Innovative Finance in Education

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# From Giving to Investing

## Philanthropy vs. Sustainable Investing

<table>
<thead>
<tr>
<th>Description</th>
<th>Charitable Giving</th>
<th>Strategic Philanthropy</th>
<th>Social Finance</th>
<th>Impact Investing</th>
<th>Integration</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Charitable giving</strong></td>
<td>Making donations to nonprofits to enable them to achieve their vision. Hands off, no/low strategy, low resource intensity</td>
<td>Strategic donations into a variety of solutions to help achieve their philanthropic vision. Hands on, robust strategy, high resource intensity</td>
<td>Investing with the explicit intention to generate a measureable social impact, alongside a financial return</td>
<td>Investing with the intention to generate social impact alongside a market-based financial return</td>
<td>Integrating ESG factors into traditional investment processes to improve portfolio risk/return</td>
<td>Excluding companies or industries from portfolios where they are not aligned with an investor’s values</td>
</tr>
<tr>
<td><strong>Desired primary outcome</strong></td>
<td>Perceived positive E&amp;S impact</td>
<td>Demonstrable positive E&amp;S impact</td>
<td>Priority E&amp;S impact plus some financial return</td>
<td>E&amp;S impact plus competitive risk adjusted returns</td>
<td>Competitive risk adjusted financial returns, outperformance</td>
<td>Market returns, non-underperformance</td>
</tr>
<tr>
<td><strong>Financial return</strong></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>E&amp;S outcomes</strong></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Integration**

- Competitive risk adjusted financial returns, outperformance

**Exclusion**

- Excluding companies or industries from portfolios where they are not aligned with an investor’s values
Impact First

Scale of funding available

Government Funding and ODA

Philanthropy

Social Finance

Sustainable Investing

Social return

Impact Only
Grant making

Impact First
Financial returns based on social outcomes

Finance First
Market-based financial returns

Financial return

Start-up
Expansion
Scale
Why it makes sense for Optimus Foundation

- 15 year track record in strategic philanthropy
- Access to some of the world's wealthiest clients – 90% of which are philanthropically active
- Draw on expertise of a global financial institution
- Experience as the investor in the world's first Education Development Impact Bond (DIB)
Why innovative finance in education?

1. **Bridge estimated $2.5 trillion annual funding gap** to achieve the UN Sustainable Development Goals (SDGs).
   - Current funding through foreign aid and traditional philanthropy only adds up to billions rather than the trillions of dollars needed
   - Private philanthropy can play a catalytic role in closing this gap by linking development and financial sectors and unlocking private capital

2. **Improve the effectiveness and equity of educational spending** by increasing access to information and instill transparency and accountability focused on outcomes.

3. **Raise the profile and make the case for investing in education**: it is critical for long-term economic growth and essential for the achievement of all of the SDGs. A dollar invested in an additional year of schooling generates $10 in benefits in low-income countries.

4. **Promote innovation in education** – private sector can test new implementation models and help build the ecosystem for innovative finance by piloting new financing instruments.
Challenges for innovative finance in education

- Potentially longer timeframes for investment
- Complex value chain – strong interdependency between different parts of the education system
- Disagreements about measurement amongst education experts versus need for simplification for investors
- Governments remain main funders and providers of education – off limits for private (social) investors?
Elements of Social Finance at Optimus Foundation

1. Building the Ecosystem:
   Early support to attract private capital

2. Loans for Impact
   Debt funding for promising social enterprises (with a revenue model)

3. Development Impact Bonds
   Risk transfer and payment linked to social outcomes/results

4. Social Finance Fund Structures
   Portfolio approach and pay for outcomes

Results Based Finance (RBF)
II.

Building the Ecosystem
Building the ecosystem

Increase financial viability with flexible (grant) capital to reduce upfront transaction costs and uncertainty

Create the appropriate enabling environment, which will incentivize investment without distorting functioning markets:

- Build local capacity via technical assistance
- Enable sharing of market knowledge and best practices
- Build evidence needed to shape policy and regulatory reform
- Support to intermediary and accelerator organizations
Building the ecosystem

Example: Partnership Schools for Liberia (PSL)

PSL is a form of public-private partnership where non-state operators take over management of public schools but teachers remain on government payroll, balancing efficiency and public accountability.

<table>
<thead>
<tr>
<th>The PSL Model</th>
<th>PSL Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three core elements</td>
<td>Sustained quality at scale</td>
</tr>
</tbody>
</table>

1. **Public Private Partnership**
   - This partnership structure is the first of its kind in the world

2. **Multiple Providers**
   - PSL is delivered by multiple providers with different models of education delivery

3. **Results Focused**
   - PSL aims to transition to a results-based model where providers are financially accountable for delivering quality

**PSL Impact**

- **PSL as a catalyst:** replication of innovation in PSL schools across public system
- **PSL as an innovator:** potential for innovation as delivery is tailored to local context
- **PSL as sustainable solution:** incentive to improve delivery and accountability for government and funders
Building the ecosystem

Example: Partnership Schools for Liberia (PSL) – Year 1 results

1. Literacy and numeracy
   - Students in PSL schools learnt 60% more than students in non-PSL schools.

2. Attendance
   - PSL teachers were 20% more likely to be in school than non-PSL teachers, student attendance improved by 10%.

3. Teacher quality
   - In Year 1, PSL teachers were 16 percentage points more likely to be engaged in active instruction in the classroom.

4. Students attitudes and wellbeing
   - Students at PSL schools were more likely to think school is useful, and less likely to think some tribes in Liberia are bad.

5. School leadership and management
   - Extra resources are an important pathway to impact the PSL program, but changes in management practices play an equally important role.

BUT

- Resources used in PSL schools (much) higher than in public schools.
- One operator didn't have to apply to the same rules (introduced classroom caps, high teacher turnover, not acting in own vs. common interest).

Notes: (1) Results from midline data from the independent evaluation on the short term impact of PSL; (2) As measured by the Early Grade Reading Assessments (EGRA) and Early Grade Math Assessment (EGMA) testing, conducted at the beginning and end of the year.
Building the ecosystem

Example: Partnership Schools for Liberia (PSL)

Notes
(1) Grant to cover non-teacher costs; (2) Some operators with higher costs will require supplementary funding from internal or external sources of finance.
Building the ecosystem

Other examples

I. Global Schools Forum
   • Enable sharing of market knowledge, best practices and experience via networks to focus on quality and equity (in this case non-state actors in education)

II. Innovation Edge
   • Innovations in Early Childhood Development. Providing grant making support to intermediary and accelerator organizations incubating or otherwise developing social business and results-based funding models
III.

Results Based Finance
Results based Finance

Allows philanthropic investors to maximize social impact, recycle their capital, and potentially generate a result-based financial return.
Loans for Impact
Loans for Impact – The model

Debt financing where realizing impact lowers interest rates

Generic structure

Why use Loans for Impact?

- Designed to seed and scale debt funding for promising social enterprises
- Targets beneficiaries in low-income settings and that can pay for some products and services.
- Can reconcile tensions between the financial requirements of investors and the impact motivations of the social entrepreneurs

Pilot program to be expanded if successful
Impact Water Uganda (IWU) is a social business dedicated to scaling safe drinking water solutions for schools.

Optimus Foundation (lender) and the Rockefeller Foundation (outcome funder) aim to support the accelerated roll-out of IWU’s water systems.

Optimus Foundation will provide a loan for impact structured as a USD 500,000 5-year loan.

The Rockefeller Foundation will pay an outcome payment depending on IWU’s ability to meet outcome targets.

The better social outcomes IWU achieves, the more their interest rate will decrease, and

The better social outcomes IWU achieves, the higher the return for Optimus Foundation rising up to 9%.

Loans for Impact – example

Returns based on increased provision of clean water in schools

<table>
<thead>
<tr>
<th>Impact Water Uganda interest rate</th>
<th>Difference in return as result of Outcome Payment from Rockefeller Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>UBS Optimus return</td>
</tr>
<tr>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>9%</td>
<td></td>
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</table>
Development Impact Bonds
Development Impact Bonds

Development Impact Bonds are not Bonds

**Development Impact Bonds are:**

- Results-based contracts in which working capital is provided upfront by investors
- Outcome funders (donors or government) only pay for results

**Benefits of a DIB structure**
- Transparency & accountability
- Risk (financial) transfer to investors
- Flexibility and innovation in program execution
The Development Impact Bond structure

The investor assumes execution risk, whilst the outcome payer only pays for results.

1. Working capital
2. Program Implementation
3. Independent verification
4. Verification of outcomes
5. Payment for results
6. Incentive payment

Investor
Optimus Foundation

Service Provider

Outcome evaluator

Outcome payer

Beneficiaries
When to use Development Impact Bonds

DIBs are NOT a silver bullet

An impact bonds works well for...

- Complex problems – but a clear outcome
- Innovative (but previously demonstrated) interventions needed
- Optimal sequencing of inputs unknown (or unknowable) ex-ante
- Need for external risk capital
- New collaborations or partnerships are needed

...when these conditions are met...

- Outcomes measurable and simple
- Reliable and timely data flow (including baseline data)
- Outcomes attributable to inputs
- On-the-ground delivery & iteration capacity
- Availability of social investment
- Government and donor priority

...but works less well when ...

- Outcomes are almost certain from paying for the activity (e.g. rural roads)
- Limited opportunity for innovation – such as where there are strong statutory obligations
- Difficult to attribute impact to the intervention rather than external factors
The Development Impact Bond structure

UBS Optimus Foundation is in the process of bringing DIBs to scale

Pilot
- Educate Girls DIB
- Rajasthan Maternal Newborn Health DIB

Transition to Scale
- India Education DIB Fund

Scale
- Outcome / Investment Fund

2015 – 2018
2017 – 2020
2018

1 2 3 4
Educate Girls DIB

**Aim of pilot**

- Launched in 2015 to provide, and improve, education in rural India by increasing girl enrolment and improving learning in rural Rajasthan

**Key information**

- **Target population**
  - c.18,000 children in 166 government schools
- **Key performance metrics**
  - Learning outcomes across girls and boys in Grades 3-5
  - Enrolment of out-of-school girls into government primary schools
- **Duration**
  - 3 years (mid-2015 to mid-2018)
- **Payment**
  - 10% expected IRR,
  - 80% outcome payment for learning and 20% for enrollment

**Participants**

- **Risk investor**
  - UBS Optimus Foundation
- **Outcome funder**
  - CIFF
- **Service provider**
  - Educate Girls
- **Outcome evaluator**
  - IDinsight
- **Project manager**
  - Instiglio

**Year 2 results**

- On track to recoup initial investment
- Enrolment targets exceeded (88% of out-of-school girls enrolled), continued learning gains delivered for Indian children (53% of total 3 year learning target achieved).

"The DIB has led to a shift in our organization’s DNA and had a positive ripple effect across our entire organization"

- Safeena Husain, Executive Director of Educate Girls
Education DIB Fund in India

**Objectives**

- **Increase financial flows to high-quality programs** that deliver improvements in learning outcomes
- **Maximise educational outcomes** by establishing robust monitoring frameworks and accountability mechanisms
- Demonstrate the benefits of innovative financing mechanisms and operating models to government to **create a systemic change in the Indian educational system**

**Description**

- The Education Development Impact Bond (DIB) Fund is a **performance-based fund** that supports education providers in India to **improve learning outcomes for over 200,000 primary school students** in India.
- The DIB Fund is developed through a partnership between UBS Optimus Foundation, British Asian Trust and Michael and Susan Dell Foundation.

**The DIB**

- **Outcome funders**
  - UBS Optimus Foundation
  - British Asian Trust
  - Michael and Susan Dell Foundation

- **Risk investors**
  - UBS

- **Service providers**
  - Kaivalya Education Foundation
  - Gyan Shala

- **Primary school students**
  - Kaivalya Education Foundation
  - Education interventions

**Key**

- Financial flows
- Non-financial flows
# Education DIB Fund – key terms

## OVERALL FUND CHARACTERISTICS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target outcome funding pot</td>
<td>USD [10] million</td>
</tr>
<tr>
<td>Tenure</td>
<td>[4] years</td>
</tr>
<tr>
<td>Payment schedule</td>
<td>Annual, based on outcome targets</td>
</tr>
<tr>
<td>Funding recipients</td>
<td>[4] shortlisted service providers: Educate Girls, Kaivalya, SARD, Gyan Shala</td>
</tr>
</tbody>
</table>

### Use of funds

- **Service delivery costs:** USD [7.6] million; [78%] of total outcome funds
- **Interest rate:** USD [740,000], based on [8%] p.a. on investment amount if outcome targets are met
- **Service provider incentive:** USD [740,000] if outcome targets are exceeded
- **Operational costs:** USD [700,000], including outcome evaluation costs

## SUMMARY CAHSFLOWS

### INVESTORS

- **Commitment to invest** up to a maximum of USD [3] million (including contingency funds)
- **Deployment of USD [2.4] million** if 100% outcome targets achieved each year (expected scenario)
- **Expected IRR** of [8%] p.a. on invested capital if outcomes are achieved / overachieved
- **Max investment returns** of USD [740,000]

### SERVICE PROVIDERS

- **Total program budget** for each service provider USD [1.5-2.5] million
- **Performance is reviewed annually** through learner outcome measurement
- **Eligible for up to USD [740,000] of incentive payments**, paid at the end of funding period

### OUTCOME FUNDERS

- **Total outcome payment** of USD [10] million
- **Tailored annual payouts** between USD [1.5] and [2.5] million in expected scenario
- **Range of total outcome payment** between USD [1-10] million based on performance, including incentive payments and investor returns

Note: Figures in brackets are still under discussion
The Education DIB Fund will improve literacy and numeracy outcomes for over 200,000 primary school children in Gujarat and Rajasthan, allowing them to achieve grade appropriate learning levels.

The DIB Fund’s portfolio includes service providers with a proven track record of delivering improvements in learning outcomes across a range of operating models:

<table>
<thead>
<tr>
<th>Operating models</th>
<th>Direct school management</th>
<th>Supplementary programs</th>
<th>Principal/teacher training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole-school management including delivery of education services</td>
<td>Supplementary remedial programs to close learning gaps for children performing below grade-appropriate learning levels</td>
<td>Principal and teacher training to improve the quality of school leadership, and the quality and motivation of teachers</td>
<td></td>
</tr>
</tbody>
</table>

Service providers:
- Gyan Shala
- educate girls
- Society for All Round Development

Track record:
- 1.0–1.5x improvement above control schools
- 0.3–0.4x improvement above control schools
- 0.5–0.75x improvement above control schools

Note: All figures are preliminary. (1) Number of beneficiaries defined as ‘the number of children who are expected to experience full learning gains throughout the tenure of the funding’. Estimates are based on annual numbers and apply a discount factor for beneficiaries that benefit ‘partially’.
...help students catch up to their age-appropriate learning levels

• A typical student in government school is performing at least 2 grades behind their age-appropriate learning level

• The DIB Fund will **fund interventions that allow a catch-up of between [1 to 2.5] grades** over the course of four years, moving children towards their age-appropriate learning levels

• The DIB Fund will provide **4 years of continuous support** to service providers to allow sustained learning outcomes at age-appropriate learning levels

• The DIB Fund is focused on improving the **learning outcomes in primary school children**, which will increase the likelihood of sustained impact due to compounding effects and the larger relative gains that can be achieved in the early years of a child’s education

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**Evolution of student learning outcomes**

<table>
<thead>
<tr>
<th>Competency level</th>
<th>Year of intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government school students</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**DIB Fund students**

Age-appropriate learning levels

Note: All numbers are preliminary estimates
…to positively influence systemic change in the Indian government school system in the longer-term.

• By funding across a range of operational models, the DIB Fund will build up a track record of effective interventions that improve quality of education in schools

• In the longer term, the DIB Fund aims to influence state governments through targeted advocacy to enable achievement of age-appropriate learning levels for a broader group of children

• This approach has already demonstrated success with the state governments of Haryana and Rajasthan requesting the support of high-performing NGOs for their education reform programs

In the longer term, the DIB Fund aims to move Indian children towards their age-appropriate learning levels
Pathways to scale for Results Based Financing
Pathways to scale

Current obstacles for undertaking DIB programs

- High transaction costs and complexity of individual deals
- Lack of coordination between supply and demand:
  - Demand: securing outcome funding (which outcomes, at which cost and for what total amount)
  - Supply: DIB ready projects based on established criteria
- Capacity levels of different stakeholders
- Focused on individual projects rather than organization or system
Pathways to scale

Rationale for scaling Results Based Finance

- Move away from a shorter-term "project-by-project" approach to a longer-term system approach
- Focus on (and pay for) outcomes rather than input regardless of final impact
- Lower transaction costs
- Pool funding
- Increase overall program cash flow efficiency

- January 18th conference to further explore the theme of "Impact Bonds - Pathways For Scale" co-organized by Swiss SECO (and SDC), Inter-American Development Bank and UBS Optimus Foundation