to look at this specifically for education (author interview with Davies, February 2014).

NON-TRADITIONAL FINANCING FOR EDUCATION

²⁰ See also www.gov.uk/advanced-market-commitments-amc

DEMAND-SIDE MECHANISMS TO SPEND FUNDS MORE EFFECTIVELY

This section explores the strengths and challenges of demand-side mechanisms to make more efficient use of existing education resources, and includes cash transfers (including girls' stipends) and vouchers.

Cash transfers

Cash transfer programmes give cash to poor households (often the mother). Unconditional cash transfers (UCTs) provide cash with no strings attached; they assume the only constraint for poor households is money. Conditional cash transfers (CCTs) provide the cash as long as certain conditions are fulfilled. In education, this could be a certain level of school attendance, for example (Baird et al., 2013).

Strengths

- They have a significant effect on enrolment: a systematic review found CCTs increased the
 probability of a child being in school by 41% and UCTs by 23%. Those that are explicitly
 conditional, monitor compliance and penalise non-compliance can increase probability to 60%
 (Baird et al., 2013).
- They significantly increase the likelihood of a child attending school, with the likelihood increasing
 with the intensity of conditions. CCTs show more effect on girls than do UCTs (Baird et al., 2013).

Challenges

- A systematic review found cash transfers have at best a small impact on test scores (Baird et al., 2013).
- Siblings (especially sisters) attend school less frequently and are more likely to drop out when there is a recipient in the household (Barrera-Osorio et al., 2011).
- It assumes sufficient local schools for children to attend that deliver good-quality education.
- Cash transfer amounts can be undermined by inflation (Devereux, 2009).

Cash transfers in education and evidence of effectiveness

Over 37 developing countries have implemented a form of CCT programme that impacts schooling outcomes (Fiszbein et al., 2009; Grosh et al., 2011). Cash transfer programmes in Latin America are typically conditional, and in Africa typically unconditional, potentially because it is assumed people will spend the money on education and health anyway (Devereux, 2009).

Cash transfers have been designed and implemented in a variety of ways. A meta-analysis of educational impacts and cost effectiveness of CCTs (Saavedra and Garcia, 2013) found the following evidence:

CCTs had the biggest impact on enrolment and attendance when the baseline was low, therefore
they were particularly effective for improving enrolment and attendance in secondary education.

- Education impact and cost effectiveness is significantly larger when the CCT is combined with support to improve schools.
- Educational effect sizes are larger in programmes with lower payment frequency.
- Educational effect sizes are larger in programmes with more stringent conditions.
- The size of the cash transfer is not related to the educational effect size.
- Cost effectiveness is greater for transfers of larger amounts and when additional support to schools is provided.

In addition, Barrera-Osorio et al. (2011) found that delaying some of the cash transfer to re-enrolment each year and graduation at tertiary level increased enrolment and graduation, especially for those most at risk, as it helped 'save' the money.

Example: Malawian cash transfer programme for adolescent girls

These were designed to understand the difference in impacts between UCTs and CCTs on adolescent girls. A randomised trial was conducted. The condition was 80% of attendance. The following findings were made:

- The dropout rate effect was 43% larger for girls who received the UCT than those with the CCT.
- Achievement was significantly improved in cognitive ability, Maths and English reading comprehension for girls with the CCT compared with the control group and those with the UCT.
- The likelihood of being pregnant or married for girls with the UCT was 27% and 44% lower than for the control group, with only small and insignificant differences for girls with the CCT.
- The transfer amount had no bearing on outcomes and smaller amounts were still effective (Baird et al., 2011).

Girls' stipends and scholarships

Girls' stipends and scholarships have not been evaluated separately, as these are a form of cash transfer. Evaluations of CCTs to explicitly address gender disparity show they do increase enrolment and attendance – for example the Bangladesh Female Secondary Stipend Programme – 12% increase in enrolment (Khandker et al., 2003); the Japan Fund for Poverty Reduction scholarship programme in Cambodia – 30% increase (Filmer and Shady, 2006); and the Female School Stipend Programme (FSSP) in Pakistan – 9% increase (Chaudhury and Parajuli, 2008).

The results are more mixed in terms of impact on learning outcomes, but where they are merit based, learning outcomes can increase. This is evidenced by a small randomised study in western Kenya, which found test scores increased significantly for eligible girls and continued after the scholarships had ceased; teacher attendance also increased (Kremer et al., 2009). They can also have additional benefits such as empowerment which results in fewer arranged marriages and less violence (Camfed Ghana, 2011). However, particular care must be made in the selection of girls, as experiences from the Ambassadors Scholarship Programme in Djibouti and Sierra Leone show (Ibid.).

Potential

There is clear evidence that cash transfers improve attendance and enrolment at school; however, they do not always improve learning outcomes. There is a growing body of research evidencing the most effective ways to design CCT programmes and to specifically address gender disparity, but more research is needed, especially on longer-term outcomes such as academic achievement, and on evaluating UCTs more generally, and in Africa (Baird et al.; 2013).

For CCTs to be most effective, they should be supported by investment in and support for schools and teachers so that quality education can be delivered and improved learning outcomes achieved.

Key readings

- Relative Effectiveness and Cost-Effectiveness of Conditional and Unconditional Cash Transfers for Schooling Outcomes in Developing Countries: A Systematic Review Baird et al.
- Education Impacts and Cost-Effectiveness of Conditional Cash Transfer Programs in Developing Countries: A Meta-Analysis Saavedra and Garcia

Vouchers

Vouchers give parents greater choice over where to send their child to school and to give access to school to those children who might not otherwise be able to afford it. They can be controversial as, although vouchers can be used in both public and private schools, programmes are often structured so public money is used to subsidise the cost of private schools for lower-income children.

Strengths

- Vouchers can be cost effective: the Pakistan Quetta programme cost less than it would have cost
 the government to create new education spaces (Morgan et al., 2013), and the Andhra Pradesh
 School Choice Programme showed that (slightly) better educational outcomes could be delivered
 at substantially lower cost (Muralidharan and Sundararaman, 2013).
- Vouchers can improve equity: both the Colombia PACES and Pakistan Quetta programmes increased private school enrolment among the countries' poorest income groups (Morgan et al., 2013).
- Vouchers may (but not always) lead to better educational outcomes: voucher winners in the
 PACES programme completed more years of school, had higher test scores, saw less grade
 repetition and had substantially higher high school graduation rates. Vouchers were renewed as
 long as the student met academic requirements (Agrist et al., 2002; 2006).
- Parents have greater choice over where to send their child to school.
- Competition increases quality in both private and public schools (Figlio and Hart, 2010).

Challenges

Vouchers do not always lead to better educational outcomes.

- Vouchers may lead to 'cream skimming', with schools selecting the most able students (Morgan et al., 2013).
- Segregation can take place in schools that accept vouchers and within their communities (Morgan et al., 2013).

Vouchers in education and evidence of effectiveness

Education vouchers have been implemented in 12 countries in Latin America (Arenas, 2004), India, Pakistan, Bangladesh and Côte d'Ivoire as well as many developed countries. The strengths and challenges provide some of the evidence to support their effectiveness. Voucher programmes have been implemented in many different ways: they vary by whether they are allocated in a lottery or not, whether they are targeted at certain socioeconomic groups, the proportion of costs they cover, whether they are linked to academic performance and the types and levels of education they can be used for. For vouchers to be as equitable as possible, Arenas (2004) suggests they should have the following features:

- Target poor students.
- Cover the entire cost of tuition.
- Require open enrolment using a lottery system when demand exceeds supply.
- Provide meaningful and accessible information to parents.
- Establish strong systems of accountability.

When voucher programmes are implemented, consideration must be given to the ability of the public sector to regulate, monitor and, if necessary, contract LCPSs, and whether LCPSs have access to capital or technical assistance to deliver quality education (Patrinos et al., 2009). Effective communication, logistical and financial processes also have to be in place (Dixon, 2013).

One of the most recent 'successful' voucher programmes is the Punjab Education Foundation's Education Voucher Scheme, outlined in the example below.

Example: Punjab Education Foundation Education Voucher Scheme

The EVS provides PKR 500 (\$15) per child to out-of-school children in poor families. The scheme started in 2006, but expanded rapidly in 2011/12 and is now enabling over 140,000 largely out-of-school children to attend LCPSs (Barber, 2013). The data show that:

- These schools on the whole achieve better outcomes for less cost: the cost per child is one-third of the cost in a government school (Barber, 2013; http://www.pef.edu.pk/pef-departments-evs-overview.html).
- Students from lower socioeconomic backgrounds with vouchers perform as well as those from socioeconomically higher backgrounds (Malik, 2010).
- Enrolment increased by as much as 100% in some areas (Malik, 2010).
- Over 50% of vouchers go to girls (Malik, 2010).

Key features that contribute to its success:

- Focus on equity targets of out-of-school and high-risk children in disadvantaged areas, and all households have to enrol girls (Ansari, 2012; http://www.pef.edu.pk/pef-departments-evs-overview.html).
- Focus on quality each participating school has to administer Quality Assurance Tests (QATs) in Science, Urdu, English and Maths and students have to achieve a certain result for the school to receive funding (Ansari, 2012).
- Focus on transparency internal/external M&E and internal/external audits (http://www.pef.edu.pk/pef-departments-evs-overview.html).
- Focus on anti-corruption vouchers have security features, i.e. watermarks (Barber, 2013).

Potential

There is evidence to suggest vouchers can provide equitable access to education and better learning outcomes that can be delivered more cost effectively than in the public sector, or at least the same learning outcomes at a lower cost. This has the potential to open up education systems. However, these results are not always the case, and depend on the design and context of the voucher programme.

Vouchers could be considered when the public sector does not have enough school places for the number of students, and there are private schools that can deliver at a certain level of quality in a location that can offer choice, and when certain socioeconomic groups need to be targeted. However, before vouchers are taken to scale, more projects need to be implemented with rigorous evaluations that understand more about how and why vouchers work, in what circumstances, for whom and with what implications, as well as what support LCPSs need in order to deliver improved learning outcomes.

Key reading

A Systematic Review of the Evidence of the Impact of School Voucher Programmes in Developing Countries
 Morgan et al.

SUPPLY-SIDE MECHANISMS TO MAKE EDUCATION FUNDING GO FURTHER

In some countries, the achievement of education goals is hampered by the lack of public education for all students. In places, these supply deficits have been addressed by a variety of PPPs, which have leveraged funding, management and operational delivery capacity from the private sector to deliver education on behalf of the public sector. PPPs create an opportunity to open up the education system and offer alternative ways of delivering education.

PPPs

There are many different types of PPPs in the education sector, including those with religious organisations that have been in operation since colonial times. Seven main types are outlined below:

Table 4: Seven main types of PPPs in the education sector

Туре	Examples (developing countries where possible)	
Private philanthropic initiatives	Academy schools (UK)	
	Jordan Education Initiative (Jordan)	
Private management of public schools	Charter schools (US)	
	Concession Schools (Colombia)	
	Fe y Alegría (Venezuela, Peru)	
Contracting out services to private schools (can	Universal Secondary Education programme (Uganda)	
include subsidies)	Foundation Assisted Schools Programme (Punjab, Pakistan)	
Adopt a school	Sindh Education Foundation (Pakistan)	
	Adopt-a-School Programme (The Philippines)	
Vouchers	PACES (Colombia)	
	Punjab Education Fund – EVS (Pakistan)	
Capacity-building initiatives	Cluster-based teacher training (Punjab, Pakistan)	
Infrastructure partnerships	Private Finance Initiative (UK)	
	PPP for New Schools (Egypt)	

Source: LaRoque (2008); author's own contributions.

Our focus for the rest of this section is on the two most prevalent PPPs, which also have the most potential for developing countries: private management of public schools; and contracting out services to private schools.

Strengths

- PPP schools can enable increased enrolment and wider access to education as they are often located where there are no or insufficient public schools.
- PPP schools have greater flexibility in management than public schools and can make key
 decisions as to how a budget is allocated and on the hiring and firing of teachers, and can test
 innovations that can lead to better education outcomes.
- Private providers for PPP contracts are often chosen on the basis of cost and quality and have performance measures as part of their contract, which can lead to better education outcomes.
- PPPs can generate greater efficiencies given their flexibility (mentioned above), but also because
 of increased risk sharing and leveraging of private sector management expertise.
- PPPs can create increased competition, which can lead to better choice and educational outcomes (Patrinos et al., 2009).

Challenges

- Evidence from charter schools, as an example of a PPP, is very mixed in terms of impact on learning outcomes (Patrinos et al., 2009).
- PPPs can represent a loss of control for governments and a loss of accountability to the public (LaRoque, 2008).
- PPPs need specific policy and contract management expertise that may not be available in developing countries; if a PPP is poorly implemented, it can lead to great financial and performance risks (LaRoque, 2008).
- Private providers can vary in quality of education delivery, so accountability is key.

PPPs in education and evidence of effectiveness

Both private management of government schools and contracting-out to the private sector have been implemented in several countries; however, the contexts have been very different and the extent to which evaluations have been undertaken varies. Table 5 provides an overview of the expected effects of private management and subsidies (i.e. contracting-out) on enrolment, education outcomes, inequality and costs. Each model is explained and explored through examples below.

Table 5: Expected effects of different PPPs on four main education objectives

Contract	Effect on increasing enrolment	Effect on improving education outcomes	Effect on reducing education inequality	Effect on reducing costs
Vouchers	Strong: number of students who receive the voucher	Strong: school choice	Strong when targeted	Strong when private sector is more efficient
Subsidies	Strong: use of already built private infrastructure	Moderate: limited by available place and quality of service delivered in private sector	Strong when targeted	Moderate
Private management and operations	Moderate: limited by the supply of private school operators	Moderate: limited by available places in the private sector	Strong when targeted	Moderate
Private finance initiatives	Moderate: limited by financial constraints	Low	Strong when targeted	Strong

Source: Patrinos et al. (2009).

Private management of public schools

Charter schools in the US and academies in the UK have attracted a great deal of attention and research. The evidence on charter schools is 'complex and changing' (CDE, 2013), as there is a high degree of variation in performance. This may be caused in part by the autonomy to manage the schools and the drive for innovation; however, it also allows the highest-performing charter schools to do well. Academies

account for 59% of secondary schools in the UK, and are driving up performance faster than any other type of public school, even though they operate in disadvantaged areas (DfE, 2013).

Two examples from developing countries are Fe y Alegría (FyA) across Latin America, and the concession schools in Colombia. In Venezuela, FyA enters into a contract with the government, which pays teacher and other staff salaries while FyA is responsible for the delivery of education. FyA schools benefit from autonomy and the training and direction provided by the FyA central organisation. Research by Allcott and Ortega (2007) found that these schools yielded higher test scores for students at the end of their basic education (Grade 11) than public institutions did.²¹

Twenty-five concession schools were set up in Bogota to serve students from low-income backgrounds. Private providers were selected to manage each school for 15 years, and were monitored on specific performance measures such as predetermined test results; if they did not meet the measures for two years, their contract would be terminated. Barrera-Osorio (2007) found dropout rates were significantly lower in concession schools, and, when observable characteristics were controlled for, students from concession schools performed 2.4% better on Maths and 4% better on reading tests than students from other public schools.²²

The Center for Development and Enterprise (CDE, 2013) summarises learning on what works in contract schools:

- Schools' success is most often attributed to autonomy and administrative decentralisation that
 provides school-level control over human capital elements, such as school leadership and
 teachers. Critical is control over hiring and firing.
- Implementation requires a strong relationship between government and school managers.
- Developing, monitoring and evaluating the effectiveness of such schools are vital.
- Non-performing contract schools must be closed down.

Contracting out services to private schools

One of the few PPP examples in Africa is the government of Uganda's Universal Secondary Education (USE) programme. The government set up a PPP whereby it pays LCPSs in sub-counties with no public school a per pupil subsidy to deliver education on its behalf. There has yet to be an impact evaluation published, although private finance has been unlocked for over 700 schools (MoES data, 2011), and country data show enrolment has increased by 77% since USE was introduced (Businge, 2011). However, there remain big implementation challenges: 1) with the low quality of education delivered in the PPP schools; 2) with the government holding PPP schools to account; and 3) with the lack of real 'partnership' (Brans, 2011).

²¹ Note that this study used propensity score matching estimators and so the results must be viewed with caution.

²²Note that this research is based on propensity matching so must be read with caution.

The Punjab Education Foundation (PEF) has introduced QATs to address issues of quality and accountability (see example below).

Example: Punjab Education Foundation – Foundation Assisted Schools

This aims to increase access to quality education for those from the lowest socioeconomic groups. Private schools are paid a 'per student' monthly subsidy for waiving tuition fees and meeting a minimum level in the QATs administered to students twice a year. If they fail to meet minimum standards twice in a row, the subsidy is taken away (World Bank, 2012). Further incentives are paid to teachers and schools with high percentage passes in QATs. In 2009, 1,337 schools serving 529,000 students were part of this programme (http://www.pef.edu.pk/pef-departments-fas-overview.html).

Evidence of success:

- Learning outcomes are improving there has been an increase in pupils scoring over 90% and a decrease in pupils scoring under 40% in the QATs (Malik, 2010).
- Dropout rates are zero (Malik, 2010).
- Cost-effectiveness estimates suggest the programme is among the cheapest interventions in developing countries for inducing enrolment gains (Barrera-Osorio and Raju, 2011).

Reasons for success:

- Schools are rigorously assessed before being accepted onto the programme, including an inspection and student achievement test (Barrera-Osorio and Raju, 2011).
- A World Bank study found the threat of losing the subsidy worked and schools met the required level of performance even though the level increased each year (World Bank, 2012).
- Management by PEF, whose mandate is to implement PPPs to improve access to quality education in Punjab, has been a major factor (Patrinos et al., 2009).

Some challenges:

- Needing to target the poorest children in the most remote areas.
- Avoiding parents moving their children from public to private schools.

Potential

Evidence on the effectiveness of PPPs is still very limited, especially in Africa. However, given that all children have a right to free education and some governments are struggling to deliver this, if designed and implemented well PPPs offer a way of opening up the education system so the state retains responsibility for regulation, quality assurance and funding, but the private sector plays a role in delivery. This approach keeps equity, access and quality at the forefront.

Contracting out PPPs could expand access to education in locations (e.g. Ghana, Kenya or Nigeria) or sectors (e.g. early childhood or secondary education) with insufficient public schools and many LCPSs. Private management of PPPs could be considered when a different approach is needed to target the most disadvantaged, for example in South Africa, where disadvantaged children are still the lowest achievers. PEF, with its independence from central government and its variety of different PPPs, is a useful example for other governments. Some governments are starting to explore PPPs with interest, for example in Rwanda, Zambia and South Africa.

Key considerations include the following:

- PPPs need to be viewed as an element of the whole education system; their specific role and how they contribute to the delivery of goals such as EFA must be very clear.
- Expertise needs to be provided to governments on how to design and, importantly, implement PPP policies effectively.
- A simple policy framework is needed with clear accountability to the government, and clear standards that are contextually relevant and include learning outcomes.
- Ongoing quality assurance is required to ensure operators are delivering against the required educational outcomes.
- Evidence must be collected so more can be understood on how and when PPPs work.

Key readings

- The Role and Impact of Public-Private Partnerships in Education World Bank
- Public-Private Partnerships in Basic Education: An International Review LaRocque

Payment by Results

PbR is the payment for a programme or service based on predefined and independently verified results. PBR as defined by DFID has three key elements:

- Payments based on results.
- Recipient discretion i.e. the recipient has space to decide how results are achieved.
- Verification of results as the trigger for disbursement (Perrin, 2013).

DFID differentiate the mechanism according to who the risk is shared with:

- Results-based aid (RBA) (also known as outcomes-based aid (OBA) is when a government is paid based on the outcomes delivered.
- Results-based financing (RBF) is when an NGO or private or public sector service provider is paid based on the results delivered.
- A DIB is when an investor is based on the outcomes delivered by a service provider (see p21).

The approach can also be differentiated based on the amount of risk that is shared, for example 10% or 100%, and whether the PbR is linked to outputs, outcomes or processes.

Strengths

- Encourages a focus on outcomes rather than inputs (Perakis and Savedoff, 2014).
- Gives ownership and responsibility to the risk sharer to deliver outcomes in the best way they see fit; in theory, this should encourage innovation.

- Allows donors to step back and focus on measuring achievements and providing technical support where needed rather than monitoring detailed processes (Perakis and Savedoff, 2014).
- Better value for money, as the donor pays only for results delivered.
- Greater transparency and accountability, as it is clear what needs to be delivered and by whom, and the outcomes are verified independently.

Challenges

- Keeping the measures as simple as possible.
- Setting the right level of target to incentivise good performance, but not to make the approach too risk averse, which could stifle innovation.
- Minimising perverse incentives and anticipating unexpected consequences.
- Selecting the right assessment methods, which are not open to tampering.
- Finding organisations to work with that have the capacity and capability to estimate an accurate PbR agreement and implement it.

RbR in education and evidence of effectiveness

The vast majority of evaluations of PbR programmes have been in the health sector, and almost all have been of RBF rather than RBA. The evaluations have been weak, and there is limited evidence regarding the potential of incentives to change professional practice (Perrin, 2013). Programmes that use PbR in education are still relatively new. DFID has been a pioneer in this sector, and was the first to implement the CGD's Cash on Delivery (COD) aid approach²³ in the education sector in Ethiopia. DFID has also implemented an RBA approach to improve completion and teachers' proficiency in English in Rwanda, and recently implemented an RBF approach in the Girls' Education Challenge (GEC). As all of these programmes have been implemented recently, it is too early to say whether they work or not, but many lessons are being learnt that will make valuable contributions to the understanding of PbR approaches. These are summarised in the examples below.

DFID has also been a core funder of the Global Partnership on Output-Based Aid (GPOBA), managed by the World Bank. GPOBA has piloted an OBA approach to subsidise tuition costs of secondary education in Vietnam, which seems to have improved access and reduced dropout (GPOBA, 2012), although it is not clear how OBA contributed to this. GPOBA plans to scope further education programmes. The World Bank has also implemented its own Program-for-Results (P4R), which finances and supports government programmes but disperses on results rather than inputs. It is currently reviewing the first two years. No education programmes have been implemented yet, but 9% of the pipeline opportunities are in the

NON-TRADITIONAL FINANCING FOR EDUCATION

²³ Based on five principles: the donor pays only for outcomes, not inputs; the recipient has full responsibility for, and discretion in using, funds; the outcome measure is verified independently; the contract, outcomes and other information are disseminated publicly to ensure transparency; and the funding complements other foreign aid or domestic resources (Perakis and Savedoff, 2014).

education sector, including a large multi-sectoral education programme in Tanzania (World Bank and P4R, 2014).

Example: Pilot COD aid - DFID/government of Ethiopia; RBA - DFID/government of Rwanda

	DFID Ethiopia	DFID Rwanda
Goals	To improve secondary education completion	To incentivise improvements in completion at key stages and in teacher competency in English
Implemented	January 2012	October 2012
Payment structure	Fixed amount for each student that takes, and each student that passes, the Grade 10 examination Additional payments for students in emerging regions, and for girls compared with boys	Fixed amount for each additional child sitting P6, S3 and S6 exams above previous year's results, plus smaller fixed amount for each additional child sitting P6, S3 and S6 exam above 2011 levels Fixed amount per additional teacher competent to use English as the medium of instruction
Funding	£10 million can be dispersed each year for 3 years 2011-2014	Up to £9 million over 3 years 2012-2015
Lessons learnt	Ministry of Education taking time to exercise discretion and respond to RBA approach More hands-on support from DFID than planned Allocations to regions based on political economy rather than results Volume of money matters to ministry buy-in Logframes are not appropriate for RBA (DFID RBA Annual Review, 2013)	The socio-political context (including accountability systems) may be key to smooth introduction of an RBA approach Ample time should be set aside for RBA-related negotiations to ensure an agreement is reached prior to implementation Relevant data will be made available by recipient to support monitoring and independent evaluation

Example: DFID's Girls' Education Challenge - PbR

Twenty-five of the GEC projects have included an element of PbR, generally 10%, based on learning outcomes and retention, with attendance used as a proxy for retention. Experience of using PbR for these projects so far is as follows.

Strengths:

- Encourages programmes to have a clear focus on learning and 'get closer to the classroom'.
- Information from the baselines is being used to adapt some programmes already.

Challenges:

- NGOs did not fully understand what PbR meant in reality, or the complexities of measuring learning and the effort required to implement such high levels of M&E.
- Allow a lot of extra time for baselines, target setting and contract negotiations.
- High cost owing to the level of M&E and legal advice required.

Considerations when using PbR:

- How to measure the impact of the programme with sufficient accuracy.
- How to set up contracts with the right amount of risk and not stifle innovation.
- How to measure learning DFID has used Early Grade Reading Assessment (EGRA), Uwezo and national exams but there are issues with timing, whether the data will be captured at school level and calibration.
- How to set the target set as expected progress (given the baseline of students two years ahead) plus 0.2 standard deviations.
- What proportion of the funding should be PbR.
- Timing a PbR approach requires an additional six months for project design and contracting as detailed baselines have to be set and contracting detail has to be worked through.
- Thinking through the situations in which the funder should not pay, bearing in mind that, in DFID locations, there could easily be external shocks that could disrupt programme outcomes.

Potential

PbR is still being piloted, so it is too early for evidence-based conclusions to be drawn. DFID's experiences have shown there are a number of challenges with implementation; however, there is potential for PbR to focus programmes on improving learning outcomes and value for money.

A PbR approach should be considered in education when:

- Indicators can be defined and independently measured (author interview with Cockburn, March,
 2014) this can be more straightforward for some measures than for others.
- There is sufficient institutional capacity and control to deliver the intervention (author interview with Cockburn, March, 2014).
- Incentives need to be strengthened to improve performance.
- There is a good relationship between funder and service provider to make PbR work, with the service provider passing down the incentives to the lowest level.
- There is potential for process innovation.
- The context/environment is already open to PbR principles, as in Rwanda.
- It is more cost-effective when compared with other approaches.

Each PbR implementation must be tailored to the context. PbR is currently being used in education to incentivise the completion of secondary education. It could be applied to all education phases, as well as to any education programme where the learning outcomes can be measured and verified.

Key readings

- Evaluation of Payment By Results (PBR): Current Approaches, Future Needs Perrin
- An Introduction to Cash on Delivery Aid for Funders Perakis and Savedoff

5: Key and emerging issues

Although there is a wide range of non-traditional financing instruments, and there is a variety of sources of finance, there are some key issues that cut across many of these. We discuss these here, and suggest ways of addressing them in Section 6.

Communication and the role of the private sector

There seems to be confusion in the education sector about what non-traditional (or innovative) financing is, and how it involves the private sector. This could owe partly to the language used and the fact that it is still in its infancy. Discussion about the use of non-traditional financing instruments therefore gets caught up in an ideological debate about the role of the private sector in education, rather than one about how non-traditional financing can address key education issues. Non-traditional financing can involve both public and private funding and can support the whole education system.

Learning and evidence

Although some organisations (e.g. the Open Society Foundation) have played an important role in funding research and driving the thinking forward on non-traditional financing, and others (e.g. Social Finance) are building expertise in, or forming networks around, specific instruments across the development sector, non-traditional financing in education is still at the stage where a huge amount of learning needs to take place. Learning is hampered by a lack of evidence on the effectiveness of these non-traditional instruments in the education sector as so few have been implemented.

Involvement and ownership by developing countries

Many of the discussions about non-traditional financing happen in the US and Europe without sufficient involvement of developing countries. Recent experience has shown there is often enthusiasm at country level to try new approaches – from both government and financial institutions. Ministries of finance may well have experience of implementing non-traditional approaches in other sectors, and therefore have the expertise to advise ministries of education, but these discussions need to be brokered and involve civil society and other stakeholders to ensure all views are taken into account and to encourage transparency and accountability. Capacity building of financial intermediaries to help facilitate the piloting of some instruments may need to take place, but not at the expense of capacity building within the public sector.

Clarity on the 'investment opportunity' in education

Certain characteristics mean education's investment market is still very nascent: it is capital intensive and therefore difficult to scale; the vast majority of delivery takes place through the public rather than the private sector; educational outcomes can take a long time to deliver; and there is a great deal of

regulation. Many potential investors are unclear what the investment opportunity is, and even those who have explored it have not found many 'ready-to-go' investment opportunities with a financial return that serve the 'bottom of the pyramid'.

There is recognition that this owes to the trade-off between social and financial investment objectives. In reality, each organisation must decide where it aims to be on the 'impact-first to financial-first' continuum, and this will determine the type of investments it will make.

It is clear the education sector does not offer quick financial returns at the same time as reaching the most vulnerable; however, there are still some investment opportunities that can either directly or indirectly deliver impact over the long term. Some examples are listed below.

Financial-first:

 Higher-cost private delivery, but with a focus on access for lower-income students, for example the higher education sector; and student finance.

Impact-first:

- Low-cost private delivery at scale in areas with unmet need, for example early childhood education.
- Tools and services for the public or private education system, for example finance products for schools; technology devices; school management systems; school rating systems; curricula; and low-cost school infrastructure.

The question remains as to whether any of these can be scaled up to have maximum impact.

Delivering outcomes for those who need it

Given that some non-traditional financing instruments and sources are best suited for those parts of the education sector that produce a financial return, some argue they may not serve the most marginalised. However, this does not always need to be the case:

- There are many types of non-traditional financial instruments that do not need a financial return
 and can therefore be targeted at the most marginalised, for example SIBs and DIBs; debt swaps;
 DCDBs; solidarity levies; and debt buy-downs.
- Non-traditional financing mechanisms that involve PbR can actually enhance the outcomes
 delivered for the most marginalised by clearly linking the funding to outcomes.
- If some non-traditional financial instruments are more suited to sectors with a financial return, they could either cross-subsidise or free up traditional financing to focus on those that still need funding.

A clear, measurable issue to rally round

One of the reasons health has been so successful in raising funds from non-traditional financing is that it has focused on a small number of major issues and has been able to articulate what needs to be done to address them in an evidenced-based way that has attracted champions like the Bill and Melinda Gates Foundation. Institutional mechanisms for example the GAVI Alliance and the Global Fund, have been set up to coordinate expenditure on particular health issues in innovative ways to make maximum impact.

The education sector has failed to spotlight its key issues for champions to rally around; even the focus on learning outcomes does not have the same clarity on what needs to be done. The lack of consistency in measuring education impact has hampered this further. Although education has high-profile names such as Gordon Brown and Julia Gillard as political champions, it lacks the sole focus of a high net worth individual or major foundation to crowd funding in and drive innovation through non-traditional financing mechanisms in the way health has.

6: The way forward

What shows significant potential to work in the future and how can we evaluate success?

Instruments that may raise additional funding

As few non-traditional finance instruments have been implemented in the education sector, assessing their potential is difficult. However, we have considered the following evaluation criteria so as to make a very high-level assessment: impact on learning outcomes; equity; enabling governments to deliver on their responsibilities;²⁴ potential additional funds; sustainability and predictability of funding; innovation; efficiency; and ease of implementation.

None of the instruments evaluated looks set to make a significant dent in the financing gap yet. Their potential is most likely to be realised when they can leverage their particular 'value added', such as a focus on learning outcomes or innovation to address a specific education issue.

This assessment shows that, relative to other non-traditional finance instruments, SIBs/DIBs and debt buy-downs have the most potential, driven largely by their ability to link funding to learning outcomes, to support governments to deliver their responsibilities, to provide predictable funding and to enable innovation. The instruments with the potential to raise the most additional funds are bonds, which can access large sources of untapped funding. The potential for social impact investing and blended finance for the private sector lies in driving innovation and stimulating education markets for the poor, with the hope that some innovations can be adopted by the public sector. All of the above instruments have extremely limited evidence, however, and many issues need to be addressed (as outlined in Section 5) before their potential can be fully evaluated.

Note: these are listed in order of *relative* potential. There is insufficient information available to give a view on *absolute* potential.

²⁴ This criterion was proposed by Samoff and Irving (2014).

Table 6: Assessment of non-traditional financing instruments that may raise additional funding

Instrument	Definition	Summary assessment of potential	To be considered when	Example education issues that could be addressed	Sources of finance
SIB/DIBs	Forms of outcome-based contracts whereby the public sector or donor (in a DIB) pays a service provider for the outcomes delivered by a specific intervention or set of interventions (Filipp and Lerer, 2013). Private investment, which can be philanthropic or commercial, is used to fund the intervention, with returns made on the basis of improved social outcomes (www.socialfinance.org.uk/).	Strong link to learning outcomes across education system. Can be targeted to address equity. Can foster innovation as allow flexibility in delivery. Can encourage efficiency as focus on outcomes. Can provide upfront and predictable funding from new sources. Very limited experience of SIBs. No DIBs have been implemented. Complex and expensive to set up and manage. Uncertain fundraising potential.	Prevention could lead to cost savings for the government at a later date. Upfront funding is needed. There is a clearly defined proposition with clear measurable outcomes. Innovation in delivery is needed. Proven model needs to be scaled. The government or a donor will pay for ongoing costs.	Expansion of early childhood education and secondary education. Girls' education.	Private commercial Foundation Government Multi/bilateral NGO
Blended finance for the public sector – debt buy-downs	A third party buys down all, or a part of, either or both of the interest and the principal of a loan between a country and a lending organisation, thereby releasing the borrowing country from all or some of its future repayment obligations (R4D, 2013).	Triggers can be based on learning outcomes or equity. Provides sustainable and predictable funding over the term as long as triggers are met. Can enable governments to improve education systems. Risk that countries will increase their indebtedness. Ease of implementation is unknown.	Countries on both sides of IDA/IBRD ²⁵ graduation threshold that still have major basic education challenges and would not otherwise borrow e.g. Angola, Bangladesh, India, Nigeria, Pakistan and Sri Lanka (R4D, 2013). LICs that are not creditworthy if bought-down debt could provide increased grant or near-grant funding (R4D, 2013)	Major basic education issues in the public sector with measurable outcomes.	Development banks Multi/bilateral Government
Blended finance for the low-cost private sector	Combination of grant and loan or equity funding to reduce the financial risk of an investment.	Uses traditional funding to leverage additional funds and encourages innovation. Could lead to an indirect improvement in learning outcomes Impact is limited to parts of education sector	Education businesses serving low- income customers that need initial subsidisation to reach the scale to attract social impact investment.	Providing tools or services to improve quality or effectiveness across the education	Multi/bilateral Private commercial Private impact

The IDA and the IBRD are part of the World Bank. The IDA provides concessional loans and grants to LICs whereas the IBRD provides loans and advice to middle-income and credit-worthy poor countries: http://www.worldbank.org/ida/what-is-ida.html

Instrument	Definition	Summary assessment of potential	To be considered when	Example education issues that could be addressed	Sources of finance
		with a potential revenue stream, e.g. for- profit education businesses that may not serve the most vulnerable (although could be replicated in the public sector). Limited experience in education. Agreeing who bears the risk could make implementation quite complex.		system Stimulating education markets for the poor where the public sector struggles to deliver e.g. early childhood education, youth training	Foundation
Social impact investing (outside of SIBs/DIBs)	Investing with the intention 'to create positive impact beyond financial return' (O'Donohoe et al., 2010).	Potential to attract new funding to education. Fosters innovation within the education system. Can drive efficiencies owing to goal of financial sustainability or return. Although it creates focus on impact, this is not necessarily on learning outcomes. Impact is limited to parts of the education sector with a potential revenue stream, e.g. for-profit education businesses that may not serve the most vulnerable (although they could be replicated in the public sector). Currently, there are few 'ready-to-go' investments.	Education businesses serving low-income customers and delivering social impact and some form of financial sustainability or return that need some investment to scale.	Providing tools or services to improve quality or effectiveness of education system. Stimulating education markets for the poor where public sector is struggling to deliver, e.g. early childhood education, youth training. Enabling access to higher education for those with lower incomes.	Private commercial Private impact Foundation

Instrument	Definition	Summary assessment of potential	To be considered when	Example education issues that could be addressed	Sources of finance
DCDBs	Created when the 'fiscal space' created from the debt swap is used to issue a bond that is sold in local currency on the local capital market, which would then be invested in by investors such as local pension funds (UNESCO, 2011).	Potential to leverage the \$6 trillion in private assets in developing countries (Bond, 2013). Used to fund public sector. Can address equity. Implementation costs are low. Could provide sustainable and predictable funding. Impact is limited to countries with outstanding debt and that have a financial market sophisticated enough to issue bonds.	 Available debt for conversion Available creditor(s) ready to cancel debt Successful legal approval of new type of debt conversion Sufficient monetary credibility to achieve acceptable rates of interest Relatively mature bond market (IFF, 2013) Need for large financial outlay Would suit LICs (Kenya, Bangladesh) and MICs (India, Ghana, Pakistan) (Bond, 2012). 	Expansion of early childhood or secondary education, or primary where that need has yet to be met.	Multi/bilateral Government National finance institutions
Diaspora bonds	A debt instrument issued by a country to raise financing from its overseas diaspora (Ketkar and Ratha, 2011).	Potential to access \$30 billion of diaspora savings from LICs (Ratha and Mohapatra, 2011), could provide sustainable and predictable funding. Needs a revenue stream to make repayments to the bondholders, likely this would need to be guaranteed by donors. No experience in education.	Countries have: • A large diaspora community • Relatively mature bond market A revenue stream to repay the bondholder (Ketkar and Ratha, 2011).	Provision of higher education.	Diaspora Government Multi/bilateral
National bonds	A bond is an investment in a debt, whereby the investor receives a fixed return on the principal and interest of the underlying security (Filipp and Lerer, 2013). Bonds can be secured on the basis of any future revenue streams.	Potential to leverage the \$6 trillion (Bond, 2013) in private assets in developing countries and would provide sustainable and predictable funding. Would need income stream to repay bondholders so unlikely to target most marginalised. Implementation possible only where financial market sophisticated enough to issue bonds – may need DFI guarantee.	Countries have: Ability to generate a future revenue stream Relatively mature bond market Credit-worthiness or a guarantor Up front capital outlay is required	Provision of higher education	Private domestic Government Private commercial

Instrument	Definition	Summary assessment of potential	To be considered when	Example education issues that could be addressed	Sources of finance
Access to finance for schools	Provision of loans to (predominantly) LCPSs.	Can provide additional funds at school level to growing LCPSs, which could improve learning outcomes or efficiencies if training on improving quality or school management is provided. Could be implemented through existing microfinance institutions. Amount relatively small. Most vulnerable students unlikely to be catered for.	There is a large LCPS market that needs access to finance. Microfinance institutions exist.	Improving the sustainability and quality of LCPSs.	Private commercial Private impact Foundation NGO
Global solidarity levies	Aims to 'levy global economic activity to pay for global public goods' (Taskforce on International Transactions and Development, 2010.	Can access new sources of funds for education ecosystem (FTT is estimated to raise €30 billion per year (European Commisson, 2014)) but yet to be implemented. Uncertain what proportion may be available for education, how it would be used and whether there could be a direct link to learning outcomes or equity.	An end-user or consumer is willing to pay a small tax on a high-volume product or service.	Any issue.	Citizen contributions Private commercial
Debt swaps	A form of debt relief in which the creditor forgives debt on the condition the debtor makes available a specified amount of local currency to be used for specific developmental purposes (Task Force on Innovative Financing for Education, 2012)	Potential to raise new funding that would be predictable and able to be used for public education systems. Limited to countries with debt left to swap, would need to ensure funds are used effectively to deliver improved learning outcomes.	Available debt for conversion. Available creditor(s) ready to cancel debt.	Any issue.	Multi/bilateral Government
Access to finance for parents/students	Provision of loans or insurance specifically for education, to parents or students.	Relatively straight-forward to implement through existing loan companies. Will only raise small amounts of funding and an ethical issue with lending parents money to pay for education when it should be free	Higher education is available but unaffordable. Parents struggling to meet education costs.	Equitable access to higher education.	Private commercial NGOs Students Parents

Source: Authors' own assessment.

Mechanisms to spend funds more effectively

Mechanisms to spend funds more effectively have been assessed against the following criteria: impact on learning outcomes; equity; enabling governments to deliver on their responsibilities; innovation; and efficiency and ease of implementation. PbR's potential stems from its ability to focus programmes on improving educational outcomes, working systemically across education and providing value for money. PPPs are considered to have potential, as, if designed and implemented well, they can open up the education system so children can access free, quality education regardless of who delivers it. With both of these, though, evidence is currently inconclusive as to whether they work, so piloting or implementation must take a learning approach.

Note: mechanisms are listed in order of potential (high to low). As above, these show relative rather than absolute potential.

Table 7: Assessment of non-traditional financing mechanisms to make funding go further

Mechanism	Definition	Summary assessment of potential	To be considered when	Example education issues that could be addressed	Source of finance
PbR	Payment for a programme or service based on predefined and independently verified results.	Drives a focus on outcomes that could be for learning or equity. Can be applied to government or non-state implementers. Can lead to innovation given flexibility in delivery and efficiencies if structured effectively. Complex and time consuming to implement effectively.	Indicators can be defined and independently measured. Context/environment already open to PbR principles. Focus on outcomes would improve results. Good relationship between partners. Implementer has capacity for PbR.	Issues where results can be measured within a practical timescale, e.g. early grade reading, progress improvements within primary, secondary schooling.	Multi/bilateral Foundation Private commercial Private impact
PPPs	Government funded but privately delivered education (Patrinos et al., 2009).	Can provide access free at point of use. Can drive innovation and efficiencies through autonomy, management effectiveness and competition (Patrinos et al., 2009). Enables government to still be responsible for education delivery.	Rapid expansion in access required but public delivery constraints. There is a low-cost private sector that can deliver quality education on behalf of government.	Issues where the public sector needs support in delivery, e.g. early childhood, post-primary.	Multi/bilateral Foundation NGO Government Private commercial

Mechanism	Definition	Summary assessment of potential	To be considered when	Example education issues that could be addressed	Source of finance
		Evidence mixed on ability to improve learning outcomes and address equity – have to be regulated and incentivised effectively (Patrinos et al., 2009).	Government able to regulate PPPs effectively. Different approach needed for certain group.		Private impact
Vouchers	Provide parents greater choice on where to send their child to school and access to school to those children who might not be able to otherwise afford it.	Can improve access when implemented effectively. Can lead to an improvement in learning outcomes (but not always) (Agrist et al., 2002; 2006). Can be cost effective (Morgan et al., 2013; Muralidharan and Sundararaman, 2013). Not always equitable. Can lead to 'cream skimming ²⁶ and segregation (Morgan et al., 2013). Rely on availability of LCPSs.	Public sector does not have enough school places for number of students. There are private schools that can deliver appropriate quality in a location that can offer choice (vouchers can also be used in public sector to encourage choice). Certain socioeconomic groups need to be targeted.	Locations with public school supply constraints and a large supply of LCPSs.	Multi/bilateral Foundation NGO Government
Cash transfers	Give cash to poor households. UCTs provide cash with no strings attached. CCTs provide cash if certain conditions are fulfilled (Baird et al., 2013).	When conditional, can significantly improve access and equity (Baird et al., 2013). Relatively straightforward to implement. Small (at best) impact on learning outcomes (Baird et al., 2013). Rely on sufficient supply of schools. Do not drive innovation or efficiency.	Sufficient schools for children to attend, but low enrolment and attendance owing to financial constraints. No choice of schools. Certain socioeconomic groups need to be targeted.	To provide access to the most marginalised.	Multi/bilateral NGO Government

Source: Authors' own assessment.

²⁶ Selection of the most able pupils.

What is needed to make instruments work better/be adopted more widely?

Section 5 raised key issues that need to be addressed to adopt those instruments with potential more widely, and to make them work better. This section makes suggestions for what is needed to do that across the instruments.

The first phase needs to be focused on: selecting one or two specific education issues; developing better understanding of the instruments and the contexts in which they may work to understand what the most promising instruments may be; forming multiple stakeholder collaborations around specific opportunities that address those issues; piloting; and capturing learning and evidence.

- Find one or two evidence-based issues that can focus the discussion on how non-traditional
 instruments can address those specific issues. Potential examples are girls' education, early
 childhood education or early grade reading or Maths, which can be supported by evidence, have
 clear measurable outcomes and lead to an improvement in learning outcomes.
- Convening of multiple stakeholders from education, finance, government, corporate and civil
 society sectors at global, regional and national levels to develop a better understanding of what
 non-traditional financing, is and how it can be used to address education issues. The Brookings
 Institution started high-level discussions with its symposium in February 2014.
- Collaborations around specific opportunities to ensure pilots are designed robustly with inputs from different perspectives, that implementation considerations are worked through and that buy-in is achieved.
- Pilots and demonstration projects to learn what works and what does not in terms of the
 efficiency and effectiveness of the instrument and its implementation challenges.
- Impact evaluations and evidence capture need to be designed and implemented to robustly
 evaluate pilots.
- **Knowledge sharing**, perhaps in the form of a knowledge hub and learning networks to capture and share progress and evidence, even in this initial stage. This could be housed in an existing entity like the Centre for Education Innovations or the GPE.
- Launch of an incubation fund to grow a social impact investment pipeline.

Following that initial phase, there is likely to be a need for greater coordination, profile raising and ultimately scaling of the instruments that work. This will therefore need:

 Coordination and brokering of opportunities through a centre of expertise for non-traditional financing that can continue to capture evidence and learning but also commission research, provide advisory services, broker collaboration opportunities, manage funds to pilot new approaches and facilitate the scaling-up of proven instruments, specifically for the education sector. This could be housed in an existing entity.

- High-level support and advocacy by a high-profile champion (either an individual or a foundation) to crowd in funding around a particular issue and the proven instrument to address it.
- Intermediary organisations that may need to be established with very clear remits and without
 duplicating existing structures, for example financial intermediary institutions to raise funds, as in
 health (IFFim, issue bonds or GAVI Alliance disperse funds). The vision and mandate of these in
 health has had a huge impact.
- **Scaling-up** once the instrument is proven, so as to make the greatest impact. Barriers to this will have to be worked through and learning captured.

A number of risks will need to be mitigated:

- Lack of 'buy-in' and willingness to pilot non-traditional instruments by key stakeholders, such as national governments, donors and investors.
- Misconceptions about what non-traditional financing is, and what it aims to do especially suspicions around the role of the private sector.
- Failure to pilot any successful interventions using non-traditional instruments that show the
 potential to scale up or to work in difficult environments such as in conflict, where much
 additional funding is needed.
- Failure to obtain high-level international political backing or champions.
- Failure to raise sufficient funds to fill the financing gap through either traditional or non-traditional means.

What are the appropriate roles for different stakeholders to play?

Multiple stakeholders need to be involved in moving non-traditional financing from theory into practice, and in evaluating the results. Table 8 summarises the key roles for each stakeholder.

Table 8: Role for different stakeholders in non-traditional financing

Stakeholder	Role
• Provide funding for research, pilots, rigorous evaluations, longitudinal evidence collection knowledge sharing	
	Work with country-level policymakers to try non-traditional approaches where appropriate, and provide technical assistance and capacity building to help with the piloting and evaluation

Stakeholder	Role
	Support the development of sound educational management information systems so accurate data can be used as a basis for evaluations
	 Support the agreement of learning metrics so there is a consistent approach to measuring education impact and support the agreement of one or two issues to focus on
	Provide concessionary funding or guarantees for relevant instruments, e.g. blended finance, bonds
	Encourage PbR approaches, greater transparency in cost effectiveness and accountability
	Enter partnerships with non-traditional sources of finance, being open to different approaches
	Fund the scaling-up of instruments that work
	Continue to stress the importance of traditional education financing
	Proactively attract high-level support
NGOs	Encourage multiple stakeholders to take part in discussions
	Advocate for addressing the needs of the most marginalised
	 Pilot non-traditional financing instruments where NGOs play an implementation role, e.g. SIBs and DIBs
	Take an outcome-orientated approach
Foundations	Bear the initial risk when piloting new instruments and making social impact investments
	Fund pilots, rigorous evaluations and the collection of evidence
	Fund or provide incubation of early stage education businesses for the poor
	Coordinate funding
	Fund the building of a new ecosystem
Governments	Greater collaboration between ministries of finance and ministries of education to discuss the potential of non-traditional financing, especially the issuing of bonds
	Encourage multi-stakeholder dialogue and involvement
	Invest in sound education management information systems
	Pilot new approaches and contribute to evaluations
	 Adopt mechanisms or innovations that have been proven – either at scale in the public sector or through PPPs
	Maintain or increase traditional funding for education
Private sector	Take part in multi-sectoral discussions to clarify the role of the private sector
	Collaborate with others to implement pilots and collect evidence
	Invest in education not just for profit
	Help the education sector understand its potential for investment
	Invest in education businesses that serve the poor and share information on impact
	Contribute to raising the profile of education so it can attract additional funding

TOPIC GUIDE

Stakeholder	Role
Civil society	 Contribute to discussions on how non-traditional financing can address education issues Monitor the needs of the most marginalised to see if they are being addressed Advocate for transparency and accountability
Think-tanks	 Drive the focus on one or two issues Convene multi-stakeholder discussions Contribute thought leadership, undertake research and facilitate knowledge sharing Proactively attract high-level support

Source: Authors' own analysis.

7: Conclusion

Aid to education is declining, public spending on education is falling short and a \$38 billion funding gap to provide good-quality basic and lower-secondary education for all by 2015 remains (UNESCO, 2014). Some organisations have started to explore non-traditional financing to see if it can raise additional funding or spend funds more effectively, and the education sector is still at a very early stage in this. Some non-traditional financing instruments with a longer history in education, for example cash transfers, vouchers and PPPs, have shown signs of success in certain contexts, but there are still many gaps in evidence, especially in Africa. Some mechanisms have only recently been implemented in education, for example social impact investing and PbR, and therefore cannot yet demonstrate when and how they may work most effectively. Other instruments have yet to be implemented in education at all, for example DCDBs and diaspora bonds.

Although non-traditional financing in development has grown to an estimated \$50 billion a year (Burnett and Bermingham, 2010), our research shows the education sector is not currently receiving a very large share of this, and, although impact investing in primary education is estimated to grow to \$10 billion per year (O'Donohoe et al., 2010), we are a long way off from seeing that level of funds raised. There is potential to raise some funds over the long term though; instruments such as bonds have the potential to leverage untapped resources, such as domestically or from diaspora; buy-downs and DCDBs can harness savings from reduced interest payments and social impact investing can attract private sector finance that is relatively new to the education sector.

The potential of non-traditional financing lies not just in raising additional funding, but also in spending resources more effectively and finding novel approaches to addressing education issues. The most potential can be realised when an instrument is used where it can add most value to an education issue, for example using social impact investing where there is a need for innovation; blended finance to catalyse the education market for the poor to address quality in the LCPS sector; PbR to promote more effective use of resources and a focus on learning outcomes; and PPPs to open up the education system to deliver quality education to those who cannot currently access it for free. The ultimate goal is to enable governments to improve education for all. To reach scale, governments will either need to implement proven non-traditional instruments or adopt proven innovations in the public system.

Non-traditional financing is not a solution for all education issues, and there are many challenges. For example, there is a lack of evidence about what works; there is not always a strong link between funding and learning outcomes; the investment opportunity is unclear; and the most marginalised may not always be reached. There may also be undesirable consequences, for example bonds may increase indebtedness at a time when countries are struggling to reduce their debt; tapping migrants' remittances may divert money away from education (Samoff and Irving, 2014); and focusing time and effort on piloting

instruments that cannot raise sufficient funding to close the funding gap may divert effort from more sustainable sources of domestic funding. There are also a number of implementation challenges to overcome, such as high transaction costs; an unfavourable economic climate; and competition with other sectors.

Non-traditional financing should not work in isolation from traditional financing. If non-traditional financing focuses on areas where it can add most value, traditional financing can then focus on the most marginalised beneficiaries and issues that non-traditional financing cannot address.

To move forward, we need to move non-traditional financing from theory into practice. The first phase of this needs to be focused on specific education issues; developing better understanding of the instruments and how they can address those issues; engaging multiple stakeholders; piloting and demonstrating instruments; and capturing learning and evidence. Assuming evidence is positive, there will be a need for greater coordination, profile raising and ultimately scaling of the instruments that work.

Given that these instruments are generally new or untested, any use of non-traditional financing is unlikely to result in quick wins. It will take time and resources to evaluate what works and what has true potential. It is also unlikely to be able to fill the entire funding gap or address all education issues. Therefore, the education sector must continue to advocate for traditional finance to be raised through domestic revenue via an increased allocation to education and the strengthening of tax systems (UNESCO, 2014); this will be the most sustainable source of education funding, and will enable developing countries to have greater ownership of their education systems (Samoff and Irving, 2014). The education sector must also advocate for countries to meet their overseas aid commitments and reach the target of 0.7% of gross national product (GNP), despite the reversing trend, so the global commitment to EFA can be supported by a global commitment to funding (Samoff and Irving, 2014).

References

- Agrist, J., Bettinger, E., King, E., and Kremer, M. (2002) 'Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment'. American Economic Review 92(5): 1535-58.
- Agrist, J., Bettinger, E. and Kremer, M. (2006) 'Long-Term Consequences of Secondary School Vouchers: Evidence from Administrative Records in Colombia'. American Economic Review 96(3): 847-862.
- Allcott, H. and Ortega, D.E. (2007) 'The Performance of Decentralized School Systems: Evidence from Fe y Alegría in Venezuela'. Conference on Public-Private Partnerships in Education, Washington DC, 7-8 June.
- Ansari, A. (2012) 'Educational Voucher Scheme in Lahore: Serving the Underserved'. New York: NCSPE.
- Arenas, A. (2004) 'Privatization and Vouchers in Colombia and Chile'. International Review of Education 50: 370-395.
- ASER (Annual Status of Education Report) Pakistan (2013) 'Annual Status of Education Report: Pakistan (National)'.
 Lahore: ASER.
- Baird, S., Ferreira, F.H.G., Özler, B. and Woolcock, M. (2013) 'Relative Effectiveness of Conditional and Unconditional Cash Transfers for Schooling Outcomes in Developing Countries: A Systematic Review'. *Campbell Systematic Reviews* 8.
- Barber, M. (2013) 'The Good News from Pakistan: How a Revolutionary New Approach to Education Reform in Punjab Shows the Way Forward for Pakistan and Development Aid Everywhere'. London: British Council.
- Barrera-Osorio, F. (2007) 'The Impact of Private Provision of Public Education: Empirical Evidence from Bogota's Concession Schools'. Policy Research Working Paper 4121. Washington, DC: World Bank.
- Barrera-Osorio, F. and Raju, D. (2011) 'Evaluating Public Per-Student Subsidies to Low-Cost Private Schools: Regression-Discontinuity Evidence from Pakistan'. Policy Research Working Paper. Washington, DC: World Bank.
- Barrera-Osorio, F., Bertrand, M., Linden, L.L. and Perez-Calle, F. (2011) 'Improving the Design of Conditional Transfer Programs: Evidence from a Randomized Education Experiment in Colombia'. *American Economic Journal: Applied Economics* 3(2): 167-195.
- Bermingham, D. and Burnett, N. (2012) 'Innovative Financing for Education: Moving Forward'. International Expert Report. Leading Group. Education Task Force.
- Birdsall, N. and Savedoff, W.D. (2010) 'Cash on Delivery: A New Approach to Foreign Aid'. Washington, DC: CGD.
- Bond, D. (2012) 'Debt Conversion Development Bonds: Mobilizing Domestic Savings to Fund Development'. Paris: UNESCO.
- Bond, D. (2013) 'The Future of Education Financing: Mobilizing Domestic Savings?' Geneva: Norrag.
- Brans, B. (2011) 'Public-Private Partnerships in Education. Analyzing PPPs as a Policy Tool for Universal Secondary Education in Uganda'. Draft.
- Brookings Institute (2013) 'New Ideas to Scale Up and Finance Global Education. Panel 3'. https://www.youtube.com/watch?v=yOAgk7xYuTE#action=share (accessed 1 March 2014).
- Bugg-Levine, A and Emerson, J. (2011) 'Impact Investing: Transforming How We Make Money while Making a Difference'. Innovations. SOCAP 11: Impact Investing Special Edition. Cambridge, MA: MIT Press.
- Burnett, N. (2013) 'Innovative Financing in Education: Is it Over Before it Began? No, We Just Need to Pivot Our Thinking'.
 Geneva: Norrag.
- Burnett, N. and Bermingham, D. (2010) 'Innovative Education Financing'. ESP Working Paper. Results for Development. New York: Open Society Institute.
- Burnett, N. Elias, N. and Hecht, R. (2013) 'Final Report on Buying Down Loans for Education to the Global Partnership for Education'. Washington, DC: Results for Development Institute.
- Businge, C. (2011) 'USE Students Enrolment up by 77%'. New Vision, 22 June.
- Camfed Ghana (2012) 'What Works in Girls' Education in Ghana: A Critical Review of the Ghanaian and International Literature'. Accra: Camfed Ghana.
- CDE (Center for Development and Enterprise) (2013) 'The Missing Sector: Contract Schools: International Experience and South African prospects'. Johannesburg: CDE.
- CGD (Center for Global Development) and Social Finance (2013) 'Investing in Social Outcomes: Development Impact Bonds'. Report of the Development Impact Bond Working Group. Washington, DC: CGD.
- Chaudhury, N. and Parajuli, D. (2008) 'Conditional Cash Transfers and Female Schooling: The Impact of the Female School Stipend Programme on Public School Enrolments in Punjab, Pakistan'. *Applied Economics* 1(19): 1-19.
- Clist, P. and Verschoor, A. (2014) 'The Conceptual Basis of Payments by Results'. London: DFID.
- Dalberg Research (2013) 'Impact Investing in Education: An Overview of the Current Landscape'. Washington, DC: Dalberg Research.
- Devereux, S. (2009) 'Cash Transfers: To Condition or Not to Condition'. Poverty Insights 80, December.
- DfE (Department for Education) (2013) 'Academies Annual Report: Academic Year 2011/12'. London: DfE.
- DFID (Department for International Development) (2013) 'Multilateral Aid Review: Global Alliance for Vaccines and Immunisation (GAVI)'. Policy Paper. London: DFID.

- DFID (Department for International Development) (2013) 'RBA Annual Review: Pilot Project of Results-Based Aid (RBA) in Education in Ethiopia'
- DFID (Department for International Development) (n.d.a) 'Access to Finance for Low Cost Private Schools'. Information Note. London: DFID.
- DFID (Department for International Development) (n.d.b) 'Developing Effective Private Education Nigeria'. Business
 Case and Intervention Summary. London: DFID.
- Disley, E. and Rubin, J. (2014) 'Phase 2 Report from the Payment by Results Social Impact Bond Pilot at HMP Peterborough'. Ministry of Justice Analytical Series. London: Rand Europe.
- Disley, E., Rubin, J., Scraggs, E., Burrowes, N., and Culley, D.M. (2011) 'Lessons Learned from the Planning and Early Implementation of the Social Impact Bond at HMP Peterborough'. London: UK Government.
- Dixon, P. (2013) 'The Parting of the Veil Low-Cost Private Schools the Evidence', in P. Dixon (ed.) *International Aid and Private Schools for the Poor: Smiles, Miracles and Markets*. Cheltenham: Edward Elgar.
- Douste-Blazy, P. (2014) speaking at the Brookings Symposium on Education Financing
- Durston, S. (2014) 'Innovative Financing: The Need for More than Finance'. Geneva: Norrag.
- ECOSOC. (2008) "Trends in South-South and Triangular Development Co-operation: background study for the Development Co-operation Forum".
- Fatunla, D.M. (2013) 'Diaspora Bonds: New Emerging Market Capital. Voices: Financing Social Change'. http://voices.mckinseyonsociety.com/diaspora-bonds-a-new-source-of-capital-for-emerging-markets/
- Ferrer, J.N. and Behrens, A. (2011) 'Innovative Approaches to EU Blending Mechanisms for Development Finance'.
 Special Report. Brussels: CEPS.
- Field, S. Muczera, M. and Pont, B. (2007) 'No More Failures: Ten Steps to Equity in Education'. OECD Education Working Paper.
- Figlio, D.N. and Hart, C.M.D. (2010) 'Competitive Effects of Means-Tested School Vouchers'. Working Paper 16056. Cambridge, MA: NBER.
- Filipp, R. (2014) speaking at the Brookings Symposium on Education Financing
- Filipp, R. and Lerer, L. (2013) 'Innovative Financing for Global Education'. Education Support Program Working Paper 58. Baden: Innovative Finance Foundation.
- Filmer, D. and Shady, N. (2006) 'Getting Girls into School: Evidence from a Scholarship Program in Cambodia'. Policy Research Working Paper 3910. Washington, DC: World Bank.
- Fiszbein, A., Schady, N.R. and Ferreira, F.H.G. (2009) 'Conditional Cash Transfers: Reducing Present and Future Poverty'. Washington, DC: World Bank.
- Goldman Sachs, J.B. Pritzker and United Way of Salt Lake (2014) 'The Utah High Quality Preschool Program'. Factsheet.
- GPE (Global Partnership for Education) (2013a) 'Results for Learning Report'. GPE.
- GPE (Global Partnership for Education) (2013b) 'Background for the GPE Replenishment Strategy Meeting'. Education Financing Brief. GPE.
- GPOBA (Global Partnership on Output-Based Aid) (2012) 'Annual Report 2012'. Washington, DC: East Meets West Foundation
- GPOBA (Global Partnership on Output-Based Aid) (2014) 'Analysing the Use of Output-Based Aid (OBA) for Education Sector Projects in Developing Countries'. Concept Note.
- Grosh, M., Andrews, C., Quinta, R. and Rodriguez, C. (2011) 'Assessing Safety Net Readiness in Response to Food Price Volatility'. Social Protection and Labor Discussion Paper 1118. Washington, DC: World Bank.
- Haq, A. and Ali, K. (2014) 'Financing Low Cost Private Schools (LCPS) through Microfinance'. MicroNOTE. Islamabad: Pakistan Microfinance Network.
- Härmä, J. (2011) 'Lagos Private School Census 2010'. Lagos: ESSPIN.
- Hughes, J. and Scherer, J. (2014) 'Foundations for Social Impact Bonds: How and Why Philanthropy is Catalyzing the Development of a New Market'. New York: Social Finance US.
- IFC (International Finance Corporation) (2010) 'Education Investment Guide: A Guide for Investors in Private Education in Emerging Markets'. Washington, DC: IFC.
- IFC (International Finance Corporation) (2011) 'Africa Schools Program Progress Report. July to December 2011'.
 Washington, DC: IFC.
- IFC (International Finance Corporation) (2013) 'Summary of IFC's Investment in Education by Regions'. Washington, DC:
 IFC.
- ITAD (2012) 'UNITAID 5 Year Evaluation: Summary'
- Ketkar, S. and Ratha, D. (2011) 'Diaspora Bonds for Funding Education'. Migration Letters 8(2): 153-172.
- Khandker, S., Pitt, M. and Fuwa, N. (2003) 'Subsidy to Promote Girls' Secondary Education: The Female Stipend Program in Bangladesh'. Munich: MPRA.
- Kremer, M., Miguel, E., and Thornton, R. (2009) 'Incentives to Learn'. Review of Economics and Statistics 91(3): 437-456.
- Laroque, N. (2008) 'Public-Private Partnerships in Basic Education: An International Review'. London: CfBT Education
 Trust.

- Leading Group on Innovative Financing for Development (2014) 'Classification of Existing Instruments of Innovative Financing'. Working Paper.
- Loder, J. Rocyn Jones, G. and Norman, W. (2013) 'Social Investment in Education'. London: The Young Foundation, Big Society Capital, Impetus – The Private Equity Foundation.
- Malik, A.B. (2010) 'Public-Private Partnerships in Education: Lessons Learned from the Punjab Education Foundation'.
 Manila: ADB.
- McLoughlin, C. (2014) 'Low-Cost Private Schools: Evidence, Approaches and Emerging Issues'. Topic Guide. London: EPS PEAKS.
- Mealla, E.P. (2007) Mechanisms of debt swap for education: Introduction for social organizations. Buenos Aires: Fundación SES.
- Morgan C., Petrosino, A. and Fronius, T. (2013) 'A Systematic Review of the Evidence of the Impact of School Voucher Programmes in Developing Countries'. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Morton, J.E and Kimball, A. (2013) 'The Case for Capital Alignment to Drive Development Outcomes'. The Brookings Blum Roundtable, August.
- Mulgan, G., Reeder, N. Aylott, M. and Bo'sher, L. (2011) 'Social Impact Investment: The Challenge and Opportunity of Social Impact Bonds'. London: The Young Foundation.
- Muralidharan, K. and Sundararaman, V. (2013) 'The Aggregate Effect of School Choice: Evidence from a 2-Stage Experiment in India'. Working Paper 19441. Cambridge, MA: NBER.
- Mundy, K. and Menashy, F. (2012) 'The World Bank, International Finance Corporation, and Private Sector Participation in Basic Education: Examining the Education Sector Strategy 2020'. *International Perspectives on Education and Society* 16: 113-131.
- Ndikumana, L. (2004) 'Additionality of Debt Relief and Debt Forgiveness, and Implications for Future Volumes of Official Assistance'. International Review of Economics & Finance 13(3): 325-340.
- Núñez-Ferrer, J. and Behrens, A. (2011) 'Approaches to EU Blending Mechanisms for Development Finance'. Brussels: CFPS.
- ODI (Overseas Development Institute) (2011) 'EU Blending Facilities: Implications for Future Governance Options'. London: ODI.
- O'Donohoe, N. Leijonhufvud, C. Saltuk, Y. Bugg-Levine, A. and Brandenburg, M. (2010) 'Impact Investments: An Emerging Asset Class'. New York: J.P. Morgan Global Research.
- OECD. (2009b) Development Co-operation Report 2009. Paris, OECD Publishing.
- Oketch, M., Mutisya, M., Ngware, M. and Ezeh, A.C. (2010) 'Why Are There Proportionately More Poor Pupils Enrolled in Non-State Schools in Urban Kenya in Spite of FPE Policy?' *International Journal of Educational Development* 30(1): 23-32
- Patel, A. (2014) speaking at the Brookings Symposium on Education Financing
- Patrinos, H.A., Barrera-Osorio, F. and Guáqueta, J. (2009) 'The Role and Impact of Public-Private Partnerships in Education'. Washington, DC: World Bank.
- Perakis, R. and Savedoff, W. (2014) 'An Introduction to Cash on Delivery Aid for Funders'. Note. Washington, DC: CGD.
- Pereira, J. and Villota, C. (2012) 'Hitting the Target? Evaluating the Effectiveness of Results-based Approaches to Aid'. Brussels: Eurodad.
- Perrin, B. (2013) 'Evaluation of Payments by Results: Current Approaches, Future Needs'. Working Paper 39. London:
- Pratham (2013) 'Annual Status of Education Report: India (Rural)'. New Delhi: Pratham.
- Ratha, D. and Mohapatra, S. (2011) 'Preliminary Estimates of Diaspora Savings'. Migration and Development Brief 14.
 Washington, DC: World Bank.
- R4D (Results for Development Institute) (2013) 'Final Report on Buying Down Loans for Education to the Global Partnership for Education'. Washington, DC: R4D.
- Robinson, M. (2013) 'Rwanda Education Development Impact Bond: A Scoping Report for DFID Rwanda'. Unpublished.
- Rose, P. and Steer, L. (2013) 'Financing for Global Education Opportunities for Multilateral Action'. Washington, DC:
 Center for Universal Education at the Brookings Institution.
- Saavedra, J. and Garcia, S. (2013) 'Educational Impacts and Cost-Effectiveness of Conditional Cash Transfer Programs in Developing Countries: A Meta-Analysis'. Working Paper 2013-007. New York: CESR.
- Samoff, J. and Irving, M. (2014) 'Education for All: A Global Commitment Without Funding'. ESP Working Paper Series 60.
 New York: Open Society Foundations.
- Sirull, B. (2014) 'It's the Year of Impact Investing: What Does that Mean for Foundations?' PND Philanthropy News Digest, February.
- Smith Ellison, C. (2013) 'The Future of Innovative Financing for Education in Fragility'. Geneva: Norrag.
- Srivastava, P. and Oh, S.A. (2010) 'Private Foundations, Philanthropy, and Partnership in Education Development: Mapping the Terrain'. *International Journal of Educational Development* 30: 460-471.

- Steer, L. (2014) 'Seven Facts about Global Education Financing'. Washington, DC: Brookings. Education + Development.
- Steer, L. and Wathne, C. (2009) 'Achieving Universal Basic Education: Constraints and Opportunities in Donor Financing. Workshop "Financing Universal Basic Education: Where Are We, What Next?' London: ODI.
- Task Force on Innovative Financing for Education (2010) "2+3=8 Innovating in Financing Education'. Report of the Writing Committee of the Task Force on Innovative Financing for Education.
- Task Force on Innovative Financing for Education (2012) 'Innovative Financing for Education: Moving Forward.
 International Expert Report'. Leading Group on Innovative Financing for Development.
- Task Force on International Transactions and Development (2010) 'Globalizing Solidarity: The Case for Financial Levies'.
 Report of the Committee of Experts of the Leading Group on Innovative Financing for Development.
- The Bretton Woods Update (2013) 'IFC Blended Finance'. The Bretton Woods Update 86, June.
- Tooley, J. (2009) The Beautiful Tree: A Personal Journey into How the World's Poorest People Are Educating Themselves. New Delhi and Washington, DC: Penguin and Cato Institute.
- Turrent, V. and Oketch, M. (2009) 'Financing Universal Primary Education: An Analysis of Official Development Assistance in Fragile States'. *International Journal of Educational Development* 20: 357-365.
- UNDP (UN Development Programme) (2012) Innovative Financing for Development: A New Model for Development Finance? New York: UNDP.
- UNESCO. (2008) Overcoming inequality: why governance matters Education for All Global Monitoring Report 2009.
 Oxford, Oxford University Press.
- UNESCO (UN Educational, Scientific and Cultural Organization) (2011) 'Debt Swaps and Debt Conversion Development Bonds for Education'. Final Report for UNESCO Advisory Panel of Experts on Debt Swaps and Innovative Approaches to Education Financing. Paris: UNESCO.
- UNESCO (UN Educational, Scientific and Cultural Organization) (2014) Teaching and Learning: Achieving Quality For All. EFA Global Monitoring Report 2013/14. Paris: UNESCO.
- UNESCO (UN Educational, Scientific and Cultural Organization) Institute for Statistics (2011) 'Financing Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity and Quality'. Montreal, UNESCO.
- UNESCO (UN Educational, Scientific and Cultural Organization), UNICEF (UN Children's Fund), UN Global Compact and UN Special Envoy for Global Education (2013) The Smartest Investment: A Framework for Business Engagement in Education. New York: UN.
- UNITAID Annual Report (2013) 'Transforming Markets, Saving Lives'. World Health Organisation.
- Upper Quartile, Institute of Policy Analysis and Research (2014) 'Rwanda. Evaluation of Results Based Aid in Rwandan Education'. 2013 Evaluation Report.
- Van Fleet, J.A. (2011) 'Global Education Challenge: Harnessing Corporate Philanthropy to Educate the World's Poor'.
 Working Paper 4. Washington, DC: Center for Universal Education, Brookings Institution.
- Van Fleet, J. (2012) 'Private Philanthropy and Social Investments in Support of Education for All'. Paper for the EFA Global Monitoring Report 2012.
- Wheeler, K. and Egerton-Warburton, C. (2012a) 'Low Cost Private Schools'. InFocus: Spotlight on Education. Lions Head Global Partners.
- Wheeler, K. and Egerton-Warburton, C. (2012b) 'Catalysing Support and Investment for Low Cost Private Schools in Pakistan'. Scoping Paper.
- Winthrop, R. Bulloch, G. Bhatt, P. and Wood, A. (2013) 'Investment in Global Education: A Strategic Imperative for Business'. Washington, DC: Center for Universal Education at the Brookings Institution, Accenture Development Partnerships and the Global Business Coalition for Education.
- World Bank (2012) 'Pakistan: Can Low-Cost Private Schools Improve Learning? From Evidence to Policy'. Washington, DC: World Bank.
- World Bank (2014) 'Overview and Experience to Date with Program-for-Results'. Washington, DC: World Bank.

