AGGREGATING CAPITAL TO ACCELERATE IMPACT

SOCIAL FINANCE

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Authors' Note

This effort is the product of a grant from the Bill & Melinda Gates Foundation to Social Finance, Inc. to explore innovative financing options for the Gates Foundation's Postsecondary Team.

Social Finance, members of the Gates Postsecondary Team, and others at the foundation have collaborated to explore examples of capital aggregation and to use those learnings to suggest how the Bill & Melinda Gates Foundation and other philanthropies can continue to grow their impact.

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About Social Finance

Social Finance is a national nonprofit organization dedicated to mobilizing capital to drive social progress. Social Finance has pioneered Pay for Success, a set of innovative financing strategies that directly and measurably improve the lives of those in need.

To date, Social Finance has mobilized $100 million of capital for social progress. Our projects address a wide range of social issues including criminal justice, education, health, homelessness, sustainability, and workforce development. Our sister organization, Social Finance UK, launched the world's first Social Impact Bond in 2010.

About the Bill & Melinda Gates Foundation

Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health with vaccines and other life-saving tools and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to significantly improve education so that all young people have the opportunity to reach their full potential. Based in Seattle, Washington, the foundation is led by CEO Dr. Susan Desmond-Hellmann and Co-chair William H. Gates Sr., under the direction of Bill and Melinda Gates and Warren Buffett.

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Aggregating capital to accelerate impact

The Bill & Melinda Gates Foundation is the largest private foundation in the history of the world. In terms of annual giving, it's three times bigger than the next US foundation.[1] It has played an outsized role in US education and global health and development over the last twenty years, and continues to do so today.

But here's the thing: it's not really all that large.

Total philanthropic giving in the United States is about one hundred times the foundation's annual spending. Governments—at the federal, state, and local levels of the US—spend over one thousand times as much as the foundation every year, the majority of it on social programs like health and education.[2] And even that pales in comparison with the markets themselves, which are both drivers and reflections of social change.

Philanthropic institutions can do enormous good working within their available funding. But if they can reach further by shaping and guiding the flow of funds beyond their own, capitalizing on efficiencies, and incentivizing innovation, their impact could be exponentially greater.

Capital aggregation is a funding framework that coordinates multiple partners and combines distinct pools of funding in an effort to promote a specific solution or to combat a specific challenge.

This is the world of capital aggregation: strategies that bring together distinct pools of funding to create disproportionate impact, strategies that make the most of interactive effects of coordinated approaches toward social change.

Different capital aggregation strategies are distinct—sometimes hugely so. Some pool grant funding from a number of foundations to serve a shared purpose, creating alignment while foregoing the cost of overlapping due diligence and management. Others use financial tools to build or shape markets for products that serve the public good. Still others attempt to create novel markets, offering prizes for improved outcomes. How do these things fit together? Where are the through lines, for example, between Gavi's Advance Market Commitments and Pay for Success, between global commodities purchasing strategies and global pandemic response funds?

In this paper, we draw from examples spanning the past three decades to create a taxonomy of capital aggregation strategies, analyze the motivations behind each, and offer practical suggestions about when and how to use them to amplify philanthropic impact, maximizing the impact delivered per dollar.

1 Foundation Center, "Foundation Stats: Fiscal Totals of the 50 Largest Foundations in the U.S. by Total Giving", 2014

2 Giving USA, "Giving USA 2017: The Annual Report on Philanthropy for the Year 2016", 2017
World Bank Group, "Data Potal: GDS (current US$)", 2016
USAFacts, "Government Finances", 2014

Partnerships to drive impact

From 1999 to 2006, the Edna McConnell Clark Foundation (EMCF) awarded over $100 million in grants to youth development nonprofits.[3] But it was hearing common challenges from its grantees: that grants were too short-term, too small, and too restrictive. At the same time, leaders at the foundation realized that they were giving funds to many of the same great nonprofits as other sophisticated funders, but that each funder had its own intricate grantmaking process to which grantees had to adapt. And between all of them, the funding they gave wasn't enough to move the needle on core social challenges.

To address those problems, EMCF launched the Growth Capital Aggregation Pilot (GCAP) in 2007. Recognizing that "monies needed for dramatic growth would outstrip its own giving capacity," GCAP raised $120 million from over 30 co-investors. EMCF acted as the "lead funder" and established the "co-investor" group by helping grantees create investment prospectuses and solicit funds from other foundations and donors. Grantees created a single application; funds were dispersed over 5 years and given as general operating support.

After an intensive diligence process, funds were dispersed to three of the nation's premier nonprofits: Youth Villages, Nurse Family Partnership, and Citizen Schools. The longer-term grants provided a predicable source of funding that allowed grantees to build long-term strategic plans. It worked.

"I met with the staff and said, 'No more fighting for earmarks, for the short-term fix, for the iodine and Band-Aids…Keep your eye on the Big Goal,'" said one grantee. "You should have seen the smiles. It was one of the more dramatic organizational moments I've ever had."[4]

Grantees could focus on achieving their goals, rather than on fundraising.

GCAP represents one type of capital aggregation: foundations coming together to make larger, more efficient grants. In the years since, many of the same partners followed up by developing Blue Meridian Partners—a grant pool of over $1 billion.

But capital aggregation isn't just grant pools.

Consider Gavi's Pneumococcal Advance Market Commitment (AMC). Pneumococcal disease is one of the leading vaccine-preventable causes of death among young children, yet demand from developing countries has historically been perceived as unpredictable, leading to lag time between vaccine roll out in high-income and low-income countries. Launched in 2009, the AMC ensured a market for the pneumococcal vaccine, in exchange for a guaranteed price and an accelerated rollout timeline. Donors provided financing guarantees; Gavi, the global vaccine alliance, selected recipient countries and forecasted demand; vaccine manufacturers made 10-year commitments to supply vaccines at a pre-specified maximum cost; and UNICEF contracted to distribute doses to recipient countries. To date, 57 countries have delivered 164 million vaccine doses through the AMC.[5]

Grant pooling: the END Fund

Another example of philanthropic grant pooling, the END Fund was founded in 2012 to end the most commonly neglected tropical diseases (NTDs).

Funders include BMGF, Children's Investment Fund Foundation, Alwaleed Philanthropies, the Elma Foundation, and others. To date the END Fund has raised more than $118 million and treated more than 140 million people.

3 The Edna McConnell Clark Foundation, "Annual Report", 1999-2006

4 William P. Ryan and Barbara E. Taylor, "An Experiment in Scaling Impact: Assessing the Growth Capital Aggregation Pilot," 2012.

5 AMC Secretariat of Gavi, The Vaccine Alliance, "Advance Market Commitment for Pneumococcal Vaccines Annual Report 1 January – 31 December 2016," Advance Market Commitments for Vaccines, 2016.
World Health Organization, "Bulletin of the World Health Organization: Advance Market Commitment for Pneumococcal Vaccines – Putting Theory into Practice," 2011

What is capital aggregation?

The Bill & Melinda Gates Foundation has many hugely ambitious goals. In service of one of them—increasing the number of credentials in the US workforce—the Postsecondary Success team asked Social Finance to help think through different capital aggregation approaches.

To better understand the capital aggregation landscape, we began by simply collecting examples. After just a handful of interviews with experts in the social sector, we had identified more than 50 examples. (See Appendix 1 for our starting list.)

Their diversity was intimidating. Was it realistic to include the Growth Capital Aggregation Pilot and Advance Market Commitments under the same banner as the Pandemic Emergency Financing Facility and the Global Health Investment Fund?

We needed guardrails. There were some examples that—even though they met our working definition of "capital aggregation"—just didn't fit the purpose of the exercise: taxation schemes; insurance plans; stock offerings; direct mail campaigns. To narrow the list, we required that examples be:

1. **Intentional,** meaning that both capital provider and recipient must jointly and willingly participate in the goal (so, no taxation schemes);
2. **Specific,** meaning that capital provision must be targeted toward a particular impact goal (so, no general fundraising or direct mail campaigns); and
3. **Mission driven,** meaning that while capital providers may be for- or nonprofit, their purpose must be fundamentally about furthering social good (so, no insurance company stocks).

Even after narrowing, the list remained overwhelming. So we changed tacks: instead of trying to exclude strategies from the realm of capital aggregation, we tried to categorize them.

Surprisingly, it didn't make sense to do so on their structure alone. There were parallels we weren't expecting. The more closely we looked at it, the Affordable Medicines Facility Malaria (AMFm)—on its face a grant pool intended to subsidize the cost of malaria combination therapies, with the goal of undercutting monotherapies—looks suspiciously more like Clinton Health Access Initiative's HIV drug procurement strategy than it looks like GCAP. The Ansari XPRIZE and the Reinvent the Toilet Challenge were both seemingly prize competitions, yet, there were fundamentally different: the former paid for positive outcomes, and therefore aggregated capital by drawing in multiple sources of private investment to achieve that outcome, whereas the latter rewarded ideas, and therefore couldn't get that same leverage effect on the investment side—it aggregated capital only for the prize itself.

To group these ideas, we needed to get beyond their basic structures. Instead, we looked to their motivations: what was the purpose, the defining set of advantages, of each?

We spoke with experts who had developed many of these examples, and read case studies on each. Patterns began to emerge. Eventually, we identified 7 motivating factors underlying the list (see sidebar, page 4).

Photo: National Family Partnership

Every example relied on more than one motivation. Each relied on different motivations to different extents. GCAP, for example had many purposes: to strengthen partnerships, to advocate for more funding toward the nation's best nonprofits, to improve predictability for its grantees. But its key motivations were to centralize decision making—to get foundations to all agree to direct their funds toward a limited number of excellent grantees, and therefore, be able to increase the size and impact of their funding—and to enhance efficiency—lowering the overall diligence cost of their grantmaking and simplify restrictions for grantees.

We scored each example by how much of a factor each motivation played in its work. This produced some interesting insights.

- Most capital aggregation strategies, perhaps unsurprisingly, are rooted in the promises of **greater centralization**—consolidating authority and decision making.
- **Few strategies focused on innovation.** Most were about achieving scale.
- **A strategy's benefit depends on perspective.** In the eyes of a given foundation, for example, pooling grants harnesses new funding; but from a sector perspective, philanthropic grant pools aren't expanding the total size of funding, and only drive greater impact if they move funding from a less-impactful strategy to a more-impactful one.
- **Even similar-seeming mechanisms can have very different motivations.** Prize competitions were the best example. Some were used to seed promising ideas: to create alignment about what goals were important, and then to fund the best ideas that could achieve those goals. Others were essentially creating artificial marketplaces: to put a price tag on an outcome, and then allow many entities to pursue that outcome. These mechanisms, in many ways, run counter to one another—the former is countering dispersion, rallying funders around a more limited set of great ideas; the latter is about drawing in new actors and funders.

Motivating Factors

Centralized decision-making

Consolidating authority can allow for deeper, more sophisticated, and more efficient due diligence.

Paying for outcomes

Developing mechanisms whereby funders can pay for impact, rather than services.

Building new partnerships / funding

Developing cross-sectoral partnerships across philanthropy, government, and investors.

Creating alignment

Coordinating multiple entities / capital pools in order to maximize total value.

Enhancing efficiency

Overcoming market failures or systemic inefficiencies through new forms of incentives or feedback mechanisms.

Advocating to non-market actors

Influencing systemic change by drawing attention to opportunities and/or injustices.

Improving predictability

Extending the timeline of service delivery or mitigating uncertainty

Photo: Center for Employment Opportunities

- **There were unexpected overlaps.** On their face, the Pneumococcal AMC, the New York State Social Impact Bond, and the Ansari XPRIZE don't look much alike; but each is a capital aggregation mechanism intended to pay for outcomes by creating a financial prize that draws in the private sector.

After scoring each of the examples in our list, we grouped examples that had similar profiles. (See Appendix for more detail on the analysis.) Like with the motivation scoring itself, this was not an exact science. We expect that the resulting categories may evolve over time. What they reveal is a starting place for how to think and talk about different kinds of capital aggregation strategies.

To group these ideas, we needed to get **beyond their basic structures.** Instead, we looked to their motivations: what was the purpose, the defining set of advantages, of each?

Innovations in capital aggregation: The International Finance Facility for Immunisation (IFFIm)

The growth rate of disease often outstrips the pace of funding. To combat this issue and to mobilize private capital, Gavi and its European government partners (including the UK and France) started IFFIm. IFFIm uses long-term donor government pledges to issue vaccine bonds in the capital markets, raising funds to immediately finance Gavi needs. To date, IFFIm has disbursed $2.6 billion to support vaccine purchase and delivery in 71 developing countries.

Toward a taxonomy of capital aggregation strategies

Through our analysis, we arrived at a working taxonomy of approaches.

Category	Description	Example
Investing in impactful businesses	Fund scalable market-based solutions or approaches that offer both positive returns and positive social impact	Global Health Investment Fund
Reshaping markets	Overcome market failures and coordinate supply and demand to create more efficient markets	Clinton Health Access Initiative
Building new markets for outcomes	Create a synthetic market for positive social outcomes to drive new investment and more cost-effective solutions	Social Impact Bonds
Building and funding an agenda	Use coordinated funding tools to coalesce agendas across diverse, often multi-sectoral actors	Gavi: The Vaccine Alliance
Granting at scale	Pool grant capital to increase grant size, coordinate evaluation, and reduce burdens of diligence and reporting	The Edna McConnell Clark Foundation
Preparing for emergencies	Develop fast-acting emergency response funding in readiness for sudden financial need	UN Central Emergency Response Fund
Incentivizing innovation	Use financial inventives to reward innovation, cost-effective products to tackle persistent problems	XPrize

Investing in impactful businesses: Fund scalable market-based solutions that offer both positive returns and positive social impact

MOTIVATIONS

Investing in commercial products can engage foundations with other, sometimes novel, partners such as institutional investors or social enterprises. In doing so, it can draw in new sources of capital to drive forward the foundation's goals.

SUCCESS FACTORS AND RISKS

The greatest challenge in this strategy is identifying goods or services that measurably achieve both significant social impact and reasonable commercial success. At times, investment products over-prioritize commercial success in lieu of impact, or vice versa; finding the right balance—and integrating well with the foundation's broader portfolio—can be challenging.

Investing in impactful businesses: The Global Health Investment Fund

The Global Health Investment Fund (GHIF) is a $108 million social impact investment fund that supports late-stage innovations for public health challenges, including malaria, pre-eclampsia, cholera, HIV, and river blindness.

GHIF has an average investment target of ~$10 million per project and invests in the development of drugs, vaccines, diagnostics, and other interventions that disproportionately affect low-and middle-income countries.

GHIF is a public-private partnership that was started in 2013 through funding from JP Morgan and the Bill & Melinda Gates Foundation. It now boasts a mix of public and private funders and sponsors.

CONSIDERATIONS

This is often a significant shift for foundations: from grants (typically negative 100% returns) to a wide spectrum of potential returns. Assessing investment risks alongside impact risks introduces a significant new skillset required of program officers and leadership. At the same time, foundations must be careful to follow their legal requirements, and investment vehicles must be able to accommodate these requirements.

EXAMPLE

To achieve the UN Sustainable Development Goals, the global health community needs to double its research and development (R&D) spending. Traditionally, because global health products often do not have significant commercial markets, most R&D has been funded by grants. The Global Health Investment Fund was developed in 2013 to find instances in which products could instead be funded by impact investors, such as products with high-volume, low-margin sales (typically supported by large commodity funders like Gavi or the Global Fund), or those with dual-market opportunities (in which profits in high-income countries can make up for limited margins in low-income countries). The fund raised $108 million from a diverse set of investors, from anchor investors like KfW and the Children's Investment Fund Foundation to strategic and financial investors like the International Finance Corporation and GlaxoSmithKline, supported by guarantees from the Bill & Melinda Gates Foundation and Sida.

Reshaping markets:[6] Overcome market failures and coordinate supply and demand to create more efficient markets

MOTIVATIONS

Market-shaping strategies are fundamentally about alignment and efficiency: they match long-term supply and demand to achieve better shared outcomes and more predictability.

SUCCESS FACTORS AND RISKS

Strong models work to overcome a clear market failure, and do so by accurately and transparently assessing the needs and challenges of multiple parties. However, it is possible for an apparent market failure to actually, in fact, be a functioning market. Additionally, shaping attempts may not be large enough to have significant impact.

CONSIDERATIONS

These strategies often require a strong, trusted intermediary in order to build bridges between supply and demand.

EXAMPLE

The drug pricing strategy implemented by the Clinton Health Access Initiative (CHAI). CHAI works to expand access to health technologies by partnering with governments to consolidate demand, while simultaneously partnering with suppliers to reduce production costs and accelerate entry of new products. CHAI's model coordinates supply and demand, clarifying requirements for products and expected market demand and pricing for those products—improving predictability for suppliers and driving down cost for purchasers.

6 USAID, "Healthy Markets for Global Health: A Market Shaping Primer", 2014

Building new markets for outcomes: Create a synthetic market for positive social outcomes to drive new investment and more cost-effective solutions

MOTIVATIONS

Outcomes-based financing ties payment to measurable outcomes, refocusing stakeholders on evidence, measurement, and efficient capital allocation. It can help to build new partnerships between foundations, governments, and (at times) investors.

CONSIDERATIONS

Foundations can play many different roles in outcomes-based financing strategies—either working alongside governments as a partial outcomes payor to incentivize participation, or providing the risk capital needed to achieve outcomes.

SUCCESS FACTORS AND RISKS

Strong outcomes markets offer clear wins for all parties: for governments, this often means clear linkage between those outcomes and economic benefits; for investors, meaningful social impact and modest financial returns; for foundations, a commitment to building sustainability for high-performing grantees. Such markets are grounded in a robust data collection infrastructure. They are most apt to succeed when sponsored by engaged and committed outcomes payors, willing to think long-term and to work through the challenges of public-sector timelines and budgeting.

Photo: Center for Employment Opportunities

EXAMPLE

The New York State Social Impact Bond built partnerships between the state government, nonprofits, and private funders (both philanthropic and impact investors) to improve recidivism outcomes for high-risk formerly incarcerated individuals. Rather than simply contract with a nonprofit to deliver an intervention and hope it creates positive impact, the State contracted for a set of outcomes—most importantly, a reduction in bed-days spent back in jail or prison over three years post-release—and agreed to pay only to the extent that those outcomes were reached. In order to overcome the time lag between intervention and outcomes measurement, private funders fronted $13.5 million to the Center for Employment Opportunities to deliver its services; those funders will be repaid if positive impact is achieved, as measured by a randomized controlled trial. The structure allows governments to spend taxpayer money only on things that demonstrate measurable impact; allows nonprofits to expand their services with multi-year funding; and allows funders to demonstrate the value of a given intervention to the public sector, creating the potential for long-term uptake and sustainability.

Building and funding an agenda: Use coordinated funding tools to coalesce agendas across diverse, often multi-sectoral actors

MOTIVATIONS

There are a handful of interlocking reasons to build large-scale coalitions around a specific challenge. It can help to build alignment and new partnerships all working toward to same defined goals—driving efficiency through better coordination and improving predictability through a more transparent roadmap for the future.

SUCCESS FACTORS AND RISKS

Strong agendas clearly define responsibilities—and funding sources / commitments—for actors from across sectors. They prioritize among options to identify impactful, best-in-class solutions, rather than simply identifying "all-in" solutions. Ultimately, doing so is predicted on having the right set of actors at the table; clear governance; leadership and decision-makers to drive the process; and good faith to ensure that the significant use of time and resources needed to build such an agenda is worth it.

Building and funding an agenda: The Global Partnership for Education

The Global Partnership for Education (GPE) was established in 2002 as a multi-stakeholder partnership to improve education systems in developing countries and to increase the number of children who are in school.

GPE builds and manages cross-sectoral relationships, with support from developing country governments, donor governments, philanthropies, and the private sector.

GPE works with developing country partners to promote co-financing, encouraging partners to allocate 20% of their national budget to education and promoting transparent reporting of budgetary allocations.

CONSIDERATIONS

These strategies are best suited for funneling more support to existing, well-evidenced solutions, rather than incentivizing the creation of new solutions.

EXAMPLE

Gavi pools capital and other resources from a variety of stakeholders, including governments, foundations, and private companies, in order to further its agenda to improve access to vaccines. Gavi uses 3 different capital aggregation strategies that coalesce a different set of stakeholders around the agenda: advance market commitments (discussed earlier), co-financing, and International Finance Facility for Immunisation (IFFIm).

Co-financing engages governments and philanthropies to move towards sustainable funding for vaccine access. Gavi provides the majority of funding for vaccines for countries contingent on countries co-financing at greater rates per year as the countries' income grows. Countries agree to a 15% increase in funding per year during a preparatory transition phase and full financing in 5 years in the accelerated transition phase.

IFFIm engages government and the private sector with the goal of accelerating the availability of predicative, long-term funds for immunization. Donor governments enter into legally binding obligations to make grant payments over a 20-year period, and IFFIm then uses these obligations to raise funds by issuing bonds in the international capital markets. Specifically, the grants are used to pay the principal and interest on these bonds. IFFIm launched 3-year and 5-year "Vaccine Bonds" in Japan, the UK, Australia, the Eurobond market, and the Islamic finance market, and, since 2006, IFFIm has raised more than $5.7 billion over 32 bond issuances. About half of the funds were used for country-specific Gavi programs that allowed 580 million children to gain access to the proper vaccinations[7].

7 IFFIm, "Annual Report of the Trustees and Consolidated Financial Statements", 2016

Granting at scale: Pool grant capital to increase grant size, coordinate evaluation, and reduce burdens of diligence and reporting

MOTIVATIONS

These strategies are about finding more philanthropic funding to increase distribution of a specific solution. They're largely about enhancing efficiency, by promoting better coordination of philanthropic capital sources and reducing fundraising and reporting burden for grantees, and about centralizing decision making around diligence and grant making.

SUCCESS FACTORS AND RISKS

To do this well requires strong relationships between funders; sufficient lead funder capacity and capabilities; and well-established service providers. It allows funders to take part in big bets—although it also can concentrate funder portfolios. Success hinges on capabilities of the lead funder to support grantees in the right way to achieve their goals.

CONSIDERATIONS

While pooled grants can more efficiently deploy philanthropic capital, it's rare that such strategies draw in new non-philanthropic funding sources (with the exception of some global development pools such as, for example, the Global Fund).

EXAMPLE

Growth Capital Aggregation Pilot (see earlier)

Preparing for emergencies: Develop fast-acting emergency response funding in readiness for sudden financial need

MOTIVATIONS

Preparation strategies are about improving predictability—creating emergency response funding that mitigates uncertainty. In doing so, they also preemptively build alignment, in order to accelerate the pace of action when funding is required.

SUCCESS FACTORS AND RISKS

Strong aggregated emergency funds have clear requirements for activation and a nimble and empowered management structure. They have considered the long-term goals of such funding, and may actively use relief funding to drive future uptake of best-practice solutions. At the same time, they have developed a strategy to wean institutions from funding over time.

CONSIDERATIONS

Emergency response funds often need to be large. And they are, by nature, risky: significant sums may be deployed to recipients that ultimately go bankrupt or change priorities.

EXAMPLE

The goal of the United Nations Central Emergency Response Fund (CERF) is to quickly deliver large-scale funding to humanitarian responders during time-critical crises, particularly those that are long-lasting. CERF collects donations from UN Member States on an ongoing basis to ensure capital is available to be quickly deployed. The existing fund structure allows for quick deployment of aid and reduces time-lag that comes with crisis-specific fundraising. CERF allocates ~$400 million in humanitarian aid each year and has provided $5 billion to 100 countries and territories since 2006[8].

Preparing for emergencies: Debt2Health

In 2007, the Global Fund launched the Debt2Health initiative. The initiative is a form of debt conversion in which developing countries with insurmountable debt obligations receive debt relief.

In exchange for the relief—which is provided by participating Global Fund donor governments—recipient countries allocate a portion of the relieved funds to Global Fund-approved programs or interventions in-country, allowing emergency relief to nudge expansion of best-practice programs.

8 CERF, "Grant Reports," 2017.

Incentivizing innovation: Use financial incentives to reward innovative, cost-effective products to tackle persistent challenges

MOTIVATIONS

Outcomes-based prizes are, at their core, about paying for outcomes: creating an artificial market around a desired outcome or set of outcomes that helps to drive novel solutions. In doing so, they can create alignment by drawing in investment from participating parties in pursuit of that outcome.

SUCCESS FACTORS AND RISKS

Of course, to draw in investors, the prize needs to be large enough to be attractive. Outcome targets must be clearly defined in order to incentivize the right kind of research and development. And prize-seekers must know about it: the financial incentive must be publicized well enough that participants come to the table in pursuit. Unrealistic or unattainable outcomes may be demoralizing, and dampen participation in future strategies. While competition can breed ingenuity, it can also result in replication; there may be instances in which financial incentives should promote collaboration, too. Finally, unlike some other capital aggregation strategies, not all innovation incentives result in clear sustainability; once a solution has been achieved, it may require further support, or a new strategy to support it.

CONSIDERATIONS

This strategy is best-positioned for outcomes that can be measured within a time-limited period (i.e., credits earned in a semester, rather than lifetime earnings). Yet, it is important to set outcomes that are meaningful and challenging.

EXAMPLE

The Ansari XPRIZE sought to incentivize innovation in the previously underfunded space of commercial space flight. To address the idea that commercial flight was not possible due to a lack of safe and inexpensive solutions, the XPRIZE challenged the creation of a safe, reusable, privately-financed manned spaceship to demonstrate that private space travel is commercially viable. Teams had to demonstrate they could meet the specified outcome—a spaceship that is capable of carrying 3 people to 100 kilometers above the Earth's surface twice within two weeks—in order to win the $10 million prize, which was privately funded by the Ansari family. The XPRIZE was well-publicized and the prize money was large enough to encourage a number of strong teams. Additionally, the XPRIZE attracted a total investment larger than the prize via each team's private capital raise, adding a greater incentive for innovation, building new partnerships across sectors, and demonstrating the viability of a commercial market. Ultimately, the winning technology was licensed by Richard Branson to create Virgin Galactic, actually kick starting a commercial space flight market[9].

9 Wasson, Renya, "Can Prizes Solve Problems Facing Vulnerable Populations?"
Gustetic, Jenn, "How to Finance Outcomes / Results through Government Prize Competitions"
Jennifer Bravo, Christopher Frangione, and Stephanie Wander, "The Power of Incentive Prize Competitions"

Photo ©2016 Mark Greenberg/Virgin Galactic

Choosing a strategy

Capital aggregation strategies are, almost by definition, a bit challenging to structure. They require coordinating across multiple partners, building agreements and often structuring contracts, and taking risks. They are harder than just giving grants, but sometimes a capital aggregation strategy is the best choice because challenges are too big for a single actor, because the answers aren't clear, or because the foundation needs input from different parts of the market.

But how does a program officer choose which strategy to pursue?

The first priority is to get specific on the challenge the strategy is intended to solve. Lacking a specific challenge (e.g., pricing of digital college advising tools, uptake of long-acting reversible contraceptives development of a more sensitive tuberculosis diagnostic, etc.) capital aggregation strategies probably aren't a good bet.

If there's a clear challenge, but not a clear solution, you may be in the realm of incentivizing innovation: set a goal and be specific about how success will be measured, offer a prize large enough to incentivize organizations to do research and development to attain that goal, and then wait to see what develops.

Often, though, we live in the world of identified solutions that haven't gotten to scale. Here, we come to our first split: is there likely to be a commercial market for this solution in the future? If so, things get tricky: is this an "investable" idea that simply needs more money, or is there a market failure that's inhibiting market growth and limited adoption? If it's the former, it falls in the realm of investing in impactful businesses—the world of impact investment funds, of social enterprise. If it's the latter, it may call for actively reshaping markets: the world of incentive payments, scale guarantees, or field building.

If there isn't a likely commercial pathway, one solution may be to join forces with other foundations—pooling funding in order to grant at scale. But if you want or need new sources

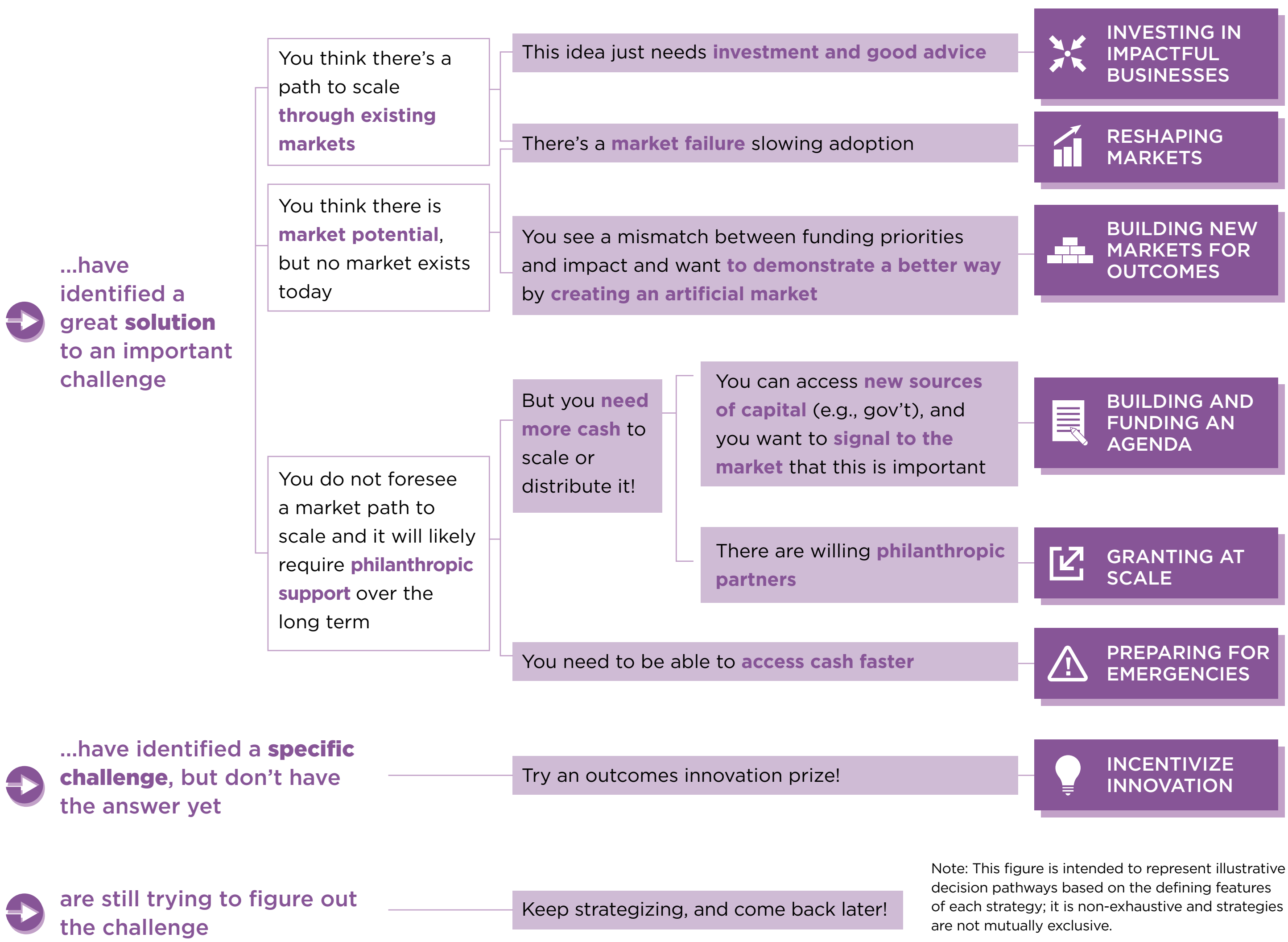
There has never been a more important time for philanthropy to engage new partners. The challenges we face as a society—and our growing interconnectedness across the globe—mean that no one actor, no one sector, can go it alone.

of funding, beyond the foundation world, you might try to build and fund an agenda: put together the infrastructure and coordinating entity that draws in not just philanthropy, but also the public sector and business in a unified approach. Or, you could aim for systemic change; instead of getting others to agree on which interventions to fund, get agreement on which outcomes are most important, then build funding pools that pay for those outcomes. Building new markets for outcomes is complicated, but it refocuses all parties on data, evidence, and risk, strengthening the linkage between funding and impact.

Below is a rudimentary decision tree for foundation program officers to consider.[10]

Note that, because of the complexity and breadth of these subjects, it's impossible to create such a tool that's perfect. In the real world, some initiatives may draw on multiple capital aggregation strategies at once: a program officer seeking to build and fund an agenda may consider reshaping markets to be a core component of that agenda. Nevertheless, we hope the below can act as a useful introduction—a basic delineation of the differences between these ideas.

You're a program officer, and you...



Note: This figure is intended to represent illustrative decision pathways based on the defining features of each strategy; it is non-exhaustive and strategies are not mutually exclusive.

10 This tool was road-tested and revised with program officers from the Bill & Melinda Gates Foundation's Postsecondary Success team.

It’s important to consider that different strategies lend themselves to different sets of partners.

Consider a foundation looking for a way to increase the reading level of low-literate adults using a digital solution – a very specific challenge. However, the foundation hasn’t seen any evidence-based interventions that it believes in. This is the situation the Barbara Bush Foundation found itself in, leading to its XPRIZE: a $7 million challenge to develop mobile applications that would result in the greatest increase in literacy skills among adult learners in 12 months in test cities.

Consider a program officer who has continuously funded an excellent nonprofit, but doesn’t have the resources to bring it to scale and sustain it. The nonprofit is creating significant value for government, which is not doing enough to support it. That’s where the Duke Endowment found itself in 2014. After a decade supporting the Nurse-Family Partnership in South Carolina, it helped construct a Pay for Success project in which the endowment, in partnership with other philanthropists, would front the funding for a major expansion of NFP; in exchange, the state agreed to repay that funding if the intervention significantly reduced preterm births, improved healthy birth intervals, and lowered rates of child injury.

It’s important to consider that different strategies lend themselves to different sets of partners. For example, “Investing in Impactful Businesses” helps to draw in commercially oriented capital; “Building and Funding an Agenda” is geared largely toward coordinating government funding.

Building bridges into different sectors can have value.

Governments can typically be brought to the table on initiatives that display clear cost reduction and value generation. Government capital far exceeds that of philanthropies, providing a potential pathway to sustainable funding; on the other hand, governments are often prone to incumbency bias, and require multiple levels of approval to take action. “Building and Funding an Agenda” and “Building Markets for Outcomes” often lend themselves to government partners.

Private partners are most likely to engage with strategies that offer a positive return on investment. They can pave the way to sustainability through commercial markets, and can act quickly to support innovative projects. However, many have a strong bias for financial returns over social returns. Strategies more closely aligned to markets, such as “Investing in Impactful Businesses,” “Reshaping Markets,” and “Incentivizing Innovation,” lend themselves to private partners.

Other philanthropic partners can be mobilized to commit funds to common problems and solutions. They are mission-driven and already dedicated to funding the space, but partnership with other philanthropies does not offer a pathway to sustainability. “Granting at Scale” and “Preparing for Emergencies” involve other philanthropic partners as those strategies are typically used when there isn’t a commercial path to scale.

Sustainability, to be sure, is a key concern across each strategy. To improve sustainability, capital aggregation strategies should aim to either (a) draw in long-term taxpayer-funded commitments; (b) develop a commercial strategy that will be supported by consumers; or (c) build a durable public good (like a vaccine) that can persist after the funding is exhausted. Commercial partners are most likely to engage with strategies that provide a positive return on investment; government partners are most easily brought to the table with strategies that display clear cost reduction or value generation.

Other considerations when picking a capital aggregation strategy are related to feasibility, sustainability, and the impact of the strategy itself on the space. Does the philanthropy already have an existing network of partners who could get involved in the capital aggregation strategy? How much capital does the strategy require to improve outcomes? Is there a path to sustainability? Answering questions like these will further narrow in on capital aggregation strategies that would complement a philanthropy's current overall strategy and achieve its goals.

There has never been a more important time for philanthropy to engage new partners. The challenges we face as a society—and our growing interconnectedness across the globe—mean that no one actor, no one sector, can go it alone.

There is much more work to be done to improve that collaboration.

The tools of capital aggregation can help to prepare philanthropy for a future defined by increasingly sophisticated cross-sector engagement—a future in which the historically disparate worlds of the social sector, the public sector, and the capital markets overlap and interact to create hybrids of greater strength and greater efficiency that will help us to get more impact from every dollar we spend.

Appendix

This appendix includes a full list of the capital aggregation examples that we reviewed to determine our taxonomy and frameworks. This list also includes a number of examples that were ultimately excluded because they did not fit our definition of capital aggregation. Also in this appendix is a detailed description of our capital aggregation taxonomy methodology.

List of capital aggregation examples considered:

Adult Literacy X-Prize

Affordable Medicines Facility Malaria (AMFm)

Airline Solidarity Tax

American Red Cross

Ansari X-Prize

Blue Meridian Partners

California Tobacco Tax

Calvert Foundation Community Investment Note

Central Emergency Response Fund (CERF)

CHAI HIV Strategy

Challenge.gov

The Children's Prize Foundation

Climate Risk Insurance

Connecticut Social Impact Bond

Debt2Health

DWP Innovation Fund

The END Fund

Equity with a Twist

FEMA

Gavi, the Vaccine Alliance

Global Fund

Global Health Investment Fund

Global Investment Fund for Water

Global Innovation Fund

Global Partnership for Education

GoFundMe

GOMESA

Growth Capital Aggregation Pilot (GCAP)

Heavily Indebted Poor Countries Initiative

International Finance Facility for Immunisation (IFFIm)

Impact Security

Innocentive – Postsecondary Learning

Kiva

Malaria in Mozambique Performance Note

Massachusetts Social Impact Bond

Matching federal outcome funds (USDOL PFS grants)

New York State Social Impact Bond

Oklahoma Social Impact Bond

Pakistan Flood Relief Fund

Pandemic Emergency Financing Facility

Peterborough Prison Social Impact Bond

Pneumococcal Advance Market Commitment (AMC)

Purdue University – Back a Boiler

Reinvestment Fund PFS Fund

Reinvent the Toilet Challenge

Sierra Club

The Social Outcomes Fund

Social Success Note

South Carolina Social Impact Bond

Social Success Note

South Carolina Social Impact Bond

Strong Families Fund

Strong Start to Finish

Ventura County Social Impact Bond

WWB micro-insurance

Capital aggregation taxonomy methodology:

First, we identified a list of seven motivation factors across the listed capital aggregation examples:

- **Centralized decision-making:** Consolidating authority can allow for deeper, more sophisticated, and more efficient due diligence.
- **Paying for outcomes:** Developing mechanisms whereby funders can buy impact, rather than services.
- **Building new partnerships / funding:** Developing cross-sectoral partnerships across philanthropy, government, and investors.
- **Creating alignment:** Coordinating multiple entities / capital pools in order to maximize total value.
- **Enhancing efficiency:** Overcoming market failures or systemic inefficiencies through new forms of incentives or feedback mechanisms.
- **Advocating to non-market actors:** Influencing systemic change by drawing attention to opportunities and/or injustices.
- **Improving predictability:** Extending the timeline of service delivery or mitigating uncertainty.

Then we ranked each capital aggregation example on a 1-5 scale across these motivations where 1 represented "little to no role in this capital aggregation example" and 5 represented "defining feature of this capital aggregation example."

Finally, we grouped similar examples together, creating our seven-strategy taxonomy. For example, multiple examples scored highly (4/5) on enhancing efficiency, building new partnerships/funding, paying for outcomes, and advocating to non-market actors. These examples were then grouped together to form the "Building new markets for outcomes" strategy.

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